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Research Aim & Objectives



Research Aim & Objectives

Research Aim

Research Objectives

The aim of this market insight is to analyse the use, regulation and impact of mobile money transfers (MMT) in East Africa.



- To outline and explain existing MMT services in East Africa
- To determine the requirements for effective MMT
- To outline regulatory requirements and implications in East Africa
- To outline the respective role of financial service providers and mobile operators
- To highlight the cost structure associated with MMT by different service providers

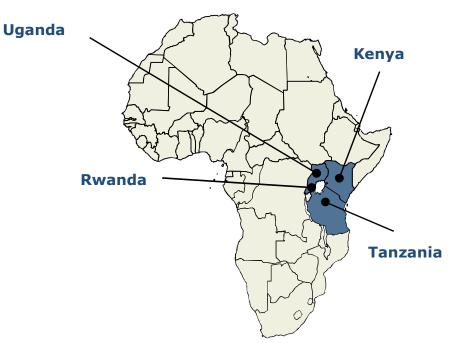
Research Scope & Definitions



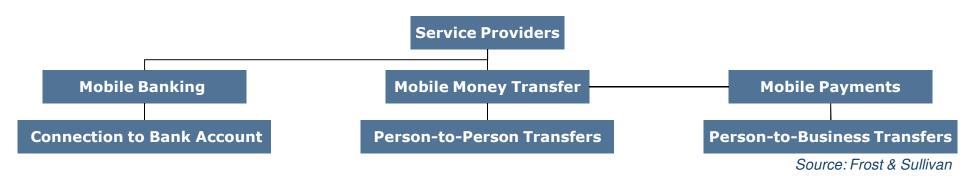
Research Scope

- This research service focuses on East African mobile money transfer services, in other words services accessed by mobile phones.
- MMT offerings by mobile service providers are analysed. MMT is subdivided into:
 - Mobile banking requires a bank account
 - Mobile money transfer person to person
 - Mobile payments person to business
- The role of two main stakeholders, namely mobile operators and their financial services partners, is investigated.

Mobile Money Transfer Services in East Africa: Countries of focus



Mobile Money Transfer Services in East Africa: Services Offered



Research Definitions

- **Mobile Operators** are telephone companies that provide telecommunications services. They may or may not have their own network infrastructure.
- Financial Services refer to services associated
 with the handling, dispensing and managing of
 money. It is a generic term that encompasses
 banks. As banks are the main role players, the term
 will be used interchangeably.
- Internet Banking is a system that allows people to perform banking activities using the Internet as a medium, such as billing, balance checks and transfers.
- Value-added services (VAS) are not a form of basic services, but rather add value to the total service offerings. VAS are unique in terms of profitability and/or stimulate the incremental demand for core services. Mobile data services such as SMS are considered as VAS, and are used to obtain information and perform transactions. Mobile money transfer is a value-added service.

- Mobile Banking is similar to Internet banking but is used to make a financial transaction using a bank's web site on a mobile telephone to view account balances, make transfers and pay bills.
- Mobile Payment is used for the payment of products and services from a person to a business through a verification process, which involves both parties.
- Mobile Money Transfer converts cash into 'virtual' money that can be sent through the service provider from one person to another using a mobile phone.
- M-Commerce, also mobile commerce, is the buying and selling of goods and services using a mobile telephone.
- Mobile Wallet refers to the cash value that can be stored on a card, phone or other electronic device that may be topped up. The term wallet is used because the card or phone is considered a replacement for the cash carried in a person's wallet.

Research Methodology



Research Methodology

- Each Frost & Sullivan research service is carried out using a defined methodology:
- A title is selected and a feasibility study carried out to determine the research service's likely impact and commercial viability.
- After approval, the scope of the research service is determined and the market is segmented based on primary research carried out during the feasibility stage.
- Secondary research is then conducted, with Frost & Sullivan internal resources and databases, allowing for the construction of a contact list of major industry participants and end users.
- A bottom-up approach allows the analyst to establish issues that impact revenue and growth of the industry participants.
- This allows for strategic opportunities and for the best route to market to be established for both global companies and smaller market participants.

- Once the initial draft is complete, the results are verified with industry contacts.
- Subsequent to publication, industry feedback is carefully considered and the market is continually monitored.

Introduction



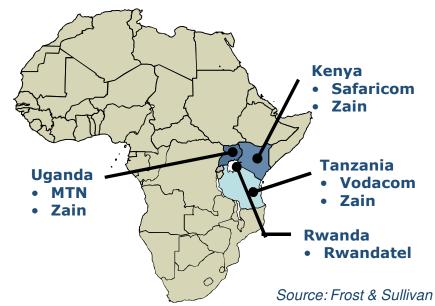
Introduction

Overview of the mobile communications market

- The purpose of this market insight is to analyse mobile money transfer services in East Africa, highlighting operators, users and characteristics of MMT services.
- Kenya, Tanzania, Uganda and Rwanda currently have a combined active mobile subscriber base of 43.3 million. Of these Kenya, has the largest share with 18.7 million subscribers, followed by Tanzania, with 11 million and Uganda, with 8.7 million subscribers. Rwanda, has the smallest mobile telecommunications market with only 1.6 million active subscribers on mobile networks.
- Mobile penetration rates of these four East African countries were below 40.0 per cent in 2008. Kenya's penetration rate of approximately 42 per cent is the highest in the region, whereas Rwanda has the lowest with 13 per cent.
- Although the mobile markets are becoming increasingly competitive with 17 mobile operators at

