

Migrant Labor and Digital Transformation Social Service Delivery in the AI Era

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ABSTRACT

Artificial Intelligence (AI) and digital transformation continue to reshape global labor markets, with disproportionate implications for migrant workers concentrated in routine-intensive sectors. While automation increases exposure to displacement in low- and middle-skilled occupations, digital infrastructures simultaneously expand capacities for social protection, labor monitoring, and cross-border governance coordination. This article analyzes the dual and conditional effects of digital transformation on migrant labor regimes. Integrating migration systems theory, labor market polarization literature, human capital theory, and digital governance scholarship, it advances a four-pillar framework of digitally mediated migrant sustainability: (1) cross-border institutional collaboration, (2) digital monitoring and data governance, (3) accessibility and digital inclusion, and (4) regulatory safeguards ensuring ethical digitalization. Drawing on secondary literature and prior research on Filipino migrant workers in Japan, the study argues that automation does not directly determine migrant precarity; rather, governance capacity mediates whether technological restructuring exacerbates vulnerability or enhances resilience. When embedded within equitable institutional frameworks, digital integration can strengthen social protection, productivity, and alignment with sustainable development objectives. However, uneven access and weak regulation risk reinforcing existing stratification within migration regimes. The article concludes that migrant sustainability in the AI era depends less on technological intensity than on institutional design and governance innovation.

Keywords: Migrant Labor, Digital Governance, Ai and Automation, Social Protection, Migration Policy, Sustainable Development

Introduction

Technological transformation has reshaped labor markets, altering global labor markets, occupational structures, skill demands, and institutional arrangements thus affecting the distribution of skills, wages, and employment opportunities. The current wave of Artificial Intelligence (AI) algorithmic management, automation and platformization represents a particularly significant shift in the scale and speed of labor market restructuring, extending beyond manual mechanization to cognitive and service-sector tasks.

While concerns regarding job displacement dominate public discourse, automation does not uniformly affect all occupations. Professions that rely on complex human qualities—such as leadership, creativity, contextual problem-solving, therapy, counseling, social work, research, teaching, and healthcare—

are comparatively resistant to full automation. According to projections summarized by the US Career Institute (2023), several occupations with high projected growth rates through 2032 include nurse practitioners (45.7%), choreographers (29.0%), physician assistants (27.6%), post-secondary nursing instructors (21.5%), coaches and scouts (20%), athletic trainers (17.5%), physical therapists (16.9%), orthotists and prosthetists (16.8%), and occupational therapists (13.9%). These occupations depend heavily on relational intelligence, ethical judgment, and embodied care—capabilities not easily replicated by AI systems.

In contrast, many routine-intensive occupations requiring minimal formal education or specialized training are more vulnerable to automation. Such occupations are characterized by repetitive manual tasks, making them more susceptible to mechanization and algorithmic management. These include domestic work, food processing, construction, welding, carpentry, agriculture, factory work, janitorial services, delivery services, hospitality, and food service roles [1].

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Migrant workers occupy a central position in this transformation. International labor migration has long been structured by segmented labor markets in which migrants disproportionately fill low-paid, labor-intensive, or socially undervalued occupations. Construction, domestic work, agriculture, hospitality, manufacturing, and logistics are sectors heavily reliant on migrant labor—and increasingly subject to digital restructuring and automation [2].

Migrant workers, particularly from labor-sending countries such as the Philippines, are disproportionately employed in these sectors across hundreds of cities worldwide. Consequently, the digital restructuring of labor markets raises important questions regarding migrant vulnerability.

This transformation creates a paradox: digitalization may intensify precarity in certain labor sectors while simultaneously strengthening social protection and governance capacities.

This article investigates the dynamics of digital transformation in migrant labor:

1. How AI and automation reshape the labor market context of migrant work.
2. How digital solutions enhance social service delivery and contribute to sustainable migrant governance.

It argues that digitally enabled governance, when embedded within equitable and coordinated institutional frameworks, can align migration with sustainable development goals. However, digitalization must be accompanied by regulatory safeguards and inclusive access to prevent new forms of inequality.

