Development Fund

mLearning: A Commercial look at Implementation
eLearning Africa
May 2011

GSMA mLearning

The GSMA

- Represents the interests of mobile operators in 219 countries
- Unites nearly 800 of the world's mobile operators, as well as more than 200 companies in the broader mobile ecosystem, including handset makers, software companies, equipment providers, Internet companies, and media and entertainment organisations.
- Produces industry-leading events such as the Mobile World Congress and Mobile Asia Congress.

The GSMA Development Fund

As of 2007, there were more mobile users in the developing than the developed world. How can we leverage this opportunity?

The Development Fund accelerates economic, environmental and social evolution through mobile technology. The provision of relevant, scalable mobile services to those in the developing world tangibly improves lives.

We are proof that doing good is good business.

Current Initiatives

Mobile Money for the Unbanked

In partnership with the Bill and Melinda Gates Foundation, MMU was launched in February 2009. It hugely accelerates the availability of mobile money services to the unbanked and those living on less than US$2 per day. Banking the developed world took 100years. Banking everyone else will take a handful

Green Power for Mobile

600 million subscribers live off grid. How does your business reach them? Green Power for Mobile specialises in helping operators build highly cost effective base stations. The excess power generated runs into kilowatts and can be used in the community: vaccine fridges and health clinics. GPM is a classic alignment of commercial and developmental goals.

mAgri

The GSMA Development Fund's mAgri initiative has been established to provide mobile solutions to serve the agriculture sector. Think of it as virtual fertiliser.tor. With our partners the Bill and Melinda Gates Foundation and the Rockefeller Foundation we run projects in Africa and India delivering mAgri services.

mHealth

The world's population is aging, and health care cost are increasing exponentially. Mobile Health's potential fill this gap is practically unlimited. mHealth works to build and deploy of viable mobile health solutions that improve access to appropriate, necessary and quality health services in developing markets.

mWomen

Groundbreaking research undertaken by the GSMA identified a yawning gender gap in phone ownership in the developing world. 300 million women remain unconnected, for a raft of cultural reasons. Closing this gap is the aim of the mWomen programme..

mLearning

No variable is a more reliable indicator of success in 2000 than a country's investment in education in 1900. This programme looks at the role mobile technology can play in delivering learning and educational services to people in remote areas or who have no access to existing education provision.

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mLearning Report

mLearning is the ability to access educational resources, tools and materials at anytime from anywhere, using mobile technology

Rationale

- No variable from 1900 better explains economic success in 2000 than investment in education
- Mobile connections will reach 6 billion by 2012 providing unmatched ubiquity and access

Overview

- mLearning projects have been piloted around the world for at least 10 years
- To date very few, if any, truly sustainable and large scale programmes exist however, the industry is gaining momentum

