**Volume04, Issue 08, 2024,**
**Publish Date: 22-08-2024**
**Doi https://doi.org/10.55640/ijbms-04-08-03**

INTERNATIONAL JOURNAL OF BUSINESS AND MANAGEMENT SCIENCES (Open access)

# AI AND WORKFORCE DEVELOPMENT: A COMPARATIVE ANALYSIS OF SKILL GAPS AND TRAINING NEEDS IN EMERGING ECONOMIES

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**ABSTRACT**

AI is developing quickly and offers considerable prospects for economic development; nevertheless, it presents crucial challenges – for instance, skills development and its effect on employee's jobs in developing economies. This research will seek to establish the current state of AI-related skills deficits and training in these economies to establish how governments and organizations can close the gaps by preparing the workforce for the future AI revolution. In line with the research questions, the following emerges as the research problem: To what extent have emerging-market companies embraced AI? What key skills are scarce both in the internal and external labor markets relevant for AI training? What challenges hinder practical training and learning of AI skills in emerging markets?

The study, therefore, uses a quantitative research approach that involves administering questionnaires to one hundred working professionals across emerging economies. A set of questions was designed to evaluate the recognition of AI among the respondents, the level of AI integration into the organizations of the participants, the AI-related skills that are still inexperienced participants, and the ways of professional training that participants would appreciate. Also, the study explored the participants' perception of the government and organizations in addressing preparing the workforce for AI.

The evaluation shows that a considerable fraction of the population still needs to gain awareness of AI technologies, while many organizations still need to experiment with such machinery. Some of the most significant skill deficiencies noted involved ethical conduct in AI and AL with other systems, and the most preferred forms of learning were practical and online. However, at the same time, they described many hindrances to practical training, such as scarce time, excessive costs, and access to quality material.

According to the research study, teamwork between governments, schools, and other organizations and industries is crucial in addressing such challenges. Thus, the author states that emerging economies can improve their AI personnel through training activities and government measures. That is why filling these skill gaps and adopting innovative training is essential to prepare for the competitive AI marketplace these economies can get.

**KEYWORDS** : Intelligence (AI), Workforce Development, Skill Gaps, Training Needs, Emerging Economies, AI Adoption, Government Policy, AI Integration.



## INTRODUCTION

AI is advancing at an extremely high rate in the global market, impacting industries and economies and creating a complicated future for workforce training. AI's ability to increase efficiency, revolutionize business models, and contribute to economic progress has made it a priority for both developed and developing countries. However, some opportunities come with the fast incorporation of AI into many industries. Nevertheless, it has some threats, especially in the context of developing countries; they still need to prepare for such

changes regarding technological advancements and available educational resources.

AI integration is expected to have an impressive economic impact on the global economy because AI is believed to deliver up to $15. It contributes up to $ 7 trillion to global economic growth by 2030 (PwC, 2018). Still, they project that the growth of AI will be tremendous over time, but emerging economies have unique challenges in fully realizing AI capabilities. Many of these issues are based on the existing skills deficiencies within the employee base. A lack of professionals understanding how to incorporate AI in fields like data science and machine learning and specialists in AI ethical considerations can hamper AI tech implementation (World Economic Forum, 2020). The global study of the ILO identified the human factor as a severe constraint, as many workers lack advanced digital skills that enable them to interact actively with AI (International Labor Organization, 2021).

It is observed that in many of the emerging economy educational and vocational training systems, the advancement of AI technologies outpaces them, leading to a situation where what is taught and what is required in the market is out of phase (McKinsey & Company, 2021). This misalignment is aggravated by the need for Machine Intelligence education and training tools, which are scarce in developed nations where AI brilliance is centralized. Thus, the workforce in these economies may be left behind while Artificial Intelligence is becoming critical to the competitiveness of a nation's economy. For example, UNCTAD (2021) has pointed out that many developing nations cannot incorporate AI into their learning systems, causing an expansion of a digital generation gap.

However, the differences between various emerging economies indicate that there is a need to understand how the skills related to AI adapt differently in the context that is considered. Although some countries have progressed much in building AI skills across their workforce, others still need to catch up due to the lack of resources, inadequate infrastructure, and policy drawbacks (UNESCO, 2022). These challenges are even more prominent in low-income countries. As the World Bank (2022) underlines, there is an urgent need for investment in digital assets and skill-building programs to facilitate AI technologies. Therefore, it is imperative to address these inequalities to enable everyone to share the opportunities that AI presents towards the development of the new economy.

Therefore, the current paper's research work seeks to conduct a cross-country comparison between a set of emerging economies based on stories of AI skills demand and training requirements. This research aims to highlight the particularistic skills gaps the above countries experience regarding AI adoption and solutions towards filling them. The primary purpose is to contribute knowledge that would be helpful for policymakers, educators, and industry stakeholders in preparing the workforce for the AI environment.

