# Generative AI and Workforce Resilience: Enhancing Enterprise Productivity and Sustainable Economic Development in Emerging Markets

Nancy Abdullah Shamaileh, Suleiman Ibrahim Mohammad, Feda A. Khrisat, Asokan Vasudevan

**Abstract:** *This paper analyses the impact of generative Artificial Intelligence on improving workforce and enterprise resiliency and sustainable economy in emerging markets. The study is about the way AI-powered technologies reshape the operations of the organization in terms of automation, better decision-making, and the use of real-time data. Secondary research approach is applied, based on the information about theoretical literature, industry sources and international statistics to find out the major trends and patterns. The discoveries indicate that the generative AI is superior in its ability to enhance the productivity level through the optimization of processes and the minimization of manual labor, especially in conditions with resource constraints. Nevertheless, the research also brings up very important obstacles, such as inadequacies in skills of the workforce, a shortage of digital infrastructure, and disproportionate access to AI technologies. Workforce resilience has become one of the important aspects since employees need to become flexible, digitally literate, and able to engage in constant learning to work with AI systems. Moreover, the collaboration of human AI improves the efficiency of operations and facilitates innovations, which will contribute to economic growth in the long term. Regardless of these advantages, job displacement and technological inequality issues are still salient. The paper concludes that the effective implementation of generative AI involves effective investment in the development of the workforce, non-discriminatory policies, and ethical governance frameworks. In general, the study highlights the importance of a balance between technological development and the potential of humans in the development of sustainable productivity and economic stability in emerging market economies.*

**Keywords:** Generative Artificial Intelligence, Workforce Resilience, Enterprise Productivity, Emerging Markets, Digital Transformation, Human-AI Collaboration, Skill Development, Sustainable Economic Development, Innovation, Automation.

Received on: 6th September, 2025

**Nancy Abdullah Shamaileh** (nancy@aabu.edu.jo) Department of Business Administration, School of Business, Al al-Bayt University, P.O. Box 130040, Mafraq, 25113, Jordan
**Suleiman Ibrahim Mohammad** (dr_sliman@yahoo.com) Electronic Marketing and Social Media, Economic and Administrative Sciences Zarqa University, Jordan. Research follower, INTI International University, 71800 Negeri Sembilan, Malaysia.
**Feda A. Khrisat** (Fedakhrisat@bau.edu.jo), Business Administration Department, Amman University College for Financial and Administrative Sciences, Al-Balqa Applied University, Jordan
**Asokan Vasudevan** (asokan.vasudevan@newinti.edu.my), Faculty of Business and Communications, INTI International University, 71800 Negeri Sembilan, Malaysia.

## Introduction

Generative Artificial Intelligence has quickly become a disruptive technology in the world of global industries and how organizations work, innovate, and compete. In emerging markets, where economic systems tend to be volatile, the lack of infrastructure and the lack of skills in the workforce, the application of generative AI induces both high opportunities and complicated issues. Advanced language models, automation tools and data-driven decision systems are all technologies that are allowing enterprises to optimize operations, minimize costs and increase productivity on a large scale. Meanwhile, the resilience of the workforce has become the primary priority, because the employees will have to constantly adjust to the changing technological requirements and shifting labor market conditions. Resilience is no longer seen as job security but rather as flexibility, being digitally literate, and being able to work with smart systems. Generative AI, in this case, can serve as a driving force towards sustainable economic growth as it enhances efficiency and allows innovations to increase, as well as inclusive expansion in resource-limited settings. It can be successfully implemented though, it requires strategic investment in skills development, ethical governance and supportive policy frameworks. The paper examines the convergence of generative AI and workforce resilience, focusing on the need to use technological opportunities to enhance productivity in enterprises in emerging markets, as well as to provide a sustainable economic environment and labor flexibility over the long term.