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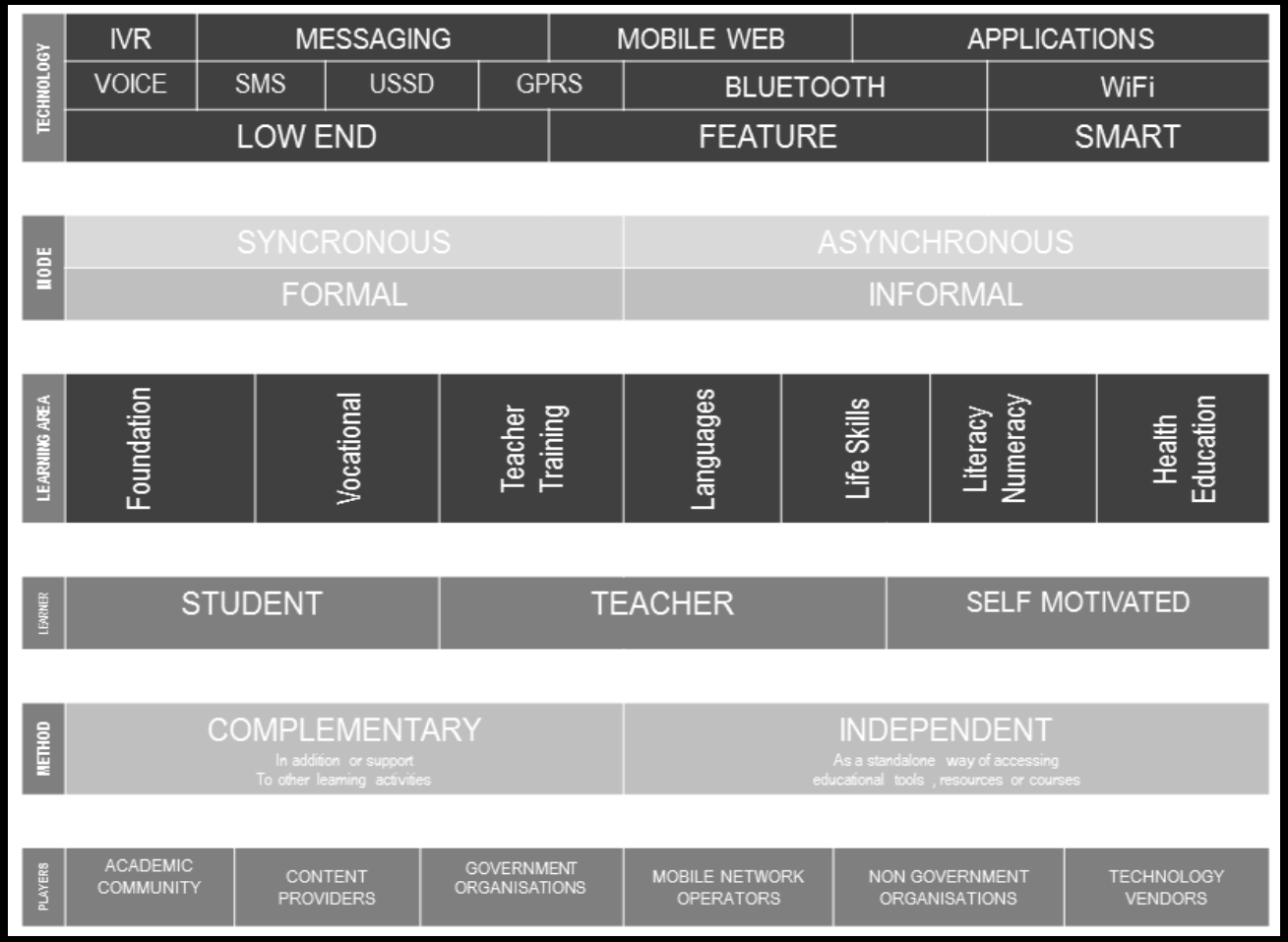
mLearning Report

mLearning: A Platform for Educational Opportunities at the Base of the Pyramid

Key Findings:

- Still and Emerging and Fragmented Market
- Handset and Technology Limitations and Capabilities need to be a key Consideration
- The Business Case is Still Under Debate
- Scalability and Replicability are a Challenge

A Framework for mLearning



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In the News….

Girls to receive free sanitary towels
Lack of pads keeps learners out of class
Kenya - May 25 2011 Daily Nation

Gordon Brown: Poor education will thwart Africa's dreams
JOHANNESBURG, SOUTH AFRICA - May 20 2011 19:01 Mail & Guardian Online

Kenya: Possessed Pupils Kicked Out of School
Kenya - May 21 2011 Nairobi Star

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Target Countries: An Analysis Method