## Literature Review

AI has spread its application in every industry, making it a main area of concern as researchers investigate its effects on human capital development. This writing also informs how AI can bring about change. It also reveals vital issues of concern regarding the skill divide and the labor force's preparedness for a future of work shaped by artificial intelligence.

### AI and Workforce Transformation

AI is currently being adopted in the workplace and is changing how work is done and the skills demanded in various industries. As highlighted by the World Economic Forum (2023), Advanced job automation by AI will continue to eliminate payroll jobs in the next three years; although eighty-five million payroll jobs will disappear, ninety-seven million new payroll roles appropriate to the new human/machines and algorithms partnerships will form. This shift emphasizes creating a human workforce that is not only tech-savvy but can also effectively interact and integrate its work with AI in creative, interpersonal ways that involve solving

higher-order problems. McKinsey & Company, in their research in 2023, identifies three areas of skills that will be in high demand: Higher cognitive skills, Social and emotional skills, and Technological skills.

Skill Gaps in Emerging Economies

A critical issue that emerging economies must deal with in the emergence of requisite skills for adopting AI is distinct. The report of the International Labor Organization in 2023 observes that many developing economies need more facilities and resources to invest in digital education and AI training, which has already received quite a lot of investment in developed economies. This has resulted in a significant skills mismatch, particularly around big data and analytics, data science, machine learning AI and ethics of use. The UNCTAD (2023) note states that many of these skill deficiencies arise from the tempo at which innovative technologies are being developed and implemented, a rate that conventional education systems in these nations have yet to match. Furthermore, the recent trend raises the possibility that appropriate strategies may not be applied if the emerging economies' digital gaps with developed ones increase even further, which renders them vulnerable in the AI industry (World Bank, 2024).

Training Needs and Initiatives

These skill gaps are adequate reasons why extensive interventions exist in the form of training that seeks to introduce the workforce to AI skills. Studies indicate that while learning should not be limited to general exposure of persons to IT in conducting their traditional jobs, it should encompass higher levels of AI skills including machine learning, integration of AI, and ethical use of AI. Incorporating the data from PwC (2023), to increase the effectiveness of training programs in emerging economies, emphasis must be placed on need analysis identifying participants' educational levels, their tech-savviness, and their required training needs. For example, a type of delivery that has been recognized as especially beneficial where there is restricted tech availability is face-to-face accompanied by online and technology-based techniques grouped under a term referred to as blended learning (UNESCO, 2023).

Firms offer such training programs, which governments in emerging economies support. According to the World Bank (2024), there is a need to enhance public-private partnerships in developing and implementing training in the use of AI. With these views, such collaborations can assist in utilizing the strengths of both sectors, along with viewing the issues of training and development to ensure that the endeavors are suitably sensitive to market needs and that a vast populace can take advantage of them. Also, every policy regime should encourage teaching and training policies that help workers adapt to innovative technology (International Labor Organization, 2023).

Comparative Analysis of AI Readiness

A literature survey on cognitive AI readiness indicates marked differences in emerging economies. Countries' AI capability, infrastructure, and investment are categorized in the Global AI Index developed in Tortoise Media in 2023. For some EE, including India and Brazil, the advancements in AI are high. Meanwhile, some need more resources for AI growth, with some being Sub-Saharan Africa's worst hit. Such differences are usually associated with differences in the quality of education, governmental legislation and regulation, and economic capital. According to the literature, mitigating these disparities needs a more complex model of the utilization of resources in education, the development of physical infrastructure, and international cooperation (UNCTAD, 2023).

**Table 1: Summary of Key Studies on AI Workforce Development in Emerging Economies**

| Study | Focus | Methodology | Key Findings |
|---|---|---|---|
| World Economic Forum (2024) | AI adoption and skill gaps in global economies | Survey-based quantitative research | Identified significant skill gaps in AI ethics and integration, especially in emerging economies. |
| UNCTAD (2024) | Technological readiness in developing countries | Mixed-methods approach (survey & interviews) | Highlighted the digital divide and the need for targeted AI education and training in emerging regions. |
| McKinsey & Company (2024) | AI's impact on global workforce trends | Quantitative analysis | Found that emerging economies lag in AI adoption due to lack of strategic clarity and skills shortages. |
| International Labor Organization (2024) | Digital skills development in post-pandemic economies | Qualitative case studies | Emphasized the importance of government intervention in closing the AI skills gap in emerging markets. |
| Deloitte (2023) | Effective training methods for AI skills | Survey and case study analysis | Revealed a preference for practical, flexible training methods like on-the-job training and blended learning. |
| OECD (2023) | AI workforce readiness and policy | Policy analysis and surveys | Stressed the need for supportive government policies to facilitate AI workforce development. |
| European Commission (2023) | Digital education action plans | Policy review | Advocated for integrating AI into national education curricula to enhance workforce readiness. |

**METHODOLOGY**

This research uses quantitative research methodology to understand the relative skill gaps and training requirements for AI the emerging economy countries by developing a survey. In the method of surveying, the collection of data is standardized regardless of the context it is being applied hence making it easier to compare the development challenges and opportunities for an AI workforce (Creswell & Creswell, 2018).

