



Current Applications of Microinsurance Innovations

2017 CAS Spring Meeting

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CAS Working Party for Microinsurance Research



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Keep an eye out for the working party's nine articles on microinsurance which will begin publishing in June 2017



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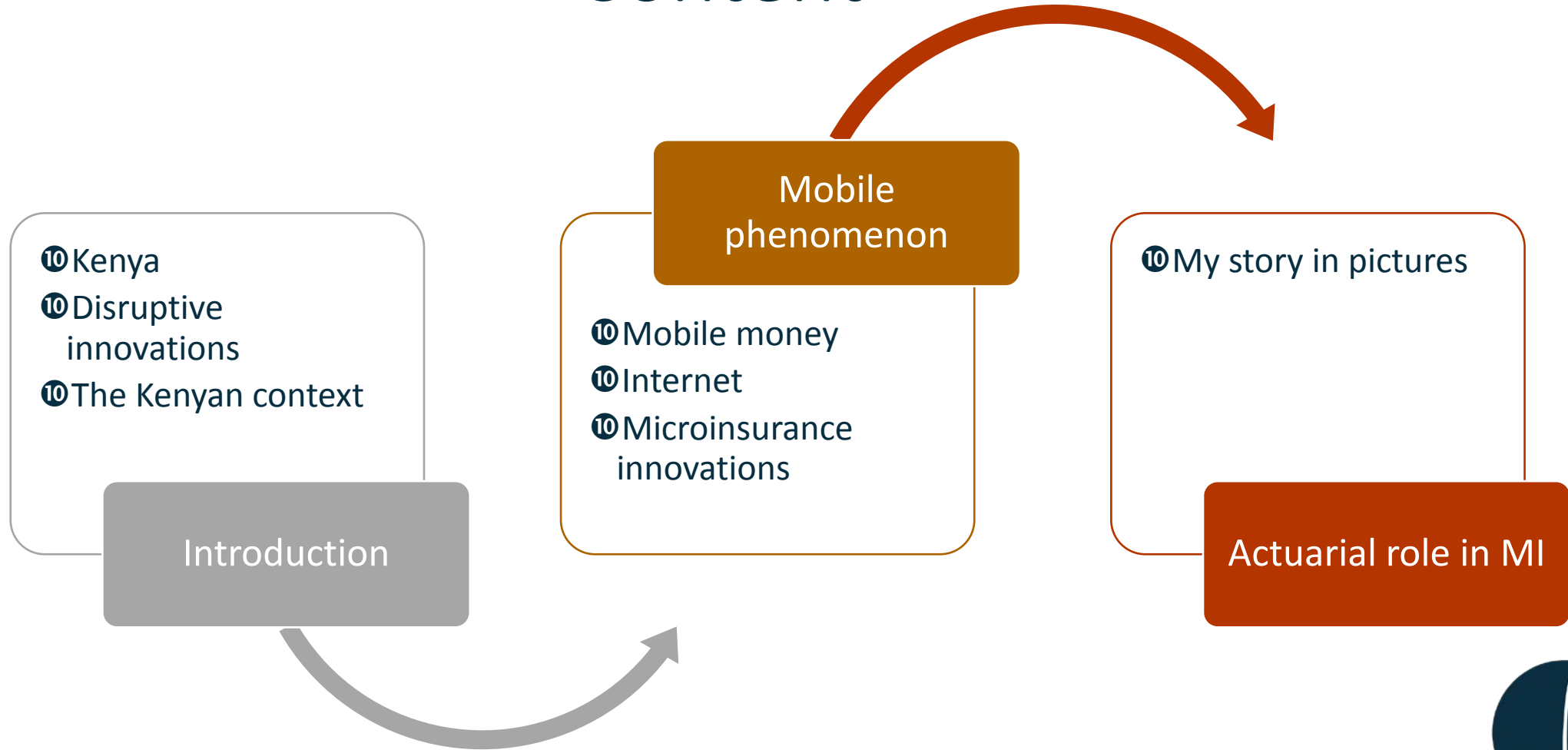
MICROINSURANCE INNOVATIONS AND OPPORTUNITIES IN KENYA

Barbara Chesire-Chabbaga, Lead Consultant, AB Consultants Limited

CAS Spring Meeting, Toronto, 22nd – 24th May 2017

Nairobi skyline at sunrise

Content



Introduction



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Kenya



TOURISM



- Largest foreign exchange earner
- 70% of Kenyans derive livelihood from agriculture
- Major foreign exchange earners include flowers, tea, coffee



