International Labour Migration in Digital Era: Implementation of Indonesian Migrant Workers Placement Services

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ABSTRACT

This study aims to examine the implementation of Indonesian Government's policy in digitizing public services for the placement of manpower abroad. The scope of this research is focused on SIAPkerja Karirhub as a form of national digital placement service, while the research subject is limited to the performance of Ministry of Manpower which has responsibilities of manpower placement abroad and its digital services. In order to depict and explore the implementation of such digital public service, this research used a descriptive qualitative method. The results show that the regulatory framework shall be strongly considered by the government as it has a significant impact on three out of four aspects of policy implementation: communication, resources, and bureaucratic structure. While the analysis on the disposition aspect reflects a common commitment between the regulator and implementer, as well as shows the absence of friction and distortion within the Ministry of Manpower in developing and implementing the SIAPkerja-Karirhub digital service.
*Keywords: Manpower Placement, Migrant Workers, Policy Implementation, Public Services Digitalization, e-Government*

INTRODUCTION

People nowadays are living in an era that full of technological development, as an impact of globalization. This is in line with Alvin Toffler's thought, as quoted by Santoso et al. (2022), that human civilization can be categorized into three eras: agrarian, industrial and information. In regard to this, Wuryanta (2004) adopted Straubhar's idea that the intensive exchange and use of communication technology, as well as the increasing need for information, has marked the beginning of the information era or the era of information society. The development of digital technology has enterd every joint of human life so that in the end it has also changed the pattern of public interaction within social, economic, political, as well as public administration aspects (Panggabean & Meilani, 2023). Technological development and its internet-based digital services not only have boosted entrepreneurs in promoting their products even to all over the world, but also facilitated the interaction between teachers and students in educational institutions (Ambarsari et al., 2024).

It is undeniable that the development of information and communication technology (ICT) is like a sword with two edges. The existence of internet and sophisticated communication tools have allowed people to access various information in a short time (Wahyuddin et al., 2024). On the positive impact, exposure to this massive and varied information can help people get the information they need. However, information that floods the public can result in information overlap, miscommunication, disinformation and create an excessive burden when the public is are unable to receive, digest, and utilize the existing information (Azzani et al., 2023; Wuryanta, 2004). This pros and cons of the ICT development also applied in the context of employment, in which people and companies have used the internet search for and publish job vacancies (Cruz, 2014). However this can also cause harm for society and job seekers and create problems if it is misused to manipulate and commit fraud, such as job fraud or job scam.

Figure 1. Complaints and Losses Due to Cyber Crime in the United States (2018-2022)
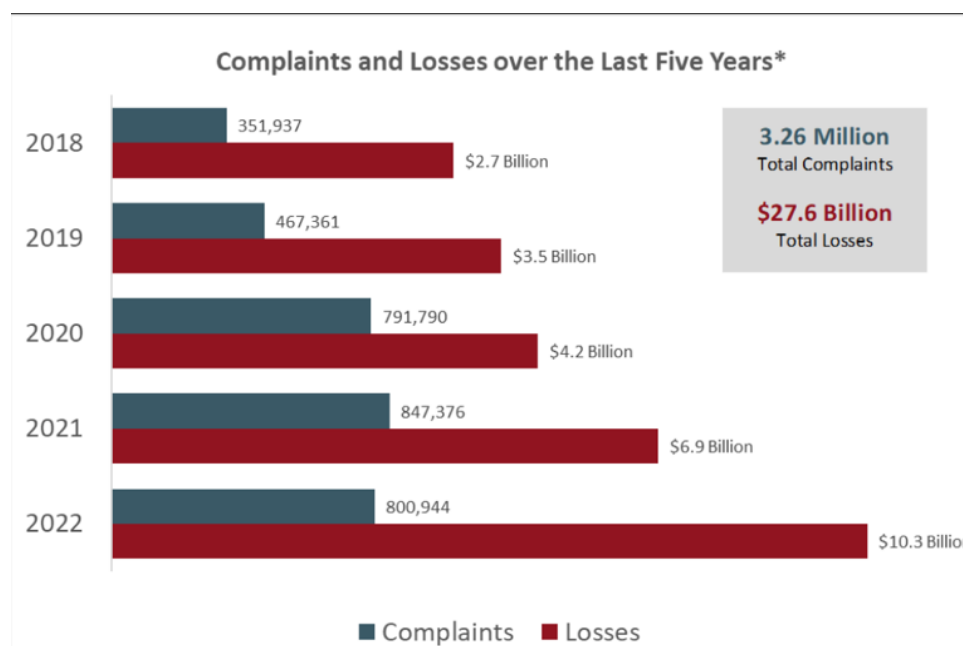
Source: Federal Bureau of Investigation (n.d.)

Problems resulting from the misuse of technology and internet occur both in developing and developped countries. Figure 1 indicates the increased of a cyber crime trends in the United States from 2018 to 2021. Although the number of complaints received in 2022 has decreased from the previous year, the number of losses due to cyber crime continue to increase. The Internet Complaint Center (IC3) of the United States' Federal Bureau of Investigation (FBI) has received 3.26 million complaints in 2018 to 2021, with total loss value of $27.6 billion. Meanwhile, in Indonesia, the National Police athority has received 39.587 complaints to date from the society. The most reported cyber crime in Indonesia is online fraud, as many as 14.495 complaints. The forms of such online fraud includes investment fraud, lottery and prize fraud, job and employment scams, technical support fraud, romance fraud, credit card fraud and online shopping fraud (Patroli Siber, n.d.). Apart from that, another report from the Indonesian Ministry of Communication and Information noted that the victims of online fraud in Inodnesia has reached 130.000 people throughout 2022 (Utomo et al., 2024).

The pattern of cyber crime in the current era has shifted so that it no longer only targets low-educated people. The operational target of cyber crime network has penetrated people or job seekers with a high educational background and mastering crypto schemes or other related digital jobs, to then be exploitatively employed in illegal activities, illegal gambling and/or money laundering (Wahid, 2023). Jin I & Dhaneswara (2023) identified that most victims of human trafficking crime nowadays were initially job seekers engaged in social media platforms and online job advertisement which turned out to be run by a cyber crime networks. The perpretrators of these crimes use the internet and digital technology to recruit potential victims because it is considered a more efficient, effective and less risky method of crime (Salsa, 2021; Volodko et al., 2020). The low understanding and lack of digital literacy of social media users are also a loophole that criminal networks exploit to get victims (Salsa, 2021; Usman, 2007).

