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Barriers to Mobile Money Transfer Uptake in Ghana

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Mobile Phones

- Globally, 5.6 billion mobile phones
- Mobile data services revenue totals \$314.7 billion
- Mobile connections are forecast to reach 7.4 billion in 2015
- Mobile data revenue is forecast to reach \$552 billion.

Gartner report "Forecast: Mobile Data Traffic and Revenue, Worldwide, 2010-2015" at <http://www.gartner.com/resId=1737114>.

Mobile Financial Services

- Nearly half a billion mobile financial services customers in 2013 (ABI research, 2009).
- Financial inclusion medium, especially in the developing world

What Informs MFS Use?

- Consumer theory
 - Product adoption
 - Consumer resistance
- Theories of technology adoption
- MFS specific observations

Product Adoption Theory

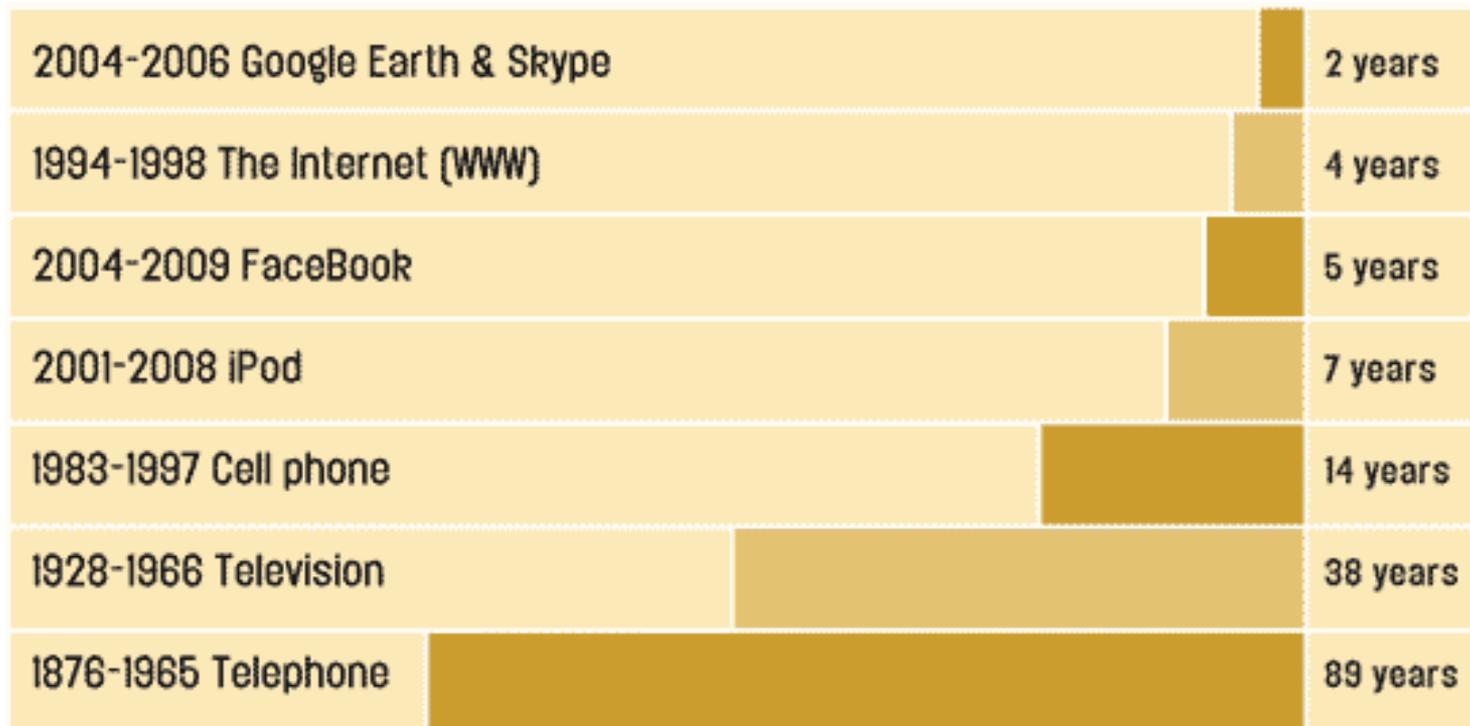
- (1) **Awareness** – the customer becomes aware of the new product, but lacks information about it.
- (2) **Interest** – the customer seeks information about the new product.
- (3) **Evaluation** – the customer considers whether trying the new product makes sense.
- (4) **Trial** – the customer tries the new product on a limited or small scale to assess the value of the product.
- (5) **Product Adoption** – the customer decides to make full and/or regular use of the new product.

