

Innovation in Addressing Youth Unemployment in Developing Countries: Evidence and Pathways from Indonesia

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ABSTRACT: Youth unemployment remains one of the most persistent development challenges facing low- and middle-income countries, and Indonesia, home to one of the world's largest youth populations, illustrates both the scale of the problem and the range of innovation-based responses being tested to address it. This review synthesizes peer-reviewed evidence on how digital technology, vocational and educational innovation, entrepreneurship ecosystems, and policy instruments have been mobilized to reduce youth joblessness in developing-country contexts, with Indonesia as the primary reference case. Drawing on 25 journal publications, the review organizes findings around four innovation pathways: (1) digital and technology-driven innovation, including platform work, e-commerce, and financial technology; (2) skills development and vocational innovation, including technical and vocational education and training (TVET) reform and government-sponsored digital skilling; (3) entrepreneurship and innovation ecosystems, including youth digital entrepreneurship and business incubation; and (4) policy and institutional support mechanisms. The review finds that innovation-based interventions generate measurable, though uneven and often short-run, improvements in youth labour-market outcomes, and that their effectiveness is conditioned by structural factors such as the rural-urban digital divide, gender disparities, and the quality of institutional coordination. The review concludes with policy implications and a research agenda for strengthening the evidence base on innovation-driven youth employment strategies in developing countries.

KEYWORDS: Youth unemployment; innovation; developing countries; Indonesia; digital economy; vocational training; entrepreneurship ecosystem

1. Introduction

Youth unemployment is a defining structural challenge of the contemporary global labour market, and its burden falls disproportionately on developing countries, where young people are more likely than adults to be unemployed, underemployed, or trapped in informal and precarious work [1]. Cross-country evidence indicates that active labour-market programmes—including training, entrepreneurship promotion, employment services, and wage or self-employment subsidies—generate positive but modest and heterogeneous effects on youth employment and earnings, with outcomes strongly mediated by programme design,

targeting, and the surrounding institutional environment [1]. These findings underscore that no single intervention is sufficient on its own; rather, sustained improvement in youth labour-market outcomes in low- and middle-income settings typically requires a coordinated mix of demand-side job creation, supply-side skills investment, and enabling institutional reform.

Indonesia offers an instructive case for examining these dynamics. As the largest economy in Southeast Asia and a country approaching the peak of its demographic dividend, Indonesia has a labour force that is disproportionately young, yet youth unemployment and the share of young people not in employment, education, or training (NEET) remain markedly higher than the national average. Structural features of the Indonesian labour market, including trade liberalization, spatial disparities in industrialization, and a large informal sector, have historically constrained the capacity of the formal economy to absorb new labour-market entrants [2]. At the same time, Indonesia has become a testing ground for a wide array of innovation-based responses, ranging from state-led digital skilling programmes to a rapidly expanding digital economy that has created new, if often precarious, forms of youth employment.

The premise of this review is that "innovation" in the youth-employment context is not confined to digital technology alone but spans at least four interrelated domains: technological innovation that creates new platforms and markets for youth labour and enterprise; pedagogical and institutional innovation in skills formation, including digitally mediated learning that has been shown to mediate the relationship between education programmes and unemployment reduction among graduates [3]; entrepreneurial and ecosystem innovation that lowers the barriers to youth self-employment and micro-enterprise formation; and policy innovation, exemplified by novel instruments such as Indonesia's Kartu Prakerja (Pre-Employment Card) programme, which combines digital skilling with direct cash transfers and has shown differentiated effects across gender and labour-market segments [4]. These four interconnected innovation pathways and their potential contributions to addressing youth unemployment are conceptually summarized in Figure 1.