In order to respond to the challenges of the current era, the Indonesian Government has enacted Presidential Instruction Number 3 of 2003 concerning National Policies and Strategies for E-Government Development (*Inpres Nomor 3 Tahun 2003 Tentang Kebijakan dan Strategi Nasional Pengembangan* E-Government or Presidential Instruction 3/2003). This Presidential Instruction was not only as an effort to adapt to globalization, but also to increase the efficiency and effectiveness of public services through the use of digital technology. This effort is in line with the research conducted by Shalihah et al. (2022) which argues that the digitization of public services is an important aspect for the government in supporting the protection provided by the state to its citizens wherever they are, especially Indonesian Migrant Workers. Digitalization of public services is a crucial option for the state in preventing cyber crimes that may affect migrant workers, such as illegal placement and employment. The Indonesian Government itself hopes that the SIAPkerja-Karirhub digital service will become a job information channel that can help the public in accessing legal job market information properly so as to avoid false information and job scams (Syah, 2023).

Fifteen years since the enactment of Presidential Instruction 3/2003, the Indonesian Government has made adjustments and increased regulations through Presidential Regulation Number 95 of 2018 concerning Electronic-Based Government Systems (*Perpres Nomor 95 Tahun 2018 Tentang Sistem Pemerintahan Berbasis Elektronik* or Presidential Regulation 95/2018). The Presidential Regulation Annex elaborates an explanation that the process of preparing and implementing e-government carried out by the central government and local governments since the enactment of Presidential Instruction 3/2003 has not developed properly. Although the implementation of e-government has contributed to the effectiveness and efficiency of the implementation of government affairs, the level of maturity varies greatly in each government institution. Moreover, the Indonesian Government also noted several problems in the development of e-government nationally, which include: (1) the lack of governance in integrated e-government nationally, (2) the inefficiency of ICT budgetary spending, (3) the nonoptimal of e-government implementation in providing public administration and public service, (4) the nonoptimal of ICT infrastructure coverage to be accessed by the whole society, as well as its utilization, and (5) the limitation of the number of public employees who have technical competence in the field of ICT.

In the context of employment, the Indonesian Ministry of Manpower follows up on the directions contained in Presidential Regulation 95/2018 through the development of electronic or digital-based systems for internal administrative services and for public services. In accordance with the mandate of the Presidential Regulation, thus the implementation of e-government is conducted based on the principles of effectiveness, integration, sustainability, efficiency, accountability, interoperability, and security. In 2019, the ministry launched the digital services in the field of employment on a national scale under the name Employment Information System (*Sistem Informasi Ketenagakerjaan* or SISNAKER). In 2021, the system was developped and re-branded under the name SIAPkerja. Eversince its inception under the name SISNAKER, the Ministry of Manpower has had a vision to build a digital ecosystem for employment services, where SISNAKER or SIAPkerja becomes a national big house of major platforms for all digital public services in the field of employment.

Among many types of employment services provided in SIAPkerja, one of them is digital services for placement of workers, both locally and internationally, that is the SIAPkerja-Karirhub application. In the context of public services for the placement of workers abroad, SIAPkerja-Karirhub is a part of wider digital ecosystem of placement services for Indonesian Migrant Workers (IMW) and prospective IMW, which collaborates and integrates with digital

services owned by other government agencies such as SiskoP2MI, BPJS Ketenagakerjaan, SIMKIM, OSS, as well as digital services owned by the Ministry of Foreign Affairs or the Representative of the Republic of Indonesia abroad. The roles distribution of those digital platform is based on the provisions of Law Number 18 of 2017 concerning the Protection of Indonesian Migrant Workers(*Undang Undang Nomor 18 Tahun 2017 Tentang Pelindungan Pekerja Migran Indonesia* or Law 18/2017), BP2MI Principal Regulation Number 7 of 2022 concerning the Pre-Work Process for Prospective Indonesian Migrant Workers (*Perka BP2MI Nomor 7 Tahun 2022 Tentang Proses Sebelum Bekerja Bagi Calon Pekerja Migran Indonesia* or BP2MI Principal Regulation 7/2022), and other derivative regulations of Law 18/2017. SIAPkerja-Karirhub itself carries out the function of providing pre-placement services for job seekers and prospective IMW.

Meanwhile, within the internal the Ministry of Manpower, SIAPkerja-Karirhub was determined by the Minister of Manpower as part of the strategic plan 'Digitalization Development of Employment Ecosystem'. This policy is regulated in Ministerial of Manpower Regulation Number 10 of 2021 concerning the Strategic Plan of the Ministry of Manpower for 2020-2024 (*Permenaker Nomor 10 Tahun 2021 Tentang Rencana Strategis Kementerian Ketenagakerjaan Tahun 2020-2024* or Ministerial Regulation 10/2021), and is one of the nine strategic priority agendas in the employment development. In order to create a specific study and analysis of policy implementation, the scope of this study will be limited to the implementation of digital services in the field of IMW placement provided by the Indonesian Ministry of Manpower through SIAPkerja-Karirhub.

In the concept of employment in Indonesia as stated in Law Number 13 of 2003 concerning Manpower (*Undang Undang Nomor 13 Tahun 2003 Tentang Ketenagakerjaan* or Law 13/2003) and its implementing regulations, manpower placement is an activity that is held to bring together workers with employers. This activity is carried out by considering the expertise, skills, interests, talents, and abilities of job seekers by paying attention to dignity, human rights, and legal protection. So that from the implementation of the manpower placement, job seekers or workers on the one hand can get jobs that match their talents, interests, and abilities, while employers on the other hand can get workers that suit their needs. In its implementation, the placement of workers must be based on the principles of openness, freedom, objectivity, and fairness as well as equality without discrimination.

Manpower placement in Indonesia normatively can be carried out independently by employers or through placement agencies, either private or public agencies. The manpower placement service is carried out in an integrated manner in a manpower placement system, which include job seekers, job vacancies, labour market information (LMI), employment or *antarkerja* mechanisms, and manpower placement institutions in the system. In manpower placement services, employment mechanism or *antarkerja* is a series of service systems consisting of LMI, job counseling, job guidance, and job intermediaries. Thus, it can be understood that the concept of manpower placement applies in Indonesia is a systemic activity that can consist of collecting LMI, providing information about jobs and positions, providing education about one's potential, interests, talents, abilities, and careers, to the establishment of a work relationship between job seekers and employers. In addition, the placement of workers is also differentiated based on their location, that is locally within the country and international outside the country or abroad.

