The Impact of Adopting Artificial Intelligence (AI) on Malaysia's Economic Environment

ABSTRACT

This study aims to conduct a systematic review of the implications of adopting Artificial Intelligence (AI) on the economic landscape of Malaysia. Drawing on various economic growth theories, the research underscores the pivotal role of AI in transforming resources characterized by diminishing marginal returns into assets with increasing marginal returns. The analysis is multifaceted, addressing three fundamental perspectives. First, it examines AI adoption's impact on microeconomic and macroeconomic dimensions. At the macroeconomic level, the research observes the influence of AI adoption on demand-pull inflation and cost-push inflation, thereby affecting overall price levels within the Malaysian economy. In contrast, at the microeconomic level, AI adoption is associated with increased productivity and the efficient allocation of resources, leading to economies of scale. In innovative and competitive business environments, AI adoption further enhances the quality of goods and services while ensuring competitive pricing strategies. Second, the study differentiates between AI adoption's positive and negative consequences across various sectors and demographic groups. It delves into specific examples to illustrate how different industries and segments of the population may either benefit from or face challenges resulting from AI implementation. Finally, the analysis contemplates both the short-term and long-term impacts of AI adoption. In the short term, immediate changes in employment, productivity, and consumer prices are evaluated, while the long-term analysis explores more structural changes, including income redistribution and sustained productivity growth. The findings of this research highlight the net positive impact of AI adoption in Malaysia, emphasizing that its benefits outweigh the associated costs. It underscores the significance of government involvement, particularly in formulating welldesigned policies and providing necessary infrastructure. This proactive government role aligns with the principles of Romer's theory of economic growth, ultimately driving the successful and sustainable adoption of AI technology for fostering economic development.