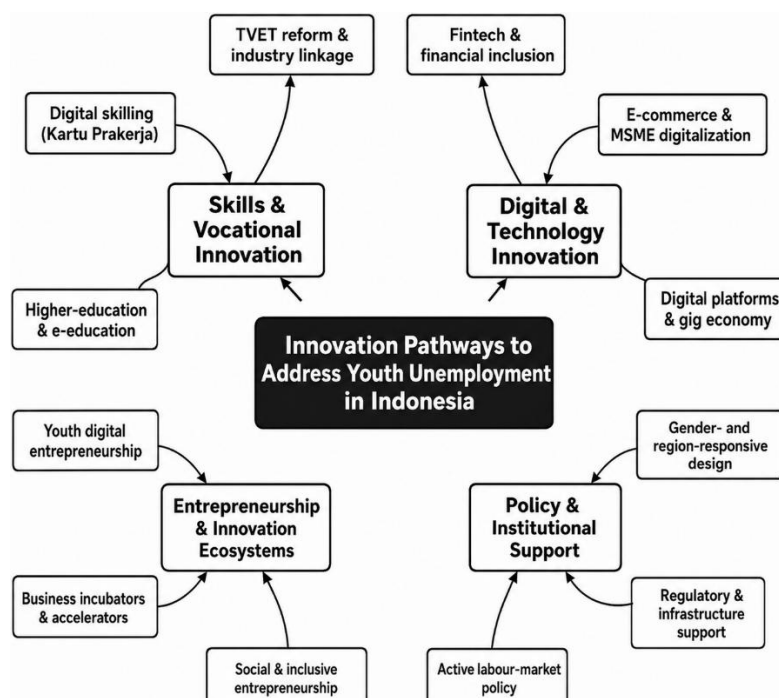


Figure 1. Innovation pathways addressing youth unemployment in Indonesia.

Importantly, these pathways should not be viewed as independent interventions. Technological innovation can expand access to digital employment, platform work, and online entrepreneurship, but its benefits depend strongly on whether young people possess the technical and transferable skills required to participate effectively. Educational and training innovations therefore provide an important bridge between technological change and labour-market participation by improving employability and facilitating adaptation to rapidly changing skill requirements. At the same time, entrepreneurship and innovation ecosystems can provide alternative employment pathways when formal labour markets are unable to absorb the growing number of young job seekers. Access to finance, mentoring, business networks, digital infrastructure, and market opportunities can determine whether entrepreneurial activities develop into sustainable sources of employment rather than remaining small-scale or necessity-driven activities.

Policy innovation provides an enabling framework connecting these pathways. Well-designed policies can improve access to training, reduce financial barriers, encourage enterprise development, strengthen digital inclusion, and better align education systems with labour-market demand. Conversely, weak coordination among employment, education, digitalization, and entrepreneurship policies may reduce the effectiveness of otherwise promising interventions. Figure 1 therefore illustrates youth-employment innovation as an interconnected system in which technological opportunities, skills development, entrepreneurship ecosystems, and policy support can reinforce one another. The effectiveness of each pathway is also conditioned by broader structural factors, including labour-market informality, regional inequality, gender disparities, education–job mismatch, and unequal access to digital infrastructure.

Consequently, innovation should not be interpreted simply as the introduction of new technologies or programmes, but as the capacity to create coordinated mechanisms that improve young people's transition from education to productive and sustainable employment. Understanding how these four pathways interact, reinforce one another, and where they fall short is therefore essential for identifying gaps in existing interventions and designing more coherent, inclusive, and evidence-informed responses to youth unemployment in Indonesia and comparable developing-country contexts. As summarized in Table 1, key structural drivers of youth unemployment include education–job mismatch, informal and precarious labour markets, trade and spatial disparities, the digital divide, and gender and household constraints. These factors demonstrate that youth unemployment cannot be addressed through technological or educational innovation alone but requires interventions that respond to broader labour-market, socioeconomic, spatial, and equity conditions. This review addresses three questions. First, what forms of technological, educational, entrepreneurial, and policy innovation have been documented in the peer-reviewed literature as responses to youth unemployment in developing countries, with particular attention to Indonesia? Second, what does the available evidence indicate about the effectiveness, reach, and limitations of these innovations? Third, what structural barriers and equity concerns condition the impact of these innovations, and what implications follow for policy and future research? Accordingly, Figure 1 provides the conceptual framework connecting the four innovation pathways examined throughout the review, while Table 1 establishes the principal structural constraints against which their effectiveness should be interpreted.