Country Selection	198

Filtering Criteria	68

- GDP per capita <5K USD
- Country Population >1M
- Safety

Clustering Criteria	23

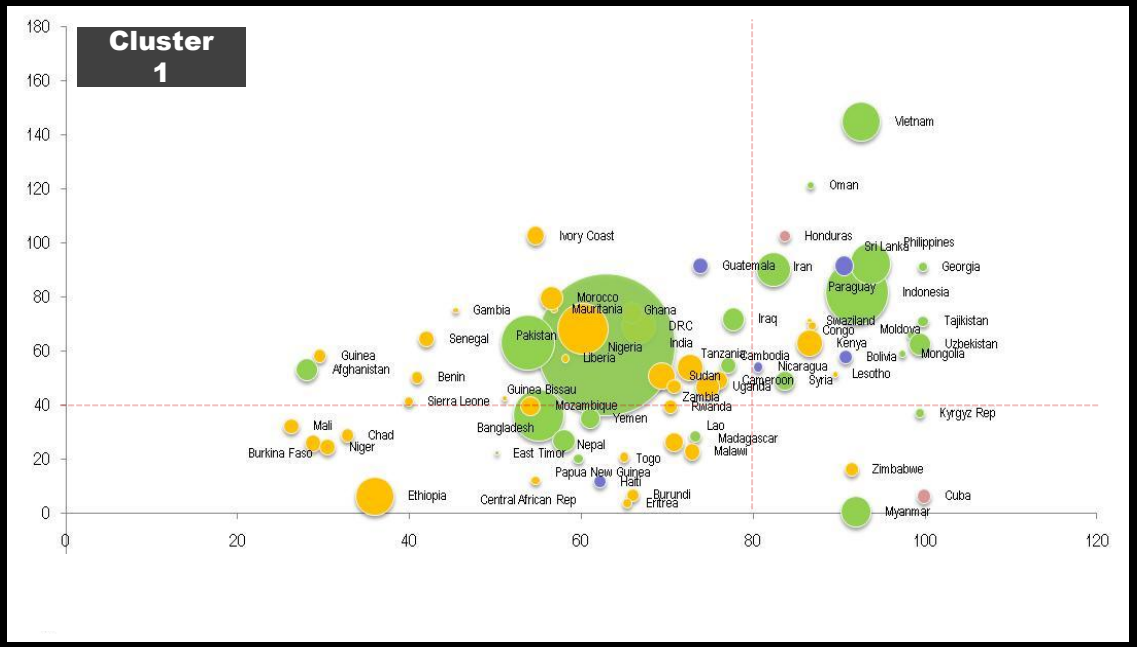
- Mobile penetration (40%)
- Literacy rate (80%)
- Cluster 1 → high need, high opportunity

Ranking Criteria	10

- Adult & Youth
  - Mobile Penetration
  - Population (Total & Rural)
  - Internet Users
  - Literacy Rate
  - Public Education Spend
  - Drop Out Rate
  - Out of School Children
  - Pupil Teacher Ratio

Selecting Criteria	4

- Safety Travel Advice
- MNO market share
- Current relationship with MNOs
- Current educational initiatives



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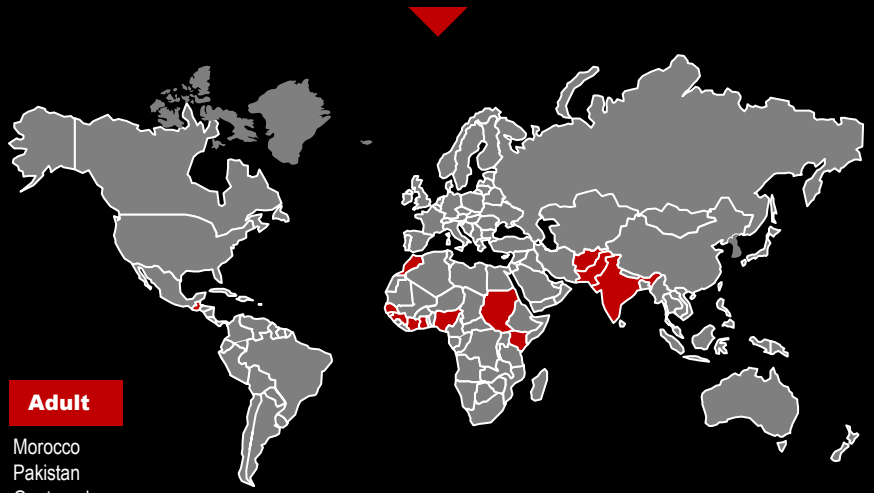
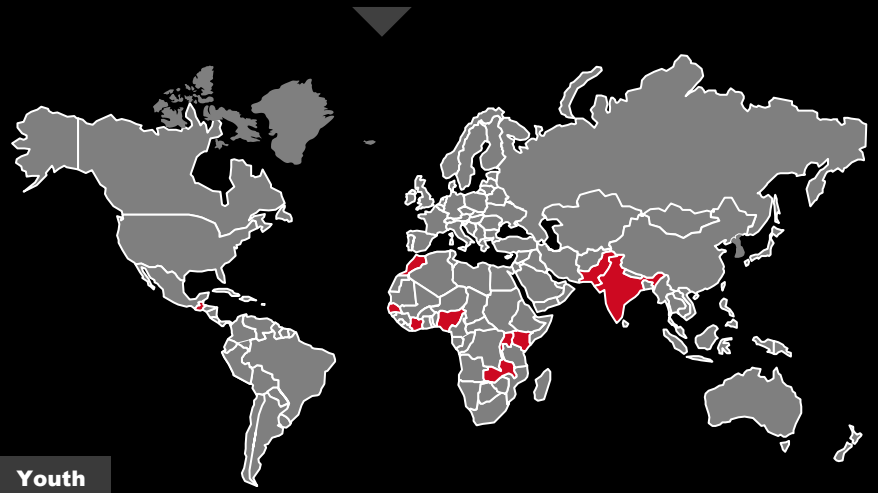
Target Countries: An Analysis Method