Data Collection & Sample Selection

To conduct this study survey questionnaires were administered online to the respondents who are working in different emerging economies. Conducted to capture awareness, usage and big gaps in AI skill set along with the desired training modes. The questions posed in the survey included selectively labelled closed-ended questions as well as Likert-scale

questions to obtain numerical measurements of the respondents' experiences and perceptions of AI skill development as opposed to the use of open-ended questions (Fowler, 2014).

The survey received one hundred participants inclusive of the technology, finance, health, and education sectors. These industries were targeted because they have widely implemented AI systems and therefore experienced high demand for training of the workforce in aspects related to AI. Due to the vast geographical distribution of the respondents, the use of online surveys helped to get the data in an efficient manner which is highly significant in this sort of comparative studies (Dillman, Smyth & Christian, 2014).

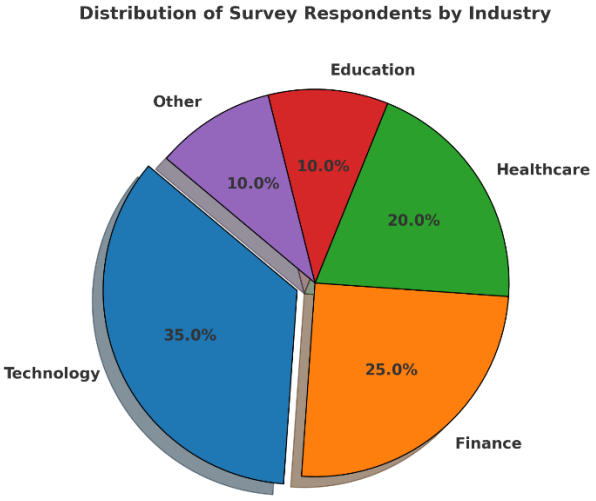


**Figure 1: Distribution of Survey Respondents by Industry**

The participants for this study were obtained from different emerging economies considering the Gross domestic product, technological adoption, and scale of Artificial intelligence usage (World Bank, 2024). The responses were gathered among others from professionals from various sectors in these economies to capture the diverse workforce. It is noted, however, that a sample size of one hundred respondents gives an idea of the level of readiness for AI and potential workforce problems; more respondents would give more intricate trends.

## DATA ANALYSIS

Descriptive statistics were used to analyze the results regarding the various AI needs and trends among the respondents. Cross-tenses to the questionnaire could be used to compare industries and economies regarding their AI appetite and workforce issues.

Results include frequency tables, bar graphs, and pie charts; the results make it easy to get an expanded comprehension of the results obtained. The paper also proved helpful in identifying concrete deficiency areas and training needs of the surveyed economies and guiding policymakers, educators, or business executives in improving AI workforce readiness.

Results

These insights are immensely helpful in understanding the knowledge gaps where AI is concerned, the training needs, and the challenges that exist in conducting training in the usage of AI tools, as revealed by the respondents across some of the emerging economies. It has been used to capture the results within several indices, such as familiarity, the adoption level of AI, significant gaps in skills, availability of skilled employees, preferred modes of training, and roles that the government should play in AI workforce matters.

### AI Familiarity and Adoption

When asked about the existing level of

awareness of the concept of AI, this is what the respondents had to say: presented in Figure 2, almost half of the workforce seems to be less informed about AI; 25% of respondents claimed to be "Very Unfamiliar" with AI while another 24% respondents claimed to be "Somewhat Unfamiliar". On the other side, 23% of responders said that they are familiar with AI, while 16% said that they are familiar with it, and hence, a smaller chunk of the workforce has more advanced knowledge about AI.

Figure 3 also presents the organization-specific AI adoption strategies, where 21% of clients reported the complete adoption of AI, and 20% of clients have partially adopted AI. Still, 24% of the respondents could not clearly state their organizations' AI use — they were ''Unsure'. There might be some issues with information sharing or perception within those organizations. Also, 17% of the respondents pointed out their organizations' practice of continuing to implement AI, which confirms the continuation of attempts to implement AI technologies.