To situate these questions theoretically, the next section synthesizes key strands of migration and labor scholarship.

Theoretical Foundations

Labor Market and Automation

Migration systems theory emphasizes interconnected flows between sending and receiving countries, structured by labor demand, policy regimes, and transnational networks (2). Migrant sustainability depends on institutional coordination across borders, particularly in social protection portability. Institutional coordination—particularly regarding labor regulation and social protection portability—is central to system stability.

Human capital theory, on the other hand, posits that labor mobility reflects differential returns to skills and training. Migrants accumulate skills abroad but face reintegration and recognition challenges. Digital platforms facilitate skill certification, remote learning, and labor market matching, strengthening the return on migrant human capital. Digital governance can enhance systemic integration and linkages across migration corridors through real time data exchange and coordinated policy design. Digital infrastructures strengthen migration systems by facilitating Data exchange, Real-time labor market matching, Social security portability management, and Cross-border communication [3].

Migration Regimes and Stratification

Migrants often move to maximize wage returns but face barriers to credential recognition and skill transferability. In this case, digital platforms enable Online Certification and

Credential Verification, Remote training and upskilling, and Digital labor market matching. These mechanisms potentially increase the portability and return on migrant human capital [1]. Demonstrates that automation disproportionately affects routine-intensive occupations and are most susceptible to substitution, while non-routine cognitive and relational jobs remain resilient. Migrants are overrepresented in such sectors, increasing exposure to technological displacement. However, automation literature also highlights that non-routine, relational, and care-intensive occupations remain resilient. Healthcare and elder care—sectors with high migrant participation—require relational intelligence, emotional labor and contextual judgment resistant to full automation. Thus, migrant labor demand is reconfigured rather than eliminated.

Digital Governance and Development

Digital governance literature emphasizes how digital infrastructures enhance state capacity, service delivery, and administrative efficiency. Digital identity systems, telehealth services, and online grievance mechanisms and dispute resolution reduce bureaucratic barriers and corruption risks. The Global Compact for Safe, Orderly and Regular Migration likewise underscores the importance of digital tools in migration management. However, digital governance also introduces risks of surveillance, data misuse, and algorithmic bias. Thus, ethical regulation is integral. claims that platform capitalism restructures labor through algorithmic control and data extraction. Migrant workers may therefore be particularly vulnerable within digitally mediated labor markets lacking transparency and bargaining power. This is a threat to ethical safeguards [4-6].

From the political economy dimension, Saskia Sassen claims that migrant labor flows are not incidental but structurally embedded in global economic restructuring. As argues, global cities generate polarized labor markets characterized by high-skill professional sectors and low-wage service economies dependent on migrant labor. Digital transformation intensifies rather than eliminates this segmentation. This strengthens automation discussion by embedding it in global capitalism rather than purely technological change. Asserts that migration regimes are shaped not only by labor demand but by political choices regarding rights and labor market access. Migrant sending and receiving countries often trade off migrant labor access against social and political rights. Thus, digital governance may either reinforce or mitigate such stratification depending on regulatory design. Linda Bosniak strengthens this idea by saying that migrant incorporation is structured through differentiated citizenship regimes. Access to social services often reflects graded membership in the host polity. Digital access to services does not automatically resolve stratification if legal status remains exclusionary. See this from the point of view of digital connectivity during transnationalism which is sustained through cross-border networks. Digital communication technologies intensify transnational social fields, allowing migrants to maintain family and community ties in real time. views migration phenomenon in light of sustainable development where its developmental impact is conditional rather than automatic. Positive outcomes depend on institutional quality and governance structures. Digital governance may enhance these institutional capacities but cannot substitute for policy coherence. Migrant care work, gendered labor, healthcare and domestic labor are deeply embedded in global labor chains.

Digital transformation may alter administrative oversight but does not eliminate the relational and embodied dimensions of care work, which remain resistant to automation [7-13].