AGRICULTURE



ECONOMY



- Population of 46.1 million Kenyans
- GDP \$69.977 billion
- GDP per capita \$1,587
- Main sectors: Agriculture, Tourism, Energy, Telco, Financial services
- Eastern and central Africa's hub for Financial, Communication and Transportation services
- 90% penetration of mobile use
- Kenya has the world's highest mobile money penetration rate



MOBILE MONEY & TECHNOLOGY



CULTURE

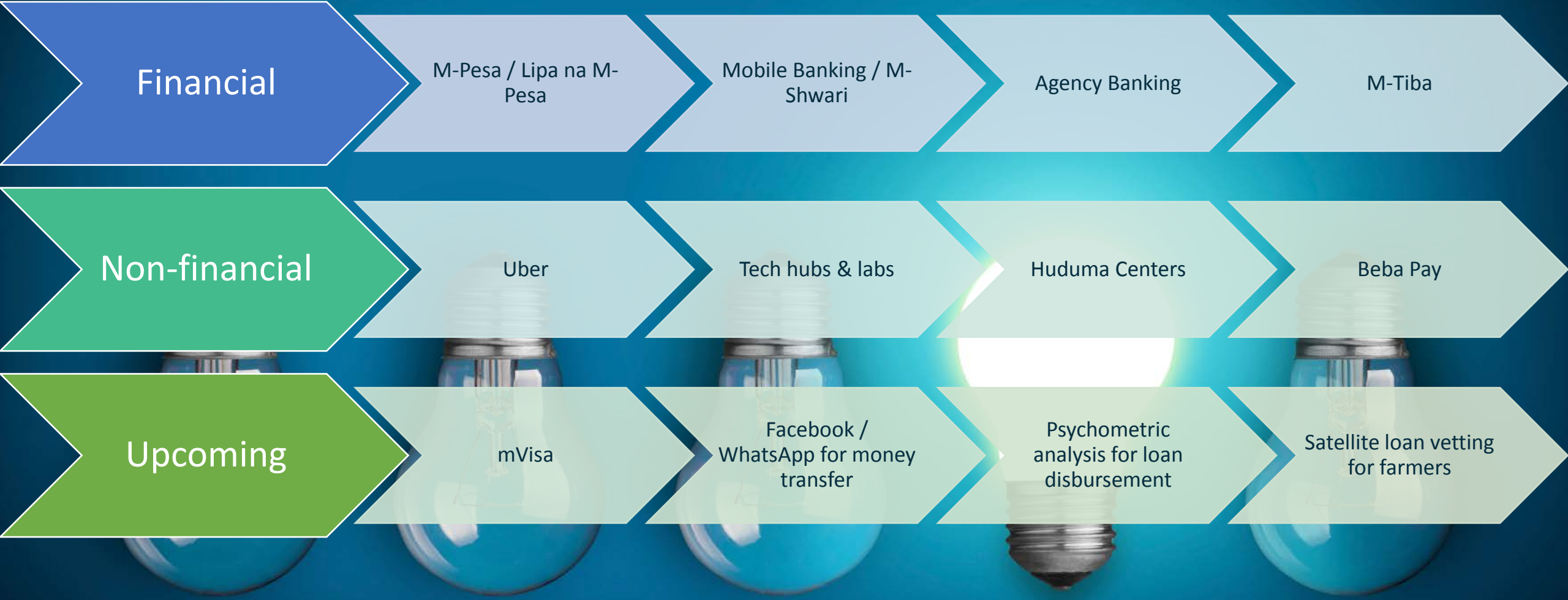


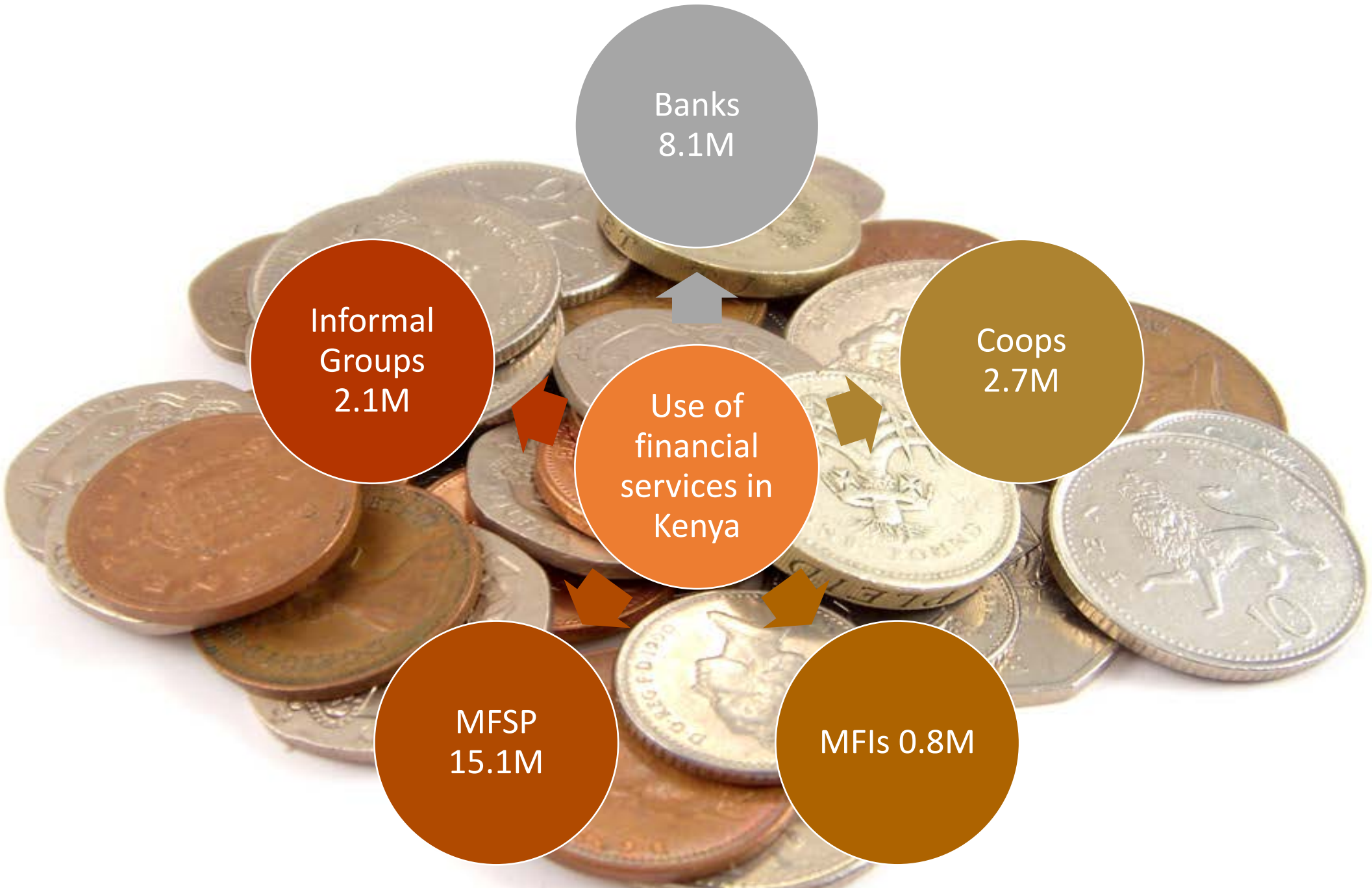
- Two official languages: Swahili & English
- 69 ethnic languages spoken in Kenya
- Kenya is known to dominate middle-distance and long-distance athletics