**Table 2: AI Familiarity**

| Category | AI Familiarity (%) |
|---|---|
| Very Familiar | 16.0 |
| Somewhat Familiar | 23.0 |
| Neutral | 12.0 |
| Somewhat Unfamiliar | 24.0 |
| Very Unfamiliar | 25.0 |

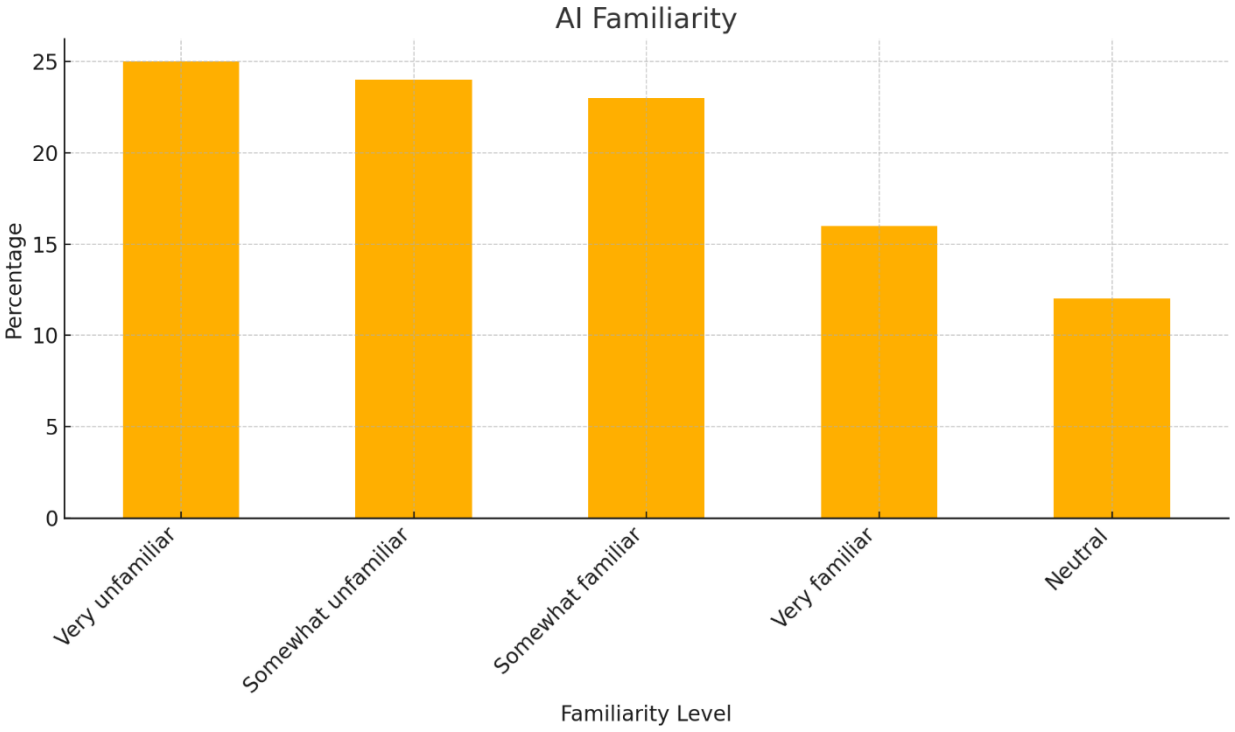


**Figure 2: Levels of AI Familiarity Among Respondents**

**Table 3: AI Adoption**

| Category | AI Adoption (%) |
|---|---|
| Fully Adopted | 21.0 |
| Partially Adopted | 20.0 |
| Planning to Adopt | 17.0 |
| No Plans to Adopt | 18.0 |
| Unsure | 24.0 |