## Problem statement

The emerging markets are confronted with incessant problems of attaining a steady output of enterprises because of the lack of technological infrastructure, skill bottlenecks of the work force, and economic instability. The blistering development of generative AI technologies has brought new possibilities to the enhancements of operational efficiency, but also contributed to the rise of concerns about people losing their jobs, becoming less skilled, and having unequal access to digital resources. Lack of technical knowledge and proper training systems make many organizations unable to integrate AI-driven systems with each other. Meanwhile, employees frequently do not have adaptive capabilities to work with intelligent technologies and make the overall resilience of the workforce. This poses a critical disparity between technological development and human ability, and this directly affects sustainable economic development. Enterprises are likely to become less productive and more unequal without organized plans of integration and upskilling of the workforce in the context of AI. Thus, to achieve inclusive growth, long-term productivity, and sustainable development in the economies of emerging markets, there is an urgent necessity to study the ways of aligning the generative AI with workforce resilience strategies.

## Literature Review

The increasing use of generative Artificial Intelligence has played a key role in determining the productivity of the enterprise and workforce, especially in the developing markets. According to the literature available, AI-related tools increase the efficiency of operational processes, as they are able to automate repetitive tasks, enhance the accuracy of decisions, and analyze data in real-time. According to studies, the productivity of enterprises using generative AI has increased by 20 percent to 35 percent in the fields of finance, retail, and customer service, in particular. Nevertheless, studies also highlight that all these advantages are not equally distributed because digital infrastructure is disproportionately uneven, and access to modern technologies differs among the economies in the developing countries (George *et al.,* 2024).

The academic evidence also indicates that workforce resilience is an important factor that can be used to optimize the advantages of AI integration. Adaptability, lifelong learning, and digital competency are increasingly becoming the elements of resilience (Sikder, 2023). It has been proven that almost 40 percent of the employees in the emerging markets need reskilling to work well with the AI systems. Devoid of specific training programs, the organizations are affected by low levels of employee engagement and technological change resistance. Moreover, the literature notes that up to 25 percent of task efficiency can be enhanced by the human-AI collaboration models, provided that the employees are trained properly.

The connection between generative AI and a sustainable economic practice is also discussed in the literature. The implementation of AI has been linked to greater capacity of innovations and better use of resources, which lead to the economic growth in the long run. Nevertheless, the issues of job displacement and ethical governance as well as income inequality continue to be salient. Research has pointed out that policy encouragement and organizational policies are critical in order to balance social inclusion and technological advancement. In general, the literature adds to the significance of the integrated

solutions that will incorporate the AI adoption with the workforce development strategies in the context of the emerging market to ensure sustainable productivity and economic resilience (Shin and Bang, 2025).

**Research Method**

The proposed research will use a secondary method of research to explore how generative AI will influence the resilience of the workforce and the productivity of enterprises in new markets (Tang *et al.,* 2024). In order to make it credible and thorough, data will be gathered using valid academic journals, industry reports, government publications and international databases. The method allows examining the existing empirical evidence, statistical patterns, and real-life case evidence without being restricted by primary data gathering. The thematic analysis approach will be used to examine major patterns regarding the adoption of AI and the ability of the workforce to cope with it and sustain the economy. This will be cost effective, will cover more data and will provide good analytical information in accordance to the research objectives.

**Results**

*Impact of Generative AI on Enterprise Productivity Growth in Emerging Markets*

Innovative AI has been found to boost productivity in enterprise in the new markets in terms of automation, decision-making, and operational efficiency (Mannuru *et al.,* 2025). Empirical studies reveal that AI-based tools have the potential to make employees more productive (by about 15 percent) in service-oriented jobs, especially customer support and other knowledge-intensive activities.

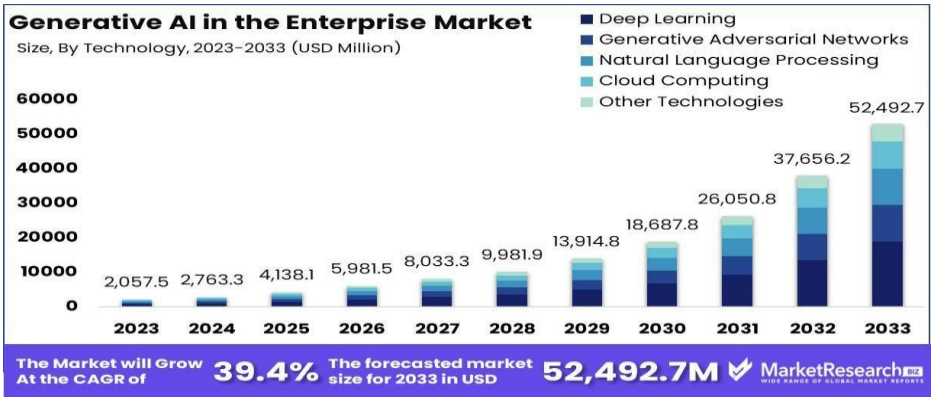


**Figure 1:** Generative AI in the Enterprise Market size

(Source: Vishwa, 2024)

