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## Abstract

This study focuses on adoption of mobile payment on business in Kenya. We employ Technology, Organization and Environment (TOE) to identify factors that motivate SME to adopt mobile payment methods in their businesses. To achieve this, we performed a cross-sectional survey and sampled 317 SMEs from three strata; hotels and restaurants, tours and travel and supermarkets. Structured Equation Model (SEM) analysis reveals a significant relationship between all indicators and latent variables; Technology, Organization and Environment. Based on these results, we then present a validated framework for the adoption of Mobile Payment platforms in SMEs.

## Refer

## ences

- R. Ahmad and Z Yunos, "The Application of Mixed Method in Developing a Cyber Terrorism Framework," Journal of Information Security, vol. 3, no. 3, pp. 209-214, 2012, doi: 10.4236/jis.2012.33026.
- C Toma, "M-Payments Issues and Concepts," Informatica Economica, Academy of Economic Studies, vol. 16, no. 3, pp. 117-123, 2012, Available from www.

revistaie. ase. ro.

- J Mutua, I N Oteyo, and A W Njeru, "The Extent of E-Commerce Adoption among Small and Medium Enterprises in Nairobi, Kenya," International Journal of Business and Social Science , vol. 4, no. 9, pp. 116-122, 2013, Available from <http://www.ijbssnet.com>.
- J N. K Kinnuthia and D M Akinusi, "The magnitude of barriers facing e-commerce businesses in Kenya," Journal of Internet and Information Systems, vol. 4, no. 1, pp. 12-27, 2014.
- Z N Jobodwana, "E-Commerce and Mobile Commerce in South Africa: Regulatory Challenges," J. Int. Commercial Law Technol, vol. 4, no. 4, pp. 287-298, 2009, Available from <http://www.jiclt.com/index.php/jiclt/article/viewFile/93/921>.
- M A Asiabugwa and J Munyoki, "E-commerce Strategy and Performance of Commercial Banks in Kenya," African Journal of Business and Management, vol. 3, 2013, Available from [http://www.aibuma.org/archive/journal/vol\\_three/PAPER%203.pdf](http://www.aibuma.org/archive/journal/vol_three/PAPER%203.pdf).
- L Chaix and D Torre, "Which economic model for," in 23rd European Regional Conference of the International Telecommunication, Vienna, Austria, 2012, available at: <http://hdl.handle.net/10419/60380>.
- T Dahlberg, N Mallat, J Ondrus, and A Zmijewska, Mobile Payment Market and Research - Past, Present and Future Proceedings: Proceedings of Helsinki Mobility Roundtable, 2006, Available from <http://sprouts.aisnet.org/6-48>.
- E H Diniz, F G Vargas, and J P Albuquerque, "Mobile Money and Payment: a literature review based on academic and practitioner-oriented publications (2001-2011)," in Proceedings of SIG GlobDev Fourth Annual Workshop, Shanghai, China, 2011, Available from <http://www.scribd.com/doc/93386441/24-REVISED-Diniz-Mobile-Money-and-Payment-Nov-14-2011>.
- G C Bruner, S A Kumar, and T Clark, "Toward a Unified Theory of Consumer Acceptance Technology, Psychology & Marketing," Wiley Periodicals, Inc, vol. 24, no. 12, pp. 1059-1084, 2007, <http://dx.doi.org/10.1002/mar.20196>.
- M Mbogo, "The Impact of Mobile Payments on the Success and Growth of Micro-Business: The Case of M-Pesa in Kenya," vol. 2, no. 1, 2010, Available from <http://www.ajol.info/index.php/jolte/article/view/51998>.
- R P Bagozzi, "The Legacy of the Technology Acceptance Model and a Proposal for a Paradigm Shift," vol. 8, no. 4, 2007, Available from [www.aisel.aisnet.org](http://www.aisel.aisnet.org).
- V Venkatesh, J Y. L Thong, and X Xu, "Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology," vol. 36, no. 1, pp. 157-178, February 2012.
- Yoon, "An empirical investigation of factors affecting organizational Adoption of virtual worlds," Ph. D. dissertation 2009.
- K Sargent, P Hyland, and S Sawang, "Factors Influencing the Adoption of Information Technology in a Construction Business Kimberley," vol. 12, no. 2, 2012, Available from <http://epress.lib.uts.edu.au/journals/index.php/AJCEB/article/view/72>.
- K Wanjau, N R Macharia, and E M. A Ayodo, "The magnitude of barriers facing e-commerce businesses in Kenya," vol. 4, no. 1, pp. 12-27, 2014.
- K Zhu, K L Kraemer, S Xu, and J Dedrick, "Information Technology Payoff in E-Business Environments: An International Perspective on Value Creation of E- Business in the Financial Services Industry," vol. 21, no. 1, pp. 17-54, 2004, Available from <http://www.jstor.org/stable/40398783>.

- M Mugenda and A G Mugenda, Research Methods: quantitative and qualitative approaches. Nairobi: ACTS press, 2003.
- J Daniel, Sampling Essentials. : Sage Publications, Inc, 2012, ch. Chapter 5: Choosing the type of probability sampling, pp. 131-132.
- S L Hoe, "Issues and procedures in adopting structural equation modelling technique," vol. 3, no. 1, pp. 76-83, 2008, Available from <http://jaqm.ro/issues/volume-3,issue-1/pdfs/ho.e.pdf>.
- P Tobbin and J K. M Kuwornu, "Adoption of Mobile Money Transfer Technology: Structural Equation Modeling Approach," vol. 3, no. 7, 2011, Available from [www. iiste.org](http://www.iiste.org).
- M J Mayhew, S M Hubbard, C J Finelli, and T S Harding, "Using Structural Equation Modeling to Validate the Theory of Planned Behavior as a Model for Predicting Student Cheating," vol. 32, no. 4, pp. 441-468, 2009.
- S Gupta and H Xu, "Examining the Relative Influence of Risk and Control on Intention to Adopt Risky Technologies," vol. 5, no. 4, 2010.

## **Index Terms**

Computer Science

Information Sciences

## **Keywords**

Mobile Payment    Structured Equation Model    Technology Organizational and  
Environmental Theory    Technology  
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