- the end of 2008, projected growth rates to 2015, are high. Growth rates of 108 per cent for Rwanda and 43 per cent for Kenya have been forecast.
- Mobile operators have not escaped the impact of the global economic crisis and face a number of challenges. These include declining average revenue per user (ARPU) over the last two years as poverty

Mobile Money Transfer Services in East Africa: Country operators



Introduction (Continued...)

levels have increased, and less money is available for network infrastructure projects. As in other African countries multiple SIM cards are prevalent and customer loyalty is not that high as people look for "the best deal" that is going to save them the most money.

 Offering a value proposition is therefore, becoming increasingly important for mobile operators. Mobile money is one of the offerings that has enhanced value propositions and has now become the leading standard in East Africa.

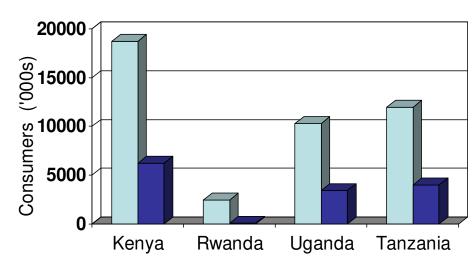
Mobile Money Overview

- Most transactions between individuals and businesses, which sell goods to consumers are cash-based. This is in part a reflection of the low number of bank accounts in the region.
- In contrast to mobile subscriptions, there are only an estimated 14.5 million bank account holders in East Africa, indicating that for every one bank account holder there are three mobile phone owners. This

translates to 90.3 per cent of a total population of 121.9 million people not having a bank account.

 Simple airtime transfers, where one person buys airtime and transfers it to another, is one of the earliest forms of mobile money transfers, even though the airtime cannot be converted into money.

Mobile Money Transfer Services in East Africa: Mobile Subscribers vs. Bank account holders



- ☐ Active mobile subscribers 2009
- Estmated bank account holders

Introduction (Continued...)

- MMT still makes use of airtime transfer but has incorporated a 'mobile wallet', which allows people to transfer money to each other, and receive cash.
- Safaricom was the first mobile network operator to offer mobile money transfers in Kenya in 2007.
- Mobile money transfer is currently offered by MTN, Zain, Vodacom Tanzania Limited, Safaricom Limited and Rwandatel S.A in East Africa. Three additional operators in the region are introducing mobile money services in 2010.
- MMT services are growing rapidly in the region and are used both by people with and without bank accounts. They provide the unbanked the opportunity to send and receive funds, which they would previously have had to deliver physically.
- Mobile money transfers have assisted network operators in reducing subscriber churn and stemming declining ARPU. After the introduction of M-Pesa, Safaricom, the pioneer of this service, increased its subscriber market share by 8 per cent.

Mobile money process

- There are several kinds of mobile money systems:
 - ☐ Mobile money transfer
 - Mobile banking
 - Mobile payments
- Mobile banking is service that a bank offers. It requires a bank account. Mobile banking makes use of a mobile telecommunications network as a platform to perform traditional banking activities

Mobile Money Transfer Services in East Africa: MMT flow options

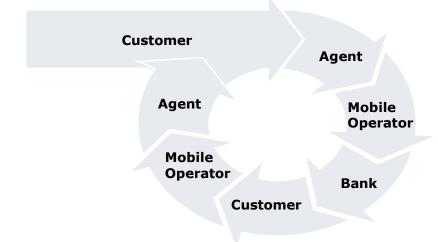


Introduction (Continued...)

- such as performing balance checks, transferring money between accounts and doing payments.
- Mobile banking is akin to Internet banking and is often included in the package a bank might offer its clients.
- The MMT service as offered by mobile operators in East Africa, has the advantage of not requiring a bank account. Money is converted into mobile airtime or into 'virtual' money, which is then transferable to other people or businesses.
- The MMT process is started by the customer who purchases the airtime, usually in cash, from an agent that mobile operators have partnered with.
 Agents may be the same as those selling airtime.
 The money is then transferred through the mobile network provider to a partner bank.
- The bank then processes the request and transfers it through the mobile operator to another customer. In order to convert the 'virtual' money into cash, this person must visit an agent.

- Mobile operators create an account with the partner bank stored under the mobile number in a mobile wallet. The network operator is responsible for the account and thus, serves as an intermediary between the subscriber and the bank.
- Transaction fees that subscribers pay accrue to the mobile operator.

Mobile Money Transfer Services in East Africa: Money transfer process



Industry Challenges & Market Forces



Industry Challenges & Market Forces

Industry Challenges

Consumer trust in the security of MMT must be established

- Mobile money represents an abstraction for people who are used to cash transactions and are exposed to low levels of banking. Considerable trust therefore, needs to be built for mobile money.
- Overcoming concerns around security and the accessibility of accounts to others is therefore, important for service providers. Mobile banking requires enhanced security features including inter alia passwords and verification codes that are issued prior to any transaction.
- The reliability of the network provider is also of concern, as customers want to ensure that despite a loss in signal, flat battery or network failure that the money will still be accessible to them.

