



# Mobile money: the world and PNG

Mobile Money Summit  
Port Moresby 21-22 October 2008

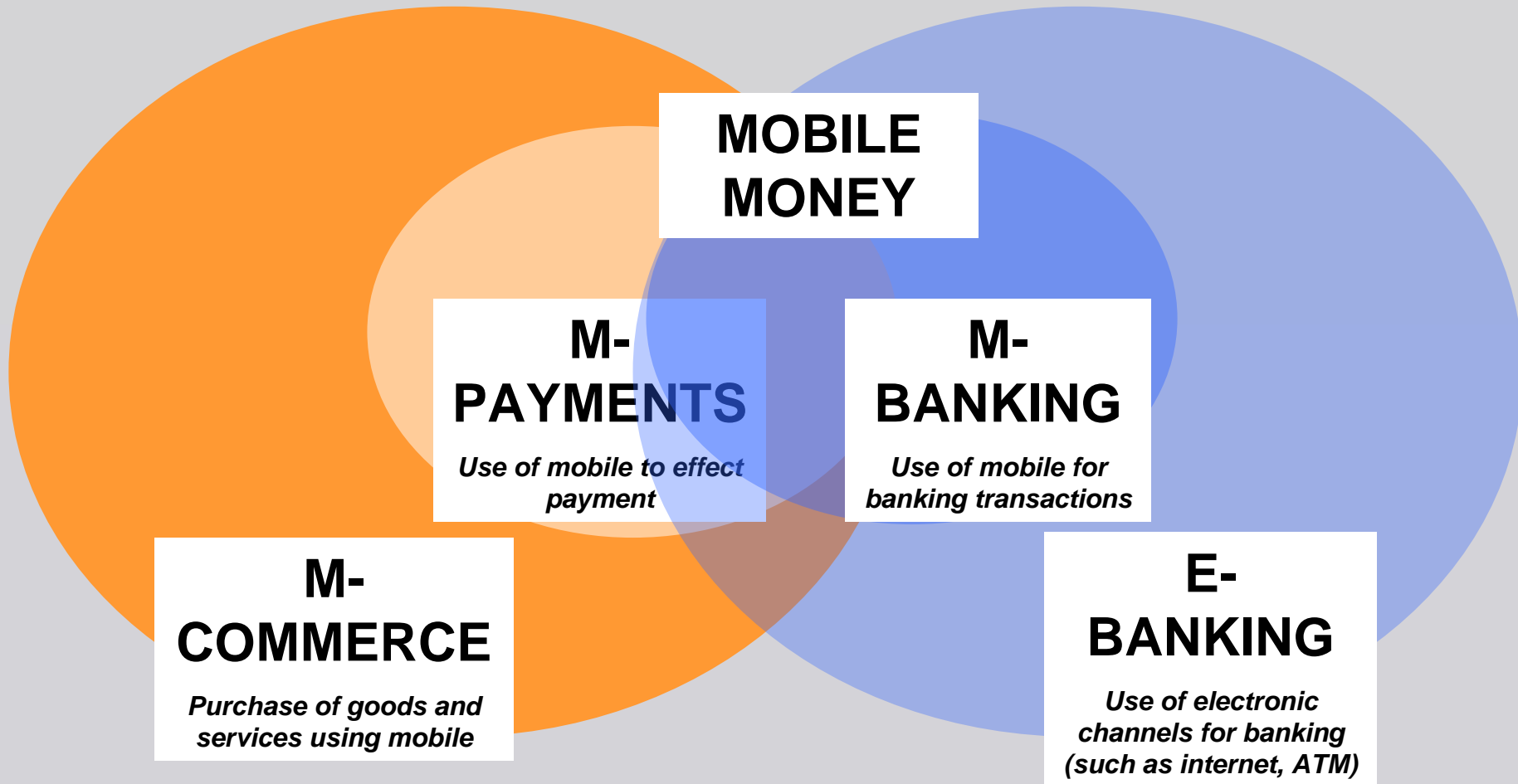
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# Outline

- ❖ What are mobile money models?
- ❖ What is happening in the rest of the world?
- ❖ What is the potential here in PNG?

# Definitions



# Branchless banking involves a mix of instruments, devices and channels



## Instruments

- Cash
- Check
- Money order
- Debit order
- Mag card
- Smart card
- **Mobile phone**

## Devices

- ATM
- PC
- Dedicated terminal
- Kiosk
- Point of sale device
- **Mobile phone**

## Channels

- Branch
- Bank staffed branch
- Mobile bank
- Internet
- **Mobile phone**
- Merchant/agent
- ATM

## Comms channels

- **Wireless**
  - 2G: SMS, USSD
  - 2.5G: GPRS
  - 3G
- Fixed line
- VAN
- Satellite

