Facing Digital Transformation: The Role of the Prakerja Program in Enhancing Indonesian Workforce Competencies

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Abstract
The Prakerja Program plays a crucial role in addressing Indonesia's demand for a digitally skilled workforce amid rapid technological and economic transformations. This study assesses the program's effectiveness by employing the European Digital Competence Framework and Kirkpatrick's Training Evaluation Model. The analysis reveals that while the program ensures accessibility and provides fundamental digital training, it demonstrates notable deficiencies in advanced skill development, sector-specific training, and practical applications. These limitations impede participants' preparedness for specialized employment in the technology sector, creative industries, and startups. The findings emphasize the necessity of an enhanced curriculum that incorporates advanced, modular training and experiential learning opportunities. To improve the program's efficacy, this study recommends fostering strategic collaborations with industry stakeholders and implementing inclusive educational strategies. Aligning the program with labor market demands is essential for cultivating a highly competent and adaptable workforce in Indonesia's evolving digital economy.

A. INTRODUCTION

The global economy is undergoing rapid digital transformation, driven by advancements in technology and the demands of Industry 4.0. This shift has created a pressing need for a digitally skilled workforce that can adapt to evolving industry requirements. In Indonesia, where sectors such as finance, manufacturing, and services are embracing digital tools, the need to upskill human resources is more urgent than ever. Technological progress also has profoundly impacted many areas of life, especially by enhancing production processes and market efficiency. The rise of digital platforms has revolutionized communication, offering greater flexibility and efficiency in how people interact[1]. Programs such as Prakerja have the potential to meet these demands by providing participants with essential digital competencies, helping them adjust to the ever-changing requirements of Indonesia's job market while supporting the country's economic stability[2]. The Indonesian government launched the Prakerja (Pre-Employment) Training Program as a strategic response to this challenge, aiming to enhance workforce competencies and support employability in the digital era. The program offers a range of training options, from technical to soft skills, targeting unemployed individuals and those seeking to improve their professional capabilities[3]. Indonesia's Prakerja program was developed against the backdrop of high unemployment rates and the economic impact of the COVID-19 pandemic, which exacerbated workforce vulnerabilities and underscored the need for adaptable skill sets. This initiative is integral to Indonesia's broader human resource development strategy, aligning with Sustainable Development Goals (SDGs) such as SDG 4 (quality education) and SDG 8 (decent work and economic growth)[4]. As industries increasingly digitize, the program's

[1] F. Susanto et al., "Analisis penggunaan tagar # 1hari1oknum dan # percumalaporpolisi dalam fungsi komunikasi bermedia komputer di instagram" 10, no. 2 (2024).
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[4] Z Komar et al., "Community Health Centres as the Pharmaceutical Services Support System in Healthy Indonesia Program: An Observational Study in West Java Indonesia," *International Journal of Applied Pharmaceutics* 13, no. 4 SE-Original Article(s) (11 Desember 2021): 216–19, https://doi.org/10.22159/ijap.2021.v13s4.43862.

emphasis on both digital and soft skills is designed to build a workforce capable of navigating the demands of a digital economy and to mitigate skill gaps that hinder individual and organizational productivity. However, as part of broader strategies to build a digitally skilled workforce, higher education institutions also play a critical role. Students' choices about higher education are heavily shaped by a combination of digital marketing efforts, tuition costs, and recommendations shared through word-of-mouth. To strengthen their recruitment strategies, universities should focus on combining impactful digital outreach with positive word-of-mouth promotion. At the same time, factors like affordability, the quality of academic programs, and the institution's reputation continue to play a vital role in influencing prospective students' decisions[5].

Despite the promise of the Prakerja program, challenges remain in effectively aligning the skills provided with those demanded by Indonesia's digital economy. Research indicates that while many workers complete the Prakerja courses, the program's curriculum lacks coherence in its alignment with actual labor market needs, resulting in training that may not adequately prepare participants for specific roles in digitally transformed industries[6]. Additionally, there is limited empirical evidence on whether the program addresses digital skills comprehensively or only provides general skill enhancement, creating a gap in understanding its true impact on participants' digital competencies. As part of the Digital Talent Scholarship initiative, the DEA program aims to cultivate skilled individuals who can drive the use and integration of digital technology in entrepreneurship. This initiative supports national strategies to strengthen the digital economy, with a particular focus on empowering MSMEs to improve their operations within the digital landscape[7].

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[6] H. D Nida, D. A. N. Ismi, dan G. S Didik, "Public-Private Partnership In Indonesian Urban Water Sanitation And Hygiene Program: Human Resource Capacity's Innovation," *Iapa Proceedings Conference*, 2019, 448, https://doi.org/10.30589/proceedings.2019.247.
[7] Sandika Rhamadona, Siska Armawati Sufa, dan Meithiana Indrasari, "Communication Audit of Digital Entrepreneurship Academy of Human Resources Research Program and Development Agency of the BPSDMP Kominfo Surabaya in Pamekasan Region" 2, no. 01 (2023): 197–206.

To address these issues, this study seeks to evaluate the Prakerja program's effectiveness in enhancing digital competencies and to identify areas for improvement. A structured examination of the program's curriculum, delivery, and outcomes will provide insights into its alignment with Indonesia's industry demands. Through an analysis of participant outcomes, this research aims to offer recommendations to strengthen the program, potentially leading to modifications in curriculum and delivery that are better tailored to the realities of Indonesia's digital transformation.

Human Capital Theory (HCT) highlights the role of education and training in enhancing individuals' skills, knowledge, and experience, which increases their productivity and value in the labor market. Developed by economists like Gary Becker and Theodore Schultz, HCT identifies human capital as a crucial asset for individual career success and organizational performance[8]. The theory emphasizes that both general and firm-specific training contribute to competitive advantages for organizations[9]. At the macroeconomic level, a well-educated workforce fosters innovation and productivity, supporting economic growth. Policymakers can leverage HCT to create education and training programs that align with labor market demands, promoting broader economic development.

