

ABSTRACT

The digital transformation of banking in Indonesia has become a strategic necessity amidst technological disruption; however, technology integration often triggers anomalies such as the IT productivity paradox and the J-Curve effect. Grounded in the Resource-Based View (RBV), Dynamic Capabilities View (DCV), and Transaction Cost Economics (TCE) theories, this study aims to examine the effect of digital transformation on bank performance proxies (ROA, ROE, and BOPO) using Net Interest Margin (NIM), Capital Adequacy Ratio (CAR), and Loan to Deposit Ratio (LDR) as control variables. The study utilized a purposive sample of 13 traditional banks that officially transformed into digital banks over a 10-year observation period from 2017 to 2026, totaling 130 observations. Data analysis was conducted using comparative panel data regression adjusted with robust standard errors using Stata.

The final regression results prove that digital transformation has a negative and significant effect on ROA, empirically confirming the J-Curve effect due to massive transitional expenditures in the early adaptation phase. For ROE, digital transformation has a negative but insignificant effect, confirming the IT productivity paradox due to the distortion from massive capital injections by corporate investors that obscure the real efficiency impact. Conversely, digital transformation has a positive and significant effect on the BOPO inefficiency ratio, confirming that the implementation of a "cash burn" strategy in the initial transition phase triggers a drastic swell in operational expenses.

Keywords: Digital Transformation, Bank Performance, J-Curve Effect, IT Productivity Paradox, Panel Data Regression.