E-government or electronic-based government system (*Sistem Pemerintahan Berbasis Elektronik*/SPBE) is an interesting current issue to be studied through various scientific perspectives. Taqiya et al. (2020), Rizal et al. (2020) and Saputra et al. (2020) examined the implementation of SPBE in Indonesian local government using the perspective of informatics and computer science. Meanwhile, Amri et al. (2022) measured the implementation of SPBE in Dumai City using three dimensions of innovation policy which include the policy governance dimension, sectoral dimension, and interaction dimension. Karman et al. (2021) also conducted a study on the implementation of SPBE in the South Buton Regency using four indicators of e-government implementation which include effectiveness, efficiency, transparency, and accountability. Many other studies have also examined the implementation of SPBE in various focuses such as aspects that hinder the implementation of SPBE (La Adu et al., 2022), the implementation of smart-government based on Edward III's policy implementation theory (Afiqurrahman et al., 2022; Oktarina, 2023), collaborative governance in the implementation of SPBE(Ahad & Barsei, 2023), legal perspective (Salsa, 2021; Shalihah et al., 2022), international relations (Antuli et al., 2023; Jin I & Dhaneswara, 2023; Khairi, 2021), human security (Al Ghifari & Wibawa, 2021), immigration (Santoso et al., 2022; M. A. Sari & Bakhtiar, 2023), as well as information and communication technology (Kelley et al., 2024; Volodko et al., 2020; Wahyuddin et al., 2024; Wuryanta, 2004). Underpinning the discourse related to SPBE or e-government and digital services that have developed so far, this study is intended to fill the knowledge gap that has not been further explored pertaining to the implementation of digital services organized by the central government or ministry in Indonesia specifically in organizing manpower placement services abroad.

METHOD

This research is descriptive-qualitative research that produces descriptive information in the form of words derived from the qualitative data collected. Although the data collection in this study mainly obtained through observation of wide-ranging regulatory documents such as laws and regulations, government documents, research articles, books and digital data, interviews are also conducted to obtain supporting information and at the same time ensure the validity of the findings collected. The informants involved in this study are officials of Indonesian Ministry of Manpower based at the Secretariat General, the Center for Employment Data and Information Technology, the Job Market Authority, and the Directorate of Indonesian Migrant Workers Placement and Protection. Adopting the data analysis process of Creswell (2023) as illustrated in

Figure 2. The Flow of Qualitative Data Analysis

, the qualitative data collected is then analyzed, reduced based on the suitability of the theme, presented descriptively, until finally conclusions can be drawn.

Figure 2. The Flow of Qualitative Data Analysis
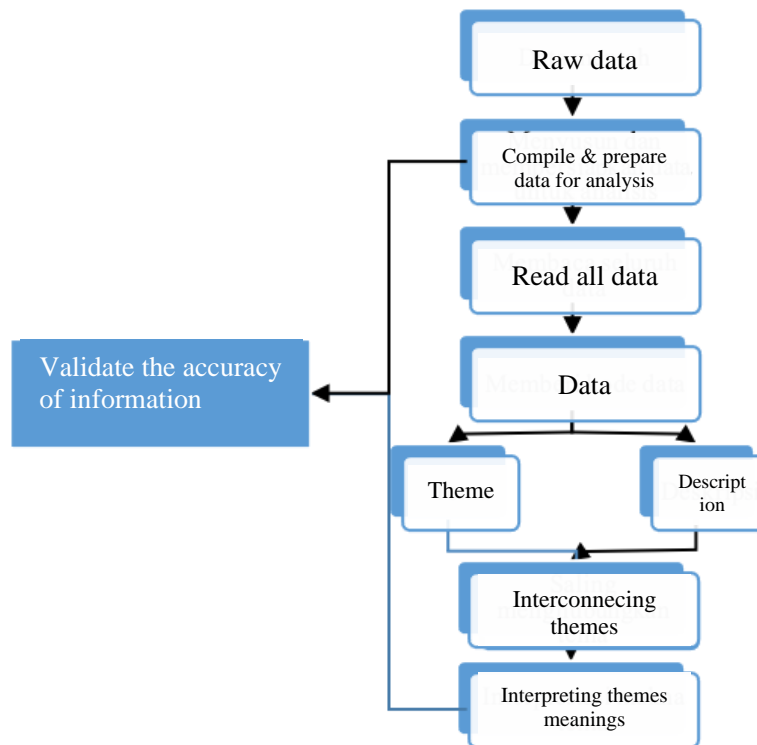
Source: Creswell (2023)

RESULTS AND DISCUSSION

Implementation of the Digitalization of IMW Placement Services

The Indonesian Ministry of Manpower is a central government agency that has the responsibiilities of government affairs in the field of employment. It is carried out, among other, through the formulation, determination, and implementation of policies in four core areas of employment, including: (1) manpower competence and competitiveness as well as labor productivity, (2) manpower placement and employment opportunities, (3) industrial relations and labor social security, and (4) labor supervision and occupational safety and health. Each of these fields is under the responsibility of the '1st Echelon' unit at the level of the Directorate General. Issues in the manpower placement and employment opportunities, specifically the placement of IMW abroad which are the focus of this study, are the responsibility of the Directorate General of Manpower Placement and Employment Opportunities Expansion (*Diretorat Jenderal Pembinaan Penempatan Tenaga Kerja dan Perluasan Kesempatan Kerja* or *Ditjen Binapenta dan PKK /* **DG MPEOP**) and its '2nd Echelon' unit of the Directorate of Indonesian Migrant Workers Placement and Protection (*Direktorat Bina Penempatan dan Pelindungan Pekerja Migran Indonesia* or *Direktorat PPPMI /* **Directorate IMW**). However, the issues of manpower placement cannot be separated from the labor market mechanism, while the responsibility of labor market affairs are under a different unit in the Ministry of Manpower, namely the Labor Market Center (*Pusat Pasar Kerja* or *Pasker /* **LMC**) which is a '2nd Echelon' under another '1st Echelon' namely the ministerial Secretariat General. LMC generally carries out tasks related to the preparation of technical policies, implementation, as well as monitoring, evaluation, and reporting of job market services.