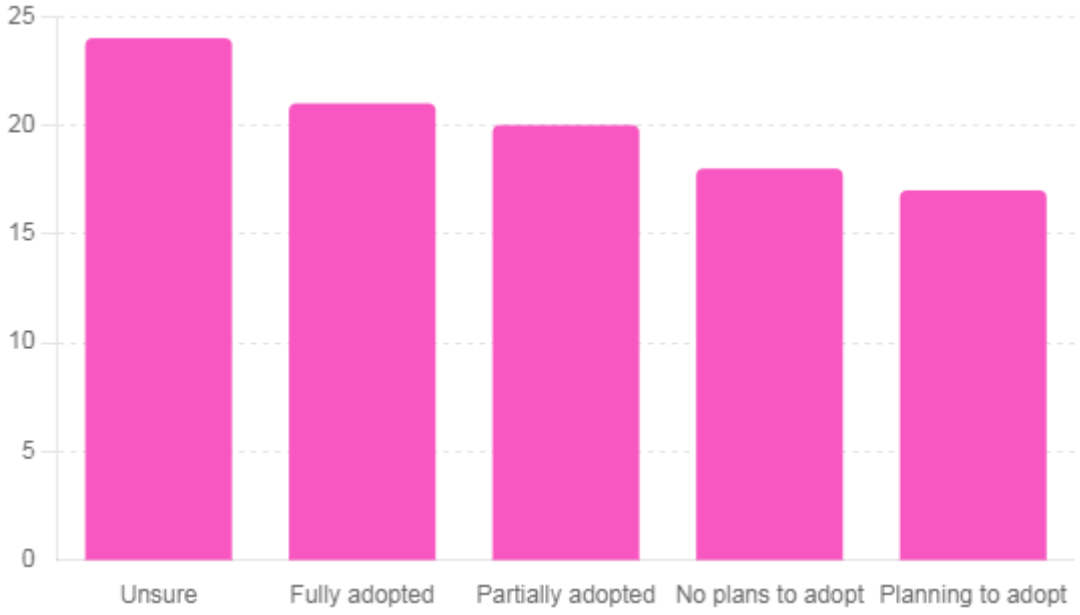


**Figure 3: Organizational AI Adoption Status**

Significant Skill Gaps and Availability of Skilled AI Professionals

Several yawning skill deficits, evident in AI-related domains, were noted during the analysis. As shown in Figure 4 (caption: The gap, as defined as 'Significant Skill Gap', in the comparative analysis of the availability of skilled AI professionals and the magnitude of the situation was stated to be the most important one, and the other two were identified based on relative importance, namely, "Ethical and Responsible AI Use" (26%) and "AI Integration with Existing Systems" (25%). Other significant deficits are observed in such subtopics as "Data Analysis and Interpretation," wherein 19% of the learners are not well-equipped, or 15% do not have adequate knowledge of Machine Learning and AI Algorithms.

However, there is a need for other skills necessary in the continually expanding field of AI. Despite this, only 23% of respondents said that skilled professionals were available at 'Excellent' or 'Good' while 18% were at 'Poor' and 17% were at 'Very Poor.' Thus, while there is a demand for AI skills, there has been a shortage of them, which points to the need for training interventions to fill this gap.

**Table 4: Significant Skill Gaps and Availability of Skilled AI Professionals**

| Category | Significant Skill Gaps (%) | Availability of Skilled AI Professionals (%) |
|---|---|---|
| AI Integration with Existing Systems | 25.0 | |
| AI Programming | 15.0 | |
| Data Analysis and Interpretation | 19.0 | |
| Ethical and Responsible AI Use | 26.0 | |
| Machine Learning and AI Algorithms | 15.0 | |
| Excellent | | 23.0 |
| Good | | 20.0 |
| Fair | | 22.0 |
| Poor | | 18.0 |
| Very Poor | | 17.0 |

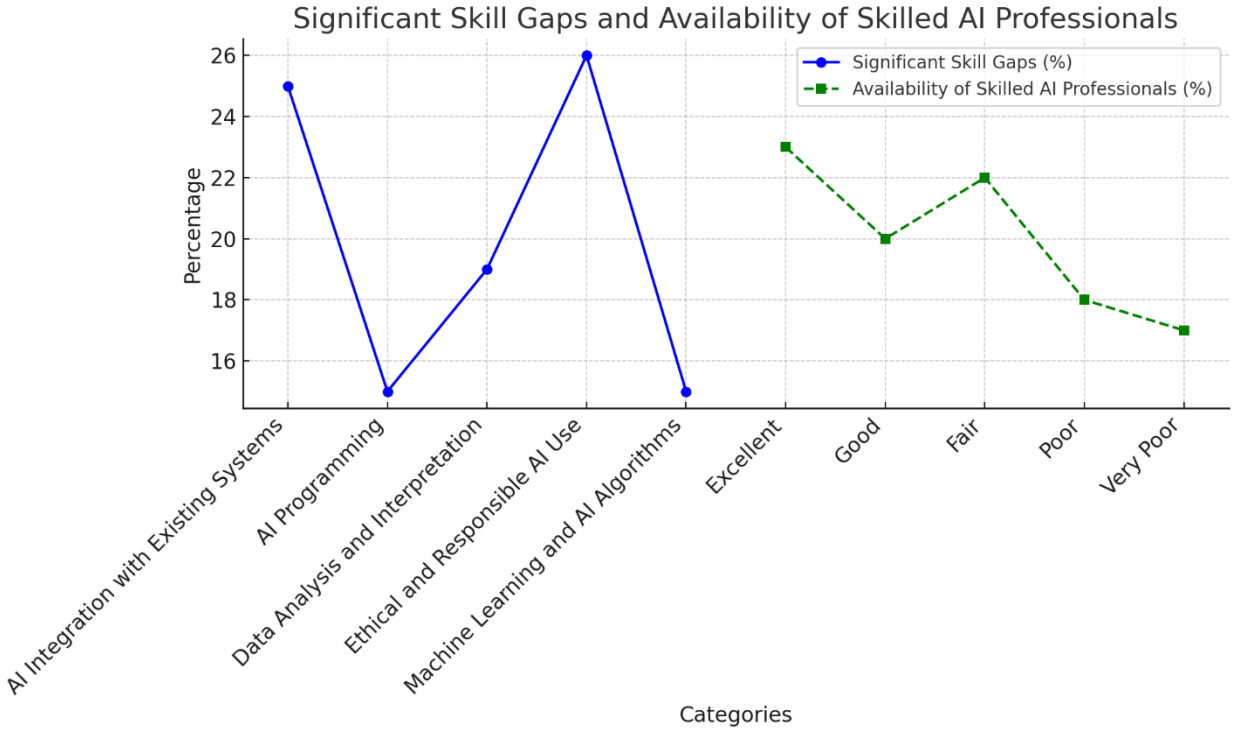


**Figure 4: Comparative Analysis of Significant Skill Gaps and Availability of Skilled AI Professionals**

**Preferred Training Methods**

Participants gave marked preferences for individual AI training techniques as depicted in figure 5 below. The two most preferred training approaches were "On-the-job Training" and "Blended Learning" both of which were preferred by approximately 20% of the participants. Other sources were chosen by 19% as "Self-paced Learning Modules" followed by "Online Courses" chosen by 18% of the participants. The 'In-person Workshops' were

also selected by 17% of the respondents, further underlining the population's desire for diverse and easily implemented learning opportunities that can be adjusted in accordance with the students' peculiarities.