The mobile phone cuts across, causing confusion but is one among many approaches



# What does the client require? Phone vs card

		Client requires cell phone?	
		Yes-basic	No
Client has a card?	Yes		
	No		

# What type of handsets do clients have?



## ❖ Handset capability:

- Standard phones
- Advanced:
  - Feature phones
  - Smart phones

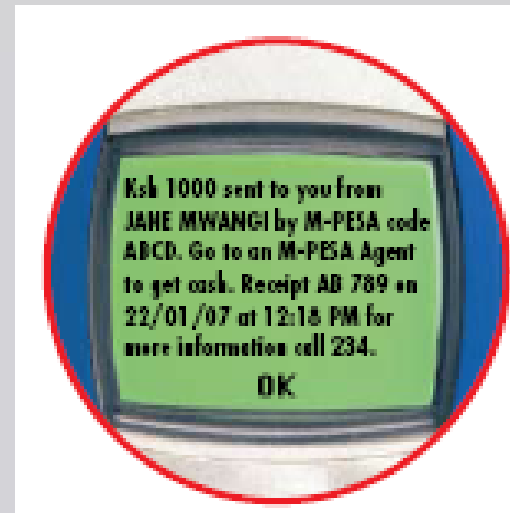
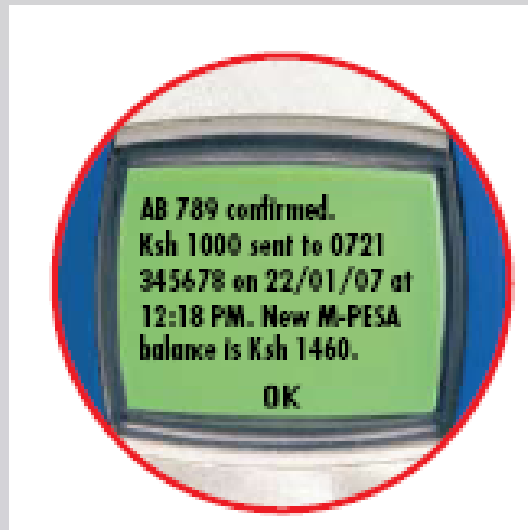
- Also:
  - which networks are they on?
  - how reliable is the coverage?