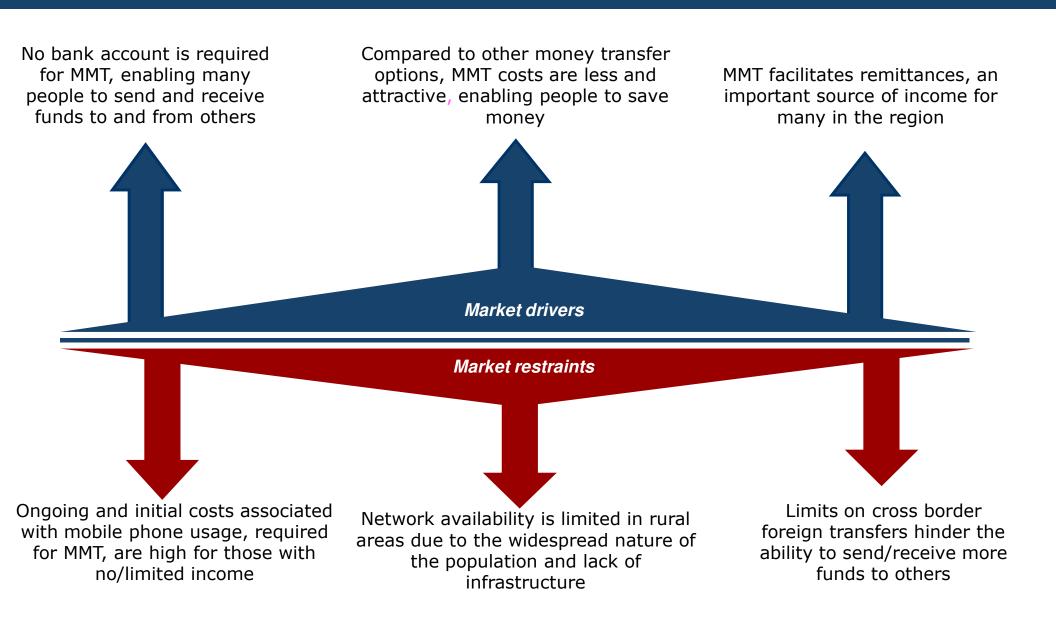
Literacy levels play a pivotal role in the use of electronic services including MMT

 Some form of educational and/or technological literacy is required to operate mobile telephones, which may create a challenge for people with lower levels of education. This applies equally to bank accounts and these factors may hinder market growth and development.

Interoperability between networks is of major importance to the effectiveness of MMT

- Interoperability, in other words the ability to safely send and receive money from one network provider to another, is an issue that needs to be clarified.
- In the absence of clear regulatory guidelines governing mobile money transfers in the region, this may dampen development of the industry. Equally applicable is the transfer of money across borders.

Forcefield Analysis of Drivers and Restraints



Industry Challenges & Market Forces

Market Drivers

No bank account is required for MMT enabling many to receive funds

- Only one out of three people in East Africa has a bank account, for reasons of uncertain income, income which is too low or lack of collateral.
- In addition, the network of bank branches and ATMs is limited largely to urban centres as the banking infrastructure cannot accommodate the widespread nature of the population. This could pose a problem if people receive funds but have no access to a bank.
- MMT does not require users to have a bank account as money can be converted into airtime or 'virtual' money that is stored in the SIM card and used to and receive money to and from others.

Cheap transfer costs and no subscription fees an attractive feature of MMT

- The transfer costs involved in MMT are low in comparison to traditional banks and informal financial services.
- The inexpensive service enables people without regular income, or who fall into a very low income bracket, to avoid bank charges and send or receive money free-of-cost.

Large amount of remittances allow people to transfer funds to others effortlessly

- Remittance from abroad or urban areas is an important source of income for many households in East Africa.
- MMT enables people working in other countries to send money home to friends or family with relatively little effort, when compared to normal banking processes.

Industry Challenges and Market Forces

Market Restraints

Mobile phone costs are still high for those who have no/limited income

The global economic crisis has increased the number of poor people, especially in rural areas.
 People are more price sensitive and the initial cost of handsets represents a significant barrier for the adoption of mobile money services.

Network availability is problematic due to the widespread nature of the population

- Geographic coverage for mobile operators is approximately 60 per cent in East Africa, with
 population coverage estimated at 80 per cent. This is due to the dispersion of population over a
 widespread area that the cellular infrastructure has not yet penetrated.
- Rural areas are neglected in terms of infrastructure development because of the lower value of subscribers. Returns on investment for urban network infrastructure development are typically higher.

Limits on foreign transfers placed by banks limits peoples ability to send/receive more funds

- All of the mobile network providers have a minimum and maximum amount that can be loaded in one transfer. There is also a limit on the amount of money/airtime that can be transferred in one month, which limits the amount of remittances.
- This has an impact on families receiving remittances as they are only able to receive a limited amount of funds from others in one transaction or in one month.

Product Offering



Product Offering





- The service is only offered Kenya. Approximately 10.2 million subscribers make use of the service at the end of 2009. The company reports transactions worth 70.48 billion transferred through M-Pesa in 2009.
- Although it has not been a major revenue generator for the operator, the fact that it has made a material contribution to customer loyalty is of great significance.