Country Selection	Filtering Criteria	Clustering Criteria	Ranking Criteria	Selecting Criteria
198	68	23	10	4
	▪ GDP per capita <5K USD ▪ Country Population >1M ▪ Safety	▪ Mobile penetration (40%) ▪ Literacy rate (80%) ▪ Cluster 1 → high need, high opportunity	▪ Adult & Youth - Mobile Penetration - Population (Total & Rural) - Internet Users - Literacy Rate - Public Education Spend - Drop Out Rate - Out of School Children - Pupil Teacher Ratio	▪ Safety Travel Advice ▪ MNO market share ▪ Current relationship with MNOs ▪ Current educational initiatives



Adult

Morocco
Pakistan
Guatemala
India
Senegal
Nigeria
Gambia, The
Ghana
Cote d'Ivoire
Sierra Leone
Sudan
Tanzania



Youth

Pakistan
Nigeria
Senegal
Zambia
Cote d'Ivoire
Morocco
Tanzania
Guatemala
India
Uganda

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Target Countries: An Analysis Method

Country Selection 198

Filtering Criteria 68
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Clustering Criteria 23
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Ranking Criteria 10
- Adult & Youth
  - Mobile Penetration
  - Population (Total & Rural)
  - Internet Users
  - Literacy Rate
  - Public Education Spend
  - Drop Out Rate
  - Out of School Children
  - Pupil Teacher Ratio

Selecting Criteria 4
- Safety Travel Advice
- MNO market share
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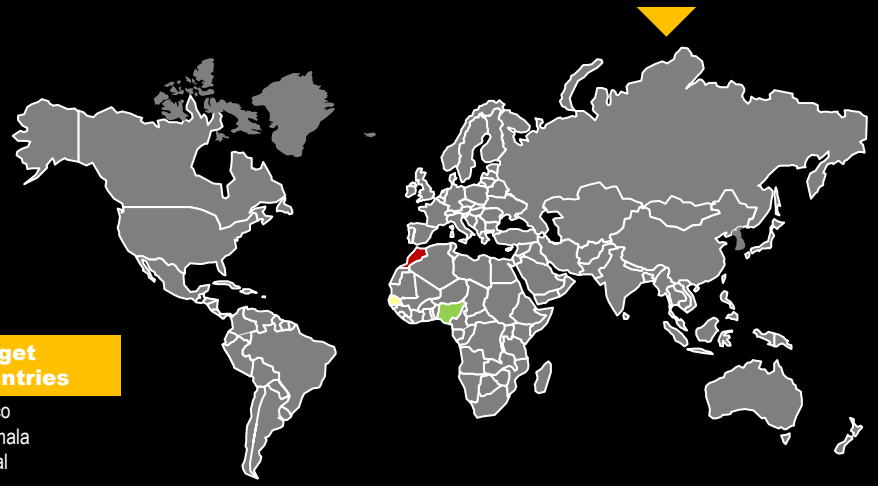
- Current educational initiatives



Target countries

Morocco
Guatemala
Senegal
Nigeria

	Population, 2009	GDP per capita, PPP, 2009	Internet users (per 100 people), 2008	Literacy rate, youth total, 2008	Literacy rate, adult total, 2008	Unemployment rate, 2009
Guatemala	14,026,947	$4,720	14.3	86.0	73.8	3.2
Morocco	31,992,592	$4,494	33.0	76.6	56.4	10
Nigeria	154,728,892	$2,203	15.9	71.5	60.1	19.7
Senegal	12,534,228	$1,817	8.4	50.9	41.9	48

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The ‘Best Fit’ Solution?

mLearning framework

- Target: Students, Self motivated
- Technology: Mobile web, Applications, Voice (Feature)
- Platform: Social Media, Web
- Learning areas: Training modules, Languages, Life skills

Guatemala

- Population: 14.0
- Mobile penetration: 90.0%
- Literacy: 86
- Unemployment: 3.2

mLearning framework

- Target: Students, Self motivated
- Technology: Mobile web, Applications (Feature)
- Platform: Social Media, Web
- Learning areas: Career advice, Financial literacy

