

Article

Implications of Automation and Artificial Intelligence for Employment Law Politics

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Abstract: This study aims to examine the implications of automation and artificial intelligence (AI) on employment law politics in Indonesia, as well as their impact on employment structures and relationships. Along with rapid technological advances, especially in the fields of automation and AI, the world of employment is undergoing significant transformations that affect work models, employment contract arrangements, and worker protection. This study will identify how these technologies affect employment relationships, creating new opportunities, but also threatening the sustainability of jobs in certain sectors. This study uses a qualitative approach with descriptive analysis to understand the dynamics of change resulting from automation and AI, and their legal implications for workers and companies. The main focus of this study is to assess the extent to which employment policies in Indonesia can accommodate the new challenges arising from this technological shift, and how the existing employment law system needs to adapt to remain relevant and effective. The findings of this study are expected to contribute to policymakers, legal practitioners, and academics, by providing recommendations on how employment policies in Indonesia can be updated to anticipate the negative impacts of technology, protect workers' rights, and create social justice in an increasingly digitalized world of work. This research will also provide an overview of the role of technology in shaping future industrial relations and regulations, and propose a legal framework that is adaptive to the development of automation and artificial intelligence in Indonesia.

Keywords: Artificial Intelligence, Automation, Digitalization, Employment Law Policy, Work Transformation

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1. Introduction

Article 27 paragraph (2) of the 1945 Constitution emphasizes that every citizen has the right to work and a decent living. However, technological advances, especially automation and artificial intelligence (AI), threaten the traditional structure of employment relations. Automation has replaced human labor in various sectors, especially manufacturing and services, while AI is starting to take over complex tasks such as data analysis, decision making, and human resource management.

Automation and AI have revolutionized the way we work, especially in sectors such as manufacturing, transportation, and services. Automated systems equipped with artificial intelligence are able to replace human work in repetitive and routine activities, such as in factories that use intelligent robots for assembly, or digital platforms that enable transactions and services without direct human involvement. For example, companies such as Go-Jek and Grab have replaced most workers with algorithmic systems that facilitate freelance work through digital applications. In this context, new challenges arise regarding the legal status of workers on these digital platforms.

In addition, AI enables closer supervision of employees through data-driven performance monitoring, raising questions about privacy and the protection of individual rights in the workplace. Therefore, it is important to understand the long-term impact of this technology on employment relationships and employment arrangements.

In Indonesia, existing employment regulations, such as Law No. 13 of 2003 concerning Employment, have not fully accommodated changes caused by automation and AI. The regulations focus more on traditional employment relationships, which assume permanent workers with clear legal status, as well as protections such as minimum wages, working hours, and social security. However, with the increasing growth of platform-based and freelance work, which does not always have a clear employment relationship with the employer, many workers do not receive adequate legal protection.

This creates a gap of uncertainty in Indonesia's labor law system, where workers involved in the digital ecosystem are often not protected by existing provisions, such as social security and basic workers' rights. The Job Creation Law, although aimed at improving the investment climate and labor market flexibility, also does not adequately accommodate the challenges arising from the influence of this new technology.

This trend raises new challenges in employment law politics. Existing regulations, such as Law No. 13 of 2003 concerning Employment, do not specifically regulate the impact of technology on the workforce. Even Law No. 6 of 2023 concerning Job Creation, which aims to increase work flexibility, has not sufficiently addressed the challenges of automation and AI. The implications of these changes include the

potential for increased unemployment, loss of protection for workers, and the need for updates to employment regulations.

In comparison, countries such as Germany and Japan have integrated technological aspects into their employment regulations. Indonesia, as a developing country that is preparing to face the industrial revolution 4.0, needs to reorganize its employment law policy to be in line with technological developments. Therefore, this research is important to provide concrete solutions in facing this challenge.

Based on what has been described, the author feels the need to limit the problem to prevent the topic from broadening in this study. Therefore, the author has formulated three problem formulations that will be the focus of the research. First, this study will examine how automation and artificial intelligence (AI) affect the structure and employment relations in Indonesia. Second, it will examine the extent to which current employment law policies in Indonesia have accommodated the impacts of automation and AI. Finally, this study will propose policy recommendations to update employment law policies to be more in line with the era of automation and AI. By focusing on these three problem formulations, it is hoped that this study can provide an in-depth and relevant analysis of the challenges and opportunities faced by Indonesian employment law in this era of rapidly developing technology.

This study has three main interrelated objectives. First, this study aims to comprehensively identify the impact of automation and artificial intelligence (AI) on employment relations in Indonesia, including changes in job structure, skills required, and dynamics between employers and employees. Second, this study will analyze the extent to which current employment regulations in Indonesia are appropriate and able to accommodate the new challenges presented by automation and AI in the world of work. Finally, based on these findings, this study aims to provide concrete and applicable recommendations for the renewal of employment law policy in Indonesia, so that it can be more responsive and adaptive to rapid technological developments, especially in the context of automation and AI. By achieving these three objectives, it is hoped that this research can make a significant contribution to the development of more relevant and effective employment policies in the digital era.