Consumer Resistance

- Functional barriers
- Value barrier
- Risk barrier
- Psychological (e.g. tradition, image)

(Ram & Sheth, 1989)

Technology Adoption



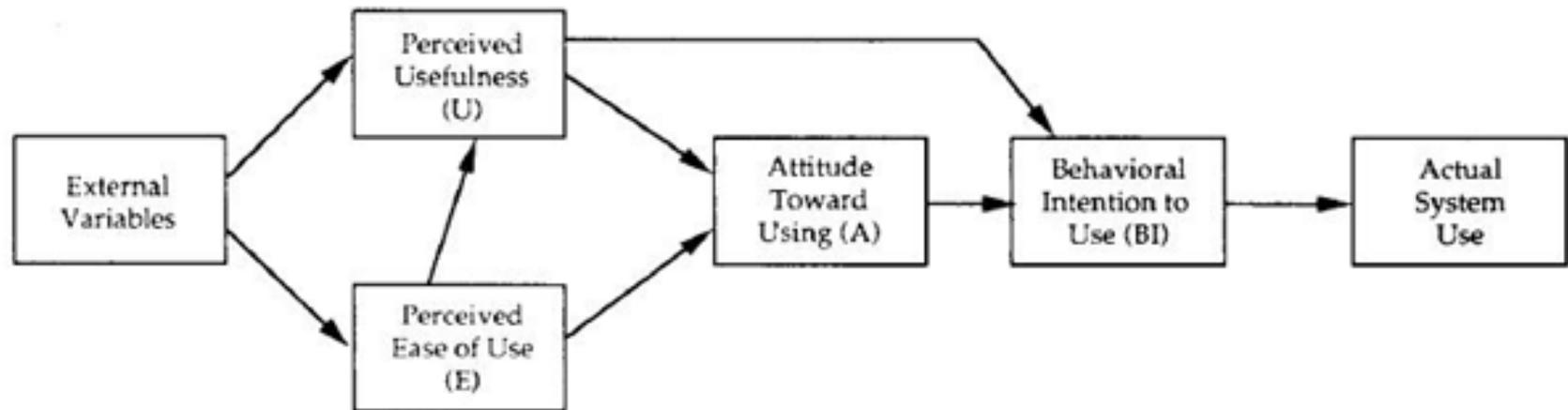