# How does it work—MPESA?



In your M-PESA menu pick “send money” & enter

1. Recipient phone number
2. How much you want to send
3. Your secret PIN



You both receive SMS confirmation of the transfer

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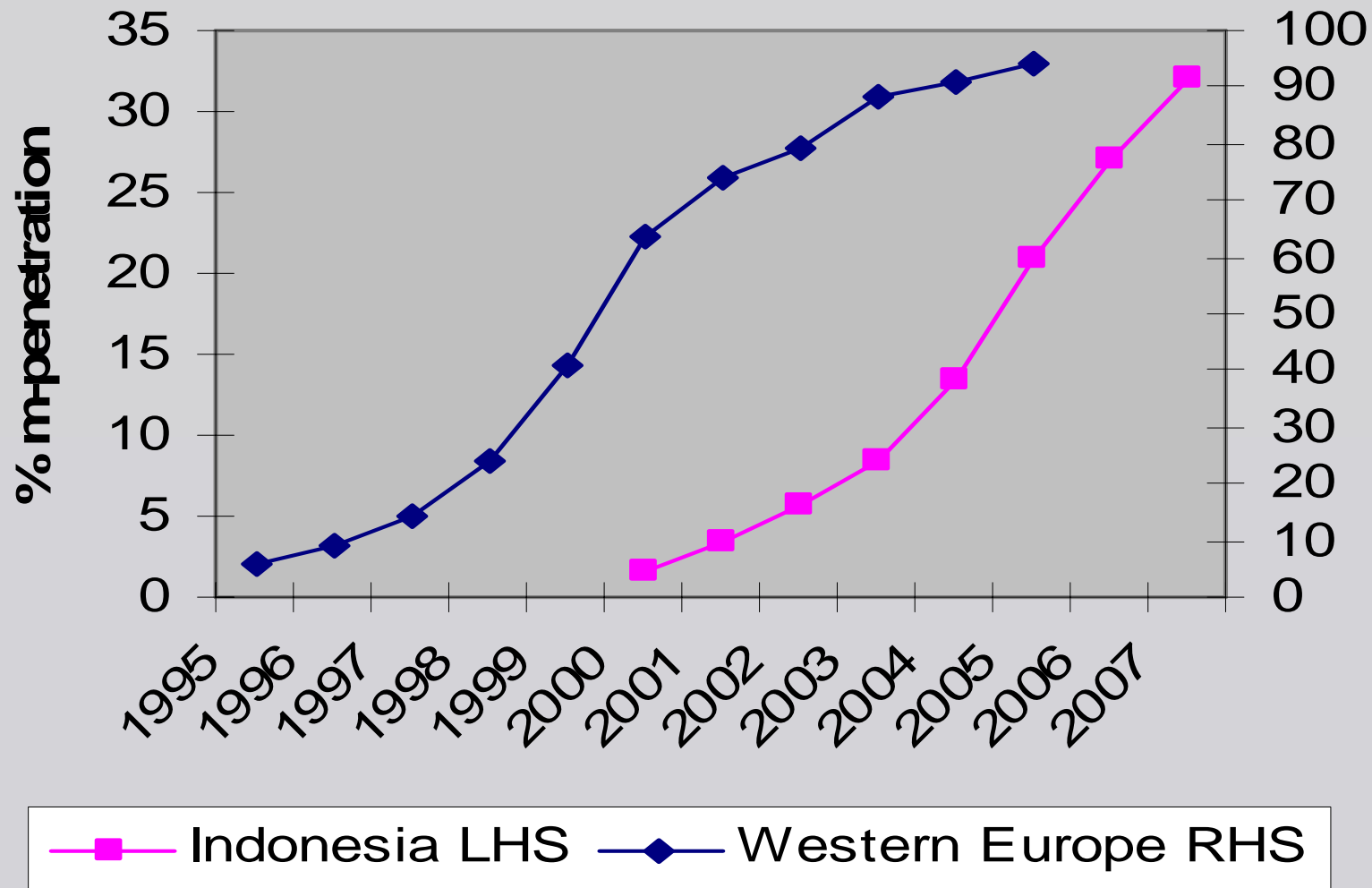
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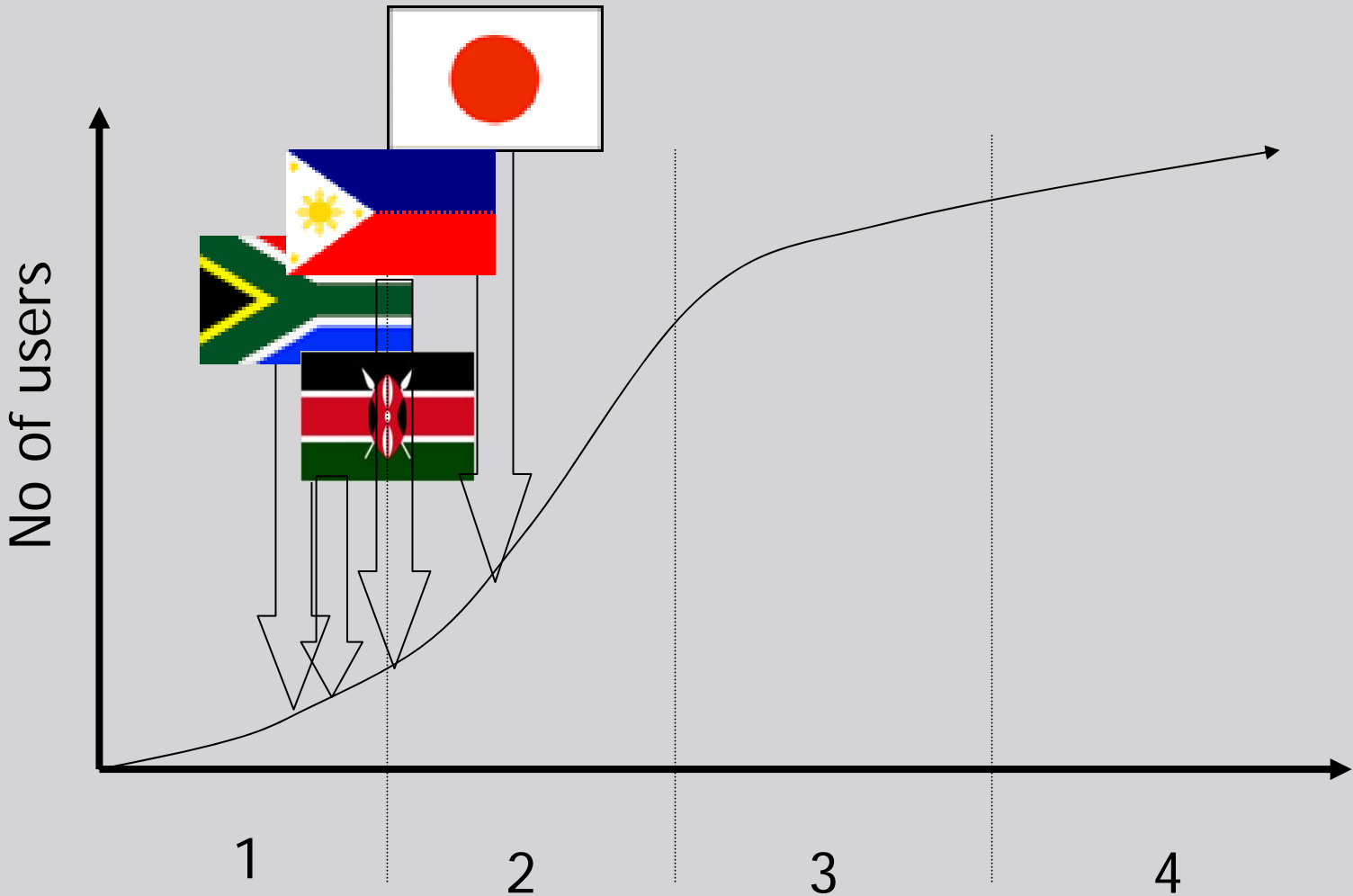


