# AN ANALYSIS OF PRODUCTIVITY GROWTH IN THE MALAYSIAN MOBILE TELECOMMUNICATIONS INDUSTRY

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ABSTRACT

This research explores and analyzes the change in the productivity of Malaysian mobile telecommunications industry during the period 1996 to 2001. The data consists of a panel of five mobile service providers in Malaysia namely Celcom, DiGi, Maxis, TimeCel and TM Cellular. Productivity has been measured by the Malmquist index, using a Data Envelopment Analysis (DEA) technique. The Malmquist productivity measures are decomposed into two components: technological change and technical efficiency change index. The results showed that Maxis is persistently technically efficient through out the period of the study while TM Cellular and Celcom were the least technically efficient operators under the constant returns to scale (CRS) and variable returns to scale (VRS) versions of technology. Indeed, Maxis was also found to be the major innovator in the industry over the period of the study. The study also finds that Total Factor Productivity (TFP) has increased significantly for the whole industry in which technical progress has been the most important source of productivity growth to Malaysian mobile telecommunications industry. Low technical efficiency in the industry indicates a great potential for the industry to increase productivity through improvement in technical efficiency. Continuously expanding market liberalization and enhancing the productive capacity of technology appears to offer better prospects for Malaysian mobile telecommunications industry to achieve greater productivity growth.

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