

CPRafrica/ CPRsouth 2013

Mysore, India

5-7 September 2013

Contextual Assessment of Adoption and Use of Information and Communication Technologies (ICTs) *By Small Businesses in Lagos, Nigeria*

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Introduction

Lagos:

- Most populous city in Nigeria with a population of about 18 million
- 2nd fastest growing city in Africa and 7th fastest growing city in the world
- Nigeria's main commercial hub (although with a lot of traffic and not so world class infrastructure)

Focus of research

ICT adoption among small businesses (SMEs) in Lagos, Nigeria. An SME in the Nigerian context is any business with:

- Capital assets ranging from \$30, 000 to \$2 million
- Staff strength from 11 to 300 employees.

Methodology

- A qualitative approach based on extensive interviews with 60 owner/managers of the small businesses covered in the study, over a three month period. This allowed an exploration of the broader trends of usage and also to understand how and why certain usage patterns emerged.
- Quantitative data from the World Economic Forum's annually published Global Information Technology Report for 2013, which uses the Networked Readiness Index (NRI) framework to assess ICT readiness of businesses in 147 countries to compare ICT readiness of businesses in Nigeria to that of three other countries in Sub Saharan Africa: Kenya, Mauritius and South Africa.

Key Points

Low levels of ICT Adoption by SMEs

The level of ICT usage by small businesses in Nigeria is significantly low, even when compared with what is obtainable in other African countries benchmarked by the World Economic Forum's annual Global Information Technology Reports' Networked Readiness Index (NRI).

Challenges to ICT Adoption by SMEs

SMEs are more likely to experience several challenges with regards to ICT adoption and implementation; such challenges may include reliability issues caused by infrastructural challenges, high cost of implementation of technologies and manpower gaps existing in the workforce.

Government Policy and SME ICT Adoption

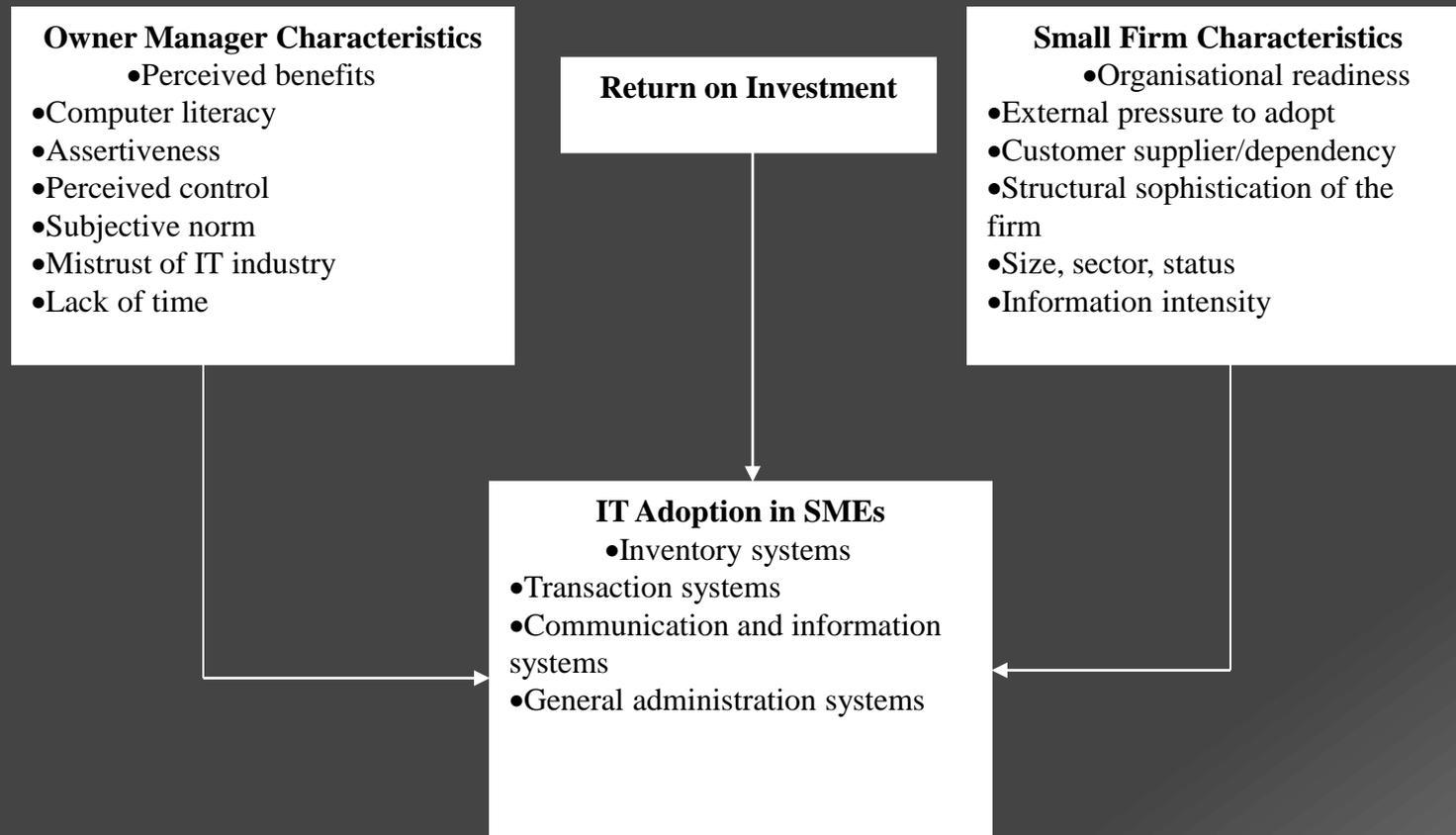
Government policies should also influence ICT adoption among SMEs as an external source by designing policy initiatives that aid SMEs, apart from other factors such as the suppliers, clients and rival businesses.