The Prakerja program emphasizes digital literacy by integrating foundational skills, ICT proficiency, and advanced digital competencies such as data analysis, digital marketing, and cybersecurity. Leveraging frameworks like the European Digital Competence Framework (DigComp) and UNESCO's ICT Competency Standards, the study evaluates the program's effectiveness in equipping participants for Indonesia's tech-driven economy (Abubakari, 2023). These frameworks highlight core areas, including information literacy, collaboration, digital content creation, safety, and problem-solving, which are critical for fostering a digitally competent society prepared for evolving

[8] Christopher M Harris, Lee W Brown, dan Marshall W Pattie, "You are drafted: the role of employee and manager human capital on employee career advancement," *Journal of Organizational Effectiveness: People and Performance* 9, no. 3 (1 Januari 2022): 506–23, https://doi.org/10.1108/JOEPP-07-2021-0189.

[9] Chris Changwha Chung et al., "Human capital in multinational enterprises: Does strategic alignment matter?," *Journal of International Business Studies* 46, no. 7 (2015): 806–29, https://doi.org/10.1057/jibs.2015.15.

technological challenges[10].

Training Program Effectiveness Theory, coupled with Kirkpatrick's Four-Level Training Evaluation Model (1998), provides a robust framework to assess the Prakerja program's impact. This model evaluates effectiveness across reaction, learning, behavior, and results, linking participant satisfaction and knowledge gained to real-world applications and career outcomes[11]. Key factors like relevance to job roles, instructional quality, and participant engagement play pivotal roles in training success, highlighting the need for continuous evaluation to address emerging organizational and workforce needs[12].

Industry-Skill Alignment Theory underscores the necessity of aligning the program's curriculum with labor market needs to address skill mismatches and enhance workforce employability[13]. Programs incorporating input from industry stakeholders are shown to effectively prepare adaptable and globally competitive workers, particularly for contexts like Industry 4.0 and 5.0 (Shanfari, 2024). Continuous collaboration between industries and educational institutions fosters targeted initiatives and lifelong learning, ensuring relevance amid technological shifts.

Digital Divide Theory examines barriers such as limited internet access, low digital literacy, and insufficient devices, which hinder participants in underserved or remote areas from fully benefiting from the Prakerja program[14]. These disparities, driven by income, education, and geographic location, exacerbate socio-economic inequality, limiting participation in digital opportunities[15]. Bridging this divide requires policies promoting digital

[10] José Manuel García-Vandewalle García et al., "Analysis of digital competence of educators (DigCompEdu) in teacher trainees: the context of Melilla, Spain," *Technology, Knowledge and Learning* 28, no. 2 (2023): 585–612, https://doi.org/10.1007/s10758-021-09546-x.
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[14] Mei Lan Fang et al., "Exploring Privilege in the Digital Divide: Implications for Theory, Policy, and Practice," *The Gerontologist* 59, no. 1 (9 Januari 2019): e1–15, https://doi.org/10.1093/geront/gny037.
[15] Farooq Mubarak dan Reima Suomi, "Elderly Forgotten? Digital Exclusion in the Information Age and the

inclusion, ensuring equitable access to technology and opportunities, and addressing systemic disparities critical to workforce development in a digital society.

Scientific literature underscores the importance of targeted, industry-aligned training programs in equipping workers with relevant digital skills for economic competitiveness. Studies by Nouri et al. (2019) highlight that skill-specific training not only enhances employability but also positively impacts organizational performance, especially when aligned with the actual demands of modern industries[16]. Research on training programs similar to Prakerja emphasizes the need for robust frameworks that involve collaboration with industry stakeholders to ensure relevance and efficacy in skill development [17]. These findings suggest that integrating public-private partnerships in training programs could enhance the Prakerja initiative's ability to deliver industry-relevant skills. Additionally, literature on workforce development emphasizes the role of soft skills, such as communication and adaptability, in enhancing workplace readiness[18]. In rapidly transforming economies, technical proficiency alone may be insufficient; employers increasingly value employees who are flexible and able to navigate dynamic work environments. Integrating both technical and soft skill training within Prakerja could enable participants to contribute effectively within organizations and better align their competencies with labor market expectations.

Although the Prakerja program is a progressive step in Indonesian workforce development, research has identified several critical gaps that limit its effectiveness. Studies highlight that the program often relies on short-term training formats, which may not be sufficient to instill the depth of knowledge

Rising Grey Digital Divide," *INQUIRY: The Journal of Health Care Organization, Provision, and Financing* 59 (1 Januari 2022): 00469580221096272, https://doi.org/10.1177/00469580221096272.

[16] Homayoun Nouri et al., "Development a Model for the Evaluation and Improvement of Key Human Resource Competencies Using the Grounded Theory TT - Development a Model for the Evaluation and Improvement of Key Human Resource Competencies," *jorar* 12, no. 1 (1 September 2020): 13–22, https://doi.org/10.32592/jorar.2020.12.1.2.

[17] Mas'ud dan Tenriyola, "HR Competency Analysis on Increasing MSMEs Performance In Supporting Industrial Era 4.0."

[18] I Juniarta, I Merta, dan Wisnu Ardiansyah, "The Role of Human Resource Competence and Entrepreneurial Motivation on the Performance of Women Entrepreneurs," *Jurnal Ilmiah Manajemen Kesatuan* 11, no. 2 SE-Articles (1 Agustus 2023): 421–28, https://doi.org/10.37641/jimkes.v11i2.2078.

and critical thinking required for complex digital roles[19]. There is also a lack of consistency in training quality across different modules, with some courses not adequately addressing the advanced digital skills needed by industries undergoing digital transformation[20]. The reliance on online platforms poses accessibility challenges, particularly for individuals in remote areas with limited internet access, further limiting the program's reach[21]. These challenges underscore a research gap regarding the Prakerja program's ability to bridge digital skill gaps meaningfully and inclusively. Existing evaluations focus primarily on completion rates rather than real employment outcomes, creating a need for studies that assess the program's long-term impact on employability and career growth. This study addresses these gaps by examining the program's role in digital competency development and evaluating its accessibility, alignment, and impact on participants' employment prospects.