- MTN Mobile Money (MMM) is an MMT service that is offered in Uganda. The service was launched in 2009, with MTN Rwanda set to launch its MTN MMT service by the end of 2009.
- There has been a rapid uptake of MMT in Uganda and Rwanda is set to achieve similar goals with its launch at the end of the year.



- Zain entered the MMT market approximately a year ago and it is at present, operating in Kenya, Uganda and Tanzania.
- Zain's mobile money service is called ZAP. In 2009, Zain launched three new applications: Zap Distro (a Web tool to manage dealerships), Zap Transact (collect cash from numerous sources and put directly into bank accounts), Zap Master Pay (ease cash administration, whereby a company pays up into up to 1,000 Zap accounts at a time). These new applications were designed to meet the requirements of small and medium enterprises through easing the transaction processes.

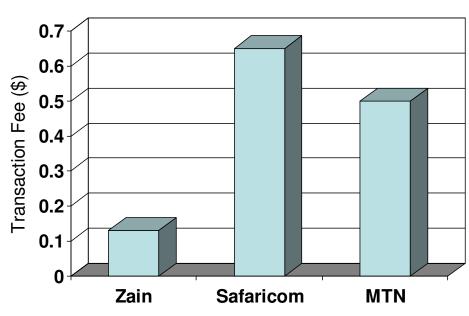
Other

- Four mobile operators will be entering the MMT market in 2010.
- Zanzibar Telecom (Z-Pesa) will be the new operator in Tanzania.
- Essar Telecom (YU cash) and Orange will be the two new operators entering the Kenyan market.
- Uganda Telecom will also be launching the MMT service during 2010.

- The different service providers in the four countries of focus have varying transaction amounts and tariffs depending on the amount that being transferred to, and from, one person to another. All the currencies have been converted to US Dollar.
- The network operator that allows the smallest amount of money/airtime to be transferred in one transfer is Zain Tanzania Limited with a minimum amount of only \$0.01 and the smallest transaction fee of \$0.11. Zain Tanzania also offers the most inexpensive transaction fee ranging from only \$0.11 to \$0.75 on amounts of \$0.01 to \$373, respectively.
- The largest transferable amount in one transaction is \$5319 offered by MTN Uganda, with a transaction fee of \$59.68. This will be suitable for people who want to transfer large sums of money at once without low limits on transaction amounts.

 Zain Uganda Limited is great for customers that are not transferring fixed amounts regularly or that do not know how much they want to transfer. They offer a minimum transfer amount of \$0.05 and ranges to \$514. This allows for more flexibility as the minimum amount is very low and largest amount very large, when compared to other service providers.

Mobile Money Transfer Services in East Africa: Illustrative fees for transfers less than \$1000



Tariff Outline

Mobile Money Transfer (MMT) in East Africa: Tariff Outline (2009)

Country	Operator	Transaction Range (\$)		Fee Range (\$)	
Country		Min	Max	Min	Max
Vonya	Zain	0.65	456	0.13	0.13
Kenya	Safaricom	1.32	462	0.40	1.14
Uganda	MTN	2.66	5319	0.43	59.68
Ogariua	Zain	0.05	514	0.13	2.60
Tanzania	Vodacom	0.75	373	0.15	8.21
iaiizailia	Zain	0.01	373	0.11	0.75

Mobile Money Transfer (MMT) in East Africa: Countries, Operators, Products and Banks (2009)

COUNTRY	PARTNER BANKS	
	CitiBank	
	Standard Chartered Bank of Kenya	
VENIVA	Post Bank	
KENYA	Kenya Commercial Bank	
	Consolidated Bank	
	CFC Stanbic Bank	
	•Citibank	
	•Standard Chartered Bank of Kenya	
UGANDA	•Post Bank	
	•Stanbic Bank	
	•Central Bank of Uganda	
	•CitiBank	
TANZANIA	•Standard Chartered Bank of Kenya	
	•Post Bank	

- Kenya also has the most partner banks due to the development of MMT and that they were the first East African country to implement it.
- Uganda Telecom will be the new network provider offering mobile banking in Uganda.
- Citibank, Standard Chartered Bank and the Post bank are banks that are partners in all three countries
- Central banks are not involved in the MMT partnership process except for Uganda.

Regulation



Regulation (Continued...)

- There are three institutions that need to collaborate and meet common ground for MMT and m-banking to sufficient regulation:
 - >Mobile operators want more influence as their infrastructure and hardware is being used.
 - >Banks consider m-banking their turf and want more control over tariffs and clients.
 - >Agents, phone manufacturers, sim suppliers and software providers are all wanting a cut of profits or have more of a say.
- Many of the African countries have different regulatory institutions and regulations that govern the financial sector, which pose a problem for cross-border transfers.
- Kenya currently has an overlap of regulation in four financial sectors, the Capital Markets Authority (CMA), the Retirement Benefits Authority (RBA), the Insurance Regulatory Authority (IRA) and the Central Bank of Kenya (CBK).
- Regulatory overlaps allow regulated entities to engage in regulatory arbitrage, which enables entities to register products, where regulations are weakest and most cost effective.