SPORTS

Disruptive Innovations





Banks
8.1M

Informal
Groups
2.1M

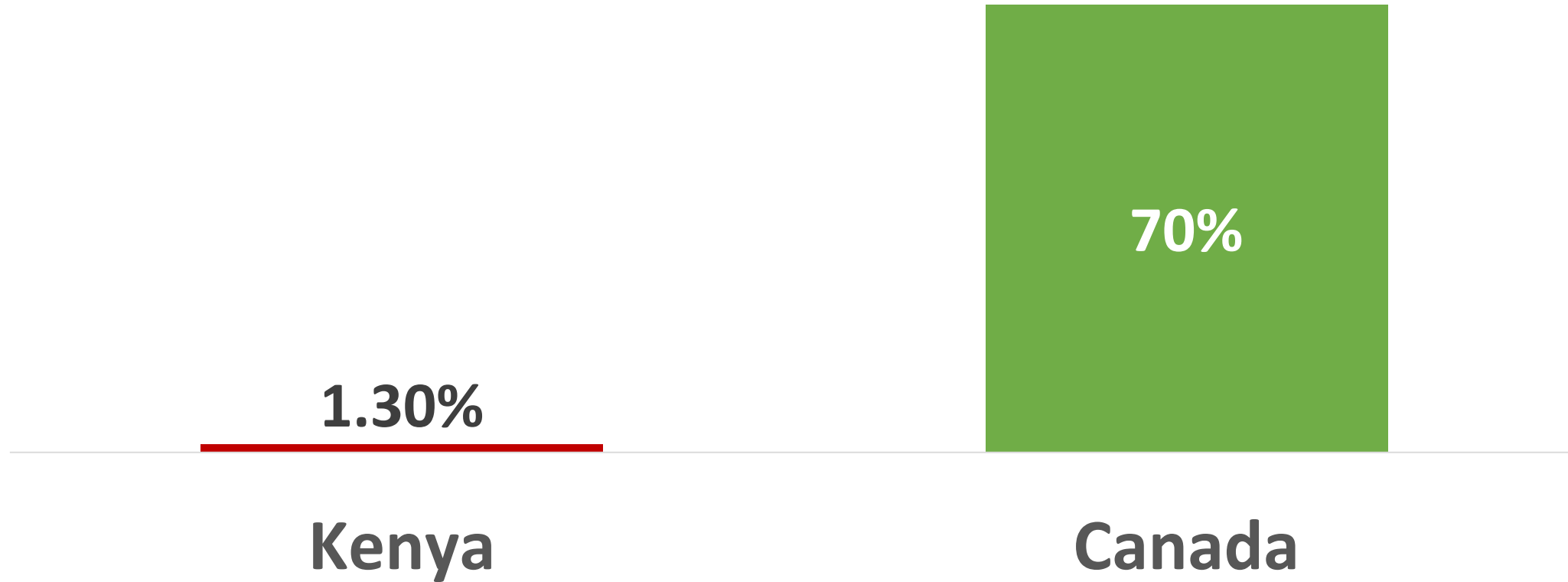
Use of
financial
services in
Kenya

Coops
2.7M

MFSP
15.1M

MFIs 0.8M

Life insurance penetration



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75%

...of Kenyans have never had an insurance cover



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The mobile phenomenon



The Kenyan Context

Kadogo
economy

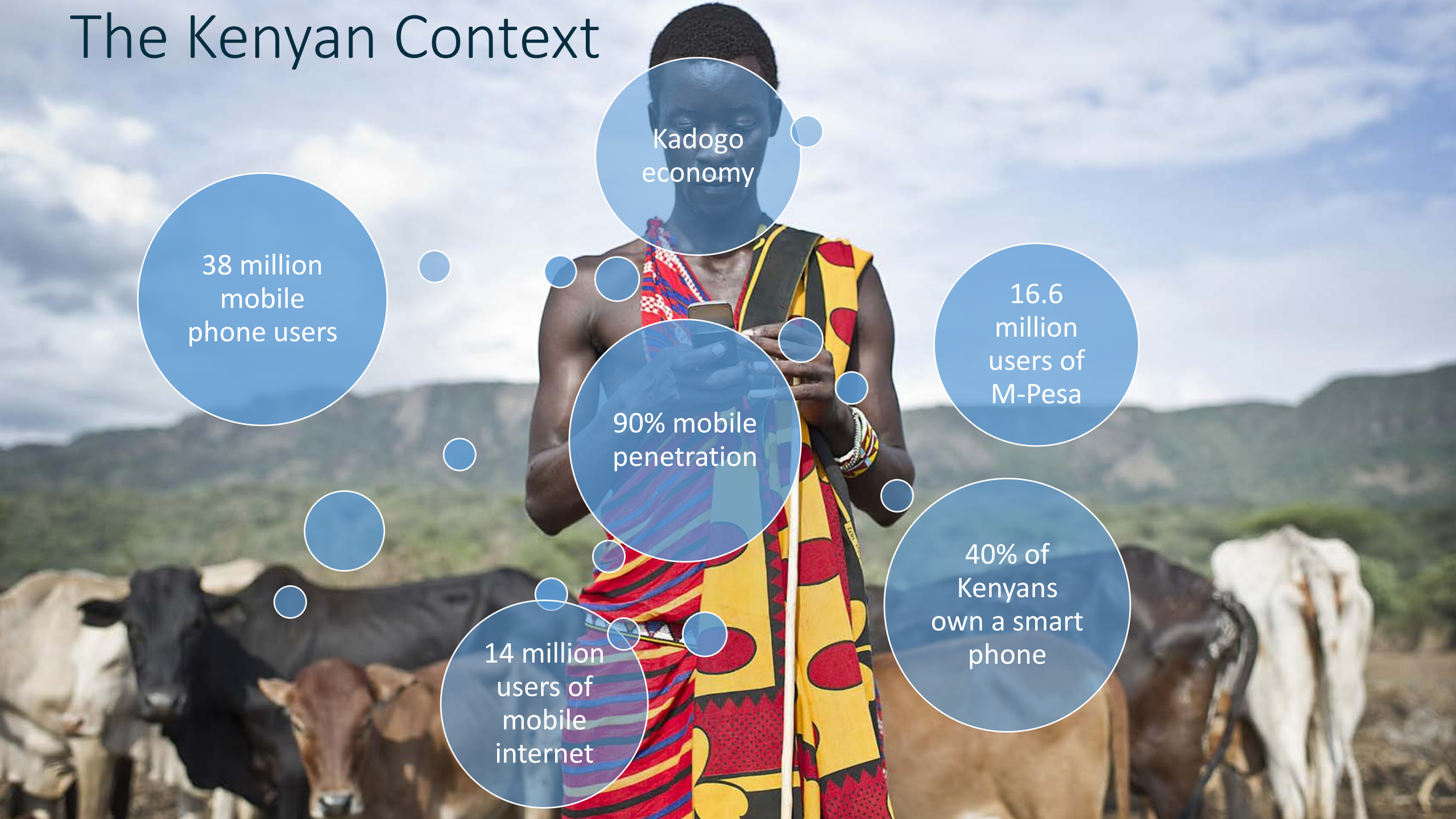
38 million
mobile
phone users

16.6
million
users of
M-Pesa

90% mobile
penetration

40% of
Kenyans
own a smart
phone

14 million
users of
mobile
internet





Mobile money

- 📱 Kenya has the world's highest mobile money penetration
- 📱 16.6 million users transact USD 50 billion annually
- 📱 Over 100,000 mobile money agents country-wide
- 📱 Successful due to ability to stay ahead of lagging regulators



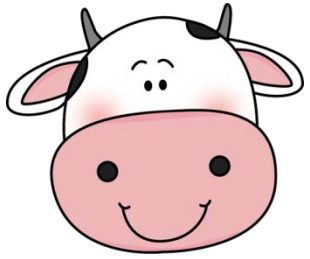
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Opportunities for insurance and financial services

- 📶 30% of Kenyans use smart phones
- 📶 Mobile internet subscriptions rose 5.9% to reach 14.7 million users
- 📶 Total internet users stand at 23.2 million
