

## *Legal and Regulatory Barriers to Entrepreneurship and Innovation:*

### *The Case of Mobile Banking*

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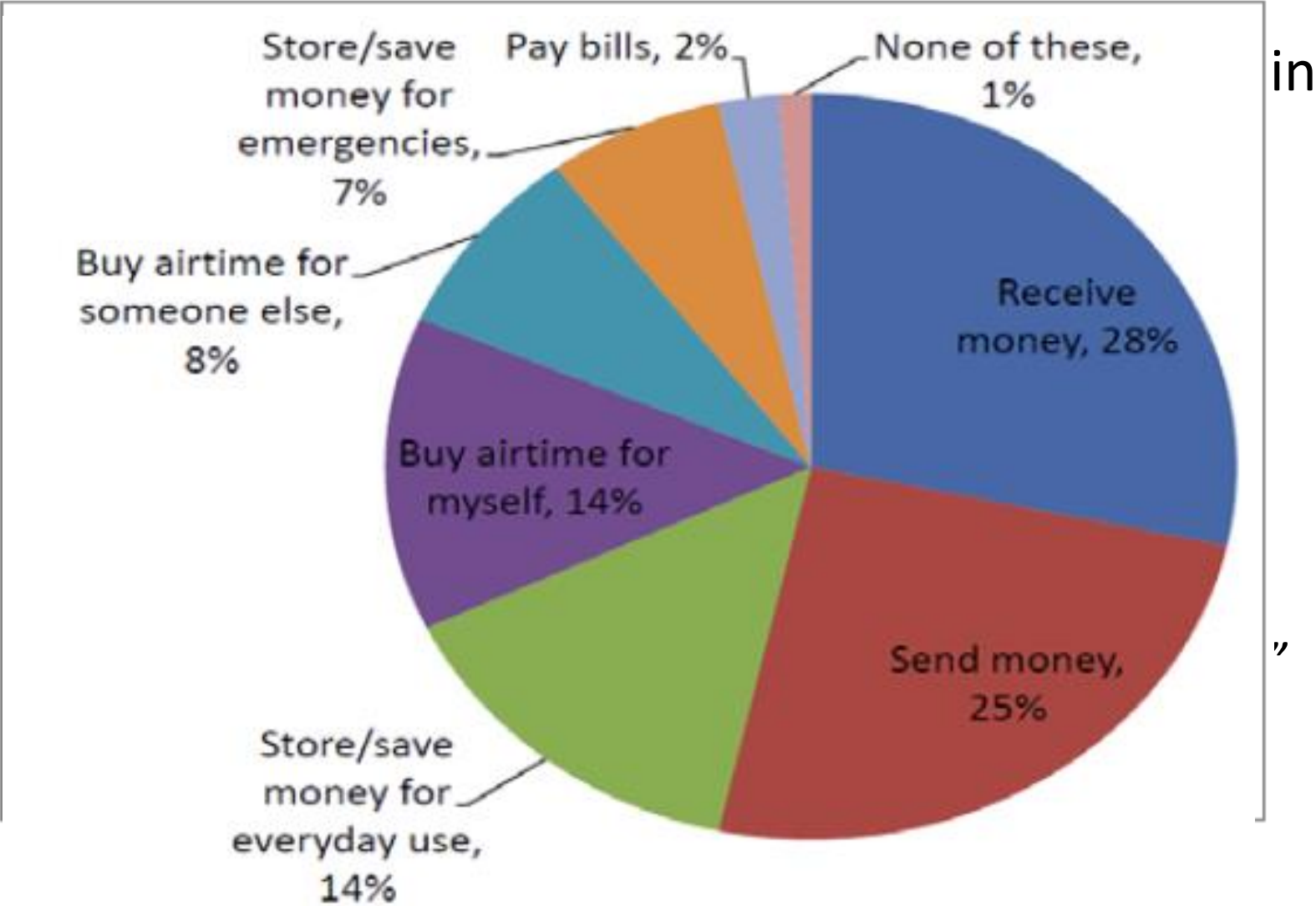
# Presentation Outline