Migration literature therefore, shows how migrant labor regimes must be situated within broader transformations of global capitalism. As demonstrates, global cities depend structurally on migrant labor for low-wage service work, even as high-skilled sectors expand. Automation and AI do not eliminate this segmentation but may intensify it through labor market polarization [1]. At the same time, migration governance reflects political trade-offs between labor access and rights protection [8,9]. Digital governance mechanisms—such as telehealth, online grievance platforms, and digital remittance systems—may mitigate precarity. However, as notes, stratified citizenship regimes limit full incorporation. Thus, digital transformation mediates but does not override structural inequalities embedded in migration systems [10].

Conceptual Framework

Digital Mediation Model of Migrant Sustainability model conceptualizes digital governance capacity as the mediating institutional layer between macro-level automation pressures and migrant sustainability outcomes. The strength of digital inclusion, regulatory safeguards, and cross-border coordination determines whether technological restructuring exacerbates vulnerability or enhances sustainable migrant integration. It suggests that lack of strong digital governance leads to AI increased precarity. On the other hand, strong digital governance leads to AI-induced restructuring that makes it manageable and potentially enhances productivity. Digital governance is therefore a moderating and mediating variable.

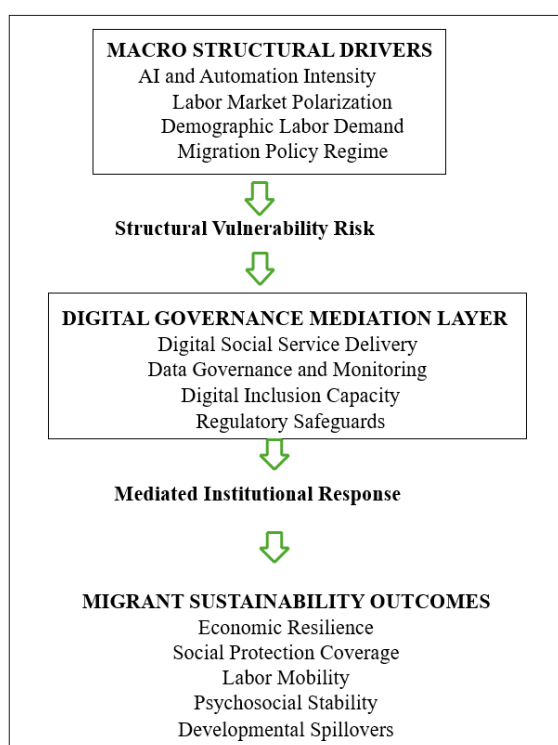


Figure 1: Digital Mediation Model of Migrant Sustainability

The components of macro structural drivers create structural vulnerability exposure. Digital mediation layer includes

Digital Social Service Delivery: telehealth, digital legal access, financial platforms, and online training; Data Governance and Monitoring: migrant registries, labor compliance tracking, cross-border coordination; Digital inclusion capacity: internet access, digital literacy, language accessibility; Regulatory safeguards: data protection, anti-discrimination rules, AI transparency; and Migrant Sustainability Outcomes that can be measured as economic resilience, social protection coverage, labor market mobility, psychosocial stability and developmental spillovers aligned to SDG 8 (Decent Work), SDG 10 (Reduced Inequalities), and SDG 3 (Health and Well-being).

The framework proposes that AI-driven labor restructuring does not directly determine migrant precarity. Instead, its effects are mediated by digital governance capacity and social protection accessibility. It moves the argument beyond “Automation displaces migrants” toward “Governance capacity determines whether digital transformation produces vulnerability or sustainability.”

Discussion

Automation and Occupational Differentiation

The relationship between digital transformation and migrant labor is not purely displacement driven. While automation may threaten certain occupations, digital technologies simultaneously create new infrastructures that enhance labor management, service delivery, and governance systems. Healthcare, logistics, education, finance, and construction increasingly rely on hybrid labor models in which digital tools augment rather than replace human workers. For instance, in healthcare institutions, robots may be used for routine medication delivery or inventory management. Yet the core functions of patient care, diagnosis, and psychosocial support continue to require human professionals. In such contexts, automation and migrant labor coexist rather than operate as substitutes.