Additionally, in realizing the strategy for developing the digital employment ecosystem, there is another '1st Echelon' unit that is responsible for the management of information technology and data related to the national employment, namely the Employment Planning and Development Agency (*Badan Perencanaan dan Pengembangan Ketenagakerjaan* or *Barenbang/**P&D Agency***) and its '2nd Echelon' unit, namely the Employment Data and Information Technology Center (*Pusat Data dan Informasi Ketenagakerjaan* or *Pusdatik*/**DITC**). As a subordinate unit that supports the performance of P&D Agency, DITC is more technically responsible for managing data and information technology related to employment, disseminating employment information, information systems and security, and developing information technology at national scale. Therefore, in building SIAPkerja-Karirhub's digital services for manpower placement abroad, the DITC cannot run alone, but must work together with the Directorate IMW and LMC.

In a separate public institution, Law 18/2017 and Presidential Decree Number 90 of 2019 concerning the Indonesian Migrant Workers Protection Board (*Perpres Nomor 90 Tahun 2019 Tentang Badan Pelindungan Pekerja Migran Indonesia* or Presdential Decree 90/2019) give mandate to the Indonesian Migrant Workers Protection Board (*Badan Pelindungan Pekerja Migran Indonesia* or *BP2MI*/**IMWPB**) to carry out services and protection of Indonesian Migrant Workers, organize placement services, carry out the placement of Indonesian Migrant Workers on the basis of written bilateral agreements, and carry out verification of Indonesian Migrant Worker documents. Following up on this mandate, IMWPB also develops digital services, namely the SiskoP2MI, to provide public services mandated to it. Even though the integration between SIAPKerja-Karirhub and SiskoP2MI is interesting to study from the aspects of information systems, the implementation of SPBE integration, and the implementation of policies, yet those issues are not accommodated in this study because the scope is very broad and goes beyond the aims of this research.

The Implementation of E-government at The Indonesian Ministry of Manpower

The digitization of manpower placement services for IMW as well as other public services in the field of employment, is a response from the Ministry of Manpower towards Presidential Regulation 95/2018. Although the government has called for the preparation and development of digital infrastructure for public services through Presidential Instruction 3/2003, the Presidential Instruction does not mandate the principles that must be guided by the government agencies during its implementation—namely effectiveness, integration, sustainability, efficiency, accountability, interoperability, and security. At the beginning of its appearance, SISNAKER dominated the content on the Ministry of Manpower website by providing 12 digital employment services which include: (1) job training services, (2) apprenticeship services, (3) services for the use of foreign workers in Indonesia, (4) mandatory employment reporting services in companies, (5) institutional services, (6) professional certification services, (7) job market services and manpower placement or the SIAPkerja-Karirhub, (8) Indonesian national competency standardization services, (9) productivity services, (10) company regulations and collective bargaining agreement services, (11) occupational safety and health and OSH management permit services, as well as (12) assistance services. In addition, there are also four supporting services within the SISNAKER which include procurement applications, news, data and information, and labor regulations. In providing these dozens of services, SISNAKER has been integrated with other public digital services developed by related ministries/institutions such as: Ministry of Home Affairs, Ministry of Law and Human

Rights, Ministry of Finance, Ministry of Investment (BKPM), and Employment Security Agency (*BPJS Ketenagakerjaan*).

Figure 3. Mapping of Applications in SIAPkerja Digital Services
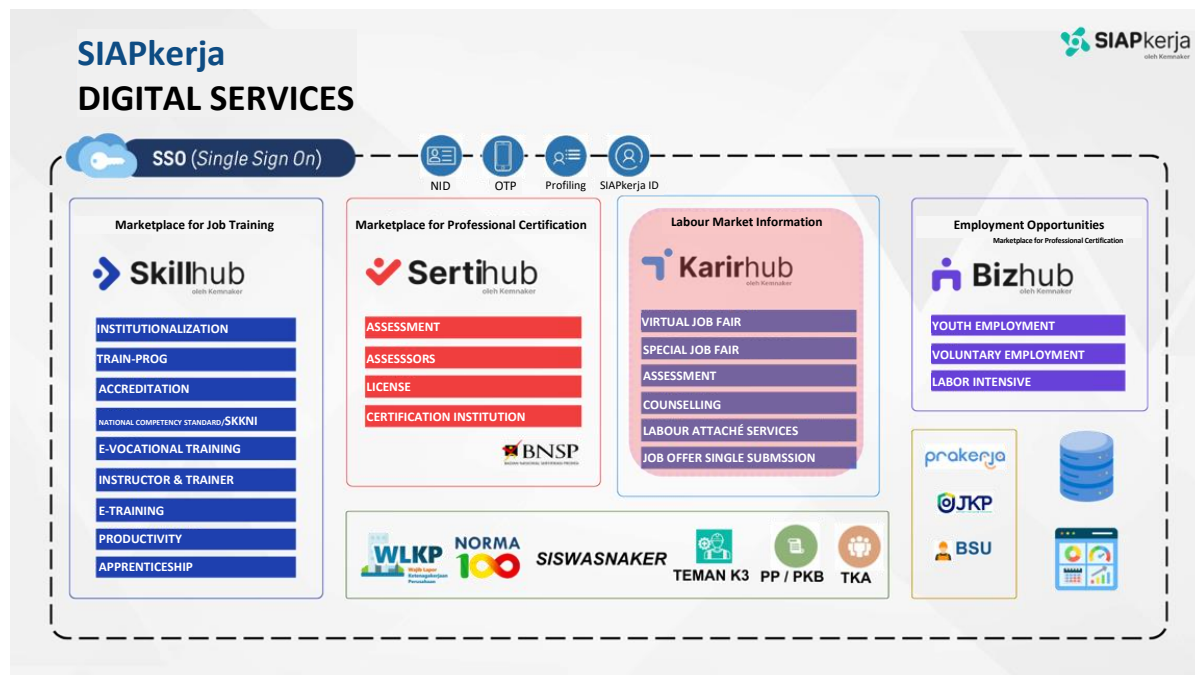
Source: Indonesian Ministry of Manpower