- A Tale of two Institutional Contexts
  - The Emergence of Mobile Financial Services in Kenya and Jamaica
- Institutions Matter!
- A Comparative Analysis of Legal and Regulatory Artifacts – Kenya & Jamaica
- Some Conclusions

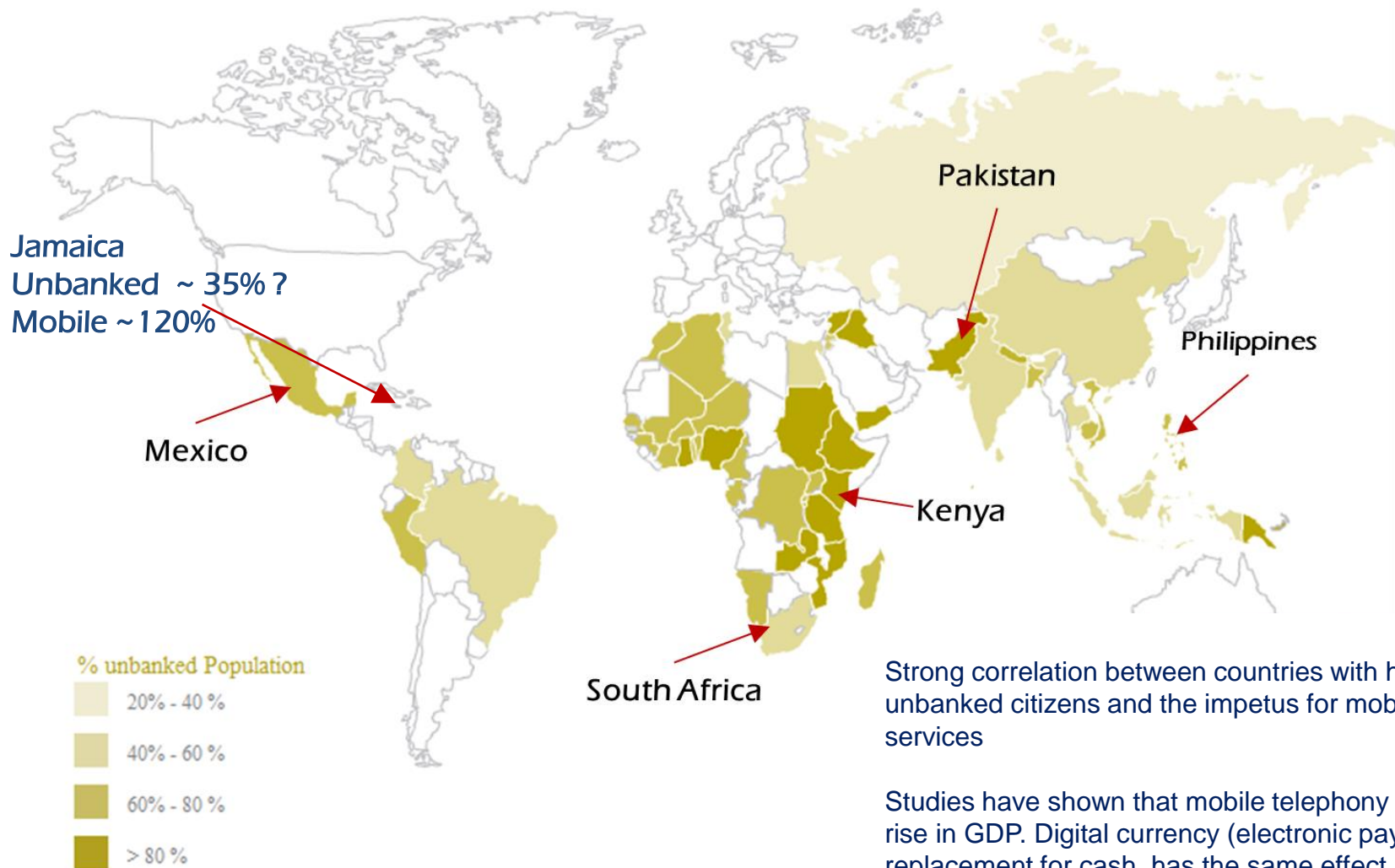
# Mobile Financial Services in Kenya

Dates	Key Events / Developments
Jun, 2006	Financial Access Survey of 2006 highlighted the very low reach of the traditional banking sector in Kenya <ul style="list-style-type: none"><li>- 70% rural population; 19% Kenyans with bank accounts;</li><li>- 1.5 bank branches and 1 ATM per 100,000 people</li><li>- Mobile phone penetration ~30 percent and growing much faster</li></ul>
Aug, 2006	Safaricom approaches the Central Bank of Kenya (CBK) regarding M-Pesa