The impact of AI on employment must be understood in terms of task substitution rather than occupation elimination. Certain historical precedents—such as the decline of telephone operators and postal clerks—demonstrate how technological change can render specific occupations obsolete. However, many contemporary sectors exhibit hybrid labor models in which digital tools complement rather than replace human workers.

The integration of digital systems is also seen in sectors such as human resources, logistics, construction, finance, education, retail, manufacturing, and media. These sectors increasingly integrate digital systems into workflows while maintaining substantial human labor demand.

This differentiation between routine substitution and relational resilience has significant implications for migrant labor.

Migrant Labor Demand in Aging Economies

Countries experiencing demographic aging and declining fertility rates—including France, Japan, Nordic countries, and parts of East Asia—face persistent labor shortages in healthcare, elder care, construction, and service sectors. This is why migrant nurses, caregivers, and health professionals continue to be recruited to sustain the demand for human-intensive care services.

Migrant workers fill critical gaps in these labor markets. Aging populations create structural labor demand in healthcare, elder care, construction, hospitality, and service sectors. Even where digital technologies are integrated into workflows, human labor remains indispensable in relational and care-intensive occupations. Automation thus alters the nature of tasks within occupations but does not eliminate structural labor demand.

This coexistence of automation and migrant labor underscores an important distinction:

while technology may alter the nature of tasks, it does not eliminate the need for human workers in many sectors. Instead, automation reconfigures occupational roles, requiring new forms of skill adaptation and institutional coordination. Migrant labor in such contexts reflects demographic necessity rather than technological redundancy.

Social Service Access and Migrant Sustainability

Migrant work can be temporary under contract or permanent for immigrants. In both cases, workers are affected by the social service delivery of the host country. Social services encompass healthcare, legal aid, employment, education and childcare, as well as assistance for housing, community, cultural and social integration and social security benefits.

In a study conducted by this author, the Social Security services available to migrant workers in Japan include social welfare, health and Medicare services, employment security, employment insurance, food safety and others that benefit the women, mothers, children, senior citizens. Social Security in Japan enhances the living and work conditions of Filipino workers, and enables them to save and invest the money that otherwise would be spent for health and other necessities. In case of unemployment, they can also rely on benefits and insurance. In times of crisis and emergency such as typhoons and epidemic, there are social infrastructure and government facilities that can protect them [14].

Ramirez found that providing effective Social Security to migrant workers also benefits Japan as a migrant worker receiving country. With its serious labor problem, dwindling and aging population, it relies on migrant workers to cushion and push its socio-economic development. Although the presence of health workers does not directly solve the aging problem of Japan, their services are of great value to medical and health services for the public especially during the COVID-19 pandemic. The construction workers, for their part, help build government infrastructures that benefit the public for many years. The work of thousands of Filipinos in the manufacturing and production industries is a response and support to Japan's need for laborers. Language teachers are important to the English language learning of Japanese students and adults who need to communicate with the global world. Domestic workers enable Japanese women to leave the house for employment. Hotel cleaners, beauty parlor attendants, sales personnel and other low-skilled workers are crucial to the operation of private business establishments. All these, the Filipino workers are able to do because of Japan's labor compensation and strong Social Security. As Japan responds to the needs of workers, they enhance their living and work conditions at the same time. The migrant workers, for their

part, contribute to the socio-economic development of Japan by filling in the need for laborers in different industries.

There are agencies that support social services for migrant workers, such as government agencies, international organizations, Non-Governmental Organizations (NGOs), (Migrant workers' Centre MWC, Singapore, Human Rights Watch (HRW), The Migrant Network, etc.), Labor Unions, Local Support Groups and Faith-based Organizations.

We have seen how Japan manages social service delivery. For these to become accessible to larger groups of migrants, digital transformation is inevitable.

Digital Transformation of Social Service Delivery

Digital technologies are reshaping how social services are delivered to migrant populations. Telemedicine platforms enable remote medical consultations, reducing geographic barriers and minimizing time away from work. Online training modules facilitate skill upgrading and language acquisition. Digital legal platforms provide access to labor rights information and grievance procedures. At the same time, digital technologies are transforming migration governance itself. Telemedicine, digital remittance platforms, online grievance mechanisms, and transnational data sharing systems are reshaping how migrants access social protection and how states manage labor mobility. Digital infrastructures reduce geographic barriers, enhance administrative efficiency, and enable real-time monitoring.