The objective of this study is to critically examine the effectiveness of the Prakerja (Pre-Employment) Training Program in equipping Indonesian job-seekers and workers with the digital skills necessary for thriving in a rapidly digitizing economy. The research aims to assess the extent to which the program aligns its curriculum with industry-specific digital competencies and addresses current gaps in digital and soft skill development. By focusing on these aspects, this study seeks to provide actionable insights that could help policymakers refine and adapt the program to better serve Indonesia's evolving labor market. The novelty of this research lies in its comprehensive approach to evaluating a government-led training initiative within the context of digital transformation. Unlike previous studies that mainly address program completion rates, this study will examine real-world outcomes related to employment, career advancement, and skill relevance, providing a nuanced understanding of the program's impact. This research will offer

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[20] Najwa Khairina dan Arbi Wijaya, "The Determinant of Human Development in Eastern Part of Indonesia during 2012-2020," *Signifikan: Jurnal Ilmu Ekonomi* 12, no. 1 (2023): 83–96, https://doi.org/10.15408/sjie.v12i1.29496.

[21] Mustopa et al., "Challenges in Artificial Intelligence Development in Higher Education in China, India, and Indonesia: International Students' Perspectives," *International Journal of Learning, Teaching and Educational Research* 23, no. 2 (2024): 354–73, https://doi.org/10.26803/ijlter.23.2.17.

evidence-based recommendations for improving the Prakerja program, contributing to the academic literature on workforce development and digital transformation while supporting Indonesia's strategic goals for human resource advancement.

B. RESEARCH METHODS

This study employs a qualitative research design to assess the effectiveness of the Prakerja (Pre-Employment) Training Program in enhancing digital competencies among Indonesian job seekers and workers. A case study approach is adopted to provide a comprehensive understanding of the program's implementation and its alignment with industry demands. By utilizing a phenomenological perspective, the research captures participant experiences and evaluates the practical relevance of the acquired digital skills. The study follows a systematic research process, beginning with a literature review to establish a theoretical foundation. Purposive sampling is used to select informants who can provide valuable insights based on their direct experience with the program. Participants, including Prakerja graduates and industry representatives, are selected through purposive sampling to ensure diverse perspectives. Data collection involves semi-structured interviews, allowing for in-depth exploration of training outcomes, challenges, and industry relevance. Thematic analysis is employed to identify key patterns and insights. Findings contribute to understanding the program's impact, offering recommendations for curriculum enhancement and industry collaboration.

C. RESULTS AND DISCUSSION

The Prakerja program has played a crucial role in addressing Indonesia's digital skills gap by providing accessible, entry-level training in software usage and social media management. While it has enhanced digital literacy and economic opportunities, its curriculum lacks the depth required for specialized roles in Indonesia's rapidly evolving digital economy. Participants have noted the program's theoretical focus and limited scope, which do not sufficiently prepare them for advanced challenges such as e-commerce strategies and data analytics. To enhance its effectiveness, the program must integrate advanced, industry-specific modules and collaborate with technology firms to offer hands-on training. Additionally, participants' diverse backgrounds and career

aspirations underscore the need for a more adaptive curriculum that aligns with individual needs and industry demands. Strengthening these aspects would enable Prakerja to serve as a transformative force in Indonesia's digital workforce development.

Table 1. Biography of participants of the Prakerja's program

Participant	Gender	Age	Education	Employment Status
P1	Male	27	Bachelor of Informatics Engineering	Unemployed, looking for work
P2	Female	23	High school, graphic design course	Graphic design freelancer
P3	Male	30	Diploma in Business Administration	Junior employee at a startup company
P4	Female	35	Bachelor of Education	Honorary teacher
P5	Male	40	Junior high school, small entrepreneurial experience	Micro-entrepreneur (laundry business)
P6	Male	32	Bachelor Degree	Private
P7	Male	38	Master Degree	Self-employed

For example, participants in this study include a 23-year-old graphic design freelancer with a high school education, a 40-year-old micro-entrepreneur who completed junior high school, a self-employed master's degree holder, and an unemployed informatics engineering graduate actively seeking work. These varied profiles emphasize the need for a flexible, customizable curriculum that addresses unique professional goals and closes existing skills gaps. By analyzing this demographic data, the program can identify its strengths and limitations, paving the way for targeted improvements that better prepare Indonesia's workforce to thrive in a rapidly evolving digital economy.

Relevance of Curriculum

The Prakerja program's curriculum offers a foundational introduction to digital skills, covering areas such as software usage and social media management. While beneficial for participants with limited prior exposure to

digital tools, the program lacks depth and fails to address sector-specific competencies essential for Indonesia's evolving digital economy. Participants acknowledged the value of the general knowledge provided but emphasized the absence of advanced training necessary for specialized roles in industries such as technology, startups, and the creative sector. The curriculum remains adequate for beginners; however, it does not sufficiently align with industry-specific or advanced digital skill requirements. A thematic analysis further categorizes the curriculum's relevance, highlighting its strengths in foundational training while identifying gaps in advanced and sector-specific competencies. Addressing these limitations is critical to enhancing the program's effectiveness in preparing participants for specialized workforce demands.

Table 2. Initial, Axial, Selective Codes of Relevance of Curriculum

Initial Codes	Axial Codes	Selective Codes	Thematic Code
• Basic digital skills provided • Lack of advanced training • Sector-specific gaps noted • Creative tools missing • Tech skills underrepresented	• General skill coverage • Lack of depth in content • Misalignment with industry needs	• Foundational alignment • Gaps in advanced skills	Curriculum Relevance

The evaluation of the Prakerja program's curriculum employs a structured coding methodology to assess its relevance and effectiveness. Initial coding identifies key observations, including the program's emphasis on basic digital skills, the absence of advanced training, sector-specific skill gaps, and limited technical competencies. These observations are categorized into broader axial codes, revealing overarching themes such as the shallow coverage of digital skills and misalignment with industry requirements. Selective coding further refines these themes into core findings, emphasizing the program's strength in foundational training while exposing critical deficiencies in preparing participants for specialized roles.