The massive economic estimations also suggest that generative AI might add between 0.1 and 0.6 annual growth in labor productivity, and more expansive automation technologies can increase the influence to 3.4 percentage points each year. Such gains are even higher in the emerging economies, where resources are the main constraint to efficiency. Research also indicates that implementation of AI enhances sales by as much as 16.3 in online trade settings, which has a direct effect on the production of an enterprise. Furthermore, three-quarters of executives (72 percent) admit that generative AI is among the productivity change agents in organizations (Mannuru *et al.,* 2025). This information proves that generative AI is a productivity multiplier because it streamlines workflows, minimizes human effort, and provides scalable operations. The delivery of these advantages, however, is subject to successful implementation measures and work force preparedness within the emerging market-based enterprises.

*Workforce Skill Transformation and Digital Adaptability Trends*

The introduction of generative AI has greatly boosted the process of reskilling the workforce more so in emerging markets where digital skill gaps are eminent. Studies show that almost 40 percent of the employees need reskilling in order to fit the working environment with AI made it clear that workforce development initiatives are urgent (Vishwa, 2024).

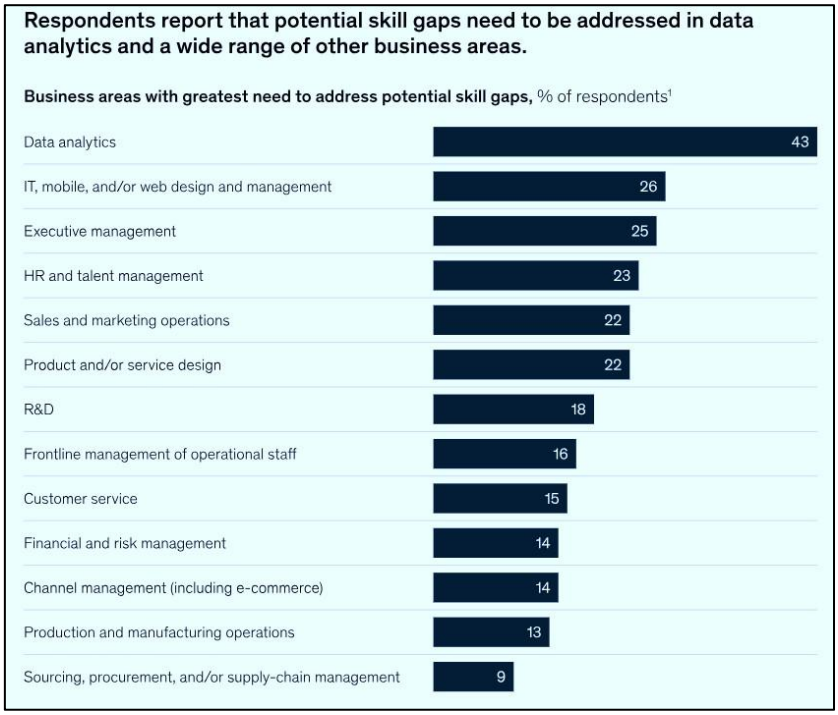


**Figure 2:** Companies are reskilling to address talent gaps

(Source: McKinsey, 2020)

Moreover, it is also shown in the global workforce surveys that workers who use generative AI on a daily basis are 92 percent more productive than 58 percent of non-users are (Baynit, 2025). In spite of these advantages, the number of employees who use AI tools every day is only 14 percent, which means the existence of a significant adoption gap. There are also organizational differences where 72 percent of the executives report having access to learning resources, but only 51 percent of non-managerial workers do the same.