- 📶 Distribution of insurance through an app
- 📶 Consumer education – tips and education about insurance
- 📶 Bundling with online services such as free basics
- 📶 Huduma center, e-citizen, IPRS – online platform for all government services
- 📶 mVisa – looking to take on Safaricom in its home turf. Leveraging smart phone use providing a cheaper platform for money transfer. Is there an opportunity for bundling insurance services?

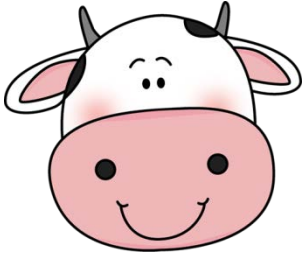




Agriculture

- 🐮 Agriculture is the largest employer in Kenya
- 🐮 Agriculture is the largest contributor to Kenya's GDP
- 🐮 Main sectors include:
 - 🐮 Dairy – Approx 5 million cows and only 39,000 livestock policies
 - 🐮 Tea – 560,000 tea farmers; 700,000 tea pickers; 70 factories but no significant insurance product in this industry
 - 🐮 Horticulture
- 🐮 Financial inclusion is at 69%
- 🐮 93% of farmers still receive their income through cash





Opportunities in Agriculture

🐮 Leverage on agricultural input companies

🐮 Fertilizer

🐮 Seed

🐮 Artificial Insemination – not yet been done

🐮 On-demand cover that provides protection when a farmer most needs it e.g. when the cow is pregnant

