

The Role of Information Technology and the Creative Economy in Reducing Unemployment Rates in West Java Province

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ABSTRACT

This research investigates the role of information technology and the creative economy in reducing unemployment rates in West Java Province, addressing challenges posed by global economic uncertainties. Employing a qualitative methodology, data was gathered through interviews with six staff members from local government departments, documentation, and literature reviews. The analysis, using the Miles and Huberman model, revealed that while information technology disseminates crucial information and fosters economic growth, it also contributes to job displacement. The creative economy emerges as a viable solution, requiring collaborative efforts among government, industry, and academia. The study suggests that policies must adapt to technological advancements, supporting workforce adaptation and leveraging the creative economy's potential. Continuous training and reskilling initiatives are essential for an inclusive and resilient labor market. Further research should explore specific strategies for aligning education with industry needs

INTRODUCTION

The unemployment rate remains a pressing issue in various regions, including West Java, where the economic landscape is continually challenged by global uncertainties. The integration of technology and the creative economy (ekonomi kreatif) has become increasingly significant as regions strive to adapt to these economic fluctuations and mitigate unemployment. Research highlights various factors influencing unemployment, demonstrating a complex interaction between industry, government policies, and education that contributes to the region's workforce dynamics.

Sidauruk (2013) underscores the difficulties in delineating the creative economy sector from other industrial sub-sectors, indicating that current budgeting lacks a dedicated focus on creative economic activities. This lack of specificity impairs the ability of stakeholders to foster an environment conducive to growth and innovation within the creative industry. Moreover, barriers such as suboptimal licensing processes, inadequate investment, and insufficient intellectual property rights protection also hinder the expansion of creative economic practices, which are essential for job creation in West Java.

In a comparative analysis of the creative economy's sub-sectors, Daulay (2018) identifies that the craft industry ranks third, trailing behind culinary and fashion sectors. This positioning suggests a vibrant potential that could be leveraged through collaborative efforts among government entities, academia, and industry players. The mutualistic symbiosis among these stakeholders is crucial for formulating strategies that harness the strengths of each sector to capitalize on emerging opportunities. Aggressive strategies, or S-O strategies, that utilize existing strengths to tap into these opportunities can catalyze the development of the creative economy, ultimately leading to enhanced employment prospects.

Contrarily, Veronika and Mafruhah (2022) explore the relationship between economic growth and educated unemployment, presenting findings that indicate a negative and significant effect of economic growth on this form of unemployment in West Java. The findings suggest that despite overall economic advancements, educated individuals remain at risk of unemployment, illuminating a disconnection that exists between education outcomes and labor market demands. Investment and inflation variables, meanwhile, were found to have no significant influence in this context, revealing gaps in economic policy mechanisms and their implementation.

In terms of addressing workforce skills and training, Mustari et al. (2025) highlight initiatives by the local Labor Office (Disnaker) designed to enhance training programs in collaboration with the private sector. The introduction of digital innovations, such as the BIMMA application, aims to broaden access to employment information. However, challenges persist, such as skill mismatches and entrenched geographic preferences of the labor force, which complicate the broader impact of these programs. This emphasizes the importance of continuous adaptation and response to local labor market needs and international economic conditions.

The study conducted by Kartini et al. (2024) demonstrates the potential of promotional strategies to invigorate local youth and emerging entrepreneurs, fostering an environment conducive to the management of businesses more systematically. Promoting entrepreneurship among the younger generation reinforces the creative economy framework, which can pivotally influence job creation in West Java. Concurrently, Hayati (2021) advocates for the creation of synergies between the creative economy and local governance systems, notably through BUMDes (village-owned enterprises) and initiatives aimed at developing smart villages. This collaborative effort, underpinned by robust government support, media engagement, and community involvement, has the potential to amplify job generation mechanisms.

Additionally, Andika et al. (2024) reiterate that local governments play a central role in steering and supporting the growth of the creative economy through policies and programs tailored to regional strengths. By implementing strategies that connect technology with creative economy initiatives, governments can create more diverse employment opportunities, thereby addressing rising unemployment.

Research on the Human Development Index (HDI) by Saptanno and Maatoke (2022) delineates a similar trend, identifying that HDI negatively correlates with unemployment rates, while economic growth and inflation do not seem to exert a significant effect. This raises critical questions regarding the effectiveness of growth initiatives in translating into lower unemployment rates, highlighting the need for strategies that guarantee the correlation of human development with tangible employment outcomes.

Furthermore, Prabowo (2018) reveals that minimum wage regulations significantly impact employment levels, indicating that while wages play a crucial role in labor dynamics, investment and economic growth alone are not sufficient for addressing employment challenges in regions like Banten. This finding reiterates the necessity of a multi-faceted approach that addresses wages, education, and market alignment in response to current economic conditions.

Fatimah (2018) articulates that poverty levels exhibit a complex relationship with the Human Development Index, which remains low in areas with high poverty rates, thereby limiting individuals' quality of life and economic mobility. The impact of unemployment on living standards is apparent, affirming that a systemic focus on employment generation is essential not only for economic growth but also for improving overall human development metrics.

Given the global economic uncertainties and inflationary pressures, it is critical for stakeholders in West Java to engage actively in harnessing the potential of information technology and the creative economy. By focusing on these sectors, the government can develop a strategic framework that not only supports innovation and entrepreneurship but also broadens employment opportunities across

LITERATURE REVIEW

Information Technology

The literature on information systems emphasizes their critical role in enhancing organizational efficiency and decision-making processes. Information systems facilitate the collection, processing, and dissemination of data, which is essential for strategic planning and operational execution in various sectors, including economics and labor. One significant impact of information systems is their ability to provide real-time data analysis, which can help policymakers make informed decisions regarding economic strategies, including inflation control and unemployment reduction (Taslima, N.et al 2024).

Effective information systems can monitor inflation trends by analyzing consumer prices, production costs, and supply chain dynamics, enabling governments and organizations to respond swiftly to economic fluctuations. Timely insights derived from robust information systems allow policymakers to implement appropriate measures, such as adjusting interest rates or modifying taxation policies, aimed at stabilizing prices and curbing inflation. Additionally, these systems support businesses in forecasting demand and managing resources efficiently, which can further help reduce inflationary pressures.

Furthermore, information systems play a vital role in addressing unemployment by streamlining job matching processes. By utilizing databases that connect job seekers with employers, information systems facilitate efficient recruitment and reduce the time individuals spend searching for employment. Online platforms and job portals backed by comprehensive information systems provide access to a wider range of opportunities, empowering job seekers and enhancing labor market dynamics.

Moreover, information systems support skills development initiatives by offering training programs and educational resources that align with current industry demands. By equipping the workforce with relevant skills, information systems contribute to higher employability rates and a more resilient economy. Consequently, the integration of information systems in economic planning and labor market strategies is crucial for mitigating inflation and decreasing unemployment, ultimately leading to greater economic stability and growth.

Creative Economy

The creative economy has emerged as a vital sector in driving economic growth and job creation. Defined as the intersection of creativity, culture, and commerce, it encompasses various industries such as arts, design, media, and technology. The integration of information systems plays a crucial role in enhancing the effectiveness and competitiveness of the creative economy. By streamlining processes, improving communication, and facilitating access to resources, information systems enable creative entrepreneurs to innovate and respond to market demands more effectively (Hokmabadi, et al, 2024).

One of the systemic advantages of information systems in the creative economy is their ability to analyze market trends and consumer preferences. This analytical capability allows businesses to adjust their strategies swiftly, minimizing the risk of overproduction and waste, which can contribute to inflation. When companies are better informed about market dynamics, they can

optimize pricing strategies and manage resources efficiently, thereby stabilizing prices and controlling inflation rates.

Additionally, information systems support job creation within the creative economy by fostering collaboration and networking among creative professionals. Online platforms allow for the easy sharing of ideas and projects, enabling startups and freelancers to connect with potential clients and collaborators. As more individuals engage in creative industries, employment opportunities increase, effectively lowering unemployment levels.

Furthermore, training programs and digital resources are often disseminated through information systems, equipping individuals with necessary skills for the creative economy. By enhancing skill sets, these systems not only improve employability but also ensure that the workforce can meet the evolving needs of the creative sector. Thus, information systems play an essential role in reinforcing the creative economy's capacity to mitigate inflation and reduce unemployment.

Unemployment Rates

Unemployment is a critical economic indicator that reflects the health of a labor market and has significant implications for overall economic performance. The relationship between unemployment and inflation is often illustrated by the Phillips Curve, which suggests an inverse relationship between the two; as unemployment decreases, inflation tends to increase, and vice versa. This relationship highlights the delicate balance policymakers must maintain to foster economic stability.

High rates of unemployment can lead to reduced consumer spending, as unemployed individuals have limited income to support consumption. This decreased demand can exert downward pressure on prices, thereby potentially reducing inflation (Muhammad, A. A. 2023). Conversely, when unemployment is low, increased consumer spending can drive up demand for goods and services, thereby contributing to inflationary pressures. Understanding this dynamic is essential for effectively managing economic policy.

In addition to its direct impact on inflation, unemployment also affects the overall economic growth trajectory. High unemployment rates often result in underutilized resources and a diminished workforce, which can stifle innovation and productivity. As a nation grapples with elevated unemployment, firms may become hesitant to invest in expansion or new projects, further exacerbating economic stagnation. This cycle can create a feedback loop, where low investment leads to sustained unemployment and restrained inflation.

Moreover, the unemployment rate can influence monetary policy decisions. Central banks monitor unemployment closely, as shifts in labor market conditions can necessitate adjustments in interest rates. For instance, if unemployment is declining, a central bank may raise interest rates to prevent inflation from spiraling out of control. Thus, unemployment not only affects inflation directly through demand channels but also influences broader economic policies geared toward maintaining price stability and fostering sustainable economic growth. Understanding this relationship is vital for developing informed economic strategies and interventions.

METHODOLOGY

This research employs a qualitative methodology to explore the role of information technology and the creative economy in reducing unemployment levels in West Java Province. Data will be gathered through in-depth interviews, documentation, and literature reviews centered around the research topic. The research activities are scheduled to take place from early February to April 2025. A total of six respondents will be involved in this study, comprising two staff members from the West Java Department of Manpower and Transmigration (Dinas Tenaga Kerja dan Transmigrasi or Disnakertrans), two from the Department of Communication and Information (Dinas Komunikasi dan Informasi or Kominfo), and two from the Department of Tourism and Creative Economy (Dinas Pariwisata dan Ekonomi Kreatif or Disparbud).

The data collected will undergo analysis using the Miles and Huberman analytical model, which consists of three primary stages: data reduction, data display, and conclusion drawing. In the data reduction phase, the information gathered will be simplified through note-taking or summarization, ensuring that key themes and insights are highlighted while minimizing extraneous details. Following this, the data display stage will organize and present the information in a structured manner to facilitate understanding and interpretation.

To ensure the validity of the findings, triangulation techniques will be employed. Triangulation of sources will involve comparing data obtained from diverse sources, such as interviews, observations, and documents, to assess the consistency and reliability of the results. This approach enhances the credibility of the research findings by providing a comprehensive perspective on the interplay between information technology, the creative economy, and unemployment reduction. By triangulating data from multiple sources, the study aims to achieve a more nuanced understanding of the issues at hand, ultimately contributing valuable insights to the discourse on economic development in West Java. Provide clear and concise versions of your methods of conducting research, population and samples, and data analysis tools.

RESULTS AND DISCUSSION

The research findings indicate a complex interplay between information technology, the creative economy, inflation, and unemployment rates in West Java Province. The advancement of technology has become a pivotal force in shaping the employment landscape, offering both opportunities and challenges. Respondent 1 articulates that information technology plays a significant role in addressing unemployment by disseminating vital information about government programs at both central and regional levels. This accessibility allows job seekers to stay informed about available resources and opportunities that can improve their employment prospects. However, the rise of technology also raises concerns about job displacement, as certain positions may become redundant due to automation and digital innovations.

This dual nature of technology reflects broader trends within the labor market, as highlighted by Respondent 2. The emergence of roles such as Big Data Specialists, Robotic Engineers, and Information Security Analysts indicates a shift towards more specialized positions that may not have existed a decade ago. As

industries evolve, there is a pressing need for individuals to acquire new skills that align with technological advancements. The concern about job loss due to automation underscores the necessity of adapting educational and training programs to better prepare the workforce for the demands of a digital economy. The creative economy, as emphasized by Sidauruk (2013), is positioned as a viable solution to mitigate unemployment rates and create job opportunities. The development of this sector not only promotes economic growth but also provides a platform for enhancing the skills and productivity of the workforce. Daulay (2018) further elaborates on the collaborative efforts required among stakeholders—government, industry, and academia—to drive the creative economy forward. The S-O strategy mentioned by Daulay highlights the potential to leverage existing strengths to exploit new opportunities, thereby fostering an environment conducive to job creation and economic resilience.

Moreover, the research conducted by Veronika and Mafruhah (2022) underscores how economic growth negatively influences educated unemployment in West Java. This finding points to a disconnection between economic advancement and job creation for educated individuals, suggesting that additional factors must be addressed to enhance employment rates among this demographic. Policies aimed at increasing investment and inflation may not directly translate into employment opportunities, necessitating a more nuanced approach to economic management.

The local government's role, as pointed out by Andika et al. (2024), is central in guiding and supporting the growth of sectors such as the creative economy. Through various policies and programs, local authorities can create an ecosystem that nurtures creativity, innovation, and entrepreneurship. This development not only fosters a diverse job market but also helps in addressing skill gaps that persist in the workforce.

Additionally, Mustari et al. (2025) discuss the competency-based training programs designed to expand access to employment information through digital innovations. While these programs are beneficial, they also face challenges, such as skill mismatches and the variability of training schedules that can hinder their effectiveness. The tendency of workers to remain in their local areas further complicates the situation, limiting their exposure to opportunities that may exist elsewhere.

Respondents 3 and 5 reinforce the importance of policy direction that aligns with technological advancements. As technology rapidly evolves, policies must be agile enough to accommodate new developments and ensure that the workforce remains competitive. This requires ongoing collaboration among government agencies, educational institutions, and industry players to identify emerging trends and prepare the workforce accordingly (Achdiat, M. et al 2024).

Respondents 4 and 6 place significant emphasis on nurturing the creative economy by expanding its product range and marketing efforts. By fostering an environment where creative industries can flourish, West Java has the potential to increase employment significantly. The creative economy not only serves as a source of job creation but also contributes to the overall resilience of the economy by diversifying the types of skills and industries present in the labor market.

The Human Development Index (HDI) research conducted by Saptanno and Maatoke (2022) further illustrates that broader economic factors, such as human development levels, have a direct impact on unemployment rates. This highlights the interconnectedness of various socio-economic factors that contribute to employment outcomes. As higher education and skill development are essential components of human development, prioritizing these areas becomes crucial in combating unemployment.

Prabowo (2018) notes the significance of minimum wages on employment levels, indicating that policies surrounding wage structures can have substantial effects on the labor market. While minimum wage policies are intended to protect workers, they also raise questions about the balance between ensuring a living wage and maintaining competitive hiring practices for employers. This analysis prompts further discussion on how wage policies interact with broader economic principles, including inflation and investment behavior.

Fatimah (2018) emphasizes the relationship between economic growth and human development indices, noting that improvements in economic conditions do not automatically guarantee enhancements in individual well-being. This underscores the importance of holistic approaches that consider quality of life factors – such as health, education, and purchasing power – in designing effective policies aimed at reducing unemployment (Suprpto, H. A. et al 2024).

CONCLUSIONS AND RECOMMENDATIONS

The integration of information technology and the creative economy represents a dynamic approach to addressing unemployment in West Java. The research findings support the notion that while technology can facilitate the dissemination of information and create new job opportunities, it also poses challenges related to job displacement.

FURTHER STUDY

Further research should investigate comprehensive strategies aimed at effectively aligning educational programs with the evolving needs of various industries. This alignment is crucial to ensure that students acquire the skills and knowledge that are in demand in the workforce. Collaborative partnerships between educational institutions and industry stakeholders can play a significant role in shaping curricula that reflect real-world requirements. Additionally, exploring innovative teaching methodologies, such as project-based learning, internships, and hands-on training, can enhance students' practical experiences. It is also essential to continuously identify and analyze industry trends to adapt educational objectives, ensuring that graduates are well-prepared to meet the challenges of their chosen fields. This research may face limitations such as a lack of diverse industry perspectives, insufficient data on rapidly changing job markets, and potential discrepancies in educational frameworks.

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