The central theme, "Curriculum Relevance," highlights the need for alignment with industry demands and the integration of advanced skill

development. While the program effectively introduces beginners to digital literacy, it lacks the depth necessary for individuals pursuing careers in technology-driven industries. This disconnect underscores the necessity of curriculum enhancements to improve workforce readiness in competitive labor markets.

"The curriculum should include real project-based training and practical applications of the latest technologies." (Participant 1)

Participant feedback underscores a critical deficiency in the Prakerja program's curriculum: the lack of hands-on and practical training. Participant 1 highlights the gap between theoretical knowledge and real-world application, emphasizing the need for interactive, project-based learning through case studies, assignments, and exposure to emerging digital tools such as AI and big data platforms. This critique reflects the curriculum's misalignment with industry demands and technological advancements, reducing its effectiveness in preparing participants for tech-intensive roles.

Similarly, Participant 2 acknowledges the program's value in providing foundational skills but emphasizes its failure to incorporate the latest technological developments. These perspectives collectively highlight a significant gap between basic digital literacy and the evolving competencies required in the digital economy. Addressing this issue requires integrating practical, real-world training with advanced technological skills to enhance workforce readiness in competitive industries.

"This curriculum is quite helpful for basics but not adaptive enough to the latest technological developments." (Participant 2)

Participant 2 recognizes the program's value for beginners but criticizes its failure to integrate emerging technological advancements, indicating a static curriculum that lacks adaptability. This limitation is particularly problematic in fields such as graphic design and digital marketing, where rapid technological shifts necessitate continuous updates to maintain industry relevance. The inability to incorporate new tools and methodologies reduces the program's effectiveness for mid-level and advanced learners.

Expanding on this critique, Participant 3 highlights the curriculum's limited applicability to specific industry contexts, particularly the dynamic requirements of startups. While the program offers a foundational skill set, its

rigid structure prevents it from addressing specialized industry demands. Collectively, these perspectives emphasize the necessity of a more adaptive and responsive curriculum that evolves alongside technological advancements and sector-specific requirements, ensuring broader relevance and effectiveness for a diverse range of learners.

"Good enough for foundational skills but lacks relevance for startup-specific needs." (Participant 3)

Participant 3 identifies a sector-specific gap in the Prakerja program's curriculum, emphasizing its inadequacy for startups, which require specialized competencies such as growth hacking, lean product development, and data-driven marketing strategies. While the program provides a foundational skill set, it fails to address the advanced, niche expertise necessary for success in dynamic, fast-paced startup environments, which play a crucial role in Indonesia's digital economy.

A recurring critique among participants is the lack of real-world application and project-based training, which are essential for job readiness in tech-intensive industries. One participant specifically noted the need for practical applications of emerging technologies, highlighting the disconnect between theoretical instruction and industry requirements. These findings indicate that, while the curriculum effectively promotes general digital literacy, it does not align with the specialized demands of Indonesia's evolving digital economy. Strengthening the program requires the integration of advanced, industry-specific modules to enhance its relevance and applicability.

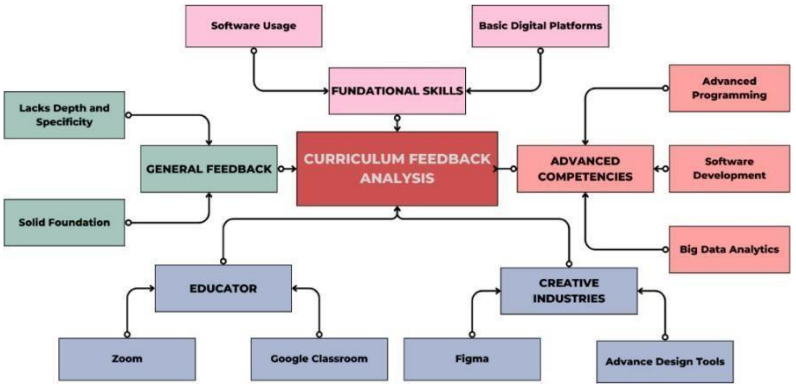


Figure 1. Diagram of Curriculum Feedback Analysis

The capacity of the curriculum to satisfy the requisite skills for Indonesia's digital economy is a point of contention among participants. Although foundational skills such as software usage and basic digital platforms were commended for their relevance for beginners, participants highlighted significant shortcomings in the curriculum's ability to address advanced competencies. Those working in technology-related fields, for instance, highlighted the lack of training in software development, advanced programming, and big data analytics. Similarly, those from creative industries highlighted the absence of up-to-date tools like Figma and advanced design software, which are critical for staying competitive in their fields. Educators expressed frustration over insufficient training in digital learning tools such as Google Classroom and Zoom. The general consensus indicates that while the curriculum provides a solid foundation, it lacks the depth and specificity required to address the specialised needs of various industries.

General and Specific Skills

Although the programme is effective in providing general digital skills, it frequently neglects the provision of specialised training that is crucial for participants seeking employment in niche sectors. The curriculum currently prioritises broad competencies such as digital marketing basics and social media management, which are beneficial for beginners or individuals exploring general digital tools. However, this generalist approach leaves significant gaps for participants with specific career goals in startups, creative industries, or micro-enterprises. The table provides an overview of the coding process used to analyse the Prakerja programme's curriculum.