Sep 2006 – Jan 2007	CBK conducts detailed assessment / due diligence of M-Pesa systems, risk mitigation program; Legal opinion determines that M-Pesa is not banking business
Feb, 2007	Safaricom issued a “Letter of No Objection” by the CBK
Mar, 2007	M-Pesa mobile phone-based payment and money transfer service, officially launched by Safaricom in March 2007
June, 2007	M-Pesa: 175,000 customers, 577 agents
May, 2008	2.5m active M-Pesa customers
Sep, 2008	4m customers, 4,230 agents; Survey of 3,000 M-Pesa users (shows high usage & product confidence)

# Mobile Financial Services in Kenya



# Unbanked Population and Mobile Financial Services



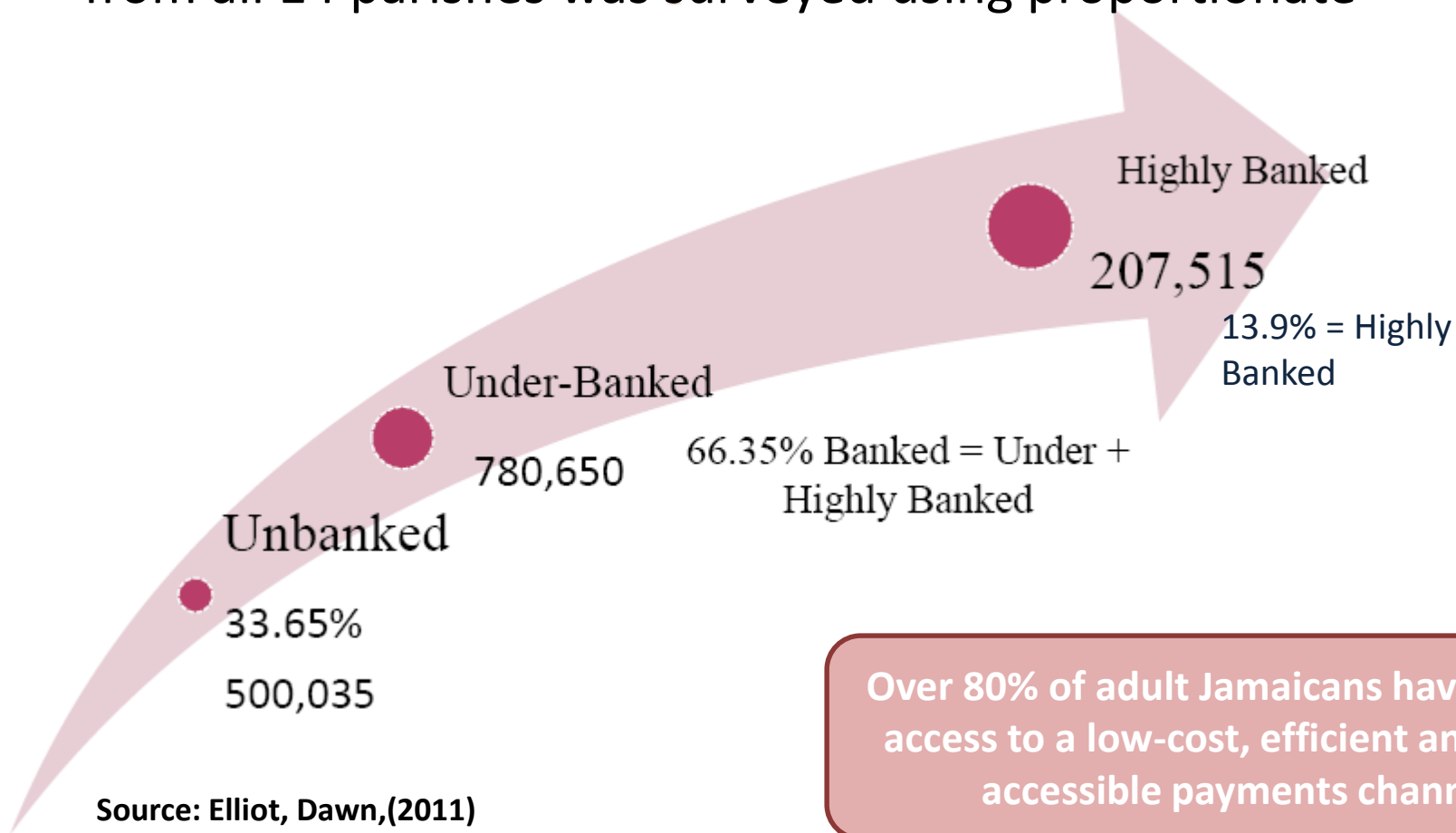
Strong correlation between countries with high levels of unbanked citizens and the impetus for mobile financial services