**Table 5: AI Training Needs**

| Category | AI Training Needs (%) |
|---|---|
| Ethical AI Use and Governance | 26.0 |
| AI Strategy and Leadership | 25.0 |
| Advanced AI Skills | 20.0 |
| Intermediate AI Skills | 16.0 |
| Basic AI Awareness and Literacy | 13.0 |


**Figure 5: Preferred Training Methods for AI Skill Development**

**Table 6: Preferred Training Method**

| Category | Preferred Training Method (%) |
|---|---|
| Blended Learning | 23.0 |
| In-person Workshops | 22.0 |
| Online Courses | 21.0 |
| On-the-job Training | 20.0 |
| Self-paced Learning Modules | 14.0 |


**Figure 6: Preferred Training Methods for AI Skill Development**

**Table 7: Primary Challenges in Addressing Gaps**

| Category | Primary Challenges in Addressing Gaps (%) |
|---|---|
| Inadequate Educational Infrastructure | 27.0 |
| High Cost of Training | 25.0 |
| Insufficient Training Programs | 24.0 |
| Lack of Qualified Trainers | 15.0 |
| Resistance to Change | 9.0 |

Barriers to Effective Training, Confidence in Addressing Skill Gaps, and Role of Government

The research questions utilized in the survey are shown in Figure 7, which incorporates the barriers to the effecting of AI training, the confidence levels towards handling AI-related skills deficiency and the perceived roles of government regarding the development of the AI workforce. The significant perceived constraints were "Time constraint" (29%), "Constraints in cost" (26%), and "Inadequate access to quality training" (24%). These barriers underline reasons and real-life factors in obtaining required AI skills by organizations or persons.

Focusing on confidence in countering these gaps, 25% expressed 'Somewhat Confident.' In comparison, 23% expressed 'Very Confident,' On the other side, 12% expressed 'Somewhat Unconfident,' and 19% expressed 'Very Unconfident,' meaning that a part of the working force is doubtful of its capacity to master AI skills in the far future.

Lastly, the roles the survey respondents produced as the government's role in fostering AI workforce development were identified. The most critical responsibilities regarded as "Development of AI Curriculum" with 23% of the votes, while the second one was less but still essential, "Regulatory Support for AI

Integration" with 22% of the votes and the third, still quite significant, was "Funding for AI Education and Training" with 20% of the votes only. Such conclusions imply that public policies are needed to manage the AI talent supply and prepare the population for the conditions of the economy based on artificial intelligence.

**Table 8: Barriers to Effective Training, Confidence in Addressing Skill Gaps, and Role of Government**

| Category | Barriers to Effective Training (%) | Confidence in Addressing Skill Gaps (%) | Role of Government (%) |
|---|---|---|---|
| Lack of Time | 29.0 | | |
| High Cost | 26.0 | | |
| Lack of Access to Quality Training | 24.0 | | |
| Resistance to New Technologies | 21.0 | | |
| Very Confident | | 23.0 | |
| Somewhat Confident | | 25.0 | |
| Neutral | | 21.0 | |
| Somewhat Unconfident | | 12.0 | |
| Very Unconfident | | 19.0 | |
| Development of AI Curriculum | | | 23.0 |
| Funding for AI Education and Training | | | 20.0 |
| Regulatory Support for AI Integration | | | 22.0 |
| Public Awareness Campaigns | | | 18.0 |
| Partnerships with Private Sector | | | 17.0 |