In terms of regulations, the development of ICT infrastructure according to the principles of effectiveness, integration, sustainability, efficiency, accountability, interoperability, and security mandated by the Presidential Decree 95/2018 has not been clearly regulated in derivative regulations at the ministerial regulation level. The most recent regulation on the development of e-goverment at the Ministry of Manpower is the Manpower Ministerial Regulation Number 26 of 2016 concerning the Implementation of E-Government at the Ministry of Manpower and Transmigration (*Permenaker Nomor 26 Tahun 2016 Tentang Penyelenggaraan E-Government di Kementerian Tenaga Kerja dan Transmigrasi* or Ministerial Regulation 26/2016). This Regulation is intended as an effort to realize governance in the field of employment through the ICT utilization in the implementation process of e-government. The scope of Ministerial Regulation 26/2016 includes: (1) policies related to ICT infrastructure, (2) kemnaker.go.id domain, (3) information system components, which consist of general applications and special applications, (4) data and information policies, (5) ministry web portals managed by the Public Relations Bureau and P&D Agency, (6) ministry e-mail, (7) human resources, including structural officials, functional officials of *Pranata Komputer* and skilled, expert and/or competent employees in the field of ICT (8) governance of e-government implementation at the ministerial level coordinated by P&D Agency and implementation at the Echelon Unit coordinated by each Secretariat of Directorate General as well as the formation of an E-Government Management Team and (9) annual evaluations.

Ministerial Regulation 26/2016 does not include the role of local governments in e-government in the field of employment. It is different from the preceding Manpower Ministerial Regulations Number PER.19/MEN/IX/2009 concerning the Development and Development of Employment Information Systems (*Permenakertrans Nomor PER.19/MEN/IX/2009 tentang Pembangunan dan Pengembangan Sistem Informasi Ketenagakerjaan* or Ministerial Regulation 19/2009), which regulates the role of local

governments in the implementation of the employment information systems development within their respective provinces/districts/cities supported by integrated information technology. In carrying out the ICT development, the utilization of electronic information technology on a national level shall bring together national admins/operators and provincial admins/operators. Similarly, the utilization at the provincial level shall connect the provincial admins/operators with the national and district/city admins/operators, while the utilization at the district/city level shall connect the district/city admins/operators with the provincil admins/operators. Even though the provisions in Article 6 of Ministerial Regulations 19/2009 regulates the system connectivity and integration, this regulation does not regulate the importance of cohesiveness, continuity, and interoperability between the central and local governments in building and developing employment information systems.

During the first period of President Joko Widodo's leadership, the Indonesian Government has set nine national development priority agendas, namely the 'Nawa Cita'. It was stipulated in the 2015-2019 National Medium-Term Development Plan (RPJMN). The 6th out of nine agendas was to pursue a clean, effective, democratic and trustworthy governance. In elaborating the goals, policy directions, and strategies to realize such 6th agenda, one of the efforts that must be taken by the Indonesian Government is the implementation of e-government to support government business processes and national development in simple, efficient, transparent, and integrated manners. In regards to the implementation of the RPJMN in the field of manpower, the Ministry of Manpower has also set the 'Nawa Kerja' for national employment development. The 'Nawa Kerja' consists of nine employment development agendas that become the priority agenda for the Ministry of Manpower, which is regulated in Manpower Ministerial Regulation Number 27 of 2016 concerning the 2015-2019 Strategic Plan of the Ministry of Manpower (Permenaker Nomor 27 Tahun 2016 Tentang Rencana Strategis Kementerian Ketenagakerjaan Tahun 2015-2019 or Ministerial Regulation 27/2016). The 6th agenda of the President's 'Nawa Cita' was then translated into the 9th agenda of the Ministerial 'Nawa Kerja' which regulates a simple, transparent and accountable agenda for employment services. During the second term of President Joko Widodo's leadership, the implementation of e-government remains the government's priority agendas. So that in the 2020-2024 Strategic Plan of the Ministry of Manpower (Renstra Kemnaker), one of the ministerial priority agendas is the 8th agenda or '*Lompatan ke-8*' regarding the development of the digital employment ecosystem, which is realized through the policy of developing employment information systems and services as the largest digital employment ecosystem in Indonesia. The transformation of SISNAKER into SIAPkerja is further regulated clearly in the Strategic Plan document. Basically, the development of SISNAKER and SIAPkerja is the government's policy action in realizing e-government in the field of employment, which is one of the government's priorities for national employment development.

Subarsono (2022) argues that the implementation of a policy program involves efforts from policy makers to influence the behavior of implementing bureaucrats to be willing to provide services which will also regulate the behavior of target groups. The implementation of a modest policy only involves one body that functions as an implementer, while the implementation of a broader policies involves various institutions. In addition, the success or failure of the policy implementation depends on various factors or variables that are interrelated. To find out the factors that affect the policy implementation of digital placement services for IMW, this study explores four key aspects or variables that affect the policy implementation: communication, resources, disposition, and bureaucratic structure.

Information Transmission to Policy Implementers

The implementation of e-government in the field of manpower is one of the Minister of Manpower' priorities which is conducted through the establishment of the Ministry of Manpower's Strategic Plan. This is a policy action in following up to the national policy priorities set by the President through the RPJMN. In its implementation, technical units within the Ministry of Manpower that are responsible for information and technology systems, labor markets, and the placement of workers abroad act as policy implementers, namely: the Directorate IMW, the LMC and the DITC. Meanwhile, local governments and representatives of the Republic of Indonesia abroad act as implementers as well as services users. While job seekers, prospective IMW, IMW, employers, and Indonesian Migrant Worker Placement Agencies (*Perusahaan Penempatan Pekerja Migran Indoneisa* or *P3MI*/IMWPA) are the target groups of policies as well as service users.

Implementers' knowledge of what they shall do is the main requirement to achieve success in policy implementation. To pursue this condition, it is necessary to convey policy goals and objectives to policy target groups, so that it will reduce distortions in implementation and avoid resistance. Communication is a way or method that can be used by policymakers to convey information about the policies they take, both to implementers and to target groups. In the process of policy communication, there are three things that are important to consider according to George Edwards III: transmission, clarity, and consistency of information (Winarno, 2014).