- The purpose of financial service regulation is to maintain financial stability and should be in line with the following principles
 - The regulator must be accountable and have independence.
 - > The regulator should have adequate resources
 - The regulator should have effective enforcement powers to enforce measures and regulations and should have the power to revoke licenses, intervene in operations for regulatory purposes and inspect operations of regulated entities.
- Agent is the first interface and most critical point that could cause risks since they are dealing directly with customers through cash transactions.
- The current measures adopted by the regulator in Uganda, is that the agent is required to have a limited company with proof of location, at least a minimum of one outlet, memorandum of understanding, cash float of \$454.5 (1 million Ugandan shillings) and another \$454.5 (1 million Ugandan shillings) deposited in the nearest Stanbic Bank

Regulation (Continued...)

- The Tanzanian and Ugandan Acts place rule making responsibility and regulations upon the Central Banks.
- The Kenyan Act, however, places these powers upon the Minister allowing more flexibility.
- There are new laws that are currently being drafted that will allow countries to harmonise banking laws.
- The minimum capital requirements for each bank serves as a safety net. This will ensure that the bank will permanently have access to funds.
- There are currently no capital requirements for agents, which is problematic as an agent can never guarantee that they will be able to convert MMT transfers in to cash.

Mobile Money Transfer Service in East Africa: Banking legislation and capital requirements

	Kenya	Uganda	Tanzania
Legislation	Banking Act, Cap. 488.	Banking and Financial Institutions Act, 1991	Financial Institutions Statute (FIS) 1993
Banking Capital Requirements	15 million Kshs. \$199.500	500 million Ushs. \$262.200	1 billion Tshs. \$750.000

Source: Frost & Sullivan.

1USD=75.15 KES

1USD=1.335 TZS

1USD=1.907UGX

21.12.2009

Industry Best Practices



Industry Best Practices

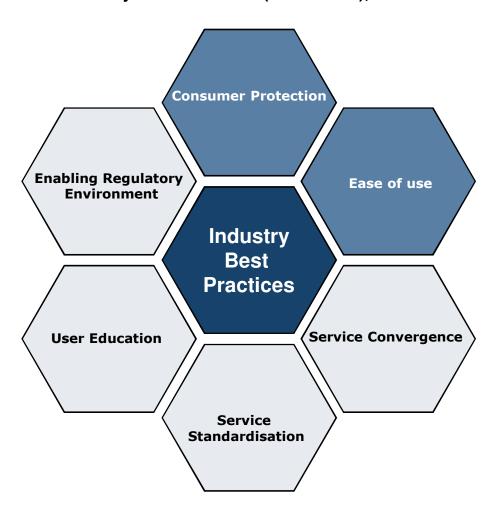
Consumer Protection

- Electronic payments may bring new risks to consumers arising, for example, from loss of payment instrument (the mobile phone), fraudulent transactions, identity theft, loss of funds through bankruptcy or fraud by the mobile money transfer provider.
- The agent is the first point of contact, which relates to a much higher element of risk as cash is being used and customers are dealt with directly.
- Service security helps build up consumer trust and leads to increased and widespread use of the service.

Ease of Use

- The success of the mobile industry is based on the principle that mobile services are easy to use for consumers anywhere and at any time.
- The user experience of services on mobile telecommunications services is an important factor that can impact on service uptake and usage, for example poor network quality.

Mobile Money Transfer: Industry Best Practices (East Africa), 2009

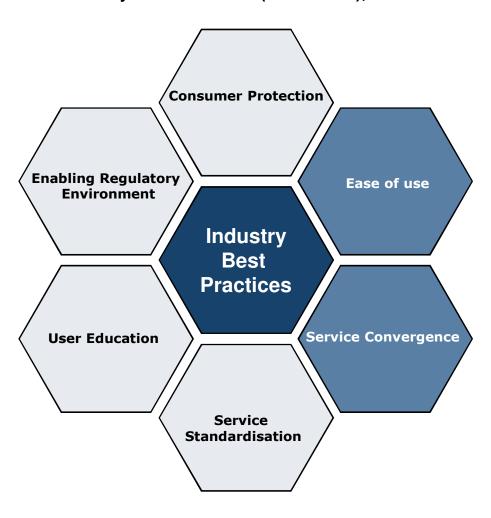


- It is important to remember that many people, in the targeted low-income and unbanked population segment in emerging markets, happen to be less educated and literate.
- Therefore, it is important to ensure a very intuitive and easy user interface to the mobile money transfer service on handsets.
- Once customers get used to the feature of a service, they will make more use of the service and its future derivatives from the original one.

Service Convergence

- While mobile banking and mobile payments are two distinct categories of mobile financial services, both services are expected to converge gradually and present within a single interface to consumers.
- This is due to the fact that operators like Safaricom, have extended the number of M-PESA subscribers by partnering with established financial institutions, such as Equity Bank, Post Bank and Housing Finance to use their wide network across the country as outlets for M-PESA.

