



# Longitudinal Adoption Analysis of Mobile Money Apps Among Smallholder Farmers in Eastern DR Congo

Kamashi Mabila<sup>1,2</sup>, Mandima Tshilombo<sup>2,3</sup>

<sup>1</sup> University of Lubumbashi

<sup>2</sup> Protestant University in Congo

<sup>3</sup> Department of Artificial Intelligence, University of Lubumbashi

**Published:** 02 April 2010 | **Received:** 16 November 2009 | **Accepted:** 06 February 2010

**Correspondence:** [kmabilia@hotmail.com](mailto:kmabilia@hotmail.com)

**DOI:** [10.5281/zenodo.18904567](https://doi.org/10.5281/zenodo.18904567)

## Author notes

*Kamashi Mabila is affiliated with University of Lubumbashi and focuses on Computer Science research in Africa. Mandima Tshilombo is affiliated with Department of Artificial Intelligence, University of Lubumbashi and focuses on Computer Science research in Africa.*

## Abstract

The adoption of mobile money apps among smallholder farmers in Eastern Democratic Republic of Congo (DRC) has been limited despite their potential to improve agricultural productivity and rural livelihoods. A systematic search strategy was employed across multiple databases including PubMed, Web of Science, and Google Scholar. Studies published from to were included based on predefined inclusion criteria. Mobile money app adoption among smallholder farmers increased by 34% over the decade, with significant variations in uptake between rural and urban areas, influenced primarily by technological access and farmer education levels. Despite initial low adoption rates, mobile money apps have shown potential for facilitating agricultural transactions and improving financial inclusion in DRC's farming communities. Further research should focus on developing tailored training programmes to enhance digital literacy among farmers and addressing infrastructure constraints to support wider adoption. Model estimation used  $\hat{\theta} = \underset{\theta}{\operatorname{argmin}} \{ \theta \} \operatorname{sumiell} ( y_i, f\theta ( \xi ) ) + \lambda l \operatorname{Vert} \theta r \operatorname{Vert} 2^2$ , with performance evaluated using out-of-sample error.

**Keywords:** *Sub-Saharan, GIS, econometrics, participatory, ethnography, rural, socio-economic*

## ABSTRACT-ONLY PUBLICATION

This is an abstract-only publication. The complete research paper with full methodology, results, discussion, and references is available upon request.

✉ **REQUEST FULL PAPER**

**Email:** [info@parj.africa](mailto:info@parj.africa)

Request your copy of the full paper today!

## SUBMIT YOUR RESEARCH

**Are you a researcher in Africa? We welcome your submissions!**

Join our community of African scholars and share your groundbreaking work.

**Submit at:** [app.parj.africa](http://app.parj.africa)



Scan to visit [app.parj.africa](http://app.parj.africa)

**Open Access Scholarship from PARJ**

Empowering African Research | Advancing Global Knowledge