Some digital solutions applications that can be useful to migrant work are WhatsApp and Telegram to communicate with their family left behind and Hello Talk for their language learning. Google Translate and iTranslate can also aid in language translation. For remittances and financial services, they can access Remitly, Revolu or TransferWise, and Finamly to help them manage their budget, save money or track expenses; for legal needs assistance and awareness of migrants' rights, the resource apps are Migrant Rights and Know your Rights (KYR). Transport and navigation apps are also available such as Grav and Lyft. For social services, there is iCare, various Migrant Support Centers, and specifically for healthcare: DocApp and HealthifyMe. When migrants are homesick and want to expand their social network, they can use Meetup or join Facebook Groups. There are also apps that can be used to research laundry slots, do online shopping and groceries, as well as apps for emergency situations in their areas of work or residence.

These developments enhance responsiveness, efficiency, and inclusivity in service provision. Digital remittance systems reduce transaction costs and enable faster financial transfers, strengthening transnational household stability. Online financial management tools support budgeting and savings behavior, contributing to economic resilience.

Through these mechanisms, digital transformation contributes to more responsive, accessible, and inclusive social service delivery systems. Digital transformation in migrant social service delivery is clearly seen across four domains:

- a. Healthcare (telemedicine, healthcare access, reduced geographic constraints and improved preventive care.

Digital health monitoring increases continuity of care, especially for workers in remote areas.

b. Legal protection

Digital complaint systems and rights-awareness platforms lower informational barriers. Documentation via digital tools strengthens labor dispute evidence. Digital documentation improves evidence retention in labor disputes [15].

c. Financial inclusion

Digital remittance platforms reduce transfer costs. Financial management apps enhance budgeting and savings behavior. Financial inclusion strengthens economic resilience and supports transnational households. Digital remittance systems reduce transaction costs and improve speed. Financial management applications enhance savings, budgeting, and investment capacity [16].

d. Psychosocial connectivity

Migration entails social and emotional costs. Digital communication platforms sustain family ties and reduce isolation. Transnational communication platforms mitigate isolation, strengthening migrant mental health and family cohesion [5]. Psychosocial stability correlates with labor productivity.

Digital Solutions and Sustainable Development of Migrant Work

The sustainable development of migrant work depends on the interaction between labor demand, social protection systems, and governance frameworks. Digital solutions influence each of these dimensions. First, digital technologies alter labor demand by restructuring task composition within occupations. Second, they enhance social protection delivery through telehealth, digital identity systems, and online grievance mechanisms. Third, they enable cross-border coordination through data-sharing infrastructures that enhance administrative efficiency and policy coordination.

When accessible and ethically regulated, digital systems can improve the psychosocial and economic well-being of migrant workers. Increased service accessibility reduces vulnerability to exploitation and health-related financial shocks. Improved administrative efficiency benefits employers and governments by lowering transaction costs and strengthening compliance.

From a governance perspective, digital solutions improve administrative coordination. Sending countries can track migrant deployment and coordinate with host-country institutions. Receiving countries can monitor labor compliance and streamline service delivery. Governments can monitor labor conditions more efficiently, track migrant deployment, and facilitate cross border communication. Employers benefit from streamlined administrative processes. Digital data systems facilitate more efficient bureaucratic processes and reduce informational asymmetries.

However, digital inclusion is uneven. Migrant workers with limited digital literacy or restricted internet access may face exclusion from digital service ecosystems. Moreover, algorithmic management systems may introduce new forms of surveillance and labor control if not accompanied by regulatory safeguards.

Analytical Synthesis: Migrant Sustainability as Institutional Mediation in the AI Era

The sustainability of migrant labor cannot be reduced to employment continuity alone. Rather, it is structurally contingent upon access to social protection systems, including healthcare, legal recourse, employment security, housing support, and social integration mechanisms. Migrant vulnerability therefore operates along two interrelated axes: labor market exposure and institutional access.