2. Research Methods

This study uses a normative legal approach, focusing on the analysis of laws and regulations, legal doctrine, and legal literature related to the impact of automation and AI on employment. The type of research is descriptive-analytical, aimed at explaining the impact of automation and AI on work structures, employment relationships, and legal regulations, as well as analyzing the differences between current regulations and conditions in the field. Data sources consist of primary legal materials (UUD 1945, Law No. 13/2003, Law No. 11/2020, and related regulations), secondary legal materials (books, journals, papers), and tertiary legal materials (dictionaries). Secondary data is the main data, supported by primary data from observations and interviews. Data collection was carried out through literature studies and interviews with experts and stakeholders in the employment sector.

Data analysis uses legal interpretation methods, including literal and functional interpretations, as well as methods such as grammatical, systematic, historical, theological, and comparative. This study uses futuristic legal theory supported by predictive, adaptive, and constructive law to analyze the impact of automation and AI on employment. The focus of the research is the legal regulation and conditions of employment in Indonesia, with case studies in sectors that are significantly affected by automation and AI, such as the manufacturing industry, transportation, and the gig economy. Expected results include identification of legal gaps in digital-era employment policies, recommendations for futuristic, inclusive, and adaptive employment regulations, and academic contributions to employment law regulations in the era of digital transformation..

3. Discussion

The Impact of Automation and Artificial Intelligence (AI) on Work Structures and Relations in Indonesia

Recently, Artificial Intelligence (AI) has become increasingly popular in various fields of human life. Various fields of human life are now increasingly interested in AI. AI is a technology that allows computers and machines to do things that previously only humans could do. Many people oppose the development of AI because many publications say that it can replace tollbooths, cashiers, and even newscasters. There is a lot of news about large companies that will reduce their staff because of AI. Many people are unhappy with the news about the replacement of human workers

with AI, especially those who worry that their job sector will also be replaced by AI. However, there are also many people who enjoy their jobs and support the development of AI.

Most people who oppose AI argue that artificial intelligence can replace human jobs. Automation and AI have replaced human workers in repetitive and high-risk jobs in several industries, such as agriculture and manufacturing. Companies can reduce costs, reduce human error, and increase productivity through automation processes. Although this job replacement by AI can benefit companies, it can also have a negative impact on unemployment rates and change the labor market. The increasingly widespread and limitless development of AI is widely opposed by various parties, this is because many circulating publications assume that AI will replace all professions that are still carried out by humans today such as toll gate officers, cashiers, and even jobs such as newscasters. Then, the many news reports about the reduction of workers from some large companies in the coming years, this is the impact of the implementation of AI by these companies. The frequent news that appears discussing AI can replace the role of humans brings negative responses from various parties, most importantly those who are worried that their field of work will be replaced by the role of AI. However, in the midst of the many parties who oppose it, many also support the development of AI, because with the presence of the role of AI, work will become easier. In the digital era, not only the government must be involved in every policy formulation, but the role of entrepreneurs, workers and the community is also important to be involved.

Today's work structure and relationships have undergone significant changes along with the presence of Automation and AI. The application of Automation and AI is believed to increase efficiency and productivity, but on the other hand it can also pose serious challenges in employment. Automation and AI are increasingly replacing the role of workers in routine and repetitive work. For example, in the manufacturing industry, the process of processing orders has been automated, reducing the need for human labor.

With the digital transformation driving the growth of the gig economy, where attendance at the workplace is no longer a must but work can be done through a digital platform that can be done anywhere, anytime without being tied to time and place of work, where work time and place of work are something that is absolutely mandatory and regulations in conventional employment relationships. Although its

flexible nature can adjust the time and place of its workers, this type of employment relationship model is very risky for abuse and often cannot provide adequate employment protection, such as social security and other workers' rights as in conventional employment relationship models.

The implementation of fewer working hours compared to conventional working hours, lower incomes, even termination of employment (PHK), are the results of the implementation of AI and Automation in employment. In addition, AI and Automation also cause labor mobility, both horizontally and vertically, and the need to reorganize the roles and responsibilities of the workforce.

This change in relationship patterns requires the workforce to have new skills to meet the needs of the job market in the digital era, because this change can cause structural unemployment, where employees cannot meet current job requirements.

Automation and AI have complex impacts on the structure and employment relationships in Indonesia. While, on the other hand, the presence of this technology can increase productivity and efficiency, it can also pose real challenges related to the reduction of permanent jobs, the emergence of a gig economy without adequate protection, and a lack of skills. Therefore, comprehensive policies are needed to address these impacts and provide the Indonesian workforce to adapt to technological change.

Indonesian Employment Law Policy Accommodates the Impact of Automation and AI

The world of work in Indonesia has undergone significant changes as a result of the implementation of automation and AI, which requires adjustments in legal policies in Indonesia. In an effort to increase the flexibility of employment relationships and encourage investment, the Government then drafted the Job Creation Law, but this law focuses more on ease of investment and has not specifically regulated the impact of automation and AI. Until now, there has been no legal umbrella that regulates the use and application of AI in employment. This has caused a legal vacuum regarding the protection of workers whose positions are threatened as a result of the implementation of automation and AI.