Table 3. Initial, Axial, Selective Codes of General and Specific Skills

Initial Codes	Axial Codes	Selective Codes	Thematic Code
• Focus on general skills • Specialization missing • Advanced tools ignored • Needs modular training • Industry-specific demands unmet	• Emphasis on general competencies • Neglect of specialized roles • Lack of industry alignment	• Overgeneralization of training • Insufficient specialization	General vs Specific Skills

The coding analysis of the Prakerja program's curriculum reveals a recurring emphasis on general competencies at the expense of specialized skill development. Initial coding highlights key observations, including the program's broad approach, limited focus on advanced tools and techniques, and unmet industry-specific demands. Axial coding further categorizes these findings, identifying a misalignment with industry needs and a lack of specialization. Selective coding refines these themes, emphasizing the program's overgeneralized training model and its failure to meet the specialized skill requirements of Indonesia's evolving job market. The overarching thematic code, "General vs. Specific Skills," encapsulates the core challenge of balancing foundational training with specialized competencies to enhance workforce readiness.

Participant feedback reinforces this critique, particularly from creative industry professionals and micro-entrepreneurs, who highlight the absence of essential tools such as Figma, advanced video editing software, and localized marketing strategies like WhatsApp Business. These omissions limit participants' ability to address sector-specific challenges, reducing the program's relevance for those pursuing niche career paths. The findings underscore the necessity of a curriculum that integrates foundational training with targeted, industry-specific modules to maximize its impact and effectiveness in Indonesia's digital economy.

"The curriculum focuses more on general skills such as the use of Microsoft Office software and social media management." (Participant 1)

Participant 1 critiques the curriculum's emphasis on general skills, such

as document management and social media, noting its failure to address specialized competencies required in industries like technology and digital marketing. While foundational skills have broad applicability, the curriculum lacks training in project management tools, coding platforms, and advanced analytics software, limiting its relevance for roles in startups and tech-driven sectors. This highlights a disconnect between the program's generalist approach and the technical expertise demanded by rapidly evolving industries.

Expanding on this critique, Participant 2 identifies the absence of essential creative industry tools, such as Figma and advanced video editing software, which are considered industry standards. This feedback reinforces the curriculum's limitations in addressing sector-specific needs, particularly in creative fields. Collectively, these insights reveal a critical gap in specialized training, suggesting the need for curriculum enhancements that integrate both foundational and advanced, industry-relevant skills.

"It covers basic design and social media content management but lacks tools like Figma or advanced video editing techniques." (Participant 2)

Participant 2 highlights a significant gap in the curriculum's coverage of industry-specific tools for the creative sector. While the program includes basic design principles and social media management, it fails to incorporate essential software such as Figma for UI/UX design and Adobe Premiere Pro for advanced video editing. These tools are critical for creative professionals to maintain competitiveness and produce high-quality outputs. This critique underscores the program's inability to adapt to industry trends, particularly in sectors where proficiency in cutting-edge tools is essential for career success.

Expanding on this critique, Participant 5 identifies similar shortcomings in the curriculum's relevance for micro-entrepreneurs, who require training in localized marketing strategies and tools like WhatsApp Business to effectively manage small-scale enterprises. While creative professionals need specialized software, micro-entrepreneurs rely on business-oriented digital tools to enhance operations. Collectively, these perspectives highlight the curriculum's broader limitation: its failure to tailor training to the distinct needs of diverse industries. Addressing this gap is crucial to enhancing the program's relevance and impact across different professional sectors.

"For micro-entrepreneurs, it doesn't address specific skills like local marketing or WhatsApp Business." (Participant 5)

Participant 5 emphasizes the need for micro-enterprise-specific training. Local marketing strategies and tools like WhatsApp Business are integral to the operations of small businesses, particularly in the context of Indonesia's growing reliance on informal economies and digital communication platforms. The absence of such practical, niche training makes the curriculum less applicable for entrepreneurs looking to scale their businesses efficiently. This excerpt reveals the program's failure to cater to the unique needs of micro-entrepreneurs, which could have a significant impact on their ability to succeed in a digital economy.

The misalignment between the curriculum and industry-specific requirements indicates that the program prioritizes general skills over specialized competencies. Bridging this gap necessitates a modular and adaptive framework, enabling participants to select industry-specific training tracks tailored to their professional objectives. Such an approach would enhance the program's effectiveness and relevance by accommodating diverse participant needs. The findings reveal that while the program successfully imparts general digital competencies, its lack of specialized, industry-relevant training limits its utility for individuals aiming to excel in niche markets.

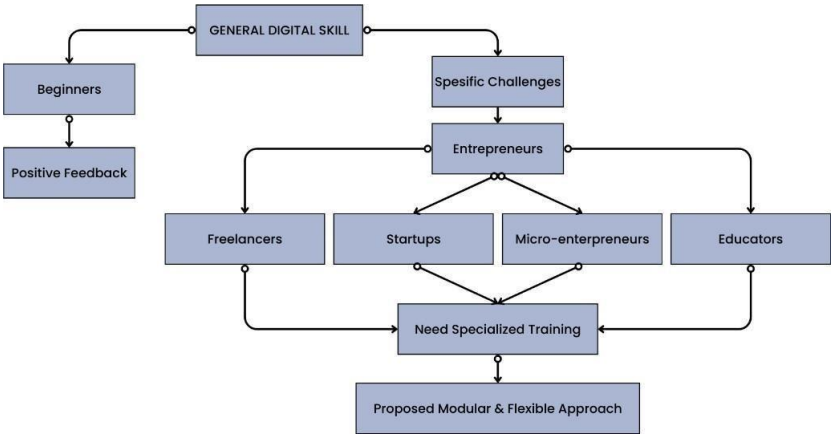


Figure 2. Diagram of General Digital Skill

Participant feedback consistently highlights the curriculum's focus on general digital skills, such as digital marketing and content creation, which proved beneficial for individuals with limited prior experience in digital tools.

However, this generalized approach failed to meet the specific demands of participants engaged in freelancing, entrepreneurship, and professional roles.