Importance of ICT Adoption by SME Productivity

ICTs have been proven to have significant transformative effect on society, improving efficiency, eliminating physical barriers and enhancing quality of life. It has also significantly transformed how business is done over the years. This is also particularly useful for improved productivity of SMEs in Nigeria and sub Saharan Africa.

Owner Manager/Small Firm Characteristics of ICT

Adoption among SMEs

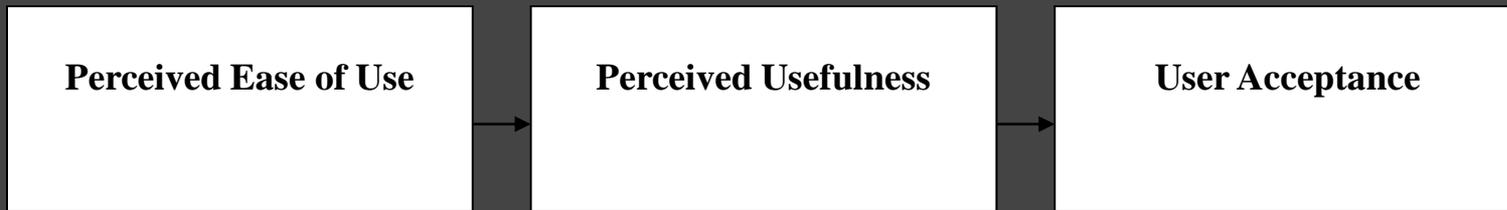


Factors affecting ICT adoption by SMEs (modified version)

(Source: Van Akkeren and Cavaye, 1999, p1081 cited in Manuelli et al. 2007)