# Mobile penetration follows the S-curve

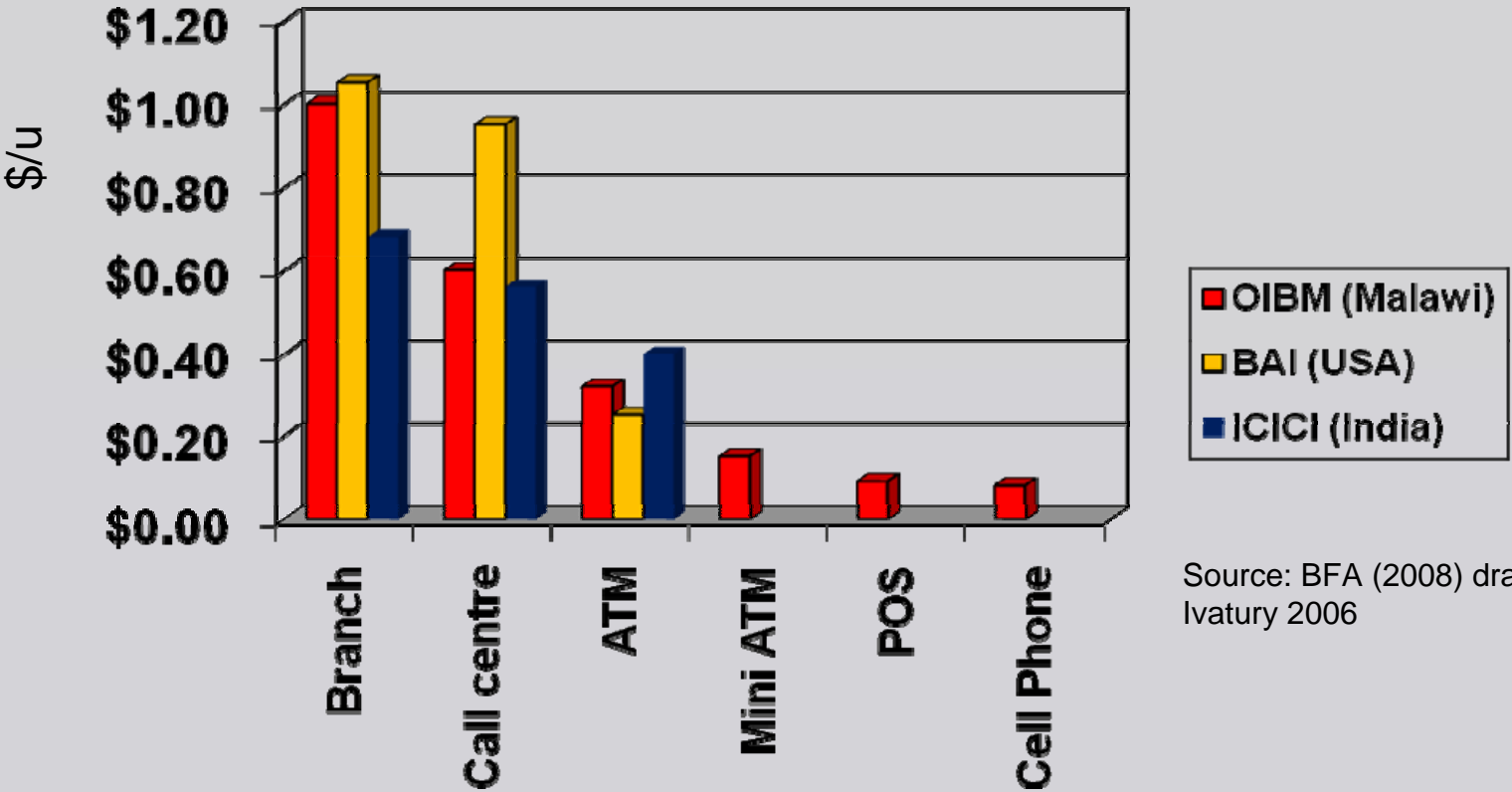


Source: ITU 2004/ WI 2007

# Current reality: m-payments



# The main motivation is reducing transactions costs



Source: BFA (2008) drawing on Ivatury 2006

But for telcos—also to increase ARPU & reduce churn

# Who is eligible? A basic segmentation

		Client has mobile phone?	
		Yes	No
Client has bank account?	Yes	Additive (13%)	Growth (6%)
	No	Transformational (13%)	Future market (68%)



*% are for Kenyan adults 2006  
Source: FinAccess Kenya 2006*

# A mobile money model comprises:

Legal liability	Who is legally responsible for the store of value?
Brand	Whose brand is at risk?
Access points	Where can the service be started and Where can it be accessed?
One or any carriers?	Is it linked to one MNO or none?




# 1. Bank driven

Legal liability	<b>Bank</b>	
Brand	<b>Bank</b>	
Access points	<b>Bank</b>	
One or any carriers?	<b>Any</b>	
Examples		

## 2. Joint venture (NonBank/ Bank)





Legal liability	Bank	<b>Bank</b>	
Brand	Bank	<b>Joint—non-bank</b>	
Access points	Bank	<b>Bank + new agents</b>	
One or any carriers?	Any	<b>One</b>	
Examples			

# 3. Payment platform





Legal liability	Bank	Bank	<b>Multiple banks</b>
Brand	Bank	Joint—non-bank	<b>Own</b>
Access points	Bank	Bank + new agents	<b>Bank + new agents</b>
One or any carriers?	Any	One	<b>One or any</b>
Examples			



# 4. Non-bank driven

Legal liability	Bank	Bank	Multiple banks	<b>Non Bank</b>
Brand	Bank	Joint—non-bank	Own	<b>Non Bank</b>
Access points	Bank	Bank + new agents	Bank + new agents	<b>Agents</b>
One or any carriers?	Any	One	One or any	<b>One</b>
Examples				

# Summary

	1. Bank driven	2. JV	3. M-payment platform	4. Non-bank driven
Legal liability	Bank	Bank	Multiple banks	Non Bank
Brand	Bank	Joint—non-bank	Own	Non Bank
Access points	Bank	Bank + new agents	Bank + new agents	Agents
One or any carriers?	Any	One	One or any	One
Examples				

