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"FROM THE BANKING HALL TO THE BANBWIDTH": IMPLICATIONS OF MOBILE PHONE BANKING

BY

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PREAMBLE

The integration of information communication technology (ICT) into various business functions is steadily gaining momentum.

Against this backdrop and on the premise of a rapidly evolving banking landscape, this paper sets out to expound on the implications of taking traditional banking practice to new frontiers;

"From the banking hall to the bandwidth".

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The paper brings to the fore the enormous capabilities of the mobile phone based system of money transfer including the ultimate capacity to resolve complex money storage, transmission and transactional issues.

The paper proceeds to explore the underlying mechanisms of mobile phone banking systems usage and their implications to future banking trends using the state of the art application models.

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The paper specifically seeks to:

- a) Examine the drivers, constraints and emerging models of mobile phone based banking
- b) Explore the possible trends of banking in future as the mobile phone banking phenomena scales to maturity
- c) Assess the strategy and policy implications of mobile phone banking within the application environment

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This paper is structured to:

- Provide an understanding of the current literature on research undertaken previously
- Offer a review of emerging service provider traits, with a stronger focus on the Kenyan scenario.
- Feature illuminative cases to drive home the fundamental paradigms of concern

The paper is based on a study conducted on existing mobile banking services in Kenya alongside mobile banking experiences of different countries

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Definition of key terms.

Bandwidth- refers to the data rate supported by a network connection or interface. It represents the capacity of the connection. The greater the capacity, the more likely that greater performance will follow.

Mobile Banking (M-Banking)- denotes the access to banking services and facilities offered by banks, such as account-based savings, payment transactions and other products by use of an electronic mobile device. When undertaken using a mobile phone it acquires the title "mobile phone banking".

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Models of M-Banking

Bank-based Model: is additive in nature and can be seen as modest extension of conventional branch-based banking. Emerges when a traditional bank uses non-traditional low-cost delivery channels to provide banking services to its existing customers. Examples: ATMs, internet banking or automated facilities providing limited banking services to banks' customers.

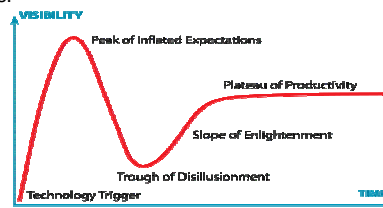
Non bank-based Model (transformational banking). It offers a distinct substitute to conventional branch-based banking. Clients can conduct financial transactions through a mobile phone or at a whole range of retail agents instead of bank branches.

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Mobile banking and the hype cycle

Gartner Research Inc. formulated the use of Hype Cycles to characterize the behavior of new technologies. Hype Cycles demonstrate how and when technologies move beyond the hype, offer practical benefits and become widely accepted. The phases of the hype cycle can be summarized as follows:



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Technology Trigger: marks the breakthrough, product launch or other event that generates significant press and interest.

Peak of Inflated Expectations: a frenzy of publicity typically generates over-enthusiasm and unrealistic expectations. Some successful applications of a technology, but there are typically more failures, attributable to the newness of the technology as well as lack of previous experiences to benchmark against.

Trough of Disillusionment: Technologies enter the "trough of disillusionment" because they fail to meet expectations and quickly become unfashionable. Consequently, the interest in the technology fades gradually.

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Slope of Enlightenment: Although the press may have stopped covering the technology, some businesses continue through the "slope of enlightenment" and experiment to understand the benefits and practical application of the technology.

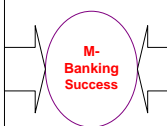
Plateau of Productivity: A technology reaches the plateau of productivity as the benefits become widely demonstrated and accepted. The technology becomes increasingly stable and evolves in second and third generations. The final height of the plateau varies according to whether the technology is broadly applicable or benefits only a niche market.

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Drivers and Constraints of Transformational M-Banking

- DRIVERS**
1. User demand
 2. Increase in banking basket size
 3. Access to financial services
 4. Real cash alternative
 5. First-time Access to M-Banking (hype)
 6. Diversification of Mobile Operator business
 7. Increase in transfers
 8. Increased Diffusion of mobile phones



- CONSTRAINTS**
1. Availability of capable Handsets
 2. User experience
 3. Lack of clear Business Models
 4. Resistance from Banks
 5. Lack of Global Technology Standards
 6. Financial Regulations & Legislation
 7. Support Issues
 8. Consumer concerns

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Study Methodology

The research approach assembled for this study is an instance of "methodological pluralism" (Boudreau and Robey, 1996; Frechtling & Sharp, 1997; Miles & Huberman, 1994).