While automation intensifies vulnerability in routine-intensive sectors where migrants are disproportionately concentrated, labor precarity does not derive solely from technological substitution. Instead, precarity emerges from the interaction between labor restructuring and stratified access to social services. In many receiving contexts, eligibility for healthcare, legal protection, and welfare benefits remains conditional upon legal status, formal registration, or geographic proximity to service centers. Undocumented migrants frequently experience exclusion, while even legally employed migrants encounter logistical and administrative barriers. These institutional constraints affect not only individual well-being but also productivity and economic resilience, as limited access to healthcare, dispute resolution, and psychosocial support increases exposure to exploitation and income shocks.

Within this structural configuration, digital governance functions as a mediating institutional layer. Digital platforms that expand telehealth access, streamline grievance procedures, facilitate remittance flows, and enable cross-border administrative coordination can mitigate the negative externalities of labor market restructuring. In this sense, digitalization does not inherently reduce vulnerability; rather, its impact depends on whether digital infrastructures are embedded within inclusive regulatory frameworks. Where digital access is equitable and legally protected, service accessibility enhances migrant resilience, strengthens labor productivity, and reduces transaction costs for employers and states alike. Conversely, where digital systems are exclusionary or weakly regulated, technological restructuring may reinforce existing inequalities.

The AI era therefore presents a structural paradox: automation amplifies sectoral exposure, yet digital governance enhances institutional protection. The decisive variable is not automation intensity per se, but governance capacity. Migrant sustainability in digitally transformed labor markets is contingent upon three interlocking conditions: inclusive digital access, ethical regulatory safeguards, and cross-border institutional coordination. Absent these conditions, digital transformation risks reproducing the very stratifications it promises to alleviate.

This framework shifts analysis beyond simplistic “job replacement” narratives toward institutional adaptation. Migrant sustainability depends not only on labor demand but on the governance architectures that mediate technological change. Future research should therefore move from descriptive accounts of digital tools toward empirical evaluation of institutional effectiveness, including the extent of digital inclusion gaps, the productivity effects of telehealth systems, and the impact of online grievance mechanisms on labor dispute outcomes.

Conclusion

The digital era reshapes migrant labor through simultaneous

pressures and opportunities. Automation increases exposure in routine-intensive sectors where migrants are overrepresented, yet demographic demand and the persistence of relational labor—particularly in healthcare and elder care—continue to sustain migrant employment. The transformation underway is therefore not one of straightforward technological substitution, but of structural reconfiguration.

Crucially, the effects of AI-driven restructuring are not predetermined. Digital technologies expand access to healthcare, legal protection, financial services, training, and administrative coordination, thereby strengthening both worker resilience and institutional efficiency. However, these gains depend on governance design. Inclusive digital access, regulatory safeguards, and cross-border institutional collaboration determine whether digitalization mitigates vulnerability or reinforces existing inequalities.

Migrant sustainability in the AI era thus rests on institutional adaptation rather than technological progress alone. Where digital innovation is embedded within equitable policy frameworks—supported by ethical regulation, data protection standards, and coordinated migration governance—it can enhance productivity, social protection, and long-term socioeconomic stability. Absent such frameworks, digital transformation risks intensifying stratification within global labor markets.

Future research should move beyond descriptive accounts of technological tools and instead evaluate institutional effectiveness, including digital inclusion gaps, the productivity and health impacts of telemedicine, the regulatory implications of AI-based labor monitoring, and the cross-national portability of digital social security systems.

The suitable governance for digitally enabled migrant program sustainability has four pillars framework to consider:

For collaboration to reduce fragmentation in migrant protection, Pillar 1: Cross-Border Institutional Collaboration can include Bilateral social security agreements, Ethical recruitment monitoring, and Digital coordination systems.

For data governance to improve transparency but requires privacy safeguards, Pillar 2: Digital Monitoring and Data Governance can include Integrated migrant registries, Real-time labor demand mapping, and Evidence-based policymaking.

To counter digital divides risk reinforcing inequality, Pillar 3: Accessibility and Digital Inclusion can provide Affordable internet access, Language-accessible platforms, and Digital literacy programs.