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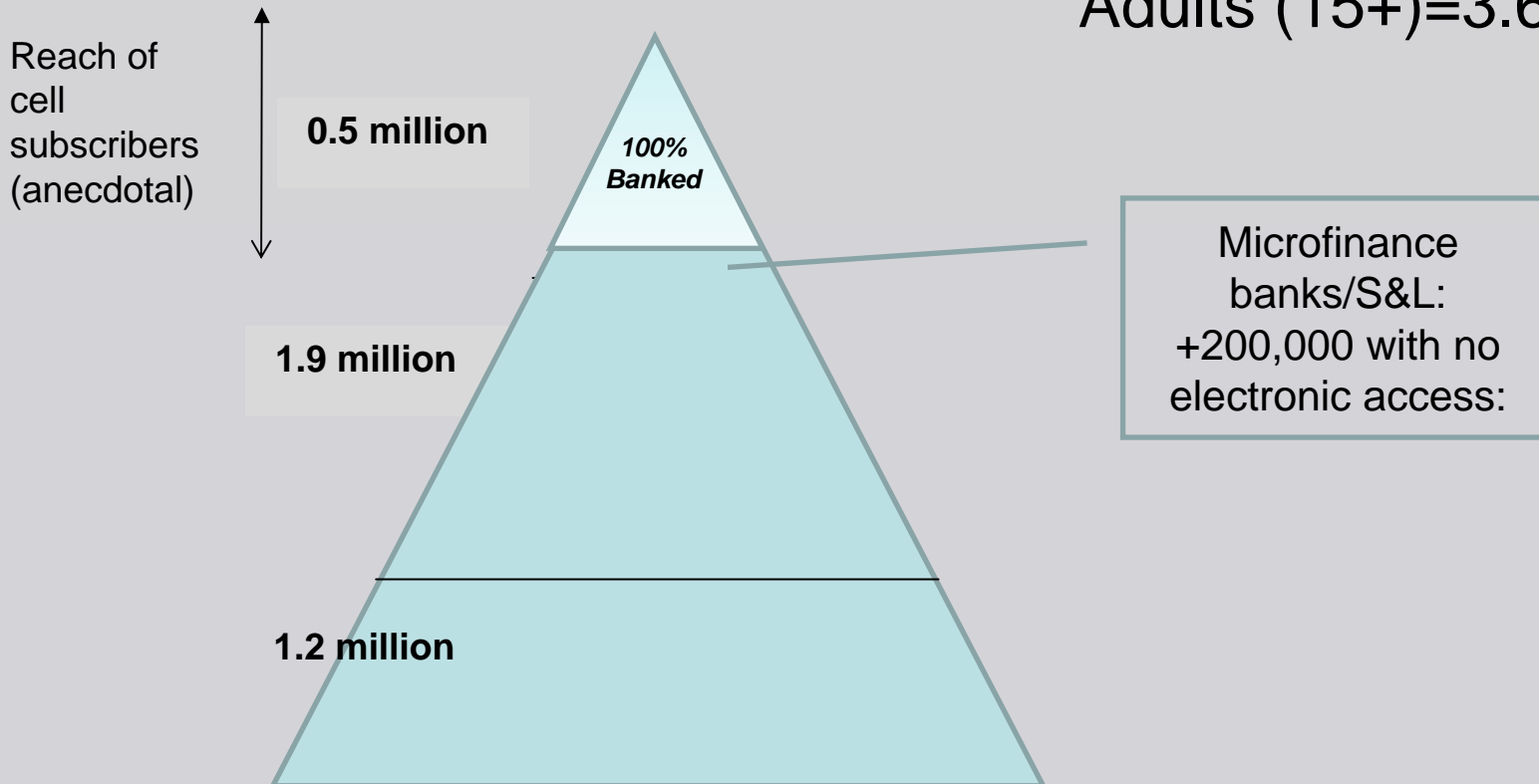
# There is strong demand for transactional banking products

- Takeup: e.g. BSP debit card, microfinance
- Attitudes towards formal institutions: seem positive
- Remittances: currently low but likely to rise
- Alternatives for domestic transfers limited




# The additional market may be 1.9m adults

## PNG : Income Distribution Pyramid

Population= 6m  
Adults (15+)=3.6m






# Benchmarking access in PNG

	<b>PNG</b> 	<b>Kenya</b> 	<b>Philippines</b> 
1. GNI pc (US\$ current)	\$850	\$680	\$1620
2. Area 000 km2	452	569	298
3. % Rural	87%	79%	36%

Source: WDI (2007)

# PNG is close to LIC norms for banking

	<b>PNG</b> 	<b>Kenya</b> 	<b>Philippines</b> 
3. % banked	16% <sup>e</sup>	19%	26%
4. % mobile penetration	10% <sup>e</sup>	30%	50%
Per 100,000:			
5. Branches	1.3	1.4	9
6. ATM	3.2	2.3	7.5
7. EFTPOS	64	6.8	55
8. Touch pts/000 km <sup>2</sup>	9.25	4.1	223

Source: I4: WDI  
L3,5,6,7: PNG: interviews; other countries: various

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# The outlook for m-banking is favorable, but with risks

- ❖ Both MNOs can technologically support m-banking
- ❖ Coverage already of large proportion of additional market (80%); coverage & acquisition race is expanding addressable market
- ❖ The regulatory environment does not block innovation but may be too uncertain in some respects
- ❖ All major banks have expressed intention to implement m-banking
- ❖ Broader economic and social environment supports move to e-cash and P2P





**Thank you!**

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# The regulatory implications of mobile money