🐮 Including the entire agricultural value chain

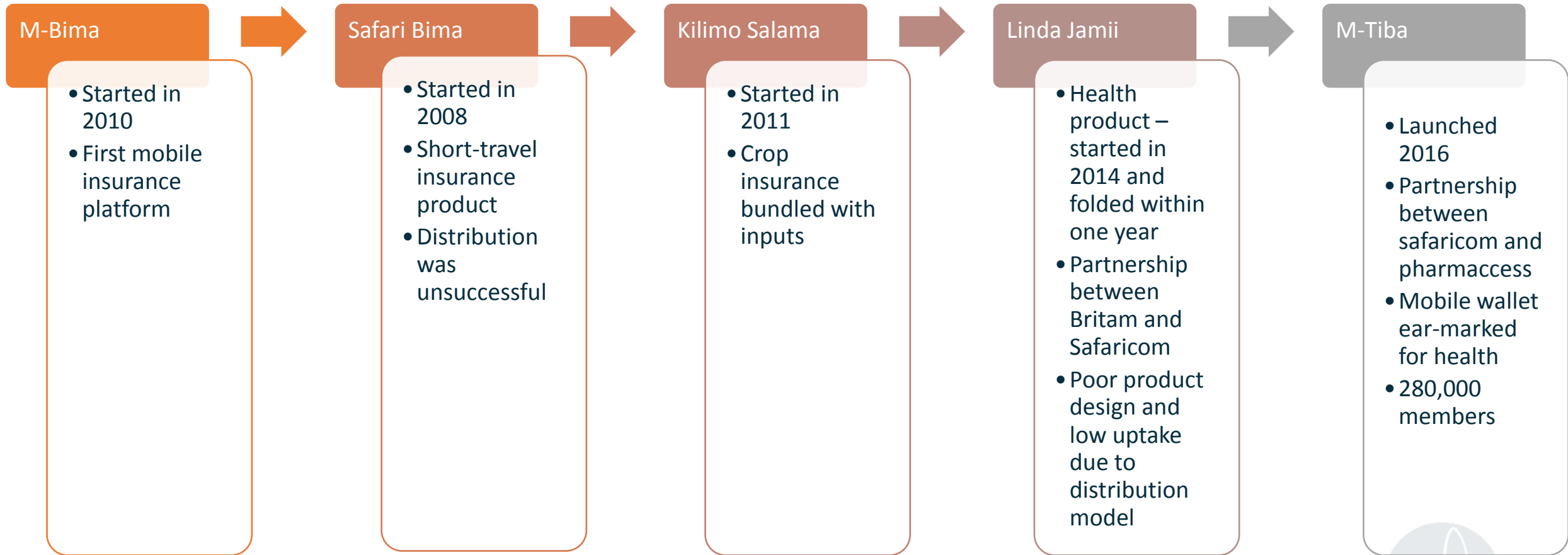
🐮 Tea pickers – weather index income protection

🐮 Other farm workers



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Kenyan microinsurance technology trendsetters



Actuarial role in microinsurance

My story in pictures



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Involvement in market research



Client Focus

Defining the target market



Co-creation with clients



Understanding market context

A photograph of an outdoor market. In the foreground, a woman in a teal shirt and patterned skirt stands with her back to the camera, talking to a man in a dark sweater. Other people are visible in the background, including a man in a suit and a woman in a white top. There are stalls with various fruits like oranges and tomatoes. A building with a corrugated metal roof and a sign with a cow's head is on the right. The sky is blue with some clouds.

Measure and understand the willingness and capacity to pay

THE MAGIC BALANCE

Business case
vs
Client value



Away From the Bright Lights – Tales of a Micro-insurance Actuary

Scott Swanay, FCAS

May 23, 2017

CAS Spring Meeting

Toronto, Ontario

What is Blue Marble Microinsurance?

- Consortium of 8 founding members
 - AIG
 - Aspen
 - Hamilton Insurance Group
 - Marsh & McLennan Companies (Guy Carpenter)
 - Old Mutual
 - TransRe
 - XL Catlin
 - Zurich
- Mission: collaborate as a for-profit social enterprise to extend protection to the emerging middle class
- Secondee model

Blue Marble Microinsurance - Ventures

- Zimbabwe maize growers – launched pilot in late 2016
- Colombia coffee growers – in development
- Peru coffee growers – in development
- Goal is to incubate 10 ventures in 10 years

Blue Marble Microinsurance Zimbabwe – Product Design Questions

- Who should the insured be?
- What crop(s) should we insure?
- What aspect of crop production should we insure?
- What peril(s) should we insure against?

Blue Marble Microinsurance

Zimbabwe – Product Design Questions (CONT)

- What historical weather data source to use for pricing coverage?
- How many years of historical data to use? Impact of climate change?
- How to deal with basis risk?
- Separate coverage for each phase or one cover for entire season?
- How to define claim triggers?
- Can insureds be incentivized to provide information that will help improve product pricing (and distribution)?

Blue Marble Microinsurance Zimbabwe – Operational Questions

- How to obtain approval from regulators?
- How to distribute the product?
- What language should marketing materials be written in?
- How quickly should we look to grow sales?
- How to collect premiums?
- How to pay claims?
- What partners are needed?
- How can farmers' exact locations be collected and verified?
- How should rainfall be measured?