Multiple units and procedures have been adopted for analysis in order to create a rich holistic picture of the mobile banking system, its usage and impacts. Included are; users and potential users of the systems, the managers of organizations in which the systems are used for service delivery and the system itself.

Approach provides answers to the 'how' and 'why' questions. (Mugenda and Mugenda, 2003).

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Two Kenyan firms have ventured into M-Banking; Zain Ltd (formerly Celtel) - Sokotele service and Safaricom Ltd - M-Pesa service.

Preliminary research revealed that M-Pesa is operationally superior to Sokotele both in functionality and acceptance.

Thus, more reliance was paid to the nature of M-Pesa operations. M-banking models from other countries served as controls for the Kenyan experience to help uncover aspects that would possibly be obscure.

Key controls relied upon were the G-Cash of Philippines and Web-Money of Russia.

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Summary of Key transactions and resultant issues

Banking Transactions		Additional Aspects Investigated	
<i>1. Transactions using M-Banking (Mobile Phone)</i>	Mean of transactions	<i>1. Resultant issues from the users' perspective</i>	Mean Score
a) Balance Enquiry	0.42	a) Reduced transactional costs	0.88
b) Pay store Account	0.96	b) Increased convenience	0.91
c) Bill payment	0.33	c) High Reliability	0.75
d) Money Transfer	1.00	d) Low entry costs	0.97
e) Cash Deposit	0.90	e) Ease to subscribe	0.91
f) Cash withdrawal	0.87	f) Multiple access points	0.94
g) Airtime purchase	0.78	g) Cashless transactions	0.79

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<i>2. Transactions using Traditional Banking Channels</i>		<i>2. Issues from the perspective of Traditional Banks</i>	
a) Cheque deposits	0.27	a) Regulatory aspects	0.92
b) International remittances	0.36	b) Legacy systems challenge	0.71
c) Cash Withdrawal	0.52	c) Competition	0.85
d) Cash Deposits	0.49	d) Positioning for strategic alliances	0.83
e) Credit facility access	0.61	e) Product switching	0.70
f) Cash transfer	0.18	f) Technology dynamism	0.86

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Key Findings

- M-banking dramatically reduces the cost of delivering financial services.
- M-Banking resolves the issues of access to finance
- M-Banking is efficient with respect to entry costs
- The use of agents and air time distributors as service points has yielded much in terms of convenience
- Mobile phone banking is popular for both money transfer and as a savings store
- Credit facility access remains a significant attraction factor for traditional banks

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- International remittances more sought after from traditional banks in comparison to cash transfers
- Use of M-banking to pay bills still remains low

Further Issues provided by respondents

- Low and middle income groups the biggest beneficiaries
- Captivates the interest of unimagined client segments e.g. banks are now acting as agents of M-Pesa.
- Low education and income groups quick to embrace
- Need to balance M-Banking technology with a reasonable human interface

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- Efficiency of service and reliability assurance
- Service interoperability
- Legacy Systems posing a challenge to banks
- M-Banking amplifying the state of competition

Issues for Regulatory authorities

- Adequacy of Consumer protection
- Distinction between payments and deposits
- Stipulations for E-money and E-Transaction dealings
- Provision for cash withdrawal and deposits by Agents
- Integrating AML/CFT regulations to account opening and cash transactions
- Precise definition of the supervisory structure for Mobile phone banking entities

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Summary and Conclusions

- M-Banking catapults technology into a position of preeminence in banking affairs. Traditional banks to contend with more robust and assertive technology solutions
- Further dilutes the prospects in the banking transactions service income following soaring levels of inter-bank competition. Banks need to find a different growth path. [Strategic alliances the best option]
- High success rate emboldening “banking business” ambitions amongst technology service providers
- More players with a diversity of mobile service options expected to stream in
- Innovation will not wait as policy makers and regulators deliberate over an ideal course of action.

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- The dawn of a cashless economy
- Several commercial banks are likely to get irrelevant as M-Banking innovativeness tends to maturity
- Next battle for banking prominence to be fought on the mobile phone-Customers the outright winners

Suggestions for further research

- Prospective trends of mobile banking
- Further research around drivers and constraints of particular issues ranking in the study
- Managerial and regulatory issues
- Imminence of a cashless economy and its wider macro-economic significance
- Applicability of Gartners Hype Model
- Suitable M-Banking appropriation framework
- Impact of M-Banking on entrepreneurial activity.

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Questions & Comments:

Thanks for your Attention

For further Discussion

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