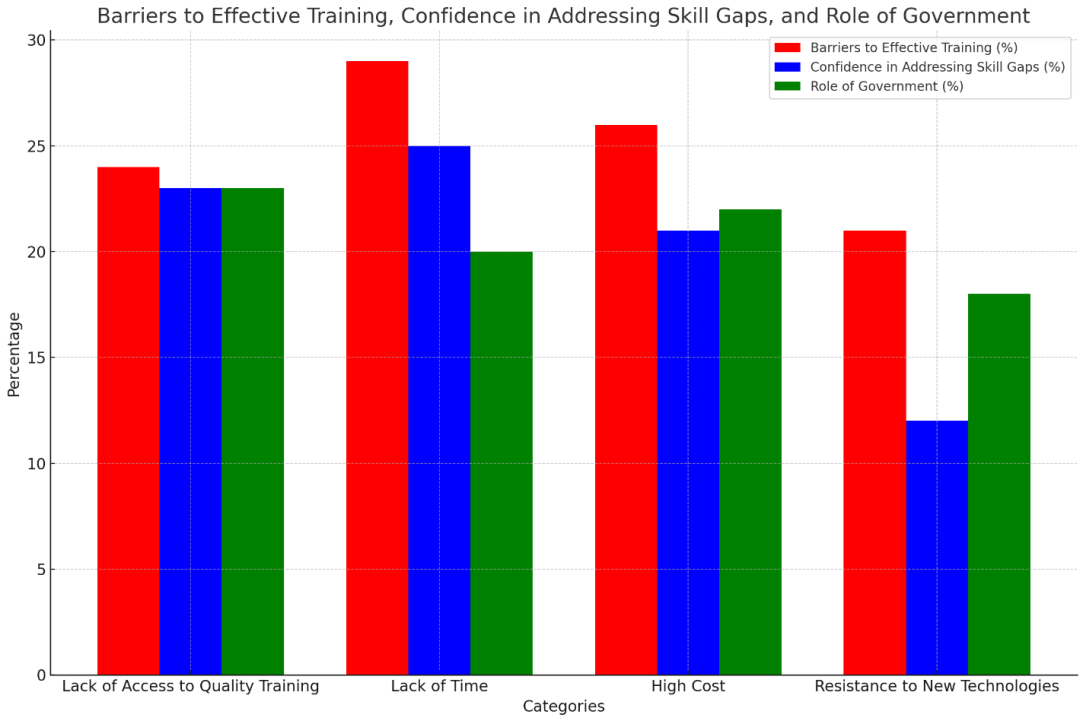


**Figure 7: Comparative Analysis of Barriers to Effective Training, Confidence in Addressing Skill Gaps, and Role of Government**

## DISCUSSION

The outcomes from this study would help to present a picture of the current state of emerging economy countries regarding identified AI-related skills and training requirements, as well as how government can shape the workforce development process. The findings point to several critical issues and potentials that are consonant with and at odds with existing work on AI and workforce change.

AI Familiarity and Adoption

The results of this survey show that the level of AI awareness in emerging economies still needs to be higher, with a majority of forty-seven. Three percent of the respondents described themselves as 'Very Unfamiliar' or 'Somewhat Unfamiliar' with AI technologies. This idea is supported by other recent works that state that despite the potential, many emerging economies need help with digital preparedness and AI literacy (World Economic Forum, 2024). This might be because of poor access to and attachment to higher learning institutions and technological resource obtainment in developing nations, as noted by UNCTAD (2024). This gives further credence to the fact that there is a need for specific educational programs to help fill in the knowledge gap.

These percentages of the AI adoption rate in the organizations and the 24% of the respondents who selected 'Unsure' for their organization's AI status imply that there could be communication issues and poor strategic direction in integrating AI. This assertion relates well to the findings of McKinsey & Company (2024), which state that many organizations in emerging economies have yet to devise coherent strategies for AI implementation and have a poor perception of the social consequences of AI. These gaps will need to be filled with technology and leadership that can steer programs involving artificial intelligence within organizations.

Significant Skill Gaps and Availability of Skilled AI Professionals

The areas marked as necessary but where the workforce is insufficiently developed are: "Ethical and Responsible AI Use" and "AI Integration with Existing Systems." The results of this work are like recent data from the World Economic Forum (2024) on the emergence of

new ethical concerns in AI and the tight connection of AI to existing structures. These difficulties are made worse by the scarcity of skilled AI talents, as pointed out by the survey in the article. Investigations have repeatedly recommended a shortage of appropriate AI human capital as one of the leading impediments to the realization and implementation of AI in emergent jurisdictions (OECD, 2023; Sayem et al., 2024).

The above results of the study also justify the argument that current education in Artificial Intelligence should be holistic, touching on technical aspects of the application as well as ethical issues pertaining to the same. The skill gaps that have been noted are notable, implying that the current training arrangements may need to be more effective in imparting the convoluted and trans-disciplinary calling of AI as specified by the European Commission (2023). Thus, there is an apparent demand for curricula combining technical, ethical, and strategic elements of AI to equip the workforce to face the complex issues that AI technologies present.

Preferred Training Methods

Survey results that show respondents' interest in 'On-the-job Training' and 'Blended Learning' resonate with the current academic literature on training where flexibility and applicability of learning are stressed out (Deloitte, 2023; Shabbir et al., 2024). Such training methods facilitate the ability of the workers to use the acquired AI skills in their workplace, which is essential in enhancing knowledge retention. Consequently, the interest in "Self-paced Learning Modules" and "Online Courses" as types of training is also connected to the availability of training that can be accessed during flexible time and with different learning paces due to the peculiarities of the emerging economies and their learners.