Key Differences Between Micro-insurance Actuarial Role & Traditional Actuarial Role

- Start-up mentality
- Greater opportunity for collaboration
- Opportunity to play multiple roles
- Difficulty in obtaining historical data
- Credibility of historical data

Compulsory Microinsurance?

Lead Me Not into Temptation ...



SERVE | ADD VALUE | INNOVATE



Compulsory Insurance Sounds Amazing!

- The government does the selling for you
- Everyone is required to buy and maintain insurance ... which is just good for them anyway
- All you need to do is price it, sign it, and service it
- So, this should work for microinsurance, too, right?
- The microinsurance market arguably needs cover more than anyone else



Tempting? Take a Bite of Original Risk!





Compulsory: If, If, If, If, If

- **If** it's going to work, it has to be REALLY compulsory
- **If** it's going to stick, you need to build in a monitoring mechanism
- **If** it's going to be effective, you'll still have to invest in financial education
- **If** it's going to be compulsory, it still has to be affordable

And even then, compulsory microinsurance won't be the same as compulsory auto in Massachusetts!



What Can We Learn from Compulsory Schemes Worldwide?

- PAID (Romania)
 - 20% penetrated
 - No real monitoring or enforcement mechanism
 - Requesting more gov't intervention and support
- TCIP/DASK (Turkey)
 - 40+% penetrated
 - 50+% retention
 - Proof of insurance required up front
 - Marketing used to drive retention (no subsequent check)





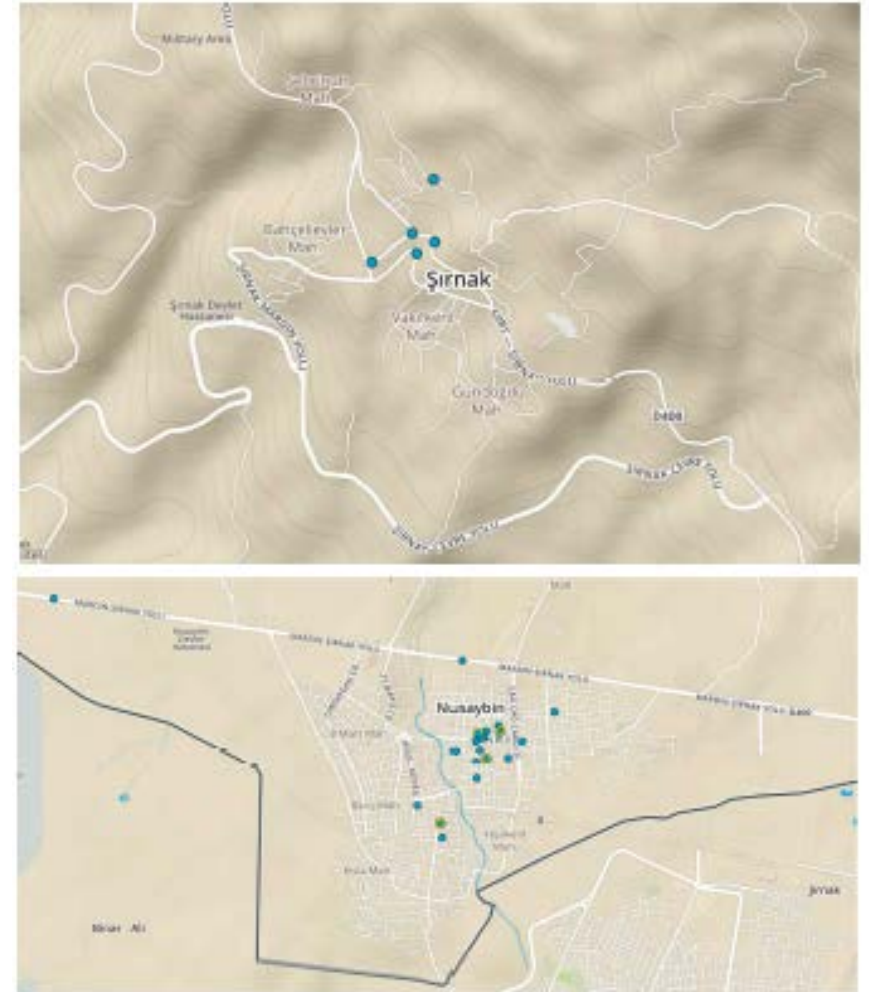
Since we're on the subject of Turkey ... let's take
a look at something else