Mobile Money Seminar  
Port Moresby 21-22 October 2008

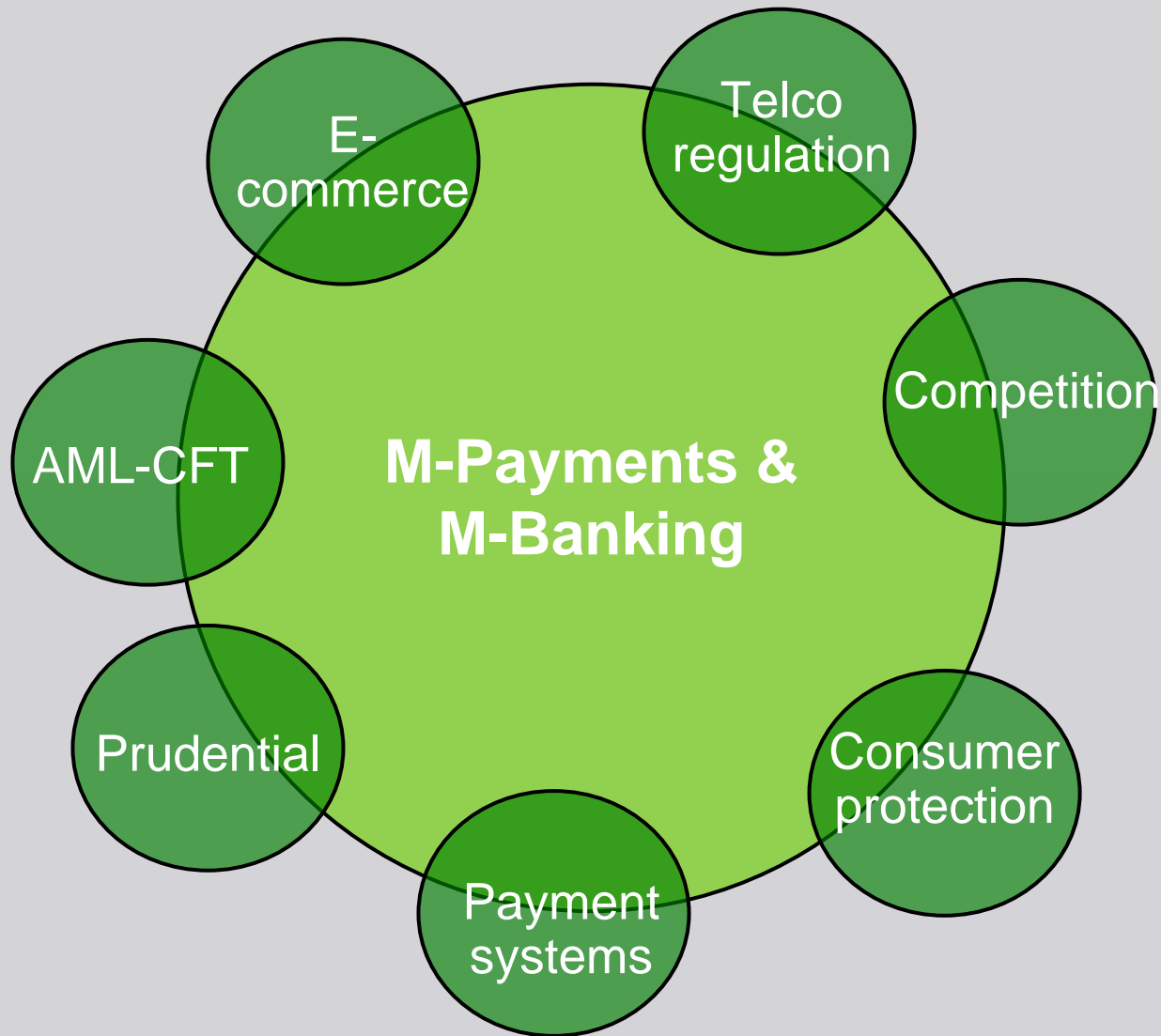
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# Contents

- ❖ What are the key policy & regulatory issues?
  - How to ensure financial integrity and avoid money laundering?
- ❖ How to create effective cross-sector regulation?
- ❖ How best to engage regulators?

# There are overlapping domains & issues



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# There are two ‘necessary but not sufficient’ preconditions

- ❖ Authorization to use ***retail ‘agents’*** as the cash-in/cash-out point and principal customer interface
- ❖ Risk-based approach for combating money-laundering and terrorist financing ***adapted to realities of remote transactions conducted through agents***

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# Next generation topics

- ❖ Regulation to ***mitigate risk of catastrophic failure***
- ❖ Issues that will affect ***scaling up*** and ***sustainability*** of branchless banking
  
- ❖ ***Issues:***
  - Appropriate regulatory space for the issuance of ***e-money*** and other stored-value instruments
  - Effective ***consumer protection*** (on a variety of fronts)
  - Inclusive ***payment system regulation*** and effective oversight as branchless banking reaches scale
  - Rules governing ***competition*** among providers and promoting ***interoperability***