**Table 1:** Workforce Reskilling and Digital Adaptability in the Era of Generative AI

| Aspect | Key Evidence | Implication | Outcome |
|---|---|---|---|
| **Workforce Reskilling Need** | ~40% employees require reskilling | Urgent need for training programs | Improved workforce readiness |
| **Productivity Gap** | AI users: 92% productivity vs 58% non-users | Strong impact of AI adoption | Higher efficiency and output |
| **AI Adoption Rate** | Only 14% employees use AI daily | Significant adoption gap | Underutilization of AI potential |
| **Access to Learning Resources** | 72% executives vs 51% non-managers | Inequality in training access | Limited workforce adaptability |
| **Skill Transformation** | Rise in cognitive skills (critical thinking, problem-solving) | Shift beyond technical skills | Enhanced decision-making ability |
| **Continuous Learning** | Increasing importance of lifelong learning | Need for upskilling systems | Greater workforce resilience |
| **Organizational Impact** | Lack of structured upskilling | Risk of resistance to AI | Reduced productivity gains |

This disproportion inhibits general flexibility and constrains the resiliency of the workforce. There is also an emerging evidence that AI use is not only changing technical skills but it is also raising the level of cognitive skills like critical thinking and problem-solving (George *et al.,* 2024). This is why continuous learning and digital fluent become more and more

characterized as the workforce adaptability. Devoid of systematic upskilling measures, the businesses cannot be sure to harness the power of AI and experience technological change rejection.

*Human AI Collaboration and Operational Efficiency Outcomes*

The definition of human-AI collaboration is now a crucial process of optimizing the efficiency of operations within the organizations that are following the adoption of generative AI technologies. Empirical research proves that AI-assisted workflows can boost task efficiency by about 15 percent and enhance the quality of services and minimize error rates (Shahzad *et al*., 2025).

**Table 2:** Human–AI Collaboration and Operational Efficiency

| Aspect | Key Data | Outcome |
|---|---|---|
| **Task efficiency** | +15% increase | Higher productivity |
| **Error reduction** | Fewer errors | Better quality |
| **Work time shift** | −3.8% time | More value work |
| **Real-time support** | AI assistance | Faster tasks |
| **Decision speed** | Quicker decisions | Operational agility |
| **Skill gap** | AI support | Improved efficiency |
| **User factors** | Trust, training | Effective adoption |
| **Workflow integration** | Daily use | Flexible operations |

Moreover, AI systems help employees to perform more complicated and infrequent tasks more efficiently as they offer support in real-time and increase knowledge reserves (Vishwa, 2024). It is also proved that generative AI shifts the work time in favor of the part of lessening the time of accomplishing the tasks, which will lower by approximately 3.8 percent in comparison with the employees, who can devote their efforts to the sphere of higher value.

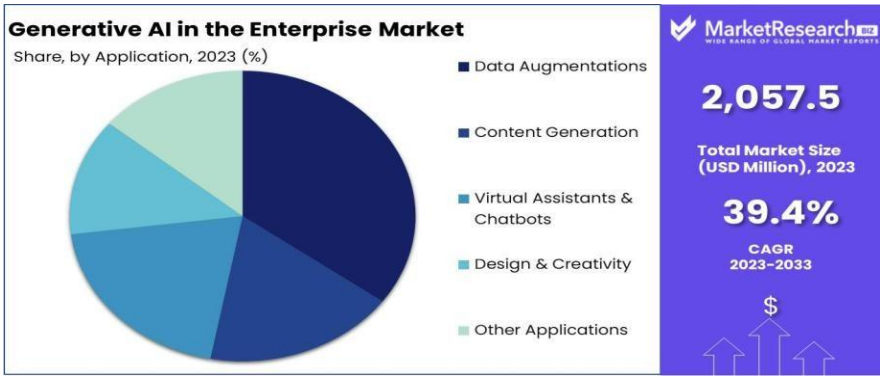


**Figure 3:** Generative AI in the enterprise market

(Source: Vishwa, 2024)

Moreover, two-thirds of practitioners are convinced that AI will radically change the manner in which work is done, which supports the significance of integrating human and AI models to work together (e.g., collaboratively). This joint venture is especially useful in overcoming the lack of skills and enhancing the efficiency of the services provided in emerging markets. Nevertheless, human-AI interaction is mostly framed by the effectiveness of user trust, training, and system reliability (Vishwa,

2024). The companies that manage to incorporate AI into their everyday routine report an increased speed of decision-making, improved productivity, and an augmented flexibility of the operations.