Time to reach 150 million users

Source: Porthole Research, ITF Advisors

Theories of Technology Adoption

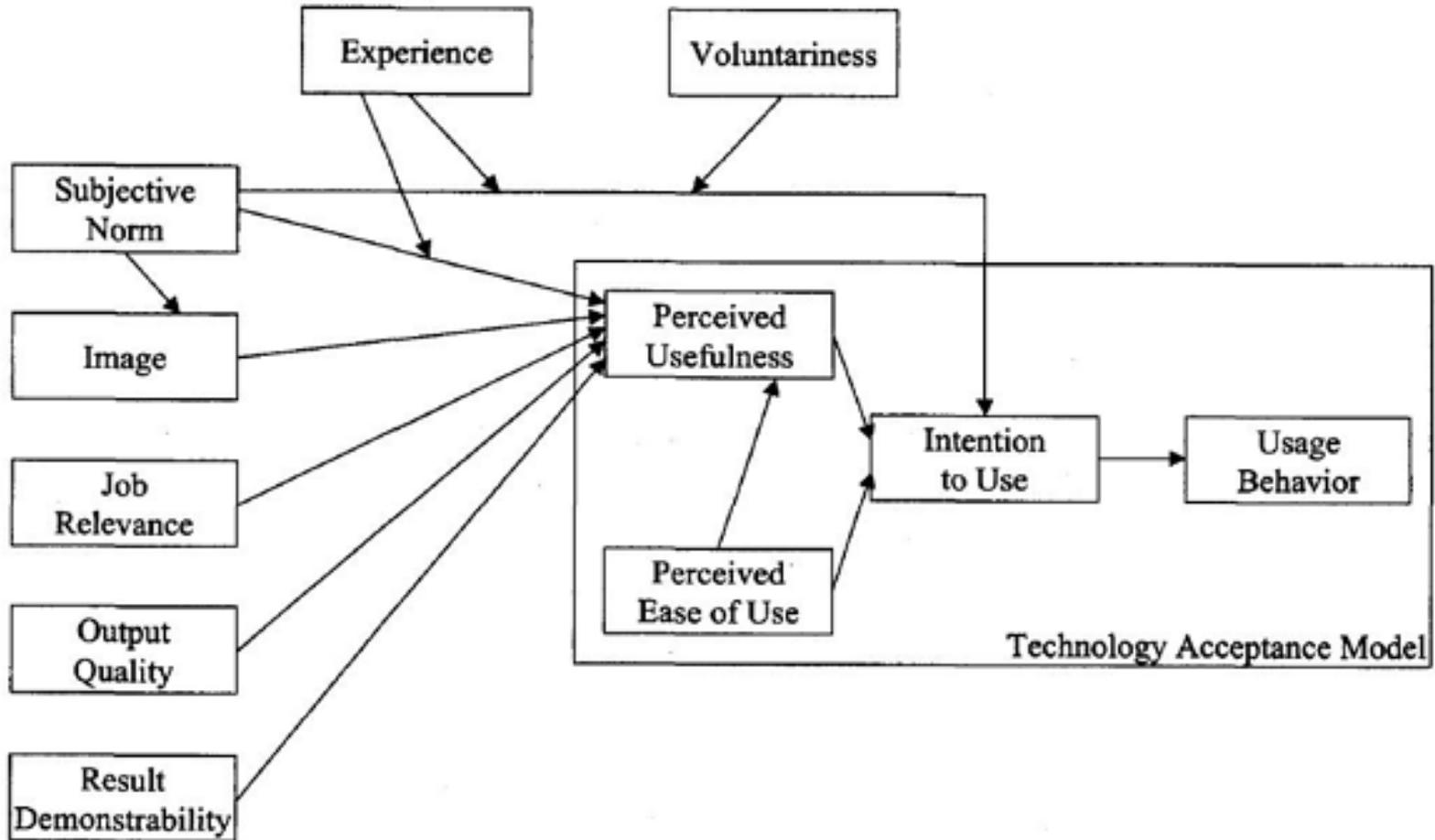
- TAM
- UTAUT
- Rogers

Technology Acceptance Model (TAM)