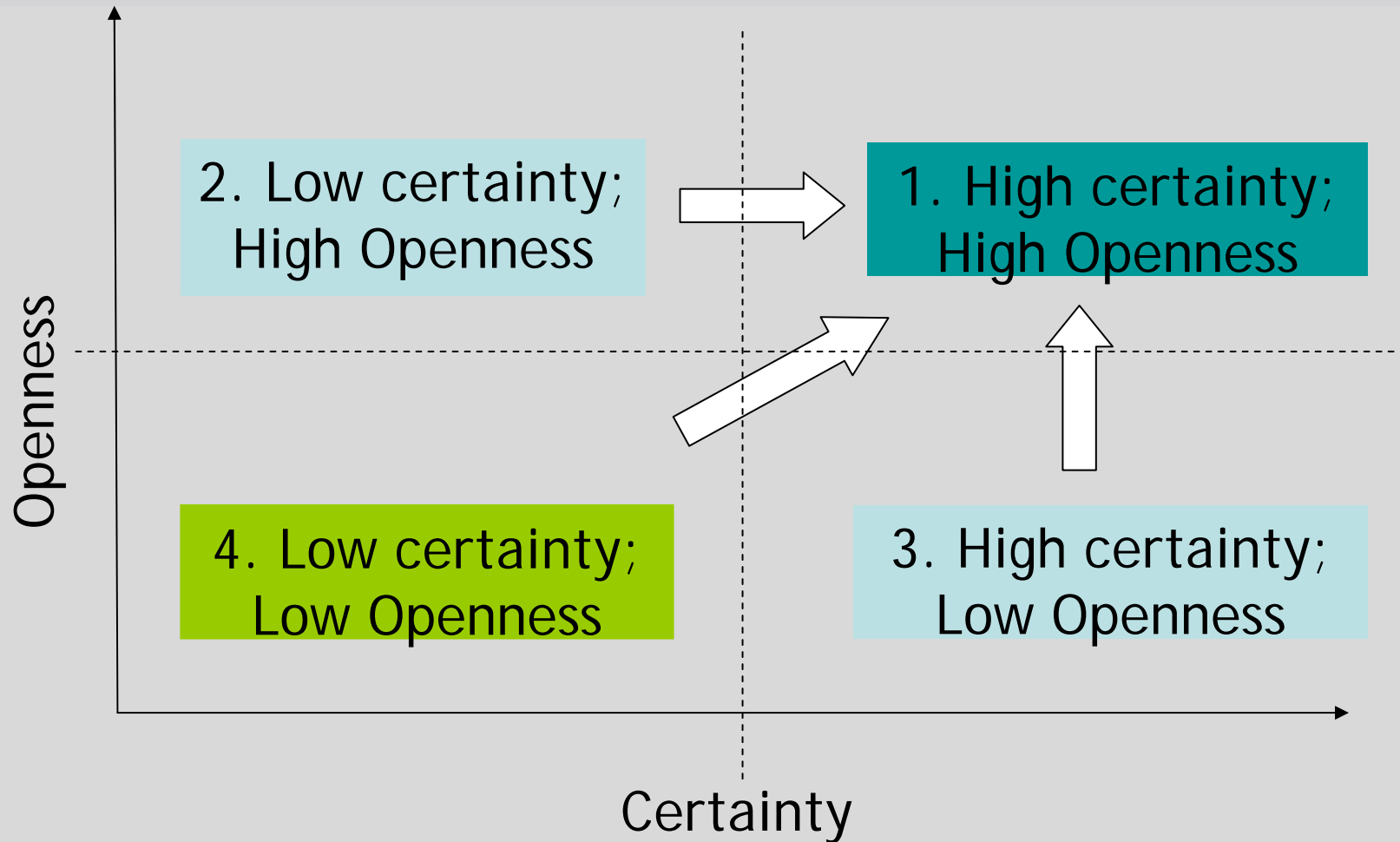
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# What constitutes a proportionate regulatory approach?

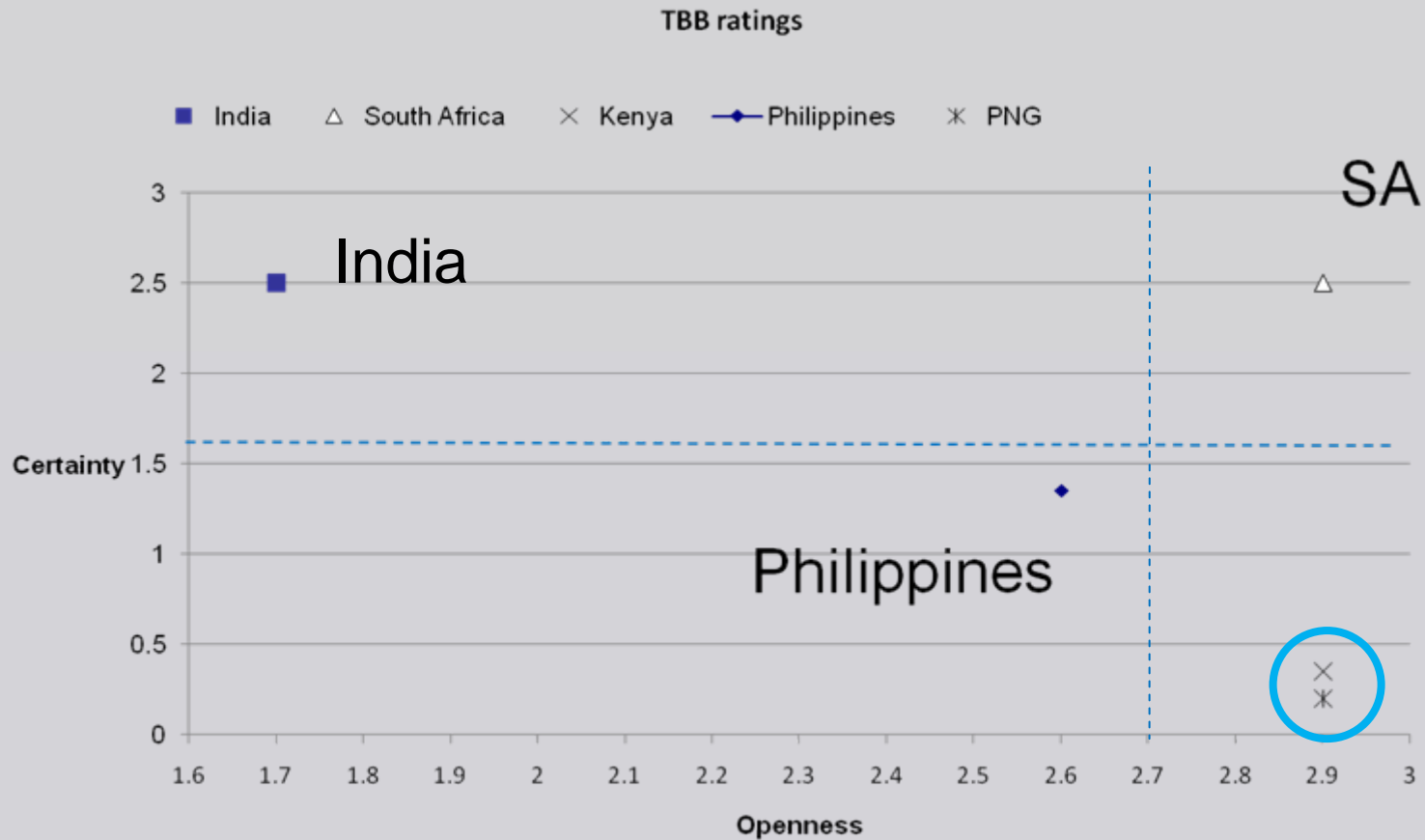
- ❖ Existing regulation not drafted with convergence of banking, payments and telecommunications in mind
  - So it is **both over- and under-protective**
- ❖ Pace of change (including change in scale) can be rapid
- ❖ Proportionate regulation *balances openness to innovation with sufficient certainty for providers and consumers as to costs and risks*