Table 1. Structural Drivers of Youth Unemployment in Indonesia and Comparable Developing Countries.

Structural dimension	Description	Illustrative context	Ref.
Education–job mismatch	Vertical (overeducation) and horizontal (skills-field) mismatches between graduate output and labour-market demand, particularly among vocational and higher-education graduates.	Indonesia (vocational secondary and tertiary graduates)	[2, 5]
Informal and precarious labour markets	A large share of young workers enter informal or platform-mediated work lacking standard employment protections, contracts, or social insurance.	Indonesia gig and platform economy	[6-8]
Trade and spatial disparities	Trade liberalization and uneven regional industrialization concentrate formal job creation in specific provinces, leaving other regions with weaker absorption capacity.	Cross-provincial Indonesia	[2, 9]
Digital divide	Uneven access to internet infrastructure, digital devices, and digital literacy limits youth participation in digitally mediated employment and entrepreneurship.	Rural versus urban Indonesia	[10, 11]
Gender and household constraints	Household responsibilities, social norms, and unequal access to training and capital reduce female youth labour-force participation and programme uptake.	Indonesia and comparable ASEAN economies	[4, 12]

2. Digital and Technology-Driven Innovation

Digital transformation has become the most visible and rapidly evolving channel through which innovation intersects with youth employment in Indonesia. Three interrelated mechanisms are examined in this section: the rise of digital platform and gig work, the digitalization of micro, small, and medium enterprises (MSMEs) through e-commerce, and the expansion of financial technology and digital financial inclusion. Across these mechanisms, the evidence suggests that digital technology substantially expands the range of income-generating opportunities available to young people, while simultaneously introducing new forms of labour-market precarity that policy has yet to fully address.

2.1. Digital Platforms and the Gig Economy.

The expansion of app-based platforms for transport, delivery, and freelance services has created a substantial new segment of youth employment in Indonesia. Ethnographic and survey-based research shows that platform work is normalized among young Indonesians as an accessible entry point into paid work, but that this normalization coexists with a new form of precarity rooted in the absence of a standard employment relationship, unstable earnings, and limited collective bargaining power [6]. Comparable findings from other developing-country contexts describe platform-mediated "gig" work as offering youth autonomy and low entry barriers, while simultaneously exposing them to structural precarity historically associated with informal labour [7]. Psychological and well-being research on Generation Y and Generation Z gig workers further indicates that flexibility and independence are strong motivators for platform work, but that inconsistent income and weak social protection are recurring sources of strain [13]. Complementary Indonesian evidence documents both the welfare vulnerabilities experienced by gig workers in the post-pandemic period [8] and the comparatively long average job-search duration among young Indonesian workers, which

helps explain the appeal of platform work as a faster route into income generation [14]. More recent work on Indonesian Generation Z further shows that side jobs mediated by digital platforms have become a routine feature of young people's work patterns, reflecting a broader shift toward diversified, technology-enabled income strategies rather than a single, stable job [15].

2.2. E-Commerce and MSME Digitalization.

Beyond platform labour, digital technology has reshaped the demand side of youth employment by lowering the cost of starting and scaling small enterprises. Firm-level evidence from Indonesia shows that e-commerce adoption significantly improves MSME performance and financial inclusion, with adopting firms reporting higher sales growth and broader access to formal financial services than non-adopting firms [10]. Complementary research on informal MSMEs finds that digital financial inclusion, access to mobile payments, digital credit, and online marketplaces, helps informal youth-run enterprises transition toward the formal economy, although infrastructural and literacy barriers continue to constrain uptake outside major urban centres [11]. Ecosystem-level analysis of Indonesia's digital MSME landscape identifies interactive components, marketplaces, logistics platforms, digital payment rails, and government digitalization programmes, that jointly determine whether small, youth-led enterprises can convert digital access into sustained growth [16], while sub-national evidence confirms that digital transformation measurably improves financial inclusion outcomes for MSMEs, albeit unevenly across regions [17]. Firm-level studies of digitally enabled SMEs further link business agility, the capacity to sense and respond quickly to market changes, to competitive advantage, suggesting that digital tools are most beneficial for youth-led enterprises when paired with adaptive management practices rather than treated as a stand-alone fix [18].