*Challenges of AI Adoption Including Infrastructure and Skill Gaps*

Regardless of its potential transformative impact, the introduction of generative AI in the rising markets can encounter multiple life-threatening problems associated with infrastructure, skills, and organizational preparedness. Among these obstacles, workforce preparedness is one of the biggest barriers since 74 percent of CEOs note the absence of AI skills as a crucial implementation barrier. Also, the digital inequity hinders the availability of high-level AI technologies, especially among small and medium enterprises (Vindigni, 2025). It has been found that although 31 percent of SMEs have already implemented generative AI, most of them continue to face the issue of labor shortages and skill gaps that prevent the successful use thereof.

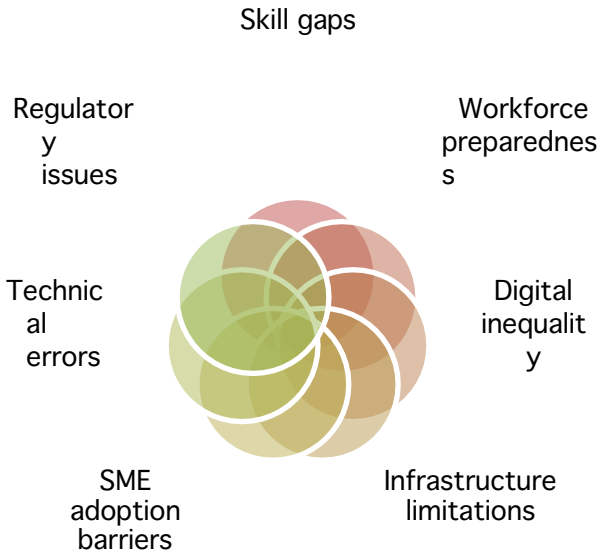


**Figure 4:** Challenges in Generative AI Adoption in Emerging Markets

(Source: Self-created)

There are technical issues like wrong outputs, which are reported by 64.2 percent of users and regulatory issues which are reported by 58.2 percent which complicate adoption further. In addition, job security remains a major concern, and 47 percent of professionals are worried about the adverse effects of AI integration on their employment because of it. These are some of the challenges that reveal an important divide between the presence of technology and its practical application. The entire potential of generative AI cannot be harnessed in the context of an emerging market without specific investments in infrastructure, training, and governance (Shahzad *et al.,* 2025).

*Contribution of Generative AI to Sustainable Economic Development*

Generative AI is a major factor in sustainable economic development through innovation, better utilization of its resources, and inclusive growth in new markets. According to economic researchers, generative AI may add between 2.6 trillion and 4.4 trillion dollars to the worldwide economy every year, which means it has a significant macroeconomic effect.

The use of AI can boost the industrial development and competitiveness of emerging economies where productivity differences are significant. There are also indications that 62 percent of organizations perceive generative AI as an innovation source that allows the organization to create new products and services. Moreover, AI contributes to the work of SMEs, which employ more than 60 percent of people, and helps them overcome workforce shortages and enhance their performance as well as operations (Newsroom, 2025). The results of sustainable development, however, are based on the fair use of AI technologies and the inclusion of people in work processes.