As a general characteristic of the Weberian bureaucratic with its vertical hierarchy, the communication pattern of the Minister of Manpower in communicating e-government policies and digitalizationof employment services to the subordinate units is carried out in a bureaucratic and hierarchical manner. The transmission of policy goals and objectives is carried out in writing through the enactment of regulations such as the Ministerial Strategic Plan, Ministerial Annual Work Plan (Renja), as well as directive and correspondence letters to related technical units. During a high-level meeting, the Minister of Manpower also conveyed the direction directly to high-level officials (Echelon I) and senior officials (Echelon II), either regularly or incidentally as needed. Information and directions from the Minister of Manpower are then transmitted by the Head of the LMC, the Director of IMW, and the Head of DITC to their respective functional officials, structural officials, and implementing officers. Progress and/or obstacles to implementation are conveyed hierarchily in bottom-up manners, namely from the technical unit up to the Minister of Manpower through correspondence letters or delivered directly during a face-to-face meeting such as high-level meetings. Horizontal communication and coordination also occurred between the LMC, the Directorate IMW and the DITC as well as the P&D Agency and DG MPEOP, both formally or bureaucratically as well as informally. Likewise, communication with external parties is also carried out formally and informally, through inter-institutional meetings and written correspondence.

In the government bureaucracy, the Ministry of Manpower's policy of 'Development of the Employment Digital Ecosystem' is further elaborated by each Echelon I to Echelon II unit. The Ministerial Strategic Plan not only contains the policy and direction of the minister's policy, but also includes the determination of activity targets and Activity Performance Indicators (IKK), as stipulated in the Ministerial Strategic Plan. The objectives of activities and IKK that have been regulated in the Strategic Plan must be guided by each subordinate unit in preparing activities or policy actions in a period of the fiscal year. The 2020-2024 Ministry of Manpower Strategic Plan has determined the IKK for the field of data management and employment

information technology, including the Information and Communication Technology Aspect Index and the SPBE or E-Government Management Implementation Aspect Index.

Based on the Government Agency Performance Accountability Report (LAKIP) for 2021 to 2023 Fiscal Years, DITC has established several policies that are focused on the development of SISNAKER and SIAPkerja, including SIAPkerja-Karirhub in it, which is carried out in an integrated manner within the ministry as well as with other central and regional institutions. Especially in 2021, DITC also stipulates socialization activities to ministries and local governments regarding all digital employment services available in SISNAKER. Meanwhile, in the following years, DITC focuses more on the implementation of coordination, consolidation, collaboration, and integration to develop SIAPkerja so that it is integrated and has interoperability with digital services owned by other institutions (Pusat Data dan Teknologi Informasi Ketenagakerjaan, 2022, 2023, 2024).

Socialization on the digital ecosystem is also one of the activities conducted by LMC and the Directorate IMW, but limited to their respective authorities. LMC, for instance, disseminates the digital service of SIAPkerja-Karirhub along with the Virtual Job Fair to local governments, job seekers, and employers, while the Directorate IMW disseminates the flow process of IMW placement through the SIAPkerja-Karirhub service to local governments, prospective IMW and IMW, P3MI, and Representatives of the Republic of Indonesia Abroad especially to labor attaché (Pusat Data dan Teknologi Informasi Ketenagakerjaan, 2022, 2023, 2024; Pusat Pasar Kerja, 2024).

In implementing e-government as mandated by Presidential Regulation 95/2018, the Ministry of Manpower has not yet established new regulations adjusted to the mandate and provisions of the Presidential Regulation. As a result, the implementation of e-government has only been guided and referred to the Ministerial Strategic Plan as its basis. This is a weakness or obstacle that causes resistance and inefficiency in the implementation of the SIAPkerja-Karirhub by local governments, because there is no regulation from the Minister of Manpower that regulates the role of local governments, local government obligations, or technical operationalization of SIAPkerja-Karirhub by local governments. Moreover, the Ministry of Manpower has also not completed at least three draft regulations that are the regulatory framework in the implementation of e-government through SIAPkerja, including Karirhub, namely: (1) Ministerial Regulation improvement draft on the Development of Employment Information Systems, which improves Ministerial Regulation 19/2009, (2) Ministerial Regulation improvement draft on E-Government in the Ministry of Manpower, which improves the previous Ministerial Regulation 26/2016, and (3) and new Ministerial Regulation draft concerning the Determination of Data Standards, Metadata, and Reference Codes and/or Employment Master Data on One Employment Data. In fact, the establishment of such a regulatory framework is a mandate from 2020-2024 Ministerial Strategic Plan 2020-2024, which is intended to support the implementation of policies for the development of the digital ecosystem (Pusat Data dan Teknologi Informasi Ketenagakerjaan, 2022, 2023, 2024).

Apart from various of activities organized by the DITC, Directorat IMW and LMC, those three subordinate units admitted that socialization to service users regarding the existence of SIAPkerja in general as well as SIAPkerja-Karirhub in particular has not been carried out massively. In addition, DITC specifically also acknowledged that the absence of related regulations is an obstacle in the implementation of e-government in the field of employment, such as the renewal of Ministerial Regulation, business process documents, development flows, and e-government management.

Availability of Resources in the Implementation of Digital Services

According to the DITC's LAKIP for the 2021 to 2023 Fiscal Year, DITC had been supported by 74 employees, 70 employees, and 66 employees consecutively. It is all divided into five divisions: (1) Administration, (2) Employment Data Management, (3) Employment Data and Information Dissemination, (4) Employment Information System Development, and (5) Employment Information Technology Infrastructure and Employment Data and Information Security Development. The apparatus assigned to the Division of Employment Information System Development (*pengembangan sistem informasi* or **PSI**) and the Division of Employment Information Technology Infrastructure and Employment Data and Information Security Development (*infrastruktur dan keamanan data* or **Inframan**) have averaged 18 people in the last three years. As many as 78 percent of PSI employees are functional officials of *Pranata Komputer*, 11 percent are other functional officials, and the remaining 11 percent are Non-Civil Servant Employees (*Pegawai Pemerintah Non Pegawai Negeri* or **PPNPN**). Meanwhile, the Division of Inframan consists around 55 percent of the functional officias sof *Pranata Komputer* and the remaining 45 percent of PPNPN. These two divisions are in charge of infrastructure, security, and development of SIAPkerja which contains dozens of digital services from the four core areas of employment and other supporting services as illustrated in Figure 3. In addition to dealing with information systems technically, they also compile and prepare documents related to the implementation of their technical tasks (Pusat Data dan Teknologi Informasi Ketenagakerjaan, 2022, 2023, 2024).