The creation of a new pattern of employment relations from conventional employment relations to digital-based employment relations, such as the gig economy, where this has not been fully regulated in employment laws and regulations. In reality,

there is no regulation of employment protection for workers who work through digital platforms and/or remote work, such as the protection received by conventional workers, such as social security and other employment rights.

Although there have been efforts to improve workforce skills, the integration of re-skilling and up-skilling programs to deal with automation and AI has not gone well. It is important for the government to formulate regulations that focus more on developing workers' digital skills, so that they can adapt to increasingly rapid technological changes, especially technological developments in the world of work.

Recommendations for Employment Law Policy in the Era of Automation and AI

The rapid development of technology has brought major changes in the world of work, the presence of automation and AI has changed the pattern of relationships that were initially conventionally limited to place and time into a dynamic, flexible pattern of relationships that are not limited by place and time. Changes in the pattern of flexible work relationships that are not limited to place and time. For example, work that is done remotely (remote working) such as virtual assistants, data analysts, or other digital platform-based work. However, this pattern of work relationships raises major challenges, especially how the regulations made must be able to provide legal protection and other social security the same as those obtained by workers in conventional work relationship patterns. Until now, labor laws and regulations have not been fully able to accommodate this dynamic, resulting in a legal vacuum that can harm workers in terms of protecting their rights.

Employment regulations must be adjusted to today's technological developments, automation and AI are clear evidence that existing regulations have not been able to reach the role of automation and AI which have caused significant changes to the pattern of employment relationships that were initially conventional which were limited to time and place to become important in carrying out the work being done, now a new pattern has emerged, namely employment relationships that are not limited to time and place, a more flexible and easier and non-binding relationship pattern, but behind the flexibility that arises and the ease and freedom offered, there are a number of problems that must be faced by workers who work in new relationship patterns, namely those who work remotely (remote working) such as virtual assistants, data analysts and so on whose protection and social security are not yet guaranteed because

they have not been accommodated in the laws and regulations governing employment, in other words, there is currently a legal vacuum regarding the protection of social security for workers who work through digital platforms.

With this dynamic, it is clear that the law is limping behind technological developments. To answer these challenges, and to prepare a regulation where the law is no longer behind the times, legal reform is needed that is not only adaptive but also predictive and constructive. These three important elements are a means of realizing a futuristic law.

First Predictive, that the law that is made must be able to see future events, a law that has a broad vision in responding to future developments, a law that has a broad reach of views on events that will occur. Thus, the employment regulations that are drawn up will have a forward-looking vision that is able to answer and anticipate the challenges of technological change and its impact on the world of work. This kind of regulatory model must be based on an in-depth analysis of technological trends, especially automation and AI and their impact on work relationship patterns. With precise and accurate predictions, laws can be drawn up more proactively and are able to prevent all possibilities that have the potential to cause problems in the future before they become a crisis.

Second Adaptive, that the law made must be straightforward but not rigid, flexible law that is able to adjust to every development of the era, law that is always ready to face all changes including facing technological transformation that is increasingly rapidly affecting every aspect of human life so that it gives rise to a new paradigm and pattern that certainly requires every regulation made to be able to follow and always be alert in reaching every change that occurs. The law must be able to adjust to all changes and dynamics that occur in the future, so that it is not bound by bureaucratic rigidity. Adaptive law allows rapid adjustment to all social and technological changes without having to wait for changes to old laws. The application of principle-based regulation can be used as an example to provide flexibility in regulating new work relationships such as gig economy and remote working, but can still provide guarantees for the protection of workers' rights.

Third, constructive, this element is very important when a regulation that is drafted must be made on a strong foundation in order to provide real benefits and to be able to face the challenges of every change and social and technological development effectively. The development of fair and sustainable employment relations must

be built into employment regulations. The constructive element demands that the law not only be able to respond to every change that exists, but must also be able to function as a means of creating new norms that can encourage creativity, productivity and protection for all parties involved.

The law must no longer falter in keeping up with the dynamics and developments of the times, especially amidst increasingly rapid social and technological developments. Ensuring protection for workers in the face of ever-changing work environments, reforming labor law regulations must be a top priority. Inclusive, sustainable regulations that are able to meet future needs require collaboration between government, academics, and industry players. This approach not only protects workers but also creates a work environment that supports the advancement of the technological economy

4. Conclusion

The structure and pattern of employment relations in Indonesia have undergone significant changes with the presence of automation and AI in the world of work. These changes bring new opportunities such as increased efficiency and flexibility of work, but also pose challenges, especially related to legal uncertainty and protection of workers' rights. Phenomena such as remote working, the gig economy, and industrial transformation require adjustments to employment laws. Unfortunately, Indonesia's current employment law policy has not been able to comprehensively cover the impacts of automation and AI, creating a legal vacuum, especially in terms of social security for digital and remote workers. To face this challenge, futuristic legal reform is needed by integrating predictive, adaptive, and constructive legal elements. This reform must include social protection, strengthening regulations related to automation and AI, and cross-sector collaboration to create inclusive and sustainable legal products, so that they can better accommodate changes in the work structure in the digital era.

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