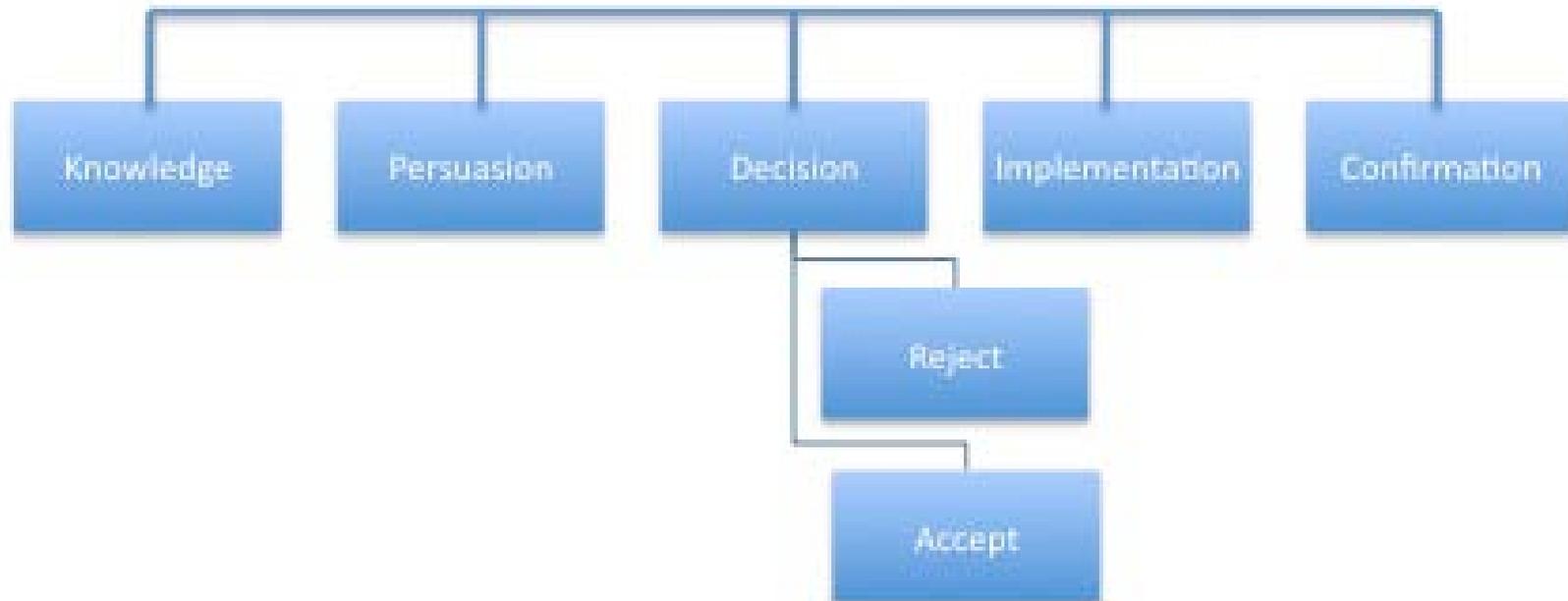


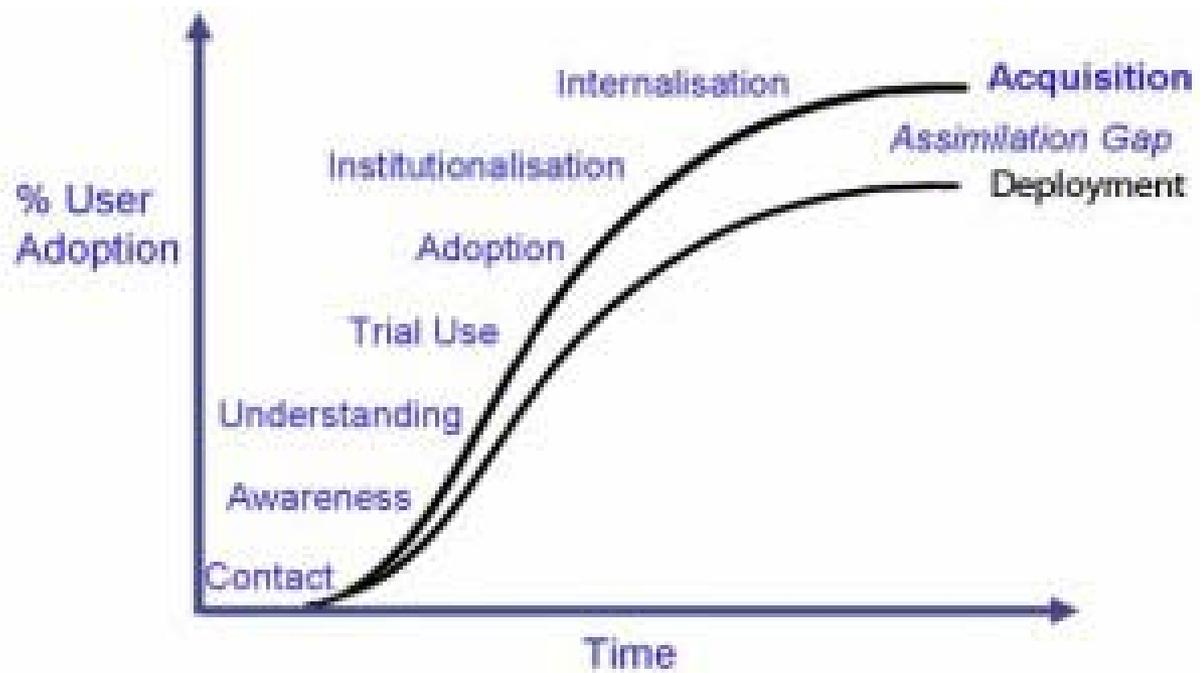
Davis, F. D., Bagozzi, R. P., and Warshaw, P. R. "User Acceptance of Computer Technology: A Comparison of Two Theoretical Models," *Management Science*, 35, 1989, 982-1003.