Morocco

- Population: 31.9M
- Mobile penetration: 98.4%
- Literacy: 76.6
- Unemployment: 10

mLearning framework

- Target: Students, Self motivated
- Technology: Mobile web, Applications (Feature)
- Platform: Social Media, Web
- Learning areas: Career advice, Job search, Life skills

Nigeria

- Population: 154.7M
- Mobile penetration: 61.6%
- Literacy: 71.5
- Unemployment: 19.7

The unemployment rate in Nigeria sits at almost 20% and close to 70% for youths. There is a great need for information about educational and work-related opportunities in order to help them grow their skills. Combining the fact that there is a high penetration of internet enabled feature phones and the rampant use of social media in urban Nigeria, a platform that integrates career advice, life skills and a job search tool would be an ideal deployment solution.

mLearning framework

- Target: Students, Teachers, Self motivated
- Technology: Voice, SMS (Low end)
- Platform: Helpline, IVR
- Learning areas: Training modules, Health Education, Life skills

Senegal

- Population: 12.5M
- Mobile penetration: 64.4%
- Literacy: 50.9
- Unemployment: 48

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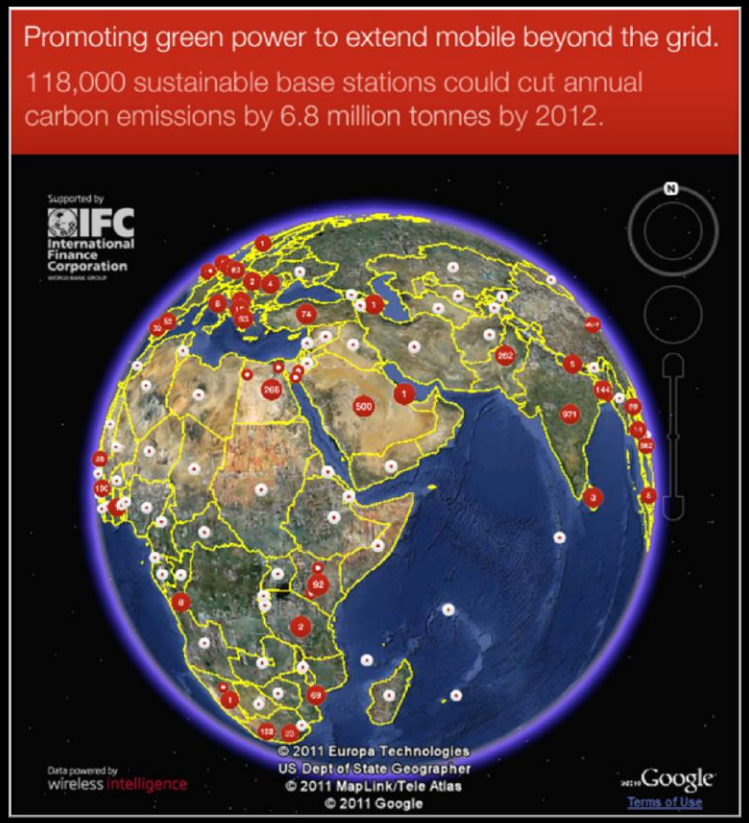
Project ‘Sustainability’

Project Example	Type	Learner	Content Supplier	Payment of Service
BBC WST Janala	Language	Self Motivated	Developed / owned by BBC WST	End User
Nokia Life Tools	Life Skills	Self Motivated	Preloaded onto Nokia handsets	End User
Text2Teach	Teacher Training/Support	Teacher	Pearson, Philippines DoE, pre-loaded onto Nokia handsets	Funder/End User
Text to Change	Health Education	Self Motivated	Provided by Text to Change	End User
Kontax/Yoza	Literacy	Self Motivated	Provided by local novelist	End User
SMS for Literacy	Literacy	Self Motivated	Locally Sourced	Funder

The Multiplier Effect: Green Power for Mobile

Green Power for Mobile



- IFC investment in to the GPM Programme has been matched by the Development Fund to approx 170% of initial funding
- Purposes of GSMA, IFC investments:
  - ✓ **3 working group meetings per year (avg 30 organisation attending)**
  - ✓ **18 MNOs receiving technical assistance**
  - ✓ **2 market research/white papers published per year**
  - ✓ **1 training guide published per year**