Customer Retention Through Insurance

- Turkish telecom provider:
TRY500 in terror cover
- Bonus for being a loyal customer
- 500,000 policies in force
- Triggered in 2016 (PCS Turkey
Cat 1613)
- Terror attacks in Şırnak,
Mardin, Hakkâri
- Avg personal claim: TRY26,000





Nothing Beats Real Selling and Real Value

- Compulsory protection can only get you so far – especially in microinsurance markets
- Financial education and affordability will always be major factors
- Mandating protection fails to solve the real problem
- The market needs to know what coverage is, what it does, and why it's important
- No program can become self-sustaining without an informed customer base



So, How Do You Sell Microinsurance?

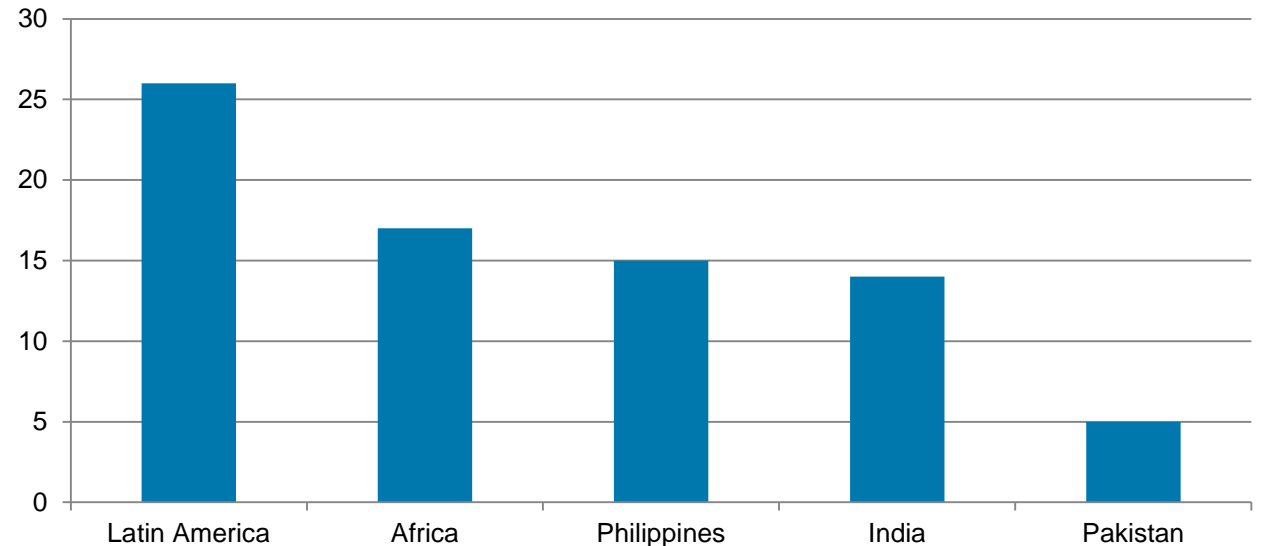
- Think back to that Turkish telecom provider: partnerships are crucial!
- Look for local market players with:
 - Large customer bases
 - Deep local market understanding
 - Frequent and regular transactional relationships
 - Level of trust with customers
 - Clear trustworthiness in dealings with you
- And you need to provide:
 - Tools for marketing and selling
 - Product information and knowledge
 - A useful, valuable product at a viable price point
 - Commitment to ongoing support
 - Sufficient patience
 - A realistic revenue stream for your local partner



A Look at Global Retailers

- Of the world's top 100 retailers:
 - 26 in LatAm
 - 17 in Africa
 - 15 in the Philippines
 - 14 in India
 - 5 in Pakistan
- And this is just a look at some regions with microinsurance potential
- You can achieve scale with the right global partner

Top 100 Global Retailer Presence by Region



Source: *Global Powers of Retailing 2017*, Deloitte

Sophisticated retailers will require a clear value proposition.

You'll face competition from:

- Banking and financial services products
- Telecom products
- Core retail priorities
- Global corporate initiatives



The Real Temptation of Microinsurance

- Profitable business with the potential to scale significantly over time
- Ability to grow alongside overall economic growth and middle class development
- Entry of more **original risk** into global re/insurance
- A top-line alternative to standard soft market thinking ... why cut when you can grow? For decades?



#OriginalRisk: c'mon, take a bite!



Questions? Compliments?
(Please, just don't rush the stage)

