

Reskilling and Upskilling: Survival Strategies Amid Global Competency Shifts

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ABSTRACT

This study explores the role of reskilling and upskilling as survival strategies in navigating accelerated global competency shifts driven by technological innovation, globalization, and industrial transformation. Using a qualitative, descriptive-analytical literature review, the research synthesizes findings from reputable academic sources, policy documents, and institutional reports to map the driving forces, challenges, and strategic approaches to workforce adaptability. Results indicate that reskilling acquiring entirely new skill sets and upskilling enhancing existing competencies are complementary approaches essential for bridging skills gaps, enhancing workforce readiness, and sustaining organizational competitiveness. The study identifies significant research gaps, particularly the scarcity of empirical studies in developing economies and the limited integration of socio-economic factors into skill development frameworks. This research offers a novel, context-sensitive model that incorporates technological, economic, and socio-cultural dimensions, providing theoretical contributions and practical implications for policymakers, organizations, and educational institutions in fostering future-ready workforces.

Keywords: *Human Resource Development, Productivity, Workforce Readiness, Reskilling, Upskilling*

INTRODUCTION

In the era of accelerated technological transformation, global labor markets are undergoing profound structural shifts that are redefining the nature of work, the composition of skills in demand, and the strategic priorities of both organizations and policymakers. The Fourth Industrial Revolution characterized by the convergence of Artificial Intelligence (AI), Big Data analytics, blockchain technology, the Internet of Things (IoT), and renewable energy systems has not only automated routine tasks but has also generated entirely new categories of employment (Mula & Ristiani, 2025). This transformation is further intensified by globalization, the rise of the gig economy, demographic transitions, and the growing imperative for sustainable business practices in response to climate change. Collectively, these forces have rendered static skill sets obsolete, compelling both individuals and institutions to adopt adaptive strategies for maintaining relevance and competitiveness in the face of rapid change (Damanik et al., 2025).

At the center of these adaptive strategies are the twin concepts of **reskilling** and **upskilling**, which have emerged as critical components of workforce development in the



21st century. Reskilling involves the acquisition of entirely new skill sets that enable individuals to transition into different occupational roles or sectors, particularly in response to labor market disruptions driven by automation and technological innovation (ILO, 2020). In contrast, upskilling focuses on enhancing and deepening existing competencies to align with evolving technological tools, industry standards, and job requirements (WEF, 2023). While they differ in scope and purpose, reskilling and upskilling are inherently complementary: the former facilitates occupational mobility across sectors, while the latter strengthens an individual's capacity to excel in their current role and adapt to incremental changes.

The urgency of implementing robust reskilling and upskilling frameworks cannot be overstated. According to the World Economic Forum (2023), over 50% of the global workforce will require reskilling by 2025 to remain competitive, and the demand for advanced cognitive, digital, and socio-emotional skills is expected to grow significantly across all industries. Similarly, McKinsey & Company (2022) reports that 87% of companies worldwide are already experiencing a skills gap, which is constraining productivity, slowing innovation, and threatening long-term competitiveness. While the need for skill transformation is universal, its urgency is particularly acute in developing economies, where structural limitations including insufficient training budgets, outdated curricula, digital infrastructure deficits, and geographic disparities in access to education exacerbate existing labor market inequalities.

Moreover, the implementation of reskilling and upskilling initiatives in developing countries faces multidimensional challenges. Financial constraints often limit the scope and reach of training programs, especially for small and medium-sized enterprises (SMEs) that lack dedicated human resource development budgets (rofiq et al., 2023). The misalignment between educational curricula and real-world industry needs further hampers the employability of graduates, while low awareness among workers regarding the importance of lifelong learning reduces voluntary participation in training opportunities (Asmara & Reflesia, 2023). Digital access barriers, including inadequate internet penetration and limited device availability in rural areas, further compound these challenges, creating a digital divide that risks leaving vulnerable populations behind in the evolving economy.