Mobile Money Transfer: Industry Best Practices (East Africa), 2009



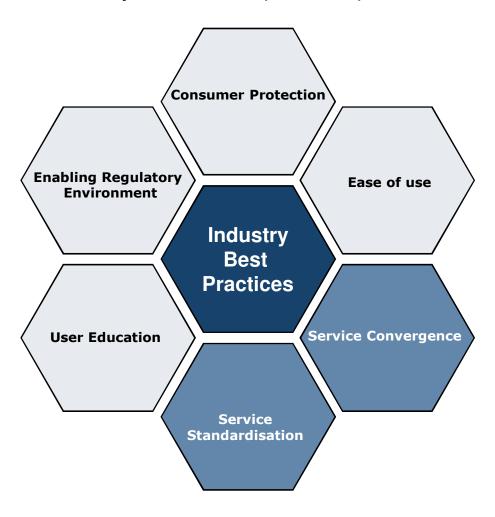
Service Convergence (continued...)

- This will result in consumers making purchase payments and doing banking transactions through one single medium (M-PESA).
- Mobile payment solution providers can integrate with other industry participants like financial service providers, payment gateway providers and advertising network providers.

Service Standardisation

- The mobile banking and payment services are fragmented and at an early stage of development, but standardisation will start as more commercial services are deployed.
- In the long term, financial institutions like banks, microfinance institutions and credit card companies in partnership with mobile operators, will offer a standardised range of services, which may resemble either the bank-led or operator-led model.

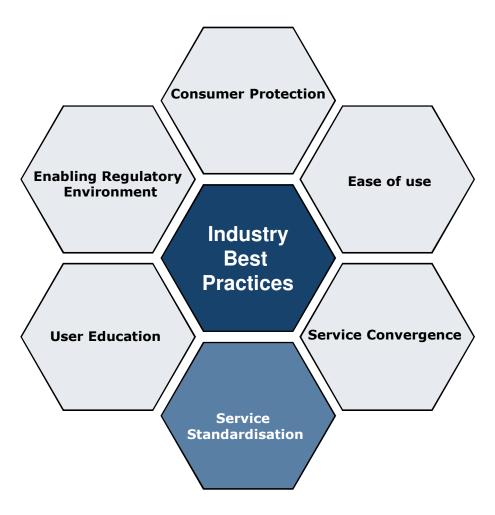
Mobile Money Transfer: Industry Best Practices (East Africa), 2009



Service Standardisation (continued...)

- For example, Monitise, East Africa, enables the offer of banking, payment and money transfer services by both banks and operators, within the regulatory framework of each market.
- This service allows multiple financial institutions to offer services on a single platform to which consumers can access through a trusted interface, regardless of their choice of mobile networks or handsets.
- This presents advantages for all parties involved –
 financial institutions, operators and merchants as
 everyone shares in the incremental benefits and
 revenues generated.

Mobile Money Transfer: Industry Best Practices (East Africa), 2009



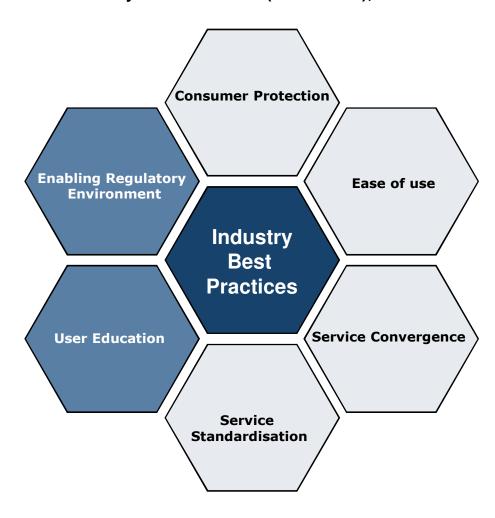
User Education

- Education to users on financial security and fraud, will be a key factor to grow mobile financial services and the area that both banks and operators should improve to secure higher mobile payment penetration.
- To address these security and fraud concerns, banks have launched educational and marketing campaigns and hired more instructive personnel to inform customers that the service is completely safe.
- Their educational programs aim to encourage customers to learn and understand the numerous benefits of mobile banking, payment and transfer services.
- Improved customer knowledge on mobile financial services and measures to protect them against risks, will drive the service uptake.

Enabling Regulatory Environment

 Regulators have to play a very important role to ensure fair and secure deployment and operation of mobile payments and banking services. This includes

Mobile Money Transfer: Industry Best Practices (East Africa), 2009



Industry Best Practices (Continued...)

Enabling Regulatory Environment (continued...)

establishing public confidence and awareness for services, keeping criminals out of the system, bringing the unbanked and under-banked onboard and preserve system integrity.

- As mobile money transfer services are regulated by the central banks of each market, there is a need for the ICT regulator to develop compatible regulation to co-monitor with bank regulator, this special valueadded service, as the market develops into a later stage.
- Mobile and financial service convergence requires financial regulation to adapt to new services, service providers and customers. This includes the adaptation of existing financial regulation to the risks of mobile money transfer services.

