

**EFFECTS OF MOBILE MONEY FINANCIAL TECHNOLOGY SERVICES ON
OUTPUT GROWTH AND PRODUCTIVITY IN KENYA**

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**A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF
ECONOMETRICS AND STATISTICS IN THE SCHOOL OF BUSINESS, ECONOMICS
AND TOURISM IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE
AWARD OF THE DEGREE OF MASTER OF ECONOMICS (ECONOMETRICS) OF
KENYATTA UNIVERSITY**

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DECLARATION

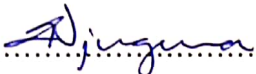
This research project is my original work and has not been presented for a degree in any other university for any other award.

Signature  Date: 27/11/2023

Gladys Njeri Wachira

K102/26862/2019

I confirm that the work reported in this project was carried out by the candidate under my supervision.

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ABSTRACT

The advent of mobile money services in Kenya has revolutionized the financial sector in the country. The rate of uptake for the service- specifically M-Pesa has been nothing but phenomenal. Within 4 years of introduction, the service had reached a high proportion of 80 percent of the Kenyan households. This is in stark contrast to the 60 years it took for Kenya to have electricity- an equally important infrastructure. This service continues to grow and evolve - providing new and more services as the years go by. It has led to the financial inclusion of people who were previously unbanked or under-banked. Africa has for years been leading her counterparts in the number of active accounts and transaction value carried out using mobile money and more specifically, M-Pesa has been heralded to be a global leader in terms of mobile money financial technology services. It is, therefore, not surprising that foreign leaders have traversed for long distances to learn about this Kenyan-bred financial service. This study, therefore, takes cognizance of the massive growth of M-Pesa and its uniqueness in providing solutions for financial inclusion particularly in a developing country like Kenya. The general objective of this study was to analyze the effects of mobile money financial technology services on output growth and productivity in Kenya. The specific objectives were to investigate whether there is a structural change in the output growth and productivity in Kenya due mobile money financial technology services; to quantify the effect of mobile money financial technology services on output productivity in Kenya; and to examine the presence of a leapfrog effect of mobile money financial technology services on output productivity in Kenya. Secondary data was obtained for the years 1980 to 2020 and diagnostic tests for unit root, normality, multi-collinearity, auto-correlation and model misspecification were conducted to ensure that the results obtained were not spurious. The study used the Growth Accounting Method to determine Total Factor Productivity's contribution to the economic growth in Kenya. A regression analysis was then performed to establish the contributions of different factor variables to the Total Factor Productivity. The findings of the study suggest that there is a structural change in output growth and productivity in Kenya as a result of the introduction of mobile money financial technologies. Mobile money financial technology services were also found to have a significant positive effect on output productivity while leapfrogging did not have a significant effect. Given mobile money's positive effect on productivity, constraints hindering adoption and use of digital technologies such as lack of electricity access, poor network quality, affordability and lack of digital skills should be addressed for increased productivity. Additionally, a robust cyber security system that ensures client transactions and information is secure should be developed and enforced.