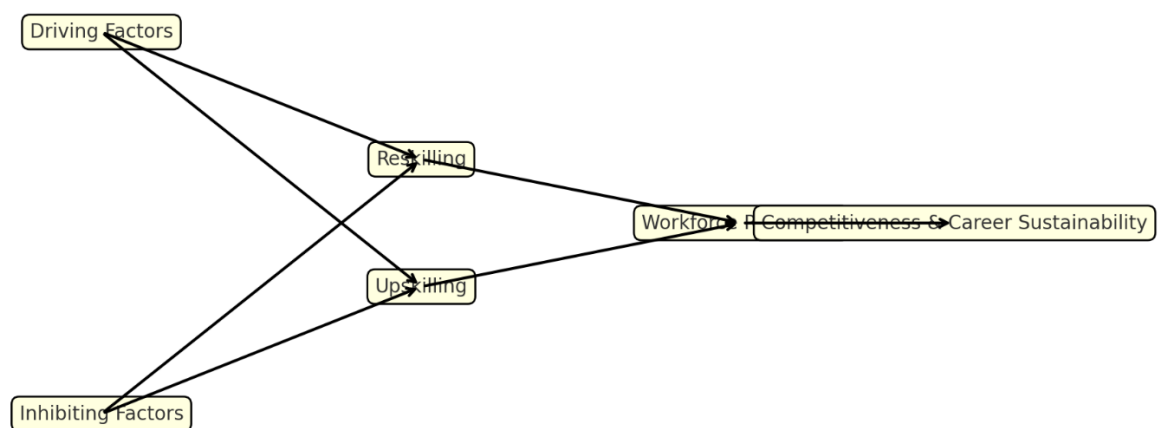
Addressing these challenges requires coordinated action among multiple stakeholders. Governments play a pivotal role in formulating policies that provide financial incentives, tax breaks, or subsidies for workforce training while establishing regulatory frameworks that promote skill mobility and labor market inclusion. Businesses must commit to internal talent development programs or form strategic partnerships with accredited training providers to ensure that workforce competencies remain aligned with evolving industry standards (Konorop, 2024). Educational institutions bear the responsibility of designing adaptive, forward-looking curricula that integrate both technical and transferable skills. At the individual level, workers must cultivate a mindset of lifelong learning, proactively seeking opportunities to upgrade and diversify their skill sets in response to changing market demands (Laili & Pradikto, 2025).

Despite the growing recognition of reskilling and upskilling as strategic imperatives, a critical review of the existing literature reveals that research in this domain remains limited in several important respects. First, most empirical studies are concentrated in advanced economies, with relatively few investigations conducted within the context of developing countries particularly in Southeast Asia where socio-economic, cultural, and infrastructural conditions significantly shape the success of training initiatives (Bairizki, 2020). Second, existing research often treats reskilling and upskilling as discrete processes, rather than integrating them into a unified strategic framework for

competency resilience that addresses both short-term adaptability and long-term career sustainability. Third, socio-economic variables such as income disparities, gender gaps, rural-urban divides, and access to digital infrastructure are frequently overlooked, despite their significant influence on training participation and outcomes. Fourth, longitudinal studies that examine the sustained impact of reskilling and upskilling on both individual career trajectories and organizational performance remain scarce, limiting the ability of policymakers and practitioners to develop evidence-based, scalable interventions (Musafah & Nurfuandi, 2025).

Against this backdrop, the present study seeks to bridge these gaps by adopting a holistic approach to workforce development that situates reskilling and upskilling within an integrated, context-sensitive model. The research is distinctive in its incorporation of technological, economic, and socio-cultural dimensions into the analysis of workforce adaptability, offering both theoretical advancements and practical insights for policy-making, organizational strategy, and human capital investment (Nurfaliza, et al., 2025). By examining these dynamics in the context of developing economies, the study contributes to the diversification of the global evidence base, enhancing the relevance and applicability of findings for diverse socio-economic settings. Ultimately, this research aims to provide actionable recommendations for building resilient, future-ready workforces capable of navigating the accelerated shifts in global competency demands while fostering inclusive economic growth and reducing inequality (Prasetyo et al., 2025).