Unified Theory of Acceptance and Use of Technology (UTAUT)*

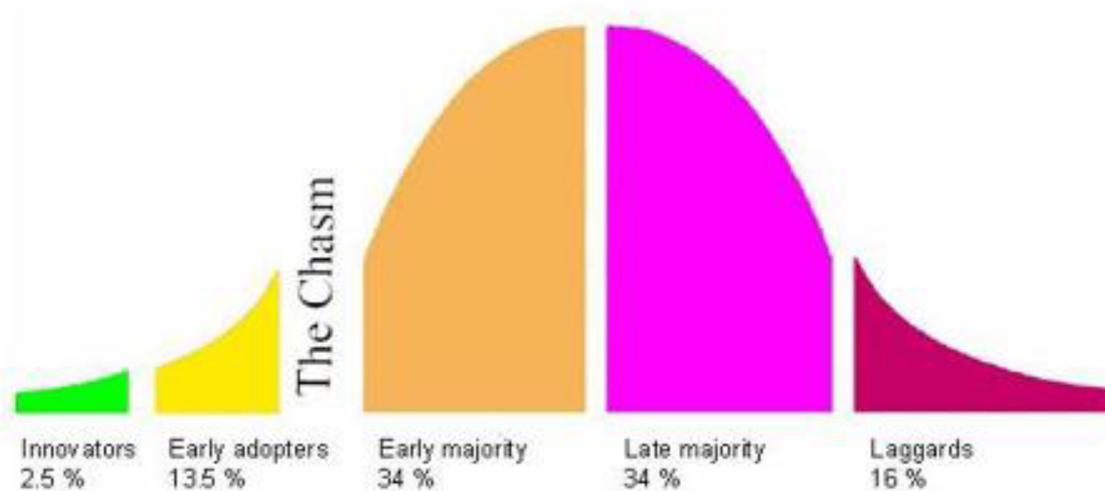


Five Stages in the Decision Innovation Process





Roger's Innovation Adoption Curve



Trying to convince the mass of a new idea is *useless*.
Convince *innovators and early adopters* first.

Theory of MFS Adoption



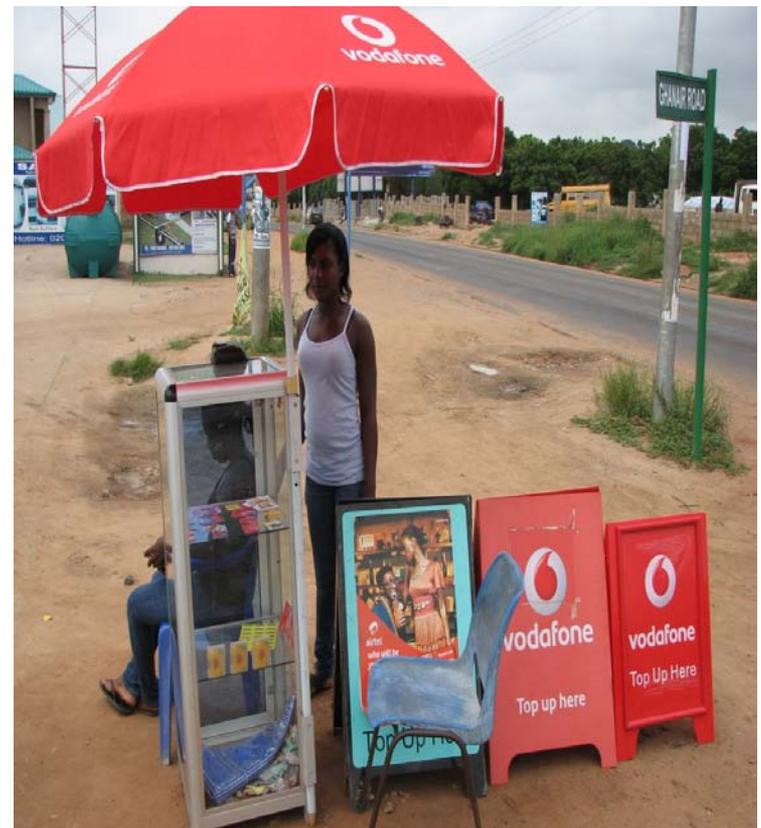
Customer MM Journey Model
McCarty, 2011

Factors Predicting Usage of MFS

- Distance from banks/agents
(Morawczynski & Pickens 2009)
- Geographical location of members of households
(Morawczynski & Pickens 2009)
- Price structures
(McKay & Pickens)
- Trust
(Morawczynski & Pickens 2009)
- Understanding and perceptions of technology
(Ivatury and Pickens 2006)

The Case of Ghana

- 73% of Ghanaians live in an area covered by mobile phone services
- Mobile phone penetration in Ghana is 65%.



Ghana: “A Competitive Mobile Market”

- Vibrant and competitive mobile market
- Six operators in 2012
- (GLO) on its way in 2010, has created a market-driven enabling environment for useful applications in a variety of sectors- agriculture, commerce, health, education and more.



Jeremiah Sam & Kwami Ahiabenu, II of
penplusbytes.org, Ghana

<http://www.ghanaweb.com/GhanaHomePage/features/artikel.php?ID=178607>

Ghanaians are Using Mobile Phone to Boost Productivity

Then

Fishermen used to throw some types of catch back into the sea rather than bring them to shore when local prices didn't make it worthwhile to haul them in.