Mobile Money Transfer: Industry Best Practices (East Africa), 2009

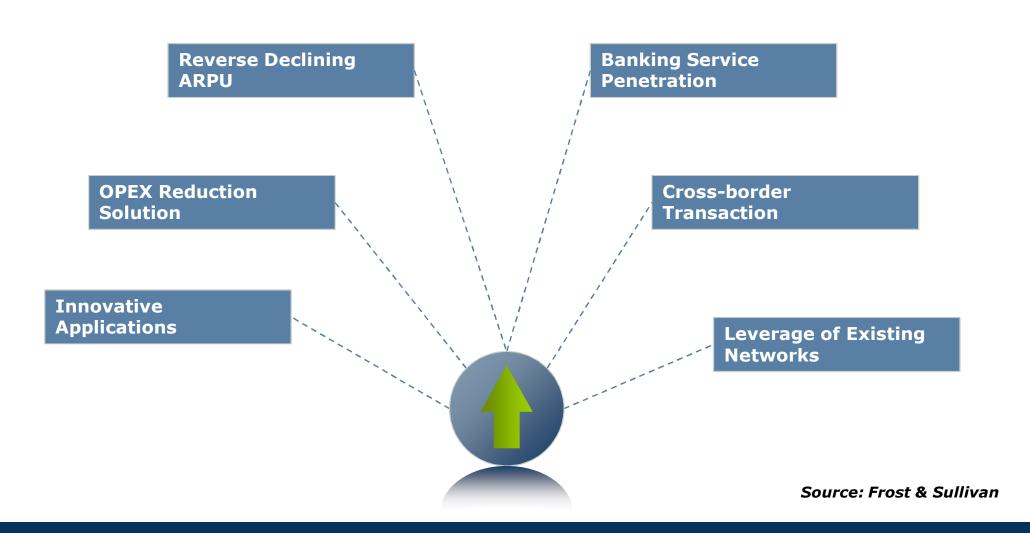


Source: Frost & Sullivan

Opportunity Analysis

Opportunity Analysis

Mobile Communications Market: Market Opportunities (East Africa), 2008-2015



Opportunity Analysis (Continued...)

Reverse Declining ARPU

- Safaricom Limited has already entered into partnership negotiations with other mobile operators, about expanding the network in which M-PESA can be used.
- This is a great opportunity for new market participants to present an increased value proposition to subscribers and increase service use.
- Facing declining ARPU, mobile money transfer service as a new and innovative value-added service, will contribute to revenue growth.

OPEX Reduction Solution

- Under current economic slow-down, banks search opportunities to reduce operational costs of their brick-and-mortar branches and save marketing and promotion costs of operators.
- Branchless banking, with innovative technologies that use mobile communication infrastructure, offers opportunities to target unbanked rural population.
- Mobile financial services give banks and operators

the opportunity to reduce their OPEX through mobile communications as a platform, and consequently improves banks' operating efficiency.

Banking Service Penetration

- The high proportion of unbanked population gives operators a great opportunity to bridge the unmatched demand gap left by banks through innovative products like mobile money transfers.
- This presents a opportunity to both financial service providers like banks and network operators to reach the unbanked population particularly in rural areas.
- Mobile operators have identified this opportunity and partnered with local and international banks to launch several mobile banking services like M-PESA, Zap and MTN Mobile Money.
- Some international initiatives to support Information and Communication Technologies (ICT) for development projects were also launched in September 2009, such as the Mobile Money for the Unbanked (MMU) program.

Opportunity Analysis (Continued...)

Banking Service Penetration (continued...)

- Since there are many more mobile phones and vendors of mobile air time, than bank branches and ATMs, mobile money transfers has a huge potential to provide access to banking service to the unbanked population in East Africa.
- For instance, the total number of ATMs in Kenya, barely surpasses 1,000, whereas there are over 10,000 mobile money transfer agents.
- The most profound impact of mobile financial services is that they provide unbanked population with access to modern financial services, so operators and banks have the opportunity to join force to improve their living standards.

Cross-border Transactions

 Due to large demand of African expatriates who work in the developed economies to send money home, mobile operators should expand their mobile money transfer services overseas, through

- partnering with established players in the international money transfer market.
- Through partnering with Western Union in 2008,
 UK-based Vodafone Group and Safaricom teamed to launch the cross-border mobile money remittance service using Western Union's processing hubs.
- This partnership enables subscribers to send remittances from Western Union stores in the UK, directly to Safaricom mobile subscribers in Kenya.
- This presents the opportunity for operators to increase their subscriber base and the profitability of mobile money transfer services.

Innovative Applications

 Even when market leaders are busy with penetrating new market segments, their established subscriber base and agent networks become the major barrier for new market entrants to launch mobile money transfer services.

Opportunity Analysis (Continued...)

Innovative Applications (continued...)

- New market participants are forced to catch up with the fast development of technological advancements and invest in new and pioneering applications that meet changing consumer needs.
- As Safaricom is not a licensed financial service provider, it is restricted from earning interests on deposits from its M-PESA service and therefore paying interests to its users.
- There exists an opportunity for new market entrants, who can offer savings incentives and create a flexible technology platform to provide mobile banking services, with lower agent management costs.
- A new risk-averse solution that protect customers from the rising fraud and security risks in the financial service industry offers new participants a competitive advantage against existing players.

Leverage of Existing Networks

- Operators can leverage their existing service distribution channels to deliver flexible financial services at zero costs.
- Safaricom has a broad range of agents, from airtime resellers to petrol stations and retail shops. This enables operators to reach out to new customers by leveraging its mobile and agent networks.
- Zain "One Network" allows travelling customers to move across geographic borders without roaming charges, which facilitates Zap crossborder transactions with neighbouring countries.
- Zain plans to introduce its Zap service in 22 One Network countries in Africa and Middle East by the end of 2009.
- Through existing networks and distribution channels, operators will be able to achieve quick time-to-market and expand their customer base.

Conclusions



Conclusions

Increasing Banking Access

- Mobile banking, payments and transfer services lower the transaction costs of money transfer and increase the flow of money.
- This can be achieved through easing the process to send a smaller amount of cash and introduce those, unbanked population, to a means of secure financial services.
- Operators may leverage their mobile networks to attract subscribers to mobile financial services as a value added offering.

OPEX Reduction

- Mobile financial services can help operators to retain existing and attract new customers, consequently reduce customer churn rate.
- The reduced customer churn implies OPEX savings for operators on marketing and promotional activities to recruit new customers.
- Mobile financial services also provides a cost-effective means for banks to deepen banking penetration in rural areas through fast and efficient mobile communications as opposed to brick-and-mortar branches.

Regulatory Barrier

- Regulatory hurdles can be a barrier to deploy services, form partnerships with other operators and banks, and limit the choice for operators to select locations for service provision.
- The regulatory environment often differs from one market to another, so a "one size fits all" approach cannot be implemented by operators for service deployment in different markets.
- There can be delays due to current regulations not catering for new technologies.

Conclusions (Continued...)

Economic Growth

- MMT services spurred rural economies by making more money available to rural population, especially farmers and small scale traders, who previously found it difficult to improve their business due to delayed payments.
- For mobile operators, mobile financial services can help attract and retain customers and generate new revenue streams.
- For financial institutions, mobile banking is an effective way to tap previously unreachable customers, due to the lack of retail infrastructure.

Service Evolution

- MMT service can be viewed as a money transfer rather than banking system in the traditional sense. Customers will in the beginning test the liquidity of the system, by withdrawing all money sent to them right away.
- This is going to change as consumer trust on service increases and customers will start taking out money depending on their daily needs. MMT will gradually integrate into mobile banking service.

Complement to Traditional Banking Services

- Traditional banks have some distinct advantages and services not found with the mobile money transfer. For instance, banks can store money and valuables, extend loans, store records and provide more security and pay interest.
- But nothing beats the efficiency and timeliness of the mobile communications. Mobile money transfer service is seen as complementary to traditional banking services.
- However, once operators start to focus on the profitability of mobile money transfer service rather than a strategic tool for customer retention. The expansion of service offerings will inevitably cause competition with banking services in the future.

About Frost & Sullivan



Who is Frost & Sullivan

The Growth Consulting Company

- Founded in 1961, Frost & Sullivan has over **45 years** of assisting clients with their decision-making and growth issues.
- Over 1,700 Growth Consultants and Industry Analysts across 32 global locations
- Over 10,000 clients worldwide emerging companies, the global 1000 and the investment community
- Developers of the Growth Excellence Matrix industry leading growth positioning tool for corporate executives
- Developers of T.E.A.M. Methodology, proprietary process to ensure that clients receive a 360° perspective of technology, markets and growth opportunities
- Three core services: Growth Partnership Services, Growth Consulting and Career Best Practices

What Makes Us Unique

Exclusively Focused on Growth

Global thought leader exclusively focused on addressing client growth strategies and plans – Team actively engaged in researching and developing of growth models that enable clients to achieve aggressive growth objectives.

Industry Breadth

Cover the broad spectrum of industries and technologies to provide clients with the ability to look outside the box and discover new and innovative ideas.

Global Perspective

32 global offices ensure that clients receive a global coverage/perspective based on regional expertise.

•360° Perspective

Proprietary T.E.A.M.TM Methodology integrates all 6 critical research methodologies to significantly enhance the accuracy of decision making and lower the risk of implementing growth strategies.

Growth Monitoring

Continuously monitor changing technology, markets and economics and proactively address clients growth initiatives and position.

Trusted Partner

Working closely with client Growth Teams – helping them generate new growth initiatives and leverage all of Frost & Sullivan assets to accelerate their growth.

T.E.A.M. Methodology

•Frost & Sullivan's proprietary **T.E.A.M. methodology**, ensures that clients have complete "360 Degree Perspective" from which to drive decision-making. **Technical**, **Econometric**, **A**pplication, and **M**arket information ensures that clients have a comprehensive view of industries, markets and technology.

<u>T</u> echnical	Real-time intelligence on technology, including emerging technologies, new R&D breakthroughs, technology forecasting, impact analysis, groundbreaking research, and licensing opportunities.
<u>E</u> conometric	In-depth qualitative and quantitative research focused on timely and critical global, regional, and country specific trends, including the political, demographic, and socioeconomic landscapes.
<u>A</u> pplication	Insightful strategies, networking opportunities, and best practices that can be applied for enhanced market growth; interactions between the client, peers, and Frost & Sullivan representatives that result in added value and effectiveness.
<u>M</u> arket	Global and regional market analysis, including drivers and restraints, market trends, regulatory changes, competitive insights, growth forecasts, industry challenges, strategic recommendations, and end-user perspectives.

Global Perspective

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