At the Directorate IMW, the average number of employees in 2021 to 2023 is 60 apparatus. This Directorate only had one functional official of *Pranata Komputer* in 2022 and increased to three people in 2023. Meanwhile, data on the employee composition at LMC is not available in its 2023 LAKIP (Direktorat Bina P2PMI, 2022, 2023, 2024; Pusat Pasar Kerja, 2024).

Figure 4. Composition of Human Resources at Division PSI, Division Inframan and Directorate IMW
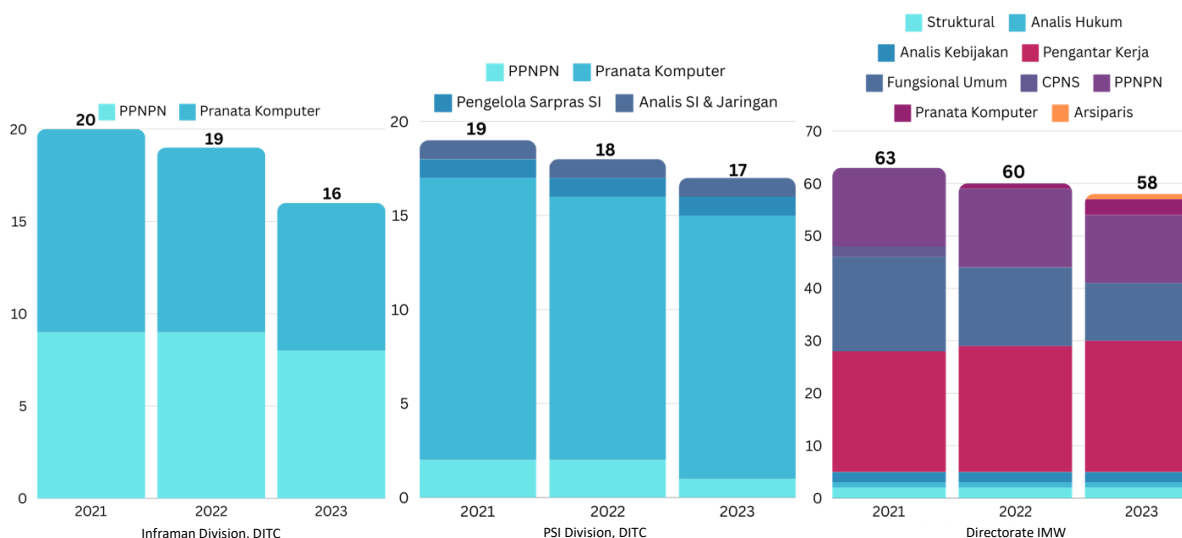
Source: Compiled by authors from various sources

According to Subarsono (2022), although the content of the policy has been clearly communicated in consistent manner, the lack and limited resources in implementing it will make the implementation of the policy ineffective. Resources in this context include human resources, competence, facilities, infrastructures and finance. This idea is proven in this study,

where the DITC, Directorat IMW and LMC noted the limitations of human resources that hinder the achievement of the IKK. Some types of services in e-government also still require skilled apparatus who have competencies according to the specifications needed in these digital services, while data related services still need functional official of statisticians or *Statistisi*, *Pranata Komputer*, and graphic designers of *Perancang Desain* (Pusat Data dan Teknologi Informasi Ketenagakerjaan, 2022, 2023, 2024). Meanwhile, in the IMW placement service, although labor attaché or representatives of the Republic of Indonesia abroad have operated the SIAPkerja digital service that facilitates the employment related document verification process, the limited personnel and the large volume of workload in verificating those hindered the effectiveness of SIAPkerja application and digital service (Direktorat Bina P2PMI, 2022, 2023, 2024). Moreover, DITC also noted that the available facilities and infrastructure such as laptops and data processing software are inadequate, which in turn slowing down the data processing process (Pusat Data dan Teknologi Informasi Ketenagakerjaan, 2024).

In addition to the implementation of the core duties by each employee according to its functions, goals, and targets that have been set in their respective units, several employees are appointed to received additional specific tasks stipulated in the Ministerial Decree or the Director General Decree. Based on the DITC's LAKIP document, it is mentioned about the existence of the Employment Data Management Team, the Internal ICT Audit Team, and the E-Government Coordination Team. Besides, there is also SIAPkerja-Karirhub Helpdesk Team or Helpdesk SIAPkerja-Karirhub for Prospoective IMW which is established in 2023 in order to support the service quality improvement and accelerate the implementation of the SIAPkerja-Karirhub. The said Helpdesk consist of nine employees of the Directorate IMW, two employees of LMC, and two employees of DITC. Some of the additional tasks attached to them are: (1) receiving questions and requests for technical assistance using the SIAPkerja-Karirhub, (2) providing responses to users or service applicants who ask for assistance, questions, and complaints in the SIAPkerja-Karirhub, and (3) creating an admin account for the Manpower Office in the province/district/city government and the One-Stop Integrated Service for Indonesian Migrant Workers or LTSA-PMI to be able to access the SIAPkerja-Karirhub. Unfortunately, the number of ad hoc or additional tasks given to those Helpdesk officers hinders the implementation of the core duties and functions of these employees (Pusat Data dan Teknologi Informasi Ketenagakerjaan, 2024).

Disposition of Policy Implementers

Disposition in the context of policy implementation, according to George Edwards III, reflects the willingness and tendency of implementers to seriously implement policies set by policymakers in order to achieve the goals and objectives of the policy (Hutagalung & Indrajat, 2022; Nugroho, 2014; Widodo, 2008). If the implementer agrees with the content of the policy that has been set, then the policy implementation can take place orderly and properly. However, if there is fragmentation and disagreement between implementers and policy makers, the implementation process will face obstacles (D. N. Sari et al., 2020). In the context of bureaucratic relations, the disposition between policy implementers and policymakers within the Ministry of Employment occurs formally and purposefully.