2.3. Financial Technology and Digital Financial Inclusion.

Financial technology (fintech) constitutes a third pillar of digital innovation relevant to youth employment, primarily by expanding access to capital and financial services for young entrepreneurs and gig workers who are typically underserved by traditional banking. Evidence from Indonesian MSMEs shows that digital financial inclusion mediates the relationship between digital financial literacy, government support, and enterprise performance, implying that fintech access alone is insufficient without complementary literacy and policy support [19]. This finding echoes a broader pattern in the innovation-management literature, where enterprise digitalization is shown to strengthen financial performance most reliably when firms also possess the dynamic capability to reconfigure processes in response to new digital tools [20]. As summarized in Table 2, digital and technology-driven responses to youth unemployment extend beyond fintech to include ride-hailing and delivery platforms, freelance and micro-task platforms, e-commerce-enabled MSMEs, and integrated digital MSME ecosystems. Each innovation creates different pathways into employment or entrepreneurship, while also presenting specific limitations related to income stability, worker protection, infrastructure access, and financial capability. Taken together, the evidence indicates that digital innovation creates substantial new income-generating pathways for youth, but that its benefits are conditional on complementary investments in digital literacy, regulatory protection, financial capability, and accessible digital infrastructure.

Table 2. Digital and Technology-Driven Innovations Addressing Youth Unemployment.

Innovation type	Mechanism	Reported outcome	Ref.
Ride-hailing and delivery platforms	Digital matching of youth labour supply with on-demand transport and delivery demand.	Rapid entry into paid work but weak contractual protection and unstable earnings.	[6, 7]
Freelance and micro-task platforms	Online marketplaces connecting young freelancers with short-term digital tasks.	Flexibility and autonomy valued by Gen Y/Gen Z workers; income volatility remains a concern.	[13, 15]
E-commerce enabled MSMEs	Youth-run micro-enterprises selling via online marketplaces and social commerce.	Higher sales growth and financial-inclusion outcomes versus non-adopting firms.	[10, 18]
Digital MSME ecosystems	Integrated logistics, payment, and marketplace infrastructure supporting informal-to-formal transition.	Improved formalization and growth potential, contingent on infrastructure access.	[11, 16, 17]
Digital financial inclusion / fintech	Mobile payments, digital credit, and savings products for youth entrepreneurs and gig workers.	Enhanced enterprise performance when paired with financial literacy and government support.	[19, 20]

3. Skills Development and Vocational Innovation

A second major innovation pathway concerns the supply side of the youth labour market: the alignment of skills formation with the changing demands of employers. This section provides evidence on technical and vocational education and training (TVET) reform, Indonesia's flagship digital skilling programme (Kartu Prakerja), and innovation in higher education delivery, including e-education models that combine digital training with entrepreneurship promotion.

3.1. TVET Reform and Industry Linkage.

Technical and vocational education is often positioned as the primary institutional response to youth skills mismatch in developing countries, yet Indonesian evidence suggests that its effectiveness depends heavily on regional economic structure. Analysis of job-education mismatch across Indonesian provinces finds that agglomeration economies, the concentration of related industries in urban centres, shape whether vocational graduates find matched employment, with graduates in less agglomerated regions facing substantially higher rates of horizontal and vertical mismatch [21]. National human-capital strategy assessments similarly argue that strengthening vocational and higher education is central to Indonesia's competitiveness, but that curriculum reform must be paired with stronger employer engagement in competency standards to close the gap between what TVET institutions teach and what industry requires [22]. Cross-country evidence on job mismatch reinforces this concern, showing that mismatched workers, including many vocational graduates, experience lower pay, lower job satisfaction, and reduced performance relative to well-matched peers, which in turn dampens the long-run returns to vocational investment [5]. At the regional level, technological intensity and knowledge spillovers have been shown to meaningfully accelerate employment growth in Indonesia, indicating that vocational reform is likely to be most effective when coordinated with regional industrial and innovation policy rather than pursued as an isolated educational intervention [9]. Evidence on female job returners further shows that targeted vocational training can improve employment, earnings, and job quality for groups