Startup professionals emphasized the need for training in growth hacking and digital product management, while micro-entrepreneurs expressed frustration over the lack of localized marketing strategies and accessible financial management tools essential for small business success. Similarly, educators sought training in interactive digital classroom management. These insights reveal a discrepancy between the curriculum and the diverse needs of participants, underscoring the necessity for a modular and flexible training framework that allows for specialized, industry-relevant learning pathways to enhance the program's impact and applicability.

Competency and Readiness Impact

The program significantly improves participants' confidence and foundational digital skills. Many participants reported enhanced familiarity with digital tools and increased confidence in applying basic digital competencies to personal or professional tasks. For instance, participants highlighted gains in document management, social media marketing, and basic online tools, which enabled them to better navigate the digital landscape. This foundational knowledge is particularly valuable for participants transitioning from non-digital roles or industries. The table provides an overview of the coding process, with a particular focus on the impact of the Prakerja programme on participants' competencies and preparedness for the job market.

Table 4. Initial, Axial, Selective Codes of Competency and Readiness Impact

Initial Codes	Axial Codes	Selective Codes	Thematic Code
• Boosts digital confidence • Builds basic competencies • Limited market readiness • Advanced roles underprepared • Freelancers face challenges	• Foundational impact • Limited readiness for competition • Gaps in technical preparation	• Competency building • Readiness limitations	Competency and Readiness Impact

The initial coding analysis identifies key observations regarding the program's role in enhancing digital confidence and developing fundamental competencies, while also revealing significant challenges, such as limited market readiness, insufficient preparation for advanced roles, and obstacles faced by freelancers. These insights are categorized into three axial codes: foundational influence, limited competitive readiness, and gaps in technical preparation. Further refinement through selective coding establishes two primary themes: competency building, which underscores the program's success in fostering basic skills, and readiness limitations, highlighting its shortcomings in preparing participants for specialized roles and competitive markets. The overarching thematic code, "Competency and Readiness Impact," encapsulates these findings, emphasizing the need for improved technical preparation and market alignment to enhance participant employability.

The program's impact on job readiness in competitive labor markets remains limited, particularly in tech-driven and freelance sectors. Participants reported underdeveloped advanced skills, such as data analytics, programming, and technical project management, leaving them inadequately prepared to compete for specialized roles. One participant acknowledged that while the program strengthened their basic digital competencies, it had minimal influence on job market readiness. Similarly, freelancers struggled due to a lack of training in advanced tools and techniques, further underscoring the program's inability to meet industry-specific demands.

Building on the "Competency and Readiness Impact" theme, Participant 1 reinforces the program's dual nature: while it effectively builds foundational skills, it remains insufficient in preparing participants for highly competitive sectors, particularly in technology and freelancing. This aligns with broader findings that, although the program instills confidence in basic competencies, it lacks the depth and specialization necessary to bridge the gap between foundational knowledge and advanced industry requirements. These insights highlight the critical need for a more tailored, industry-aligned curriculum to better address the demands of evolving labor markets.

"The program helped me strengthen the basics of digital competencies but had limited impact on readiness in the tech job market." (Participant 1)

The analysis indicates that while the program effectively cultivates foundational digital skills, such as document management and basic software usage, it lacks the depth necessary to prepare participants for advanced roles in the tech industry, particularly in areas like coding and data visualization. This misalignment with specialized skill demands in the competitive tech labor market limits participants' employability in higher-level positions.

Expanding on this critique, Participant 2 highlights similar concerns regarding the program's insufficient depth, particularly for freelancers. Although the curriculum enhances confidence in foundational skills, it does not provide the specialized training and advanced competencies essential for success in freelancing and other tech-driven careers. This feedback reinforces the need for a curriculum that extends beyond basic competency development by integrating industry-relevant, advanced skill training to enhance participants' long-term career prospects in specialized and competitive markets.

"It boosted my confidence but lacks depth for competitiveness, especially in freelancing." (Participant 2)

The analysis indicates that while the program boosts participants' confidence in using digital tools, it lacks the depth needed for freelancers to thrive in competitive markets. The absence of advanced training in skills like video editing and graphic design highlights the need for more comprehensive, specialized training to address the unique challenges faced by freelancers in creative and technical fields. Building on the analysis of the program's limitations for freelancers, Participant 3 extends this critique by emphasizing the insufficient training for technical skills required in startup environments, such as data analysis. While the program is effective in covering foundational topics like digital marketing basics, it fails to meet the advanced demands of technical and creative sectors. Together, these perspectives highlight the program's need to evolve beyond general competencies and provide specialized training that caters to the distinct needs of freelancers and professionals in highly technical fields like startups.

"The impact is positive for digital marketing basics but not enough for technical startup skills like data analysis." (Participant 3)

The analysis reveals that while the program offers foundational training

in digital marketing, it falls short in equipping participants with advanced skills essential for startup roles, such as growth hacking and data analysis. This highlights the program's limited applicability for innovation-driven environments that require technical and analytical expertise.

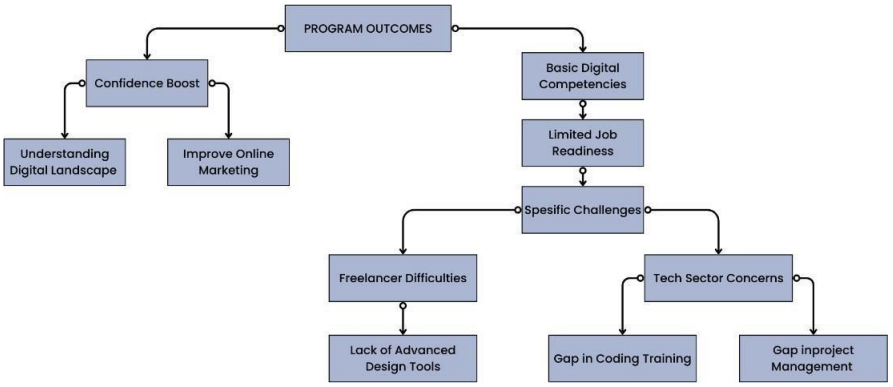


Figure 3. Diagram of Program Outcomes of Prakerja

The program effectively enhanced participants' confidence and fundamental digital competencies, with many respondents reporting notable improvements in document management, social media marketing, and the use of essential online tools. This foundational knowledge contributed to a greater understanding of the digital landscape, enabling participants to market themselves or manage their businesses online.