Nonetheless, the focus on utilitarian and highly portable training models also indicates that these strategies impose specific difficulties in applying the approaches, particularly in terms of technological support in certain regions. According to the International Labor Organization (2024), most EOAs face the challenge of digital braid, hence limiting their effectiveness in offering online learning materials and platforms. That is why they presume that while the demand for such training methods is quite evident, more significant investments in the digital environment are needed to implement them successfully.

Barriers to Effective Training, Confidence in Addressing Skill Gaps, and Role of Government

The deemed challenges which have been enumerated, such as "Lack of Time," "High Cost", and "Lack of Humane Resource Quality training", have been found to be in parallel with other emerging studies. These barriers address the realities of workers and organizations and the real-world challenge of providing for the costs of training for skills (UNESCO, 2024). To deliver inexpensive and quality training, these barriers will need synergy among several stakeholders, such as governments, schools, universities, and industries (World Bank, 2024).

An optimistic tone is discernible in moderate levels of confidence as it relates to managing AI-related skill deficits, although a considerable proportion of the respondents who clustered themselves as 'Somewhat unconfident' or 'Very unconfident' signals latent apprehensions about the sufficiency of training and education being provided in this regard. This is consistent with the McKinsey & Company data in 2024, which shows that workers, as well as employers, remain equivocal regarding their preparedness toward the more continuous technological shifts occasioned by AI.

Last, the 'Perceived role of government' in 'Development of AI Curriculum' and 'Regulatory Support for AI Integration' addresses the aspect of a policy that may go a long way in the systematic development of AI capabilities. This is consistent with the European Commission (2023), which has emphasized the need for governments to participate in formulating the policies and curriculum that will be used to educate people to fit in the emerging world of the AI economy.

**Future Directions**

Future research in this context should be

directed along the following lines to extend the findings of this research. The data obtained in longitudinal research, which follows the experience of AI application and employees' training evolution, would be crucial for evaluating the effectiveness of the present day's preparation programs and legislative initiatives. Moreover, searching for specific AI training programs also means approaching the specifics of industries: healthcare, finance, etc. As increased work is handed over to systems and software known as AI, the subsequent effects on employment must also be further researched to determine how displaced workers ought to be trained. In addition, the analysis of comparative success rates of government activities for different regions will shed light on how to support AI talent cultivation. Finally, there are vital questions on the ethical consequences of AI that still need to be examined in relation to the integration aspect of the workforce. In the following sections, future research may help elaborate on strategies to equip the global workforce for the future nature of jobs enabled by AI.

**CONCLUSION**

This work has shed much light on the profound implications associated with AI in promoting skill development in new economy workforces. The study establishes that the strategies required to close the existing skill gaps are inadequate; it underscores the need for phased approaches to managing the current and future state of work in the age of AI.

The findings imply that a vast workforce needs more exposure to AI technologies, which may slow technological uptake and subsequent economic growth in these areas. While there is a push towards AI internationally, many corporations in emerging markets need to be more concerned regarding AI, and many professionals need to know whether their organization has an AI plan. It is significant as it highlights a need for more necessary communication and strategic direction inside organizations, which must be solved to create a maximum impact of AI.

The fact that the study establishes the existence of more severe skill deficiencies in critical areas of ethical application of AI and the incorporation of AI into pre-existent systems underlines the necessity of detailed and context-based continuing education and training. These gaps, coupled with the limited availability of skilled AI professionals, highlight a pressing challenge: With particular and sizable mentoring activities designed at the level of individual learners, developing countries may still need to catch up to the rest of the world regarding AI development.

Furthermore, the study focuses on the feasibility of training methods, on-job training, and hybrid learning. These methods are in synergy with the workforce's choice, which supports the idea that traditional educational paradigms might require reconsideration regarding the current and future exigencies of the AI environment. Despite this, barriers to training still exist in the form of time, cost, and availability of quality training material. Alleviating these challenges, therefore, will, however, call for collective endeavors; hence, there is a need for governments, institutions, and industry to collaborate.

The interference is, most importantly, governmental. The study, therefore, emphasizes the importance of government-launched policies that encourage intervention towards the design and implementation of suitable AI curricula, the development of clear policies and guidelines that will govern the integration of AI into various industries, and the coordination between the public and private sectors. By taking a leadership role in AI education and creating the AI workforce, governments of emerging economies will be able to guarantee that their population is not only thinking about the AI revolution but is ready to harness its benefits.

For all the challenges identified, there are also equal measures of risks and, therefore, opportunities. New economy countries are, therefore, at the crossroads where action can

turn perceived weaknesses into strengths. These economies can, therefore, rid themselves of the above-identified skills deficiencies, adopt flexible training models for the workforce, and entrench the right government policies to foster the development of an AI-ready workforce that can drive innovations in the AI future. Hard choices must be made today for tomorrow's work in these emerging economies, and suitable investments can ensure that the regions are still in the new age of Artificial Intelligence economy.

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