Studies have shown that mobile telephony leads to a rise in GDP. Digital currency (electronic payments), as a replacement for cash, has the same effect

Jamaica is well-positioned in terms of mobile penetration and the value opportunity for establishing a more efficient way of delivering financial transactional services

# UWI-led Research Findings (2011)

- A randomly-selected, nationally representative sample of two thousand four hundred and seventy six (2476) respondents from all 14 parishes was surveyed using proportionate



Over 80% of adult Jamaicans have limited access to a low-cost, efficient and easily accessible payments channel

# Mobile Financial Services in Jamaica

Dates	Key Events / Developments
2011	<p>UWI-led Research/Survey of 2011 highlighted value opportunity for mobile payments system in Jamaica:</p> <ul style="list-style-type: none"> <li>- 65% Jamaicans banked, but only 14% with transactional accounts;</li> <li>- Bank Branch/ATM 6.64 per 100,000 people</li> <li>- Mobile phone penetration &gt;100 percent and growing</li> </ul>
Apr, 2013	<p>Bank of Jamaica (BOJ) issues “Guidelines for Electronic Retail Payment Services” - operating parameters for providers of electronic retail payment services (<i>including mobile payments</i>) - <b><i>defines electronic payments as being anchored in the Banking infrastructure</i></b></p>
Apr 2014 – Jul 2015	<p>BOJ has received 13 applications from various entities for authorization to provide electronic retail payment services primarily using mobile devices.</p>
Jun, 2014	<p><b>Banking Services Act</b> - Legislation that provides Agent banking framework that enables commercial banks and other deposit taking institutions to use agents in the delivery of banking services</p>
Sep – Dec, 2014	<p>Authorized Pilots / Trial testing of mobile banking services by several applicants: DBJ and Jamaica Co-operative Credit Union League , GKRS</p>

**Institutions Matter!**



# Institutions – What are they?

- “..humanly devised constraints that structure political, economic and social interaction. They consist of both informal constraints (sanctions, taboos, customs, traditions, and codes of conduct), and formal rules (constitutions, laws, property rights).
- Throughout history, institutions have been devised by human beings **to create order and reduce uncertainty in exchange**. Together with the standard constraints of economics they define the choice set and therefore determine transaction and production costs and hence the profitability and feasibility of engaging in economic activity.”