facing additional labour-market barriers, offering a template for gender-responsive TVET design [12].

3.2. Digital Skilling and the Kartu Prakerja Programme.

Indonesia's Kartu Prakerja programme is among the most closely studied policy innovations in this field, combining subsidized online and offline skills training with direct cash incentives distributed through a digital government-to-person payment platform. Quasi-experimental evaluation finds that programme participation improves labour-market performance for young participants during the pandemic period, although effects vary by employment status and sector [4]. Cost-effectiveness analysis of the programme's early design shows that providing training alone, without accompanying cash incentives, was the most cost-efficient configuration for reducing unemployment among participants, prompting recommendations to reconsider the balance between training and incentive components [23]. More recent evaluation using gender-disaggregated data finds that the programme's positive effect on employment probability is particularly pronounced for young women, suggesting that digitally delivered skilling programmes can help narrow, rather than widen, gender gaps in youth employment when incentive structures are well designed [4]. Complementary analysis of programme participants' subsequent labour-market trajectories finds that participation increases the likelihood of transitioning into gig work specifically, while its effect on gig earnings is more modest, indicating that digital skilling programmes are currently better at facilitating entry into non-standard digital work than at raising its quality [24].

3.3. Higher Education and E-Education Innovation.

A third strand of skills innovation concerns higher-education institutions themselves, particularly the adoption of e-education models designed to promote self-employment among graduates. Structural equation modelling evidence from a comparable developing-economy context shows that e-education programmes significantly reduce graduate unemployment, and that this effect is significantly mediated by innovation; that is, e-education is most effective when it explicitly cultivates graduates' capacity to generate novel products, services, or business models rather than transmitting technical content alone [3]. Universities can therefore play a more active role in preparing students for evolving labour markets by integrating entrepreneurship education, digital competencies, problem-solving skills, and experiential learning into academic curricula. Collaboration with industry, start-ups, and business incubators can further provide students with practical exposure, mentorship, professional networks, and opportunities to transform innovative ideas into viable employment or entrepreneurial pathways. This mediating role of innovation is consistent with broader evidence that the socioeconomic disruption associated with crises such as the COVID-19 pandemic disproportionately affected employment and unemployment outcomes in socially disadvantaged and multi-dimensionally vulnerable areas, reinforcing the case for higher-education innovation strategies that explicitly target disadvantaged youth rather than assuming uniform benefit across the student population [25]. Table 3 further indicates that the strongest skills-development strategies combine technical and vocational competencies with innovation capacity, employer engagement, and targeted support for disadvantaged groups.

Table 3. Skills development and vocational innovations relevant to youth employment.

Programme / approach	Target group	Key evidence reported	Ref.
TVET curriculum and industry-linkage reform	Vocational secondary and tertiary graduates	Mismatch varies by regional agglomeration; stronger employer engagement narrows the education–industry gap.	[21, 22]
Job–skills matching quality	Youth across education levels	Mismatched workers report lower pay, satisfaction, and performance than matched peers.	[5]
Regional innovation and knowledge spillovers	Provincial youth labour markets	Technological intensity and knowledge spillovers accelerate local employment growth.	[9]
Gender-targeted vocational training	Female job returners / re-entrants	Targeted training improves employment, earnings, and job quality for women.	[12]
Kartu Prakerja digital skilling and incentives	Unemployed and underemployed youth (national)	Improves labour-market performance and female employment probability; training-only design is more cost-effective.	[4, 23]
Kartu Prakerja and gig-sector transition	Programme alumni entering digital work	Raises likelihood of becoming a gig worker; effect on gig earnings is smaller.	[24]
Higher-education e-education programmes	University graduates	Reduces graduate unemployment; effect is mediated by innovation capacity, not training alone.	[3, 25]

4. Entrepreneurship and Innovation Ecosystems

A third innovation pathway addresses youth unemployment not by matching young people to existing jobs but by expanding the pool of jobs itself, through youth-led enterprise creation.