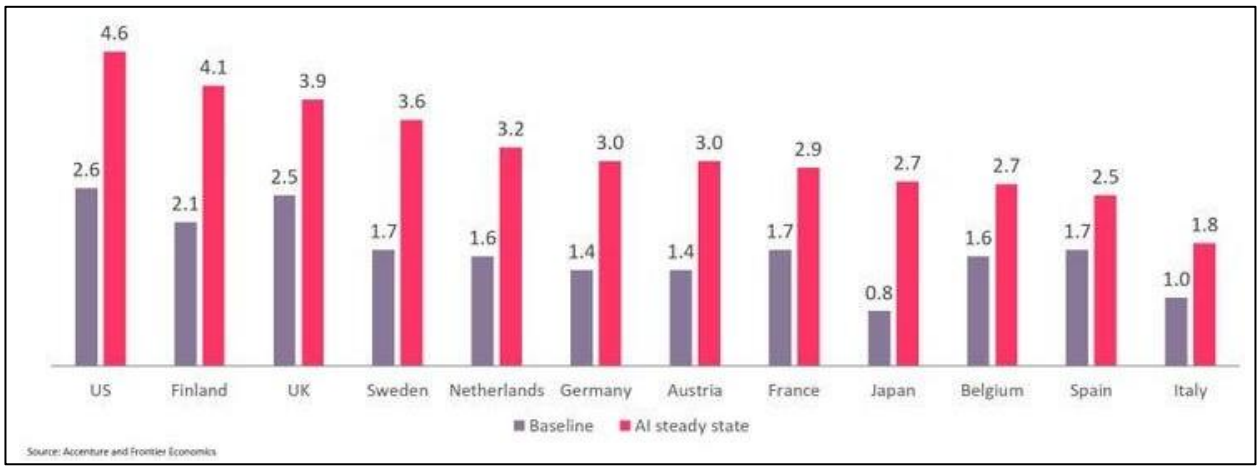


**Figure 5:** Impact of Artificial Intelligence on GVA Growth Rates by 2035
(Source: Newsroom, 2025)

**Table 3:** Generative AI and Sustainable Economic Development

| Aspect | Key Data | Outcome |
|---|---|---|
| **Economic impact** | $2.6–4.4T | Global growth |
| **Innovation role** | 62% firms | New products |
| **Industrial growth** | AI adoption | Higher competitiveness |
| **SME support** | 60% jobs | Better performance |
| **Resource use** | Efficient usage | Cost reduction |
| **Workforce inclusion** | Inclusive access | Balanced growth |
| **Digital divide** | Unequal access | Growth inequality |
| **Policy need** | Inclusive frameworks | Sustainable economy |

The advantages of AI can still be concentrated in the hands of bigger companies without the reduction of digital divides and skill difference. Thus, generative AI can only lead to sustainable development in conjunction with inclusive frameworks that can ensure workforce resilience, innovation, and economic sustainability over the long term.

**Discussion**

The results show that generative AI can transform the productivity of enterprises, and at the same time, it will disrupt the nature of workforce relations in new markets. The data show that the benefits of productivity are closely connected with the successful adoption of the AI technologies and the willingness of the labor force to embrace the shifts. Even though businesses are more efficient, automated, and can make decisions faster, the absence of sufficient digital capabilities and infrastructure leaves a wide gap in pursuing the best results. Resilience of the workforce becomes a vital aspect as the more adaptable and able to learn continuously employees are, the higher their chances are to work with AI systems and to make their contribution to the performance of organizations. Moreover, the cooperation of humans and AI results in an increase of efficiency in the working sphere, though the success of collaboration depends on training, confidence, and the availability of instruments (Vindigni, 2025). It is also discovered in the discussion that issues like skills shortage and inequality in technology and job displacement issues can inhibit the overall effects of AI implementation. Generative AI has a positive role in the development of the economy in terms of sustainability, as it leads to innovation and better utilization of resources, but there is a need to adopt an inclusive approach to create equitable growth. In general, generative AI applications should be accompanied

by robust policy frameworks, workforce development policies, and organizational strategies to rebalance the productivity benefits with economic sustainability in the long term (George *et al.,* 2024).

**Conclusion**

The generative AI can greatly contribute to the productivity and operational efficiency of the enterprise in the new market. The article demonstrates that to maximize the benefits of AI and ensure growth, workforce resiliency is a requirement. Although the adoption of AI is promoting innovation, automation, and economic growth, issues like skill gaps, infrastructure constraints, and inequality still exist. Good integration will demand sustained workforce up-skilling, excellent organizational strategies, and favorable policy frameworks. Furthermore, the challenge of human AI collaboration is critical to the enhancement of the performance results. Thus, inclusive working populations and technological progress have to be balanced in order to attain sustainable economic growth and long-term enterprise resilience in the new market economies.

**Acknowledgement:** The authors would like to acknowledge the financial support provided by Zarqa University for this research.

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