Conceptual Framework: Reskilling and Upskilling in Global Competency Shifts



METHOD

This research uses a qualitative approach with a literature review method that is descriptive-analytical. This approach was chosen because the focus of the research lies in the exploration of the concept of reskilling and upskilling as a survival strategy in the midst of changing global competencies, by integrating findings from various current scientific sources. Data was collected through systematic searches of articles in reputable international and national journals, academic books, reports of international institutions, and policy documents related to workforce skill development. The inclusion criteria include publications that have been relevant in the last ten years, in particular those that

address the relationship between the changing global competency landscape and skills development strategies, while the exclusion criteria include publications that have no direct relevance to the topic or do not meet academic standards. Data analysis is carried out using thematic synthesis techniques, which are to identify patterns, trends, and research gaps based on the literature that has been studied. The results of this synthesis are then interpreted to build a conceptual framework that maps the driving factors, inhibitions, implementation strategies, and implications of reskilling and upskilling on competitiveness and career sustainability. This approach allows researchers to provide a comprehensive understanding while identifying space for further study development that can be the basis for future empirical research.

RESULTS AND DISCUSSIONS

A systematic synthesis of the selected literature reveals that global competency shifts constitute the primary driving force behind the transformation of workforce skills. The Fourth Industrial Revolution, characterized by rapid and disruptive advancements in Artificial Intelligence (AI), Big Data Analytics, Blockchain, the Internet of Things (IoT), robotics, and automation, has fundamentally reshaped the nature of work and the competencies required to perform it effectively (Fonna, 2019). These technological changes, coupled with the global transition toward a sustainable green economy, are not merely altering job descriptions but are redefining entire sectors, creating new occupations while rendering others obsolete. According to the World Economic Forum (2023), 44% of core worker skills will experience significant changes within the next five years, necessitating an unprecedented level of adaptability from both organizations and individual workers. This shift is further accelerated by globalization, demographic transitions, evolving consumer preferences, and the increasing prevalence of remote and hybrid work models, all of which intensify competition in global labor markets (Aulia et al., 2025).

In developing countries, these dynamics present a unique set of challenges that make the urgency of skill transformation even more pressing. Limited access to advanced technologies, uneven distribution of educational resources, disparities in digital literacy, and infrastructural deficiencies hinder the ability of workers to adapt quickly to changing labor market demands (UNESCO, 2022). Moreover, socio-cultural factors such as resistance to change, traditional work practices, and inadequate policy frameworks often slow the adoption of new skills and technologies. The result is a widening competency gap between developed and developing economies, with the latter at risk of economic marginalization if proactive measures are not implemented. This reality underscores the need for targeted reskilling and upskilling initiatives that are contextually adapted to address both structural constraints and cultural considerations, ensuring that all segments of the workforce can participate in and benefit from the evolving global economy (Dassucik & Farida, 2025).

Within this context, reskilling and upskilling emerge as central adaptive strategies to bridge the widening skills gap. Reskilling refers to acquiring entirely new skill sets that enable workers to transition into different fields, whereas upskilling focuses on enhancing existing skills to meet evolving industry demands. Studies, such as those by McKinsey Global Institute (2021), indicate that organizations strategically investing in reskilling report up to a 30% reduction in employee turnover and a 25% increase in productivity. The successful implementation of these strategies requires not only adaptive learning technologies and competency-based training but also cross-sector collaboration between governments, industries, and academic institutions. Importantly, this review highlights a novelty often overlooked in prior studies: while much of the

existing literature focuses on reskilling and upskilling in developed economies with robust infrastructure, there is a significant gap in understanding how these strategies can be effectively tailored for developing countries that face resource limitations, technological constraints, and cultural resistance to change (Nugraha et al., 2025).

The analysis further demonstrates that the effective execution of reskilling and upskilling strategies significantly enhances workforce readiness, a multidimensional construct that extends beyond the acquisition of technical expertise to encompass cognitive adaptability, problem-solving proficiency, cross-disciplinary collaboration, and emotional intelligence. Workforce readiness, in this sense, is not merely an individual attribute but a strategic organizational asset that directly contributes to innovation, operational agility, and market responsiveness. Evidence from the LinkedIn Workplace Learning Report (2023) reveals that employees who engage in targeted technology-based training are 2.5 times more likely to secure promotions compared to their counterparts who do not, underscoring the career advancement potential embedded within continuous skill development. Moreover, organizations that institutionalize a culture of lifelong learning supported by leadership commitment, resource allocation, and integrated performance evaluation systems demonstrate superior resilience during periods of economic volatility. This was particularly evident during the COVID-19 pandemic, when such organizations recovered more rapidly from disruptions in supply chains, workforce restructuring, and shifts in consumer demand.