North (1991)

"when it is costly to transact, institutions matter..."

# Theoretical Basis

## Organizational Economics / New Institutional Economics



Level	Content	Academic Study Areas	Theoretical Lens	Institutional Purpose
<b>Social Embeddedness</b>	Informal Institutions: Customs, Traditions, Norms Ethics/Morality	Eg. Sociology, Cultural Anthropology		Spontaneous, Non-calculative
<b>Institutional Environment</b>	Formal institutions: Polity, Judiciary, Regulatory	Eg. Political Science, Legal Studies	Evolutionary economics, Property Rights, <i>Transaction Cost Economics</i>	Get Institutional Environment Right 1 <sup>st</sup> Order Economizing
<b>Institutional Governance</b>	Economic structures, Organization of Industry, Transactions and contract	Industrial Organization, Organizational Economics	<i>Transaction Cost Economics</i> , Incomplete contracts, Resource Dependence Theory	Get Economic Governance Structure Right 2 <sup>nd</sup> Order Economizing
<b>Resource Allocation and Coordination</b>	Resource Allocation and employment, Internal/external coordination, Price-Quantity, Incentive Alignment	Micro economics, Strategic Management, Organization Theory	Neo-classical economics, Agency theory, Capabilities / Competence Theories, <i>Information Processing theory</i>	Get Resource Allocation and Marginal conditions Right: 3 <sup>rd</sup> Order Economizing

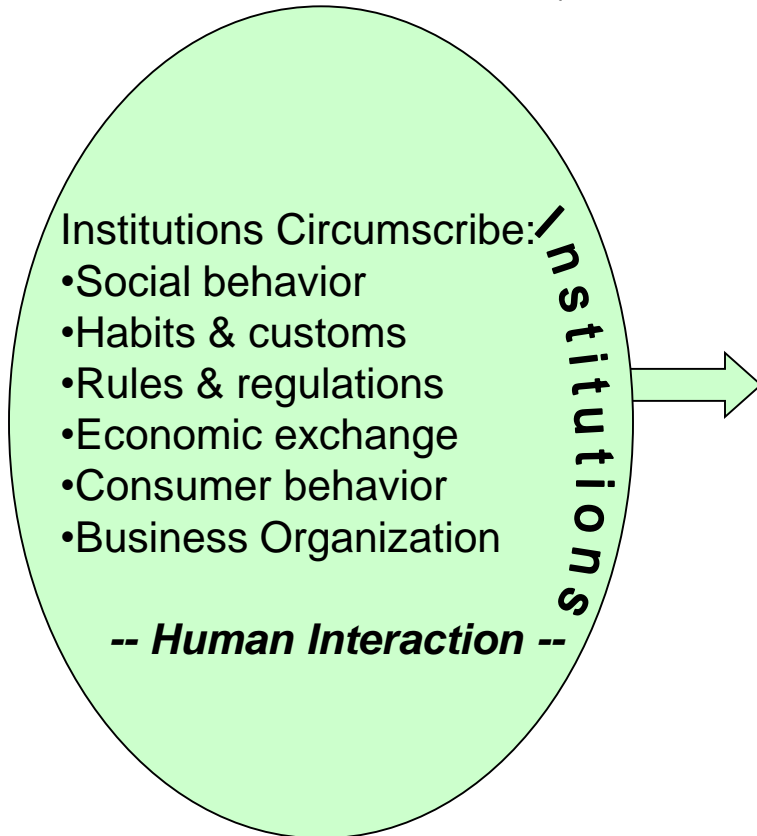
### New Institutional Economics

- Institutions do matter, Institutions are subject to economic analysis – **Matthews, 1986; North, 1991**
- TCE is a guide to theory of exchange, but also institutional analysis – **Coase, 1962; Williamson, 1998**

# Institutions & Technology Interdependence

## Institutions are:

