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POLICY BRIEF

THE EFFICIENCY PARADOX: ADDRESSING MALAYSIA'S JOBLESS AI TRANSITION

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Key Insights

- ❖ Malaysia's cost-driven AI adoption by SMEs creates an efficiency paradox where productivity rises but employment, especially in routine clerical roles, is dominated by women, lags and erodes the middle class.
- ❖ Current AI-first digitalisation grants and generic reskilling schemes prioritise tool adoption over workforce transition, resulting in jobless productivity, algorithm-dependent gig work mislabelled as entrepreneurship, and failing to provide realistic bridge skills for displaced mid-career workers.
- ❖ To realign AI with inclusive development and *maqasid al-shari'ah*, digital grants should be made conditional on Human Capital Roadmaps and retention/retraining commitments so that efficiency gains are systematically reinvested in upskilling and new, higher-value roles.
- ❖ Protecting vulnerable workers and regions and micro-SMEs requires place-based, labour-augmenting AI incentives (e.g., a Regional Digital Equity Fund) and an algorithmic audit regime with an ombudsman to ensure transparent platform rules, fair income, and reduced *gharar* for labor market participants.

1. Introduction

The strategy of Malaysia's digital economy is currently pushing for rapid adoption of Artificial Intelligence (AI) and automation. Recent data highlights a concerning trend among Small and Medium Enterprises (SMEs), known as the Efficiency paradox. While SMEs report notable productivity gains and increased output, these improvements do not lead to net employment growth. Instead, a "jobless productivity" situation emerges, where routine administrative roles are vanishing, and new complex positions are not being created quickly enough to absorb the displaced workforce.

In 2024, there was a disparity between SME output growth, which stood at 5.8%, and employment growth, which was 3.1%. AI is expected to further accelerate output growth, although employment may grow more slowly due to displacement effects. This trend is anticipated to place many workers engaged in repetitive, routine tasks with minimal cognitive requirements at a high risk of being displaced by AI technologies. The 4.2 million clerical workers in Malaysia face a particularly high risk of exposure.

The current policy framework mainly emphasizes the adoption of AI-related systems, yet it remains vague in adequately addressing the critical need for labour transition. A shift in policy is essential, advocating for government support to move from "adoption subsidies" to "transition support." This approach should involve conditional grants that necessitate the creation of human capital roadmaps and deliver

targeted social protection for those highly exposed workers.

Fourth Industrial Revolution (4IR) in Malaysia is optimistic. It promises that digital adoption will lead to high-income jobs. The New Industrial Master Plan (NIMP) 2030 champions this view. The ground reality presents a different picture. In Malaysia, SMEs account for 97% of business establishments. Their primary motivation for adopting digital tools is cost reduction, rather than raising their value-added capacity.

As a result, a decoupling effect occurs, characterized by rising output and revenue, while the number of employees remains unchanged or even decreases. This situation is called the efficiency paradox. One of the key factors is the inadequate management of transitions in workforce preparation. The benefits of AI are concentrated in capital returns. The costs of adjustment fall disproportionately on the workforce.

2. Evidence of Jobless Productivity

The Department of Statistics Malaysia (DOSM) reported a strong performance for MSMEs in 2024. The GDP for these enterprises increased by 5.8%, surpassing the national GDP growth rate of 5.1%. At the same time, labour productivity rose by 2.6% to reach RM 80,507 per person.

Despite the encouraging macro indicators, there are concerning structural changes. Employment growth has significantly lagged at 3.1%, and the skilled job creation rate in the fourth quarter of 2024 actually declined by 1.9%. Companies are

generating more value, yet they are achieving this with fewer newly skilled workers. This suggests a substitution effect rather than a complementary one.

The impact of AI adoption is unevenly distributed across regions. Our regression analysis of data from Malaysian SMEs indicates that in central economic hubs such as Kuala Lumpur, AI adoption significantly increases the talent premium. However, in regions such as Sabah and Sarawak, technological adoption does not enhance the local labor force; instead, it replaces it. Regional SMEs lack the complex ecosystems necessary to support high-level AI roles, relying on automation primarily to substitute manual and routine cognitive tasks. This situation exacerbates regional inequality, posing a risk of de-industrializing peripheral areas while the central regions continue to advance.

AI technology is also impacting certain types of occupations, particularly middle-skill jobs. These include mid-skill administrative roles such as HR assistants, bookkeepers, and customer service agents, with women holding 84% of these positions. The displacement is gradual. A firm might install a chatbot and then decide not to replace a retiring administrator. The disappearance of jobs does not occur instantly; instead, the jobs gradually become obsolete for the next generation. This technological-led change significantly weakens the middle class.

3. Analysis: The Structural Flaws in Current Support

Government grants, such as the SME Digitalisation Grant, often prioritize funding for software purchases. They cover subscriptions to Point of Sale (POS) systems, accounting software, and HR management tools. As many software solutions now incorporate AI, many firms are anticipated to upgrade their existing software to AI-enabled versions.

This approach promotes tactical efficiency but not strategic transformation. For instance, a bakery purchases software to automate invoicing and subsequently dismisses the accounts clerk. However, it does not reinvest the savings in hiring a food scientist or a marketer. While the firm becomes more efficient, the local economy loses a job, and there is no mechanism to ensure that the "efficiency dividend" is reinvested in human capital.

The efficiency paradox extends to the gig economy and micro-SMEs. Consider a ride-hailing driver or a digital platform seller on sites like Shopee. While they are technically users of AI technology, in reality, they are subject to it. Platform algorithms dictate their visibility, fees, and income, leaving them with no control over these factors. Even a minor algorithm change can severely impact their monthly earnings. This is not true entrepreneurship; it is algorithmic dependency. Current policies label these individuals as "digital entrepreneurs," a classification that obscures the precarious nature

of their income and inflates national digital adoption statistics without reflecting genuine economic security.

Reskilling programs today often lack specificity while offering broad courses, such as digital marketing or basic data analytics. This generic approach does not cater to the unique needs of needed are bridge skills (skills that enhance existing domain expertise while integrating digital proficiency). Unfortunately, the current "boot camp" model falls short of providing this essential bridge.

4. Conclusion

Malaysia is at a critical juncture. Striving for high-tech adoption among SMEs is a commendable policy objective. However, the efficiency paradox should not be overlooked. Raising SME productivity without increasing employment leads to instability in the economy. It exacerbates the divide between capital owners and workers and imposes a skill penalty on the most vulnerable workers and regions.

The success of a policy should not be judged solely by the number of companies that integrate

the displaced workers. For instance, a 45-year-old administrative officer cannot seamlessly transition into a data scientist role. The disparity between their previous skills, such as process management and human coordination, and the new skills required, like programming and advanced analytics, is significant. What is

AI technology. Instead, the true measure of technological adoption lies in the quantity and quality of jobs created by these innovations. The recommendations mentioned below provide a roadmap for progress, balancing human dignity and digital efficiency. They ensure that the benefits of the AI revolution extend to the majority, not just a select few.

Policy Recommendations

- ❖ **Policy Recommendation 1:** The criteria for digitization grants should be revised. Funding for hardware or software should be contingent on applicants submitting a Human Capital Roadmap. This roadmap should detail how the firm intends to use efficiency gains. It should require plans to upskill existing staff or hire for new roles. This recommendation is to move from funding adoption to funding integration. One approach is to withhold 30% of the grant until the firm demonstrates that there has been no net reduction in local staff over a 12-month period. Alternatively, the firm can show that it has reinvested savings into staff training.
- ❖ **Policy Recommendation 2:** There is a need to address the issue of regional skill bias, particularly in Sabah, Sarawak, and East Peninsula of Malaysia. Implementing a national AI policy with a one-size-fits-all strategy could disadvantage certain workers. We advocate for specific incentives to promote labor-augmenting AI in these regions. Tax deductions should be designed to favour technologies that enhance worker capability rather than replace them. To facilitate this, we propose the creation of a "Regional Digital Equity Fund". This fund would support SMEs in these regions that demonstrate a positive relationship between technology adoption and wage growth.
- ❖ **Policy Recommendation 3:** There is also a need for a regulatory framework to protect micro-enterprises on digital platforms. This aligns with the Islamic principle of removing uncertainty (*gharar*) in transaction. The government should mandate an algorithmic audit. Platforms must disclose the key parameters affecting seller rankings and drivers' income. They should provide a clear dispute resolution mechanism that involves human review to improve transparency. The Malaysia Digital Economy Corporation (MDEC) should establish an ombudsman office dedicated to resolving conflicts between micro-SMEs and platform algorithms, thereby ensuring fair practices.



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