Set of RPJMN, Ministerial Strategic Plan and Ministerial Annual Work Plan documents are prepared in a continuous manner so that they show the directionality and integration between the vision, mission, and agenda of annual activities set by the President and those set by the Minister. In carrying out annual activities in accordance with the activity items set out in Ministerial Annual Work Plan, the Minister of Manpower as well as the all high-level and senior

officials within the Ministry of Manpower prepare and agree on a Performance Agreement or *Perjanjian Kinerja* as a form of commitment to achieve the targets that has been set in one Fiscal Year. The Performance Agreement can also be interpreted as a form of assignment from the minister to its officials to carry out activities and realize performance targets that can be accounted for in measurable manner. The Performance Agreement that has been concluded and agreed upon—between the Minister and high-level and senior officials—is one of the references for each Ministry of Manpower's employee in setting Employee Performance Targets (*Sasaran Kinerja Pegawai* or SKP), so that it can be ensured that ministers, high-level officials, senior officials and employees of the Ministry of Manpower have the same commitment and direction for the implementation of activities. Based on the LAKIP document, the average target achievement rate by DITC, Directorate IMW and LMC reached more than 95 percent. Meanwhile, if we look at the track record of LMC since its establishment as a separate work unit under Ministerial Secretariat General in 2021, various developments and reinforcement of SIAPkerja-Karirhub service are still being carried out through the collaboration of those three subordinate units internally within Ministry of Manpower, as well as through coordination and integration with external parties.

Bureaucratic Structure and Operational Procedures

Standard Operating Procedures (SOP) are one of the important aspects of the bureaucratic structure in every organization and used as guidelines for every policy implementer in taking policy action (Subarsono, 2022). However, it should be noted that too much organizational structure or excessive managerial layers can weaken supervision and create a complicated and complex bureaucratic procedure, which results in inflexible organizational activities. In George Edward III's theorem, an inconducive organizational or bureaucratic structure will lead some available resources becoming ineffective and can hinder policy implementation (Hutagalung & Indrajat, 2022).

As discussed above, the implementation of digital services for the IMW placement through SIAPkerja-Karirhub is not a single responsibility under DITC. Other ministerial subordinate units, that are Directorate IMW and LMC, also have the same responsibilities in accordance with their respective authorities. DITC is responsible for all employment digital services in SIAPkerja. Pasker is responsible for all labour market services through SIAPkerja-Karirhub including the management of job vacancies, job seekers and prospective IMW, and employers, as well as Virtual Job Fairs and on-site Job Fairs. Meanwhile, the Directorate IMW is responsible for the business process of IMW placement which is the basis for the development of the SIAPkerja-Karirhub services.

The division of duties and responsibilities in implementing policies for the development of the employment digital ecosystem, especially the SIAPkerja-Karirhub application, has been carried out and operated in accordance with the existing regulations. However, the incompleteness of the regulatory framework that has been described above is crucial since it affects the SOP in developing and optimizing SIAPkerja-Karirhub—which includes the draft of three new ministerial regulations regarding the development of employment information systems, e-government at the Ministry of Manpower, and the determination of data standards, meta data, and reference codes and/or employment master data on One Employment Data. DITC noted that some services in the SIAPkerja platform could not be properly developed according to the specified time because the subordinate units—which act as the service owner—could not provide development flow design in timely manner (Pusat Data dan Teknologi Informasi Ketenagakerjaan, 2023). This is certainly related to the matter of e-

government architecture that has not been regulated in the Minister of Manpower Decree Number 158 of 2022 concerning Guidelines for the Implementation of SPBE within the Ministry of Manpower (*Kepmenaker Nomor 158 Tahun 2022 tentang Pedoman Penerapan SPBE di Lingkungan Kementerian Ketenagakerjaan* or Minister Decree 158/2022). By the time of this study being conducted, the Ministry of Manpower was still working to improve and strengthen the Minister Decree so that it could be adopted as a Ministerial Regulation.

CONCLUSION

In regards to the research results that has been presented above, it can be concluded that SIAPkerja-Karirhub is a form of policy implementation of the 'Employment Digital Ecosystem Development' policy that has been adopted by the Indonesian Minister of Manpower. This specifically aims to provide digital services for the IMW pre-placement process. On the one hand, SIAPkerja-Karirhub is part of the digital ecosystem of employment services within SIAPkerja. Meanwhile, on the other hand, SIAPkerja-Karirhub is also part of the digital service ecosystem for IMW and Prospective IMW, which collaborates and integrates with digital service platforms owned by other government institutions. The provision of SIAPkerja-Karirhub digital services is one of the Indonesian Government's efforts to increase the effectiveness of public services, expand the interoperability and accessibility to manpower placement services abroad, and at the same time be one of the efforts to prevent cyber crime against IMW and Prospective IMW.

The creation and development of the SIAPkerja-Karirhub digital service is the duty and responsibility of the DITC, Directorate IMW, and LMC as policy implementers within the Ministry of Manpower. The policy implementation by these three subordinate units has been achieved the targets set in the Ministerial Annual Work Plan on paper. However, if we observe each of the policy implementation variables, the lack of regulatory framework related to e-government in the field of employment has a very significant impact on other policy implementation variables of communication, resources, and bureaucratic structure. Apart from being the basis for transmitting policies and related information to the policy implementers and policy target groups, regulations set by the Ministry of Manpower will also apply as Norms, Standards, Procedures, and Criteria (NSPK) guided by policy implementers within their respective scope and authority. Clear regulations provide legal certainty in organizing and developing SIAPkerja-Karirhub services, which in turn facilitate coordination and integration internally with digital services within SIAPkerja as well as externally with digital services owened by other government institutions, which ultimately also has an impact on planning and procurement of resources in accordance with the needs that have been depicted in the regulation. Furthermoore, clear regulation not only useful as a basis for communicating information to policy implementers, but also to policy target groups through socialization and dissemination which will have an impact on the success of overall policy implementation.

In addition, the variable of resource also still requires serious attention in achieving effective policy implementation. Policy implementers need to be supported by adequate personnel and infrastructure in developing and operating SIAPkerja-Karirhub digital services, both in quantity and quality. Meanwhile, in terms of the disposition variable, all elements of the Ministry of Manpower—the minister as policy makers, the high-level and senior officials as public managers, and the employees and staff as policy implementers—have the same commitment, as outlined in the Performance Agreement and Employee Performance Target documents. In fact, there was no friction or distortion within the Ministry of Manpower in terms of the development and implementation of the SIAPkerja-Karirhub service.

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