Workforce readiness has been widely acknowledged as a critical determinant of labor market resilience, yet the breadth of scholarly inquiry into this domain remains restricted by the limited availability of longitudinal and cross-national comparative studies constraints that are particularly evident within developing economies and informal labor sectors. This paucity of empirical evidence hampers the ability to generalize best practices and to formulate policy frameworks that are both scalable and sensitive to diverse socio-economic contexts (Gunawan, 2024). Moreover, much of the existing literature adopts a predominantly macroeconomic lens, emphasizing national productivity indicators while overlooking micro-level dynamics such as individual career trajectories, organizational culture, and localized economic ecosystems. By integrating these often-overlooked dimensions, the present study advances a novel, holistic, and contextually adaptable model of workforce readiness that not only extends theoretical discourse but also offers actionable insights for policy-making, organizational strategy, and human capital development in the era of accelerated global competency shifts (Widiarsih & Reza, 2022).

At the organizational level, the integration of reskilling and upskilling initiatives into human capital management frameworks yields measurable benefits in both performance and sustainability. Empirical data from Deloitte (2022) indicate that firms maintaining consistent and well-structured training initiatives experience, on average, a 37% improvement in operational efficiency and greater stability in revenue growth, even in volatile market conditions. Such improvements are often mediated by enhanced employee engagement, reduced turnover rates, and the fostering of an innovation-oriented organizational culture. Importantly, the strategic alignment of skill development with organizational goals ensures that training investments yield a high return, not only in financial performance but also in brand reputation and employer attractiveness. Furthermore, cross-sectoral collaboration wherein private enterprises, public institutions, and academic entities co-design and co-deliver training programs has proven to be a critical success factor, particularly in contexts where resources are limited and the need for rapid workforce transformation is urgent.

From a macroeconomic perspective, nations that embed reskilling and upskilling into their national employment and education policies have demonstrated notable resilience and competitiveness in the global economy. Initiatives such as Singapore's SkillsFuture and the European Union's European Skills Agenda serve as exemplary models, showing how targeted policy frameworks can reduce structural unemployment, facilitate industry transitions, and foster lifelong learning ecosystems (Efitra & Pamela, 2025). However, the transposition of such models to developing countries must account for contextual variances, including disparities in infrastructure, governance capacity, and socio-cultural receptivity to change. This study's conceptual framework reflects this nuance, positioning global competency shifts as the principal driver that necessitates reskilling and upskilling interventions, which in turn enhance workforce readiness and strengthen organizational and national resilience (Novita & AP, 2025). The novelty of this approach lies in its simultaneous consideration of structural constraints, cultural dynamics, and resource limitations in emerging economies factors often underrepresented in the dominant discourse. By integrating these elements, the study not only fills a significant research gap but also offers a scalable, context-sensitive model that can guide both policy formulation and organizational strategy in the face of accelerating global competency shifts.

CONSLUSION

The findings of this study confirm that reskilling and upskilling are indispensable strategies for ensuring workforce adaptability in the face of rapid global competency shifts. By acquiring new skills and enhancing existing ones, individuals and organizations can bridge critical skills gaps, improve readiness, and strengthen both short- and long-term competitiveness. However, successful implementation depends on coordinated efforts among governments, businesses, and educational institutions, as well as the active participation of workers in lifelong learning. The study's novelty lies in its integrated, context-sensitive model that addresses technological, economic, and socio-cultural dimensions, particularly in developing countries. This model not only contributes to theoretical discourse but also offers practical pathways for policy design and organizational strategy, aimed at fostering inclusive, future-ready labor markets capable of sustaining economic growth and reducing inequality.

SUGGESTIONS

Future research should prioritize longitudinal and cross-national comparative studies to evaluate the long-term effectiveness of reskilling and upskilling initiatives. Policymakers should adapt successful models from advanced economies to fit the socio-economic realities of developing countries, ensuring equitable access to training opportunities. Organizations should embed skill development into their strategic planning, align training programs with industry demands, and foster cultures that value continuous learning. Educational institutions must design adaptive curricula that integrate both technical and transferable skills, preparing graduates for evolving labor market demands. Collaborative partnerships among governments, industries, and academia will be critical to overcoming structural and cultural barriers, enabling a resilient, inclusive, and competitive global workforce.

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