Without regulation, digital systems may exacerbate precarity so it will require Pillar 4: Ethical and Regulatory Safeguards with Data protection legislation, AI transparency standards, and Anti-discrimination enforcement.

Migration, when governed effectively, contributes to development in both sending and receiving countries. By strengthening migrant protection and productivity, digital

governance aligns migration with development objectives. Finally, digitally enhanced social service delivery can contribute to multiple Sustainable Development Goals (17), including SDG 8 (Decent Work), SDG 10 (Reduced Inequalities), and SDG 3 (Health and Well-being).

Theoretical Contribution

This article contributes to migration scholarship by reconceptualizing digital transformation not as an exogenous technological shock, but as a mediating institutional force within migrant labor regimes. Existing debates on automation and labor market polarization often emphasize technological substitution and occupational displacement [1]. Migration scholarship, meanwhile, highlights structural labor segmentation, stratified rights regimes and the conditional nature of migration's developmental impact [8-10,12]. However, these literatures have largely evolved in parallel. This study integrates them by positioning digital governance capacity as the critical intermediary variable linking automation driven restructuring to migrant sustainability outcomes.

First, the article advances automation debates by demonstrating that AI does not uniformly displace migrant labor; rather, it reconfigures sectoral demand within already segmented labor markets. Migrant vulnerability therefore emerges not directly from technological intensity, but from the interaction between automation pressures and institutional access to social protection. This shifts the analytical focus from technological determinism to governance mediation.

Second, the study extends migration systems theory by incorporating digital infrastructures into the analysis of cross-border institutional coordination. Digital tools—such as telehealth platforms, online grievance mechanisms, and digital social security management systems—strengthen or weaken system stability depending on regulatory design. In this sense, digital governance becomes a structural component of migration regimes rather than a peripheral administrative tool.

Third, the article contributes to the migration–development nexus by clarifying that digital transformation enhances migrant resilience only under conditions of inclusive access, ethical safeguards, and coordinated policy frameworks. The developmental effects of migration in the AI era are therefore conditional upon institutional capacity rather than technological progress alone.

By conceptualizing digital governance as both a mediating and moderating variable, this framework provides a basis for future empirical research. It invites scholars to examine how variations in digital inclusion, regulatory safeguards, and cross-border coordination shape migrant outcomes across national contexts. In doing so, the study moves beyond descriptive accounts of digital tools and toward a theoretically grounded model of digitally mediated migrant sustainability [17,18].

References

1. Autor DH. Why are there still so many jobs? Journal of Economic Perspectives. 2015. 29: 3-30.
2. Castles S, De Haas H, Miller MJ. The age of migration 5th

- ed. Palgrave Macmillan. 2014.
3. Becker GS. Human capital (3rd ed.). University of Chicago Press. 1993.
4. World Bank. World development report 2016: Digital dividends. 2016.
5. International Organization for Migration. Global compact for safe, orderly and regular migration. 2018.
6. Srnicek N. Platform capitalism. Polity Press. 2017.
7. Sassen S. The global city: New York, London, Tokyo. Princeton University Press. 1991.
8. Sassen S. The global city (2nd ed.). Princeton University Press. 2001.
9. Ruhs M. The price of rights: Regulating international labor migration. Princeton University Press. 2013.
10. Bosniak L. The citizen and the alien: Dilemmas of contemporary membership. Princeton University Press. 2006.
11. Vertovec S. Transnationalism. Routledge. 2009.
12. De Haas H. Migration and development: A theoretical perspective. International Migration Review. 2010. 44: 227-264.
13. Anderson B. Doing the dirty work? The global politics of domestic labour. Zed Books. 2000.
14. Ramirez V. Social security and migrant workers in Japan. Unpublished manuscript. 2020.
15. Migrant-Rights. The role of technology in migrant worker protection.
16. World Bank. Migration and development brief. 2023.
17. United Nations. Transforming our world: The 2030 agenda for sustainable development. 2015.
18. Brynjolfsson E, McAfee A. The second machine age. W. W. Norton. 2014.