Assessment Framework: Technology Acceptance

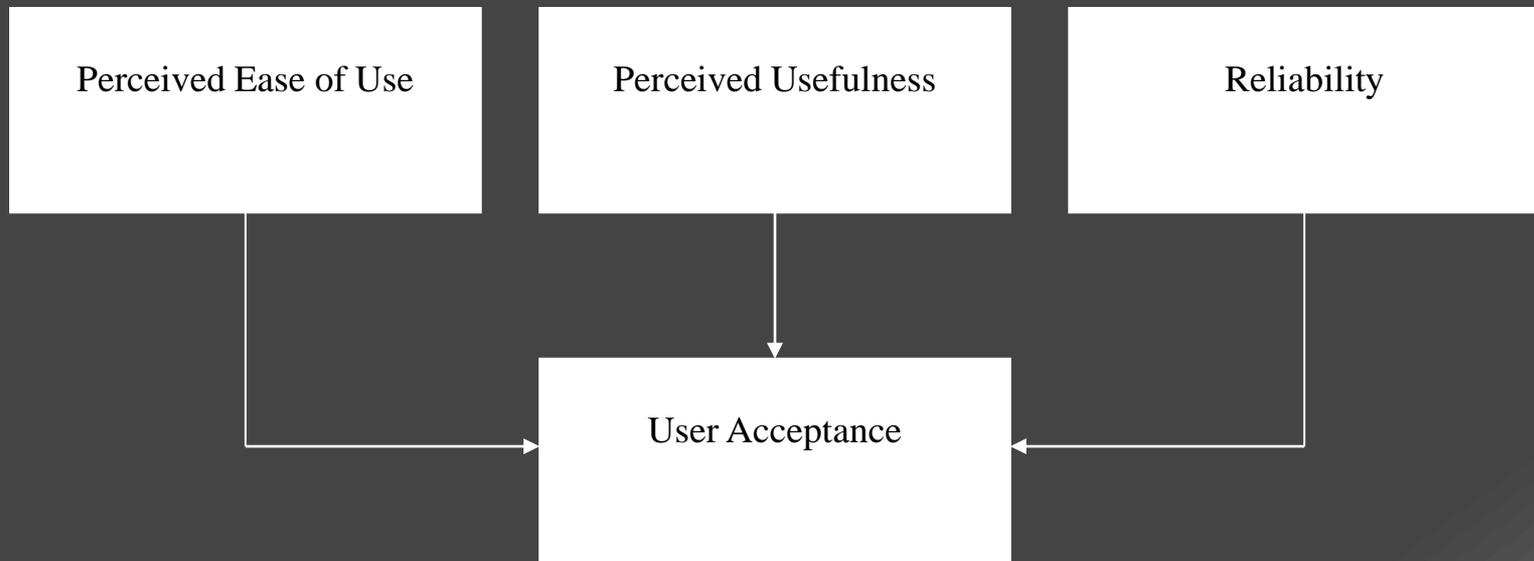
Model (TAM)



(Source: The original Technology Acceptance Model (TAM) was proposed by Davis (1989))

Assessment Framework: Technology Acceptance

Model (TAM)



Modified Technology Acceptance Model suggesting causal direction of influence on technology acceptance, incorporating a third dimension of Reliability.

(Source: The original Technology Acceptance Model (TAM) was proposed by Davis (1989))

Definition of parameters

Perceived Ease of use: degree to which a user believes a system is free of effort (Davis, 1989)

Perceived Usefulness: degree to which a user believes that a particular system will enhance job performance (Davis, 1989)

Reliability: degree to which a user believes a particular system can be depended upon.

Summary of findings – Qualitative interviews

Perceived Ease of use: Owner/manager characteristics such as ICT literacy across the 4 functional areas: inventory, payments, general administration and communications played a key role. Also mistrust of ICTs was an important determinant among the interviewees

Perceived Usefulness: ICT usefulness was well acknowledged in terms of general administrative purposes particularly for communications purposes, but not so well for financial transactions/payment purposes.

Reliability: An important observation was the reliability of ICTs as a means of financial transactions/payment purposes. 70% of the interviewees preferred cash based transactions as opposed to using online transfers, retailing or point of sale (PoS) terminals

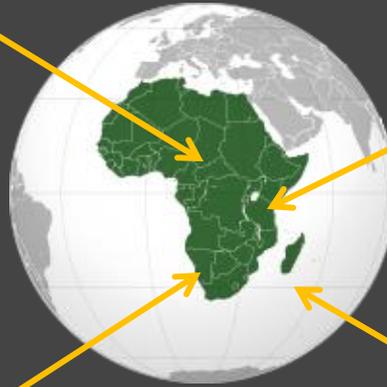
Country Comparison: 2013 Networked Readiness Index – Global Information Technology Report (WEF)