However, the program's impact on job readiness remained limited, particularly for those seeking advanced or technical roles. Freelancers struggled to differentiate themselves in a competitive market due to a lack of comprehensive training in advanced design tools and techniques. Similarly, participants in the technology sector expressed concerns regarding the absence of practical training in coding and project management. These limitations highlight the program's inability to address the specialized skill demands of the modern labor market, underscoring the need for more targeted, industry-specific training to enhance workforce competitiveness.

These findings reveals that while the program builds foundational competencies, its limited depth undermines participants' readiness for advanced or technical roles. Incorporating advanced training and real-world applications, such as case studies or mentorship opportunities, could better prepare participants for the dynamic demands of the labor market.

Strengths and Weaknesses of Delivery

The delivery methods of the Prakerja program were widely praised for their accessibility and flexibility. The online format allows participants to access courses at their own pace, making it particularly beneficial for individuals with other commitments, such as work or family responsibilities. This inclusivity enables participants from diverse educational and professional backgrounds to engage with the program. Participants appreciated features such as interactive lessons and easy access to course materials, which made learning more convenient. One participant remarked, "The main strength is the flexibility of taking classes online, so they can be accessed at any time". The table presents a detailed analysis of the strengths and weaknesses inherent to the Prakerja programme's delivery approach.

Table 5. Initial, Axial, Selective Codes of Strengths and Weaknesses of Delivery

Initial Codes	Axial Codes	Selective Codes	Thematic Code
• Accessible and flexible • Online learning appreciated • Lack of practical sessions • Content too theoretical • Challenges for low education	• Strengths • Accessibility • Flexibility • Weaknesses • Practicality • interactivity	• Delivery strengths • Practicality weaknesses	Strengths and Weaknesses of Delivery

The initial coding analysis identifies key observations regarding the accessibility and flexibility of the Prakerja program's online learning format, which participants perceive as beneficial. However, challenges such as limited practical sessions, an overemphasis on theoretical content, and difficulties faced by participants with lower educational backgrounds are also evident. These insights are categorized into axial codes, distinguishing strengths (accessibility and flexibility) from weaknesses (lack of practical training and interactivity). Further refinement through selective coding establishes two principal themes: "Delivery Strengths" and "Practicality Weaknesses." The

overarching thematic code, "Strengths and Weaknesses of Delivery," encapsulates these findings, emphasizing the need to preserve accessibility while enhancing practical, hands-on learning opportunities.

The "Strengths and Weaknesses of Delivery" theme evaluates the program's instructional methods, recognizing accessibility and flexibility as key advantages while identifying significant shortcomings. These include a lack of practical training, insufficient real-world applications, and limited customization for participants' varied educational levels and industry-specific needs. Many participants reported that the curriculum's heavy reliance on theoretical content hindered its applicability in real-world scenarios. For example, one participant noted, "The delivery method is interactive but lacks practical sessions and real-world applications." Additionally, learners with lower educational backgrounds struggled with complex content, citing the need for greater guidance and support. These findings highlight the necessity of integrating more interactive, practice-based learning components to improve program effectiveness and inclusivity.

"The main strength is the flexibility of taking classes online, so they can be accessed at any time." (Participant 1)

The program's flexible online delivery model enhances accessibility by enabling participants to learn at their own pace and accommodate personal schedules. This structure effectively eliminates barriers such as geographic constraints and rigid scheduling, making it particularly beneficial for diverse participants, including those in remote areas or with limited availability.

However, Participant 2 identifies a critical limitation in the program's implementation. While the interactive nature of the delivery model is valued, the lack of practical sessions and real-world applications significantly reduces its overall effectiveness. This feedback highlights the need for a balanced approach that maintains accessibility while integrating hands-on, experiential learning. Strengthening practical training components would ensure that the program not only reaches a broad audience but also equips participants with industry-relevant, job-ready skills.

"The delivery method is quite interactive but lacks practical sessions and real-world applications." (Participant 2)

The program's interactive delivery methods effectively engage

participants but lack hands-on, practical learning opportunities, limiting the application of theoretical knowledge to real-world, industry-relevant skills. This gap reduces participants' ability to effectively utilize their training in professional or entrepreneurial settings.

Participant 5 further critiques the delivery methods, noting that they can be overly complex for individuals with lower educational backgrounds. This feedback highlights the necessity of a curriculum that is both practical and accessible, ensuring it accommodates participants with diverse educational levels. Addressing these limitations through more hands-on learning experiences would enhance the program's inclusivity and overall impact, better preparing participants for industry demands.

"The methods are too complicated for participants with lower education levels like me." (Participant 5)

The program's delivery methods are insufficiently adapted to participants with diverse educational backgrounds, using complex content that may exclude less formally educated learners. This highlights the need for more inclusive strategies, such as simplified language and additional support, to improve accessibility and effectiveness.

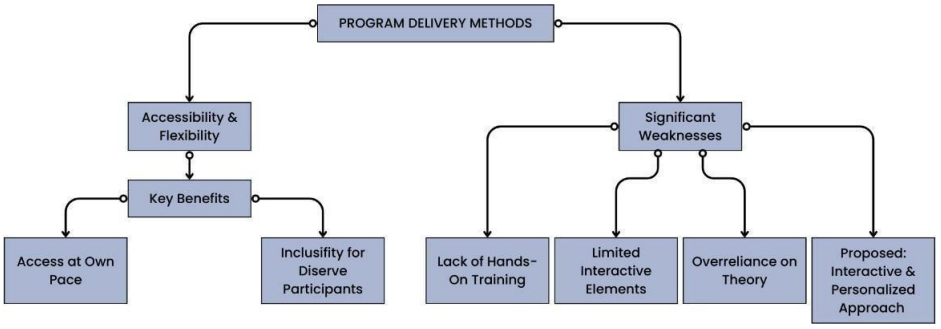


Figure 4. Diagram of Program Delivery Methods

The program's delivery methods were widely recognized for their accessibility and flexibility, with the online learning environment enabling participants to engage at their own pace. This structure promoted inclusivity, particularly benefiting individuals managing work or familial responsibilities.