- MNOs involved in feasibility studies: **20**
- Green base station rolled out by MNOs involved in feasibility studies: **2,000**
- Average investment for a green BTS**: US$50K for an average 5kW green BTS**
- Total # Green BTS worldwide: **15-20K green BTS deployed worldwide with total investment of 1.4B US$ - Target 118K BTS by 2012**
- Total Savings CO_2: **Target 6.8M metric ton by 2012**
- Total OPEX Savings: **Target 2.5B US$ by 2012**

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The Multiplier Effect: Mobile Money for the Unbanked

Mobile Money for the Unbanked

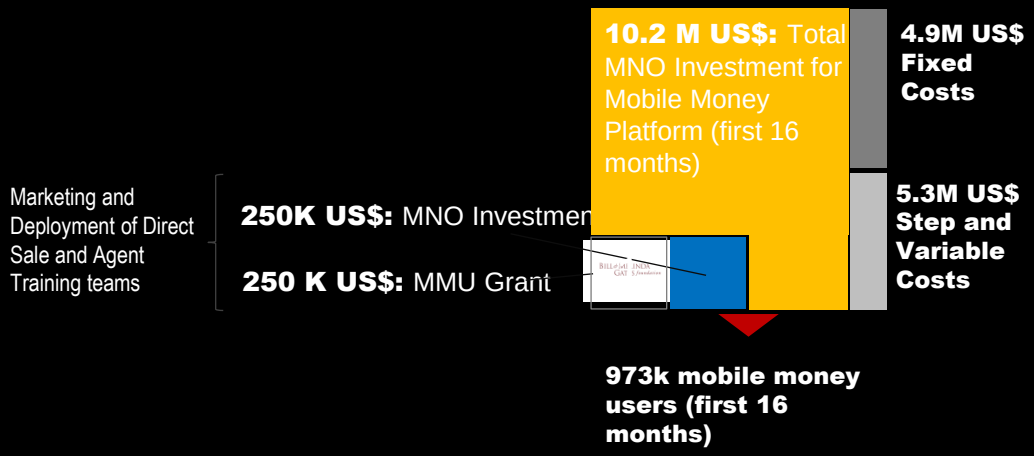
In partnership with the Bill and Melinda Gates Foundation, MMU was launched in February 2009. It hugely accelerates the availability of mobile money services to the unbanked and those living on less than US$2 per day. Banking the developed world took 100years. Banking everyone else will take a handful0

The MMU Fund and its Grantees

- Grantees: 19

- Size Grants: 50k US$ - 500 US$
- Applicants are expected to contribute at least a minimum of 50% of total project costs in cash and in kind
- Examples of grant purposes:
  - ✓Expanding distribution network via new types of agents to reach more customers
  - ✓Customer education via three step process to promote consumer adoption
  - ✓Providing a platform for Oxfam and Concern Worldwide to disburse government aid to vulnerable groups
  - ✓Joining forces with an international bank to offer cross border money transfer services to mobile money customers in East Africa☐
  - ✓ Adopting intense direct marketing campaign and person to person contact to accelerate uptake of the Mobile Money service ☐

MTN Uganda Case Study



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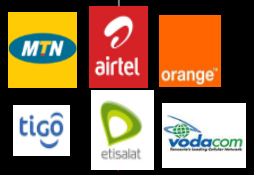
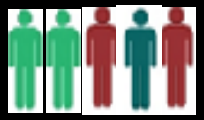
Example Implementation and Delivery Model

Other partners

GSMA Development Fund

Funding partner





Students

Teachers

Self-motivated

Education modules

Social network

Jobs directory

News & Info

Other

Delivery

Government Depts

Training Institutions

NGOs

Media

Agencies

Others

Content

Government

Other donors

Vendor advertisements

Consumers

Sustainability

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Three Questions…..

1. What are the key drivers and barriers in the uptake of mLearning services for the end user.

2. Can mLearning exist without the support of Governments?

3. What role can or should your organisation be playing?

Mobiles and Literacy

A study by Dr Clare Wood, a psychologist at Coventry University, carried out tests on eight to 12-year-olds over a 10 week period. The findings countered popular fears commonly expressed by showing that the use of text message abbreviations actually had *positive* links with literacy amongst youngsters. Furthermore, the research found the children with better spelling and writing skills were actually those that used the most ‘textisms’