# What is an enabling environment?





# The regulatory environment in PNG is highly open to TBB but quite uncertain



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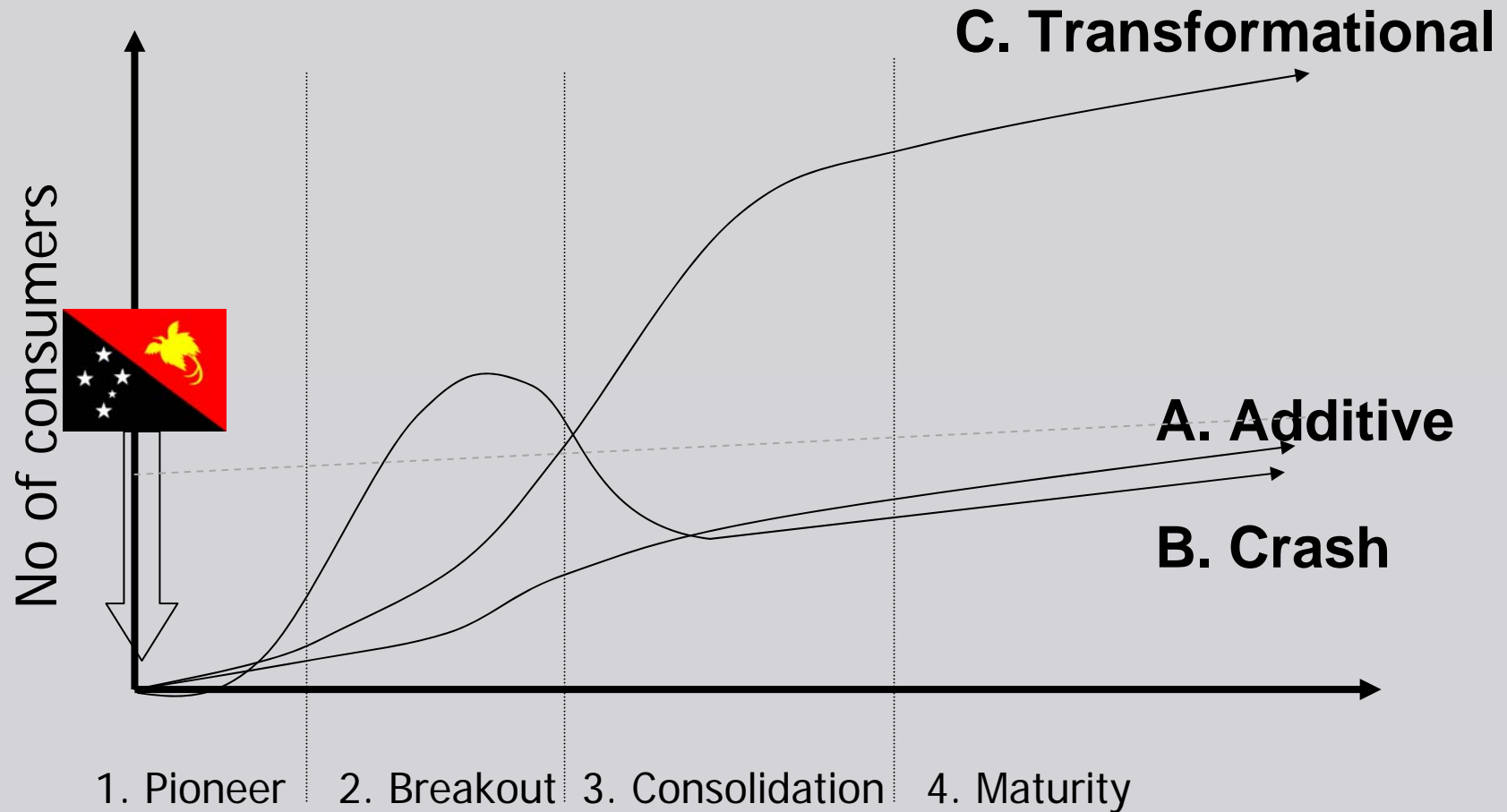
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# Engaging regulators

Regulators differ in their authority and in their attitudes towards innovation, but:

- ❖ Good practice: engage early
  - E.g. Philippines
- ❖ When is authorization or no objection required?
  - E.g. Kenya
- ❖ Maintain good practice even when not required to do so
  - E.g. Vodafone

# On which trajectory is PNG?



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**Thank you!**

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