4.1. Youth Digital Entrepreneurship.

Digital entrepreneurship has emerged as a central strategy for converting youth un- and under-employment into self-generated income, particularly as young Indonesians increasingly combine formal study or employment with digitally enabled side ventures [15]. Evidence on gig and platform-based income generation shows that many young entrepreneurs begin as informal or single-platform operators before diversifying into multi-platform or hybrid digital businesses, a trajectory that blurs the conventional distinction between "employment" and "entrepreneurship" among Indonesian youth [6, 14]. The performance of these youth-led digital ventures, however, remains closely tied to the same enabling conditions such as digital literacy, financial inclusion, and business agility, rather than to entrepreneurial motivation alone [10, 18].

4.2. Business Incubators and Digital Innovation Ecosystems.

Beyond individual ventures, the broader innovation ecosystem, incubators, digital marketplace infrastructure, and coordinated MSME digitalization programmes, plays a decisive role in determining whether youth enterprises survive and scale. Ecosystem-level analysis of Indonesia's digital MSME landscape identifies the interaction between marketplace platforms, logistics providers, digital payment systems, and government digitalization initiatives as jointly shaping enterprise outcomes, implying that incubation support is most effective when it connects young entrepreneurs to this wider infrastructure rather than providing training in isolation [16]. Sub-national evidence on digital transformation and financial inclusion similarly shows that the benefits of ecosystem participation are unevenly distributed across regions, with better-connected areas capturing disproportionately more of the employment and income gains

associated with youth enterprise digitalization [17]. Firm-level evidence on business agility further suggests that ecosystem support is most valuable when it strengthens young firms' capacity to sense and respond to market change, rather than simply providing one-off capital or training inputs [18].

4.3. Social and Inclusive Entrepreneurship.

A distinct but complementary strand of entrepreneurship innovation emphasizes social and inclusion-oriented models designed explicitly to reach disadvantaged or underrepresented youth. Evidence on gender-targeted vocational and enterprise support shows that interventions designed with women's constraints in mind, flexible scheduling, tailored financing, and mentorship, produce measurably better employment and earnings outcomes than gender-neutral programme designs [12]. Programme-level evidence from Kartu Prakerja similarly demonstrates that digitally delivered skilling and incentive schemes can be configured to disproportionately benefit young women when eligibility and outreach are designed with gender equity in mind [4]. Together with the digital financial inclusion evidence, these findings indicate that the entrepreneurship-ecosystem pathway is most effective at reducing youth unemployment when it is deliberately designed for inclusion, rather than relying on broad-based access alone to reach the most disadvantaged youth [11, 19]. Entrepreneurship and innovation-ecosystem components supporting youth employment is summarized in Table 4.

Table 4. Entrepreneurship and Innovation-Ecosystem Components Supporting Youth Employment.

Ecosystem component	Role in reducing youth unemployment	Key condition for success	Ref.
Youth-led digital ventures	Converts side-gig and freelance activity into sustained self-employment income.	Digital literacy and multi-platform diversification.	[6, 14, 15]
Digital MSME ecosystem infrastructure	Connects young entrepreneurs to marketplaces, logistics, and payment rails needed to scale.	Coordinated public-private digital infrastructure.	[16, 17]
Business agility and dynamic capability	Enables young-firm survival amid rapidly changing digital markets.	Management capacity to sense and respond to change.	[18, 20]
Gender-responsive enterprise support	Expands entrepreneurship access for young women facing household or capital constraints.	Tailored financing, mentorship, and flexible design.	[4, 12]
Digital financial inclusion for informal youth enterprises	Supports informal-to-formal transition of youth-run micro-enterprises.	Complementary financial literacy and regulatory clarity.	[11, 19]