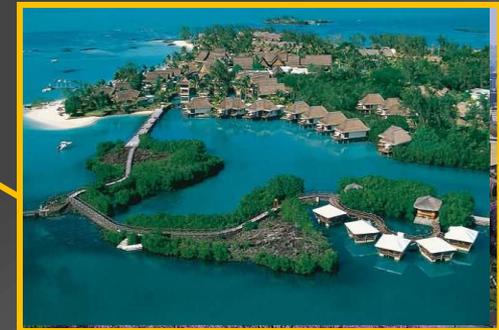
Nigeria



Kenya



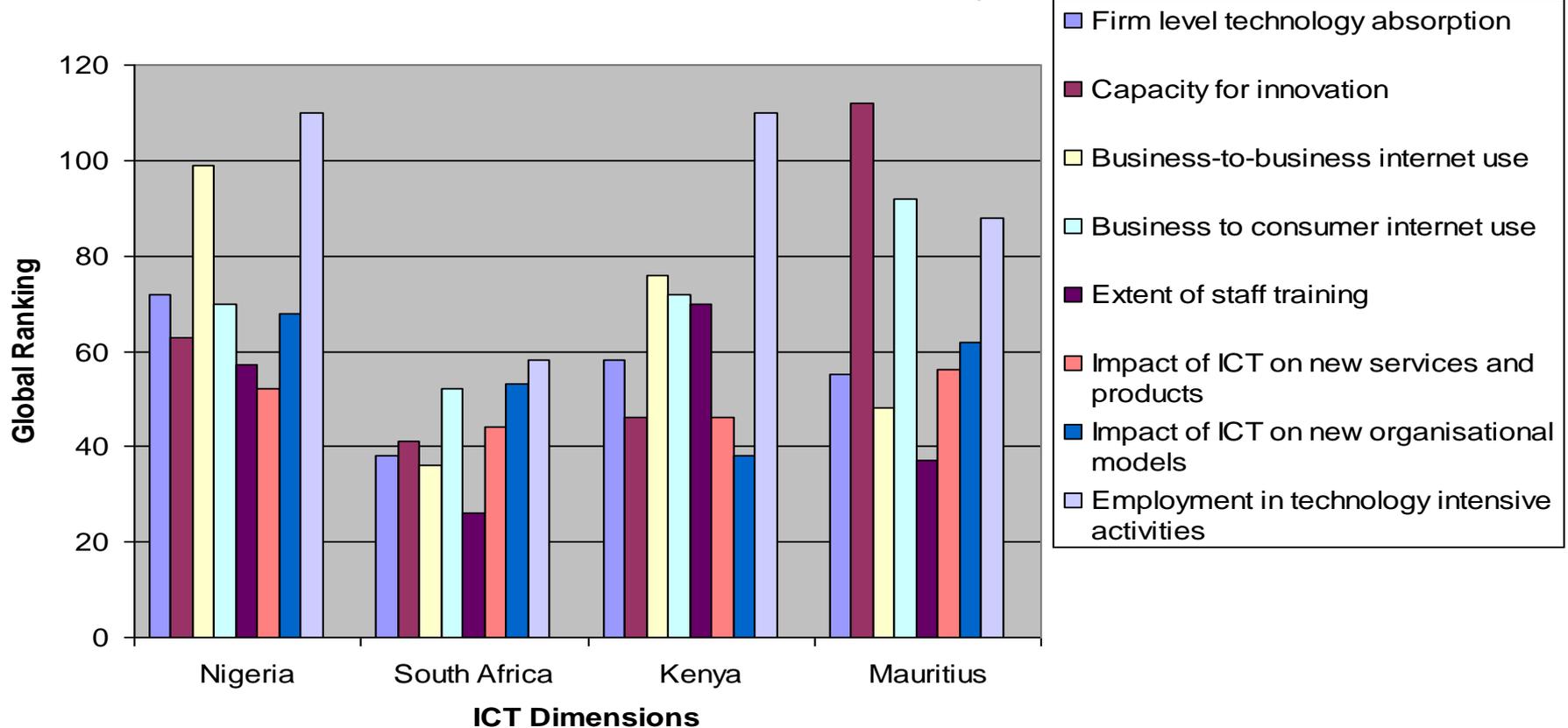
South Africa



Mauritius

Country comparison findings

Networked Readiness Index for ICT use 2013 - World Economic Forum (Comparative analysis)



Three Key Policy Recommendations

1. Government and the private sector should go beyond the current policy framework on ICT for development to ensure that targeted interventions are made to encourage higher levels of ICT adoption at the small business sector of the Nigerian economy.
2. Financial institutions should increase their marketing drive to encourage small businesses to adopt financial transaction based ICTs such as the use of point of sale terminals and mobile money for exchange of goods and services.
3. The regulatory agencies overseeing the ICT sector should ensure that optimal service delivery by ICT and telecoms operators to reduce the reliability challenges facing ICT adoption by businesses.

Thank you

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