However, a notable shortcoming was the absence of hands-on training and interactive elements. Participants consistently highlighted the lack of practical modules, real-world projects, and mentorship opportunities, which

limited the application of theoretical knowledge in professional contexts. Additionally, individuals with lower educational backgrounds found the content overly technical or complex, making comprehension difficult without additional support.

These findings underscore the dual nature of the program's strengths and weaknesses. While accessibility and flexibility are key advantages, integrating practical modules, interactive components, and personalized training would enhance the program's effectiveness and adaptability to the diverse needs of participants, ranging from beginners to professionals.

The Recommendations for Improvement

Participants offered numerous constructive recommendations to enhance the curriculum and delivery of the Prakerja program. A recurring theme was the need for advanced, sector-specific training modules. Participants suggested adding courses on app development, machine learning, and advanced tools like Adobe Creative Suite or Google Classroom to address the demands of various industries. These advanced modules would provide participants with a competitive edge in technical roles or specialized sectors. The following recommendations are presented with a view to enhancing the Prakerja programme by addressing its current limitations.

Table 6. Initial, Axial, Selective Codes of The Recommendations for Improvement

Initial Codes	Axial Codes	Selective Codes	Thematic Code
• Add advanced modules • Include practical projects • Focus on sector-specific training • Collaborate with industry experts • Tailor curriculum to sectors	• Curriculum modernization • Real-world applications • Industry collaborations	• Advanced training needed • Industry-relevant curriculum	Recommendations for Improvement

The preliminary coding analysis of the Prakerja program identifies key areas for improvement, emphasizing the integration of advanced modules, project-based learning, sector-specific training, industry collaboration, and

curriculum adaptation to align with market demands. Axial coding categorizes these findings, highlighting the necessity for curriculum modernization, practical applications, and strengthened industry partnerships. Selective coding further refines these insights, underscoring the need for an industry-relevant curriculum and advanced training as primary recommendations.

The overarching thematic code, "**Recommendations for Improvement,**" reinforces the importance of enhancing the program through sector-specific and advanced training modules to better equip participants for Indonesia's evolving digital economy and diverse job markets. A critical recommendation involves fostering collaborations with industry leaders such as Google and Tokopedia to integrate expert insights, ensuring curriculum relevance to market trends. Participants advocate for incorporating real-world projects and hands-on applications to bridge the gap between theoretical knowledge and industry-required skills.

The analysis also identifies a significant gap in the curriculum, with specific recommendations for advanced technical training in areas such as app development, machine learning, big data analytics, and design tools like Figma. Participants emphasize the program's insufficient focus on creative industry competencies, underscoring the necessity for tailored modules addressing sector-specific demands, particularly in education, startups, and the creative economy.

Further recommendations stress the importance of direct industry collaborations to enhance curriculum relevance, create internship and mentorship opportunities, and foster real-world skill development. Participants consistently highlight the need for modular and customizable learning tracks, facilitating targeted workforce training. These findings provide actionable strategies to improve the Prakerja program's effectiveness, industry alignment, and long-term applicability in addressing Indonesia's workforce development needs.

DISCUSSION

The findings of this analysis present a dual perspective: while the Prakerja program demonstrates strengths in accessibility and foundational training, it

lacks depth and industry-specific alignment, limiting its overall effectiveness. The program's flexible structure allows participants to engage at their convenience, yet its insufficient practical applications hinder job readiness for specialized roles.

Addressing these limitations requires a strategic shift toward modular, advanced training options and stronger industry collaborations. Integrating real-world projects, mentorship opportunities, and sector-specific training tracks would enhance participants' preparedness for Indonesia's evolving digital economy. Additionally, continuous feedback mechanisms and adaptive curriculum updates are necessary to maintain alignment with labor market demands.

The Prakerja program represents a significant initiative in bridging Indonesia's digital skills gap. However, its limited depth and lack of industry alignment constrain its ability to meet workforce needs. Implementing advanced modules, practical applications, and industry partnerships would enhance its relevance and impact, better equipping participants for meaningful employment and contributing to Indonesia's digital transformation.

E. CONCLUSION

The Prakerja Program plays a crucial role in addressing Indonesia's digital skills gap by providing foundational training in digital literacy and basic ICT competencies. However, the findings of this study reveal both strengths and limitations in its design and implementation. While the program's flexibility and accessibility benefit a diverse participant base, its curriculum lacks depth in advanced skills, industry-specific alignment, and practical applications.

Participants acknowledged the program's relevance for beginners but highlighted its inability to prepare individuals for specialized roles in technology, startups, creative industries, and micro-enterprises. The program's theoretical focus, combined with a lack of real-world projects and industry-standard tools, limits its effectiveness in addressing Indonesia's evolving digital economy.

To enhance its impact, key recommendations include the integration of advanced, modular training tracks tailored to specific industries,

collaborations with leading companies to incorporate real-world expertise, and a stronger emphasis on hands-on, practical learning opportunities. These improvements would align the program with labor market demands, equipping participants with specialized skills for competitive roles in tech-driven and creative sectors.

In conclusion, while the Prakerja Program has significant potential to strengthen Indonesia's workforce, its long-term effectiveness depends on strategic enhancements. Addressing gaps in depth, specialization, and practical application is essential to ensure that the program contributes to Indonesia's digital transformation while fostering a resilient, future-ready workforce.

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