5. Challenges, Policy Implications, and Conclusion

The evidence reviewed above indicates that innovation-based responses to youth unemployment in Indonesia and comparable developing countries are neither uniformly effective nor evenly distributed. This section synthesizes the principal structural and regulatory barriers that constrain these innovations, examines gender and regional disparities in their reach, and closes with policy recommendations and concluding remarks.

5.1. Structural, Institutional, and Regulatory Barriers.

A recurring barrier across all four innovation pathways is the absence of institutional frameworks that keep pace with the speed of technological and programmatic change. Platform work continues to operate largely outside standard labour-law protections, leaving young gig workers exposed to income volatility and limited recourse [6, 7]. Spatial disparities in industrialization and agglomeration mean that vocational reform and digital-ecosystem investment yield different returns across provinces, so that youth in less industrialized regions benefit less from the same nominal policy design [2, 9, 21]. Programme-level evidence from Kartu Prakerja further shows that even well-funded digital skilling interventions face a persistent trade-off between training intensity and cash-incentive costs, requiring ongoing recalibration to remain cost-effective at scale [23].

5.2. Gender, Regional, and Digital Divides.

Equity concerns cut across the innovation pathways reviewed in this article. Digital divides in infrastructure and literacy mean that the benefits of e-commerce, fintech, and digital-ecosystem participation accrue disproportionately to youth in better-connected urban areas [10, 11, 17]. Gender disparities are similarly persistent: without deliberate design choices, entrepreneurship and skilling programmes tend to reach young men more readily than young women, whereas programmes explicitly designed around women's constraints, such as gender-targeted vocational training and adapted Kartu Prakerja outreach, demonstrate that these gaps can be narrowed through design rather than left to broad-based access alone [4, 12]. The socioeconomically disadvantaged are also disproportionately exposed to shocks such as the COVID-19 pandemic, reinforcing the case for targeting innovation investment toward the youth populations least able to absorb labour-market disruption on their own [25].

5.3. Policy Recommendations and Concluding Remarks.

Three policy implications follow from this review. First, digital and technology-driven innovation should be paired with labour-protection and financial-literacy measures, since the evidence indicates that digital access alone does not guarantee decent work or sustained enterprise growth [7, 19, 20]. Second, vocational and skilling innovation is most effective when coordinated with regional industrial policy and explicit innovation-capacity building, rather than treated as a stand-alone curriculum reform [3, 9, 22]. Third, entrepreneurship-ecosystem and policy instruments, including flagship programmes such as Kartu Prakerja, should be continuously evaluated and recalibrated, with particular attention to gender and regional equity, to ensure that scarce public resources are allocated to the configurations that generate the largest verified labour-market returns [4, 23, 24].

In conclusion, this review has synthesized peer-reviewed evidence on four interlocking innovation pathways, digital and technology-driven innovation, skills and vocational innovation, entrepreneurship and innovation ecosystems, and policy and institutional support, that together characterize the current landscape of responses to youth unemployment in Indonesia and comparable developing countries. The evidence supports a cautiously optimistic assessment: innovation-based interventions can and do improve youth labour-market outcomes, but their benefits are conditional, unevenly distributed, and dependent on complementary institutional investment. Future research should prioritize longer-run impact

evaluation of digital skilling and entrepreneurship programmes, disaggregated analysis of gender and regional equity effects, and comparative studies that examine how Indonesia's experience with innovations such as Kartu Prakerja can inform policy design in other developing countries facing similarly acute youth-employment challenges.

Competing Interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this article.

Author Contributions

Both authors contributed equally to this work, including conceptualization, literature search and synthesis, writing of the original draft, and review and editing of the final manuscript. Both authors have read and approved the final version of the manuscript.

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