Now

Fishermen can call ahead to contacts in various fish markets for price updates and sail to the most profitable destination, reducing waste and increasing incomes. Being able to find signals as much as 15 to 20 nautical miles offshore from terrestrial cell towers, fishermen can call for supplies to be delivered to them or to report emergencies.



MFS in Ghana

- Widespread mobile phone use
- Success of mobile financial services in Kenya
- Increasingly recognized potential of Mobile Financial Services in global financial inclusion efforts
- Large unbanked population



Ghana's Financially Excluded, 2008

- 80% Ghanaians still unbanked?
[Adu Koranteng](#), 28/10/2008
- An estimated 80 percent of the eligible population is said to be either un-banked or under banked, and seems to have no access to financial services.

Estimates

- Out of Ghana's population of 23 million people, only 2.2 million have bank accounts.
- 80 percent of Ghana's population still keeps their savings outside the formal banking system.
- 40 percent of traders in the country's various markets have bank accounts.
- 50 percent of farmers in the ag sector have bank accounts; basically, cocoa farmers have bank accounts.

Ghana's Unbanked

- In this sense, a fire outbreak in a market, a house or a farm of a peasant farmer totally affects their savings.
- 2008 fire outbreaks at the Agbogboloshie, Kantamanto and the Kumasi Central market were said to have destroyed millions of the country's cedi notes.

Ghana, 2009

- <http://www.audiencescapes.org/country-profiles-ghana-communication-and-development-personal-finance-case-study-unbanked-case-study>
- <http://www.audiencescapes.org/country-profiles-ghana-communication-and-development-personal-finance-information-and-communication>

Question

Does:

High mobile phone coverage

+ High mobile phone market penetration

+ Low financial inclusion

+ Resounding success of MFS in Kenya (also African)

= successful adoption in another African market?

Yes

No

Our Study

- Goals: Awareness, attitudes, uptake, barriers, impact of MM, 1 year post (re)launch
- Institute of Money, Technology and Financial Inclusion

Mobile Money in Ghana

Initial introduction by MTN poorly received. Re-introduced in 2009.

At the time of data collection, 3 telecom companies (MTN, Airtel (formerly Zain), and Tigo) had launched MM products, and a 4th (Vodafone) was getting ready to do so.



Ghanaian "Moneyscape"

- Consumer resistance to new money products
 - redenominated currency,
 - ezwich,
 - visa
- Preference for cash
- Concern with fraud



Method

- Interviews
 - Location: Accra, Ghana, June – August 2011
 - Sample:
 - 35 low income, 35 non-poor, lower middle class income Ghanaian adults
 - Added due to preliminary findings: 25 merchants, 25 market women, MM vendors, MM payee locations

Supplemental Information

- Document review
 - Newspaper and magazine advertisements
- Scouting
 - Location scouting for billboards, MM ads
- 1 MM company rep



Overview of Results

- Qualitative study
- Goal was to identify the lived experience and not numbers
- In depth, rather than wide in scope, gives people the opportunity to express the whys of their behavior

Themes Identified

- Intended use of MM
 - Yes
 - No
 - Ambivalent
- Barriers to Use
- Levels of Knowledge about MM



Will you Use MM? Absolutely NOT

- “It is like when you have many dresses but you prefer one to the rest.”

22 y.o. female orange seller

- “As for me, I would like to keep my money in the bank. I cannot trust MM. If someone pays and send you money but it never comes, you lose.”

19 y.o. vulcanizer

Yes, I will use MM

- I can't tell how they send the money, that is why. I am amazed by it. But if I try it and it is able to go through, then I would say that their claims are true

hawker

- At (bank or Western Union) if the cashier is angry or you make an error on the form you can imagine what will happen... but you can transfer at your convenience with MM

public servant

Ambivalence about MM

- “Somehow it is good, but somehow it is not good.”
35 y.o. female food hawker
- “I think every system has its advantages and disadvantages.”
24 y.o. female public servant
- “It is convenient(but) the truth is Mobile Money will be my last resort.”
25 y.o male public servant



Barriers to MM Use

- No money
- Not enough knowledge about product
- Lack of trust of product (ranging from convinced it is not safe to not sure it is safe)
- MM will cause them to spend more money
- No one to remit money to
- Preference for cash
- Just haven't gotten around to it yet
- What if I lose my phone?

Levels of MM Knowledge

- Knowledge of companies offering MM
- Knowledge of vendors/agents
- Knowledge of uses
- Knowledge of product name
- Knowledge of process
- Knowledge of other countries using MM
- Previous personal use
- Knowledge of MM user



Higher Income Group

- “It is cool, safer, and faster (than other forms of money transfer). When you are paying utility bills, you can just sit in the comfort of your home.”

25 y.o. male

- Less than 10 had used MM
- Concerns with technology, susceptibility to fraud, human error, and logistical hitches (including users)
- Low awareness of global context of MM
- Recognition of non-remittance potential

Low Income Group: Knowledge Gap

“I have heard of it, but I don’t understand it”

29 y.o. unemployed male

- Only 1 interviewee had used MM
- Lower level of knowledge of MM
- Less awareness of non-remittance capabilities of MM
- Concerns dealt mostly with belief in possibility of MM, trust in product, technology (higher income group raised issues with network, fraud, logistical problems)

Results: Merchants

Location: Oxford Street and 2 malls:

“All I have heard is “Mobile Money, Mobile Money”; I do not know what it is.”

Oxford Street store manager

“I think it will be a good way of doing business.”

Accra Mall

- No success in cashless forms (visa, ezwich) due to technical and fraud problems
- Some considering moving back to cash even though it is less convenient
- MM sounds like a very good idea in theory, but is it really going to work?
- No marketing: no information available about MM

Results: Market Women

“Mobile Money is a good idea, but as for me, I prefer cash.”

Hair products seller

“It will be ok for the big time businesses. Those who deal in wholesale and bulk trading. So instead of carrying more cash n hand, when they transact their business with mobile money, it will be safe for them...

But as for mine, mine, it is a small one. I need the cash so urgently in order to go and purchase goods for sale, I don't think it s good for me.”

Saucepan market seller



Interviews with....

MM Vendors

- Low patronage of MM (about 1 a day in 1 location)



Bill Pay

- We do not accept MM here”
- “They took the ezwich machine away and have not brought it back”

Ad search

- Visible Marketing, Low awareness
- Regular Adverts on **tv, radio**, magazines, billboards, banners, bus tops, and other ad media on major commercial streets in Accra's capital city
- No person-to-person marketing
- Unanswered question: do people pay attention to these ads, or just assume they are generic phone company ads?

Interview with Mobile Money Rep; Document Review

AIRTEL

- 1% of subscribers using MM
- Hands-on workshop for journalists

TIGO

- Post-launch marketing campaign underway to increase awareness
- Recognition of large market potential
- Differentiating between table top phone credit vendors and MM agents to promote trust in MM

General Conclusions

- In Ghana, **Cash is still King**
- Ghanaians slow to accept new forms of money, including MM
- “Maybe ...trying something new is always difficult for us” 39 y.o. female public servant

Conclusions

- Merchants see benefits and problems with MM
- Market women largely ambivalent about use, prefer cash
- MM companies have a lot of work to do with regards to marketing their products, and may possibly have to consider different strategies.

Implications

MM = Ghana's AFLAC (it's there, but very few people know): different marketing needed.

Does MM matter?

Ghanaian Answer, per our data:

Despite it's potential, **not yet**, and definitely NOT YET in Ghana's urban poor.

Will this change?

“I think it is a good initiative and great innovation. I just hope that in terms of awareness creation, more information is given about it, then more and more people will like to use it.”

25 y.o. public servant



Unaware

Awareness

Understanding

Knowledge

Trial

Regular Use

Customer MM Journey Model
McCarty, 2011

Developments Post-field Work

Airtel Subscribers Can Now Pay “Trotro” Fares With Their Phones

Wednesday, 19 October 2011 19:19

Airtel Ghana subscribers can now use their mobile phone devices to transact all forms of businesses from paying utility bills to boarding Trotros (commercial vehicles) in the country.

This followed Airtel Ghana’s new innovation in its award winning mobile commerce service formerly called Zap, which has now become Airtel Mobile to allow subscribers’ mobile phone to function as a mobile wallet.

Journalists Experience Airtel Money in Ghana

October 20, 2011

Journalists from both the electronic and print media in Ghana have received hands-on knowledge of how the Airtel Money m-commerce service works. The Airtel Money Media experiential seminar, organized by Airtel Ghana, was an interactive session where journalists were taken through transactional processes for all the various products under Airtel Money.

The occasion was also used to showcase the Airtel Money mobile banking platform and ATM Cash-out; first in West Africa.

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+ High mobile phone market penetration

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+ Resounding success of MFS in Kenya (also African)

= successful adoption in another African market?

Yes

No

It depends

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- ABI research, 2009.

Factors Akin to the TAM

Attitude towards MM:

“I think positively and have a positive attitude towards MM.”

“I think it is a good thing.”

Perceived Usefulness:

- *“Adopting the use of MM is advantageous and useful.”*
- *“I think it is very useful and.....will help my business.”*

Perceived Ease of Use: Ability to Use MM Technology

- *“I don’t know how to use it but learning how to use MM would be easy for me....if I’m taught how to use it.”*

Technology Anxiety Due to the Lack of Knowledge:

- *“I have not used the MM technology because it is unfamiliar to me...I don’t understand it.”*

Perceived Risk: Security vs. Fraud & Theft

- *“As for the technology it will work, if they say it will work.....it will but I’m not sure if somebody won’t steal the money through Sakawa.”*
- *“If somebody steals your phone you’ve lost your money.”*

Intent of Use:

“I will use MM if I know that it is safe (Trust).”

“Now that you have come to talk to us about it we will use it.”

Access to Product Agent:

“Where...can I get the money? I can't leave my products to go and get the money. If they are located here (in the market), I can easily go there for my money if one pays by MM.”

Traditional Competitors:

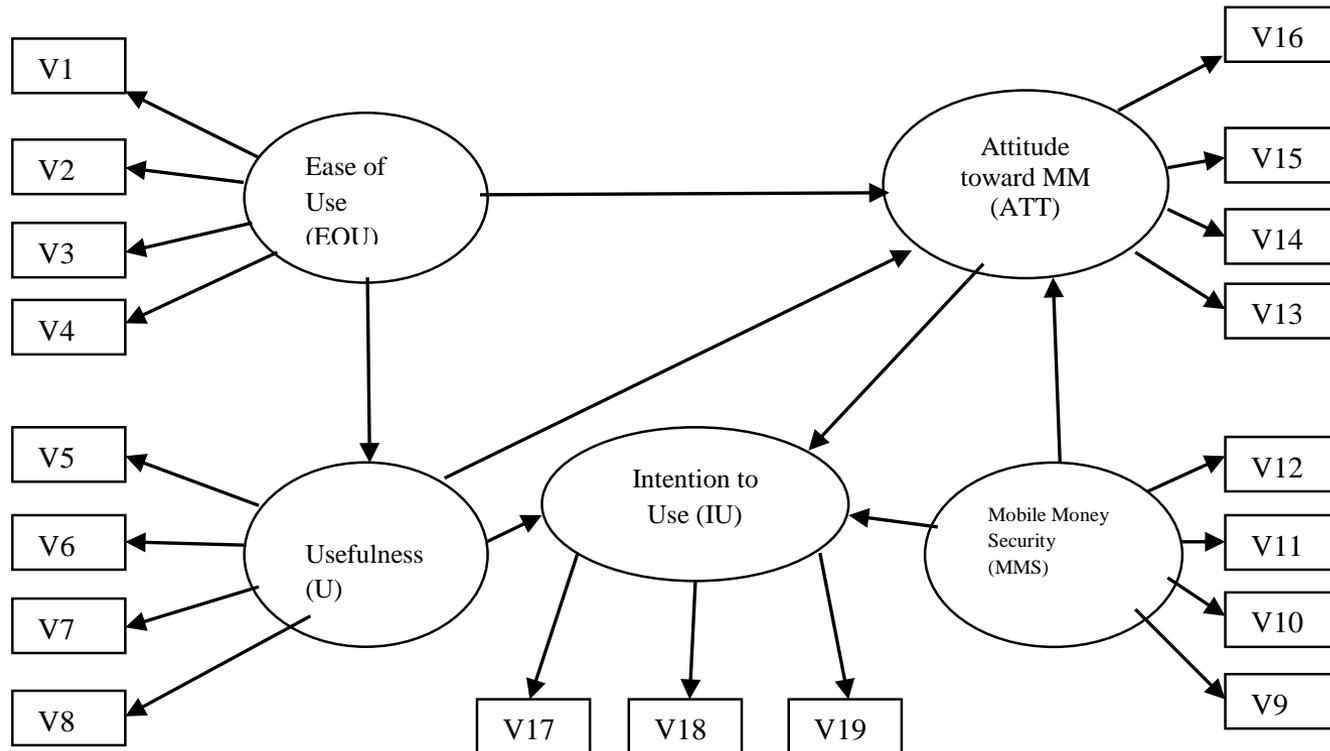
The BANKED:

"I can send money through my Bank or MoneyGram."

The Unbanked:

*"Sending money through my **friend, family member** or **a driver** is still ok, why do I have to register and pay money to send money to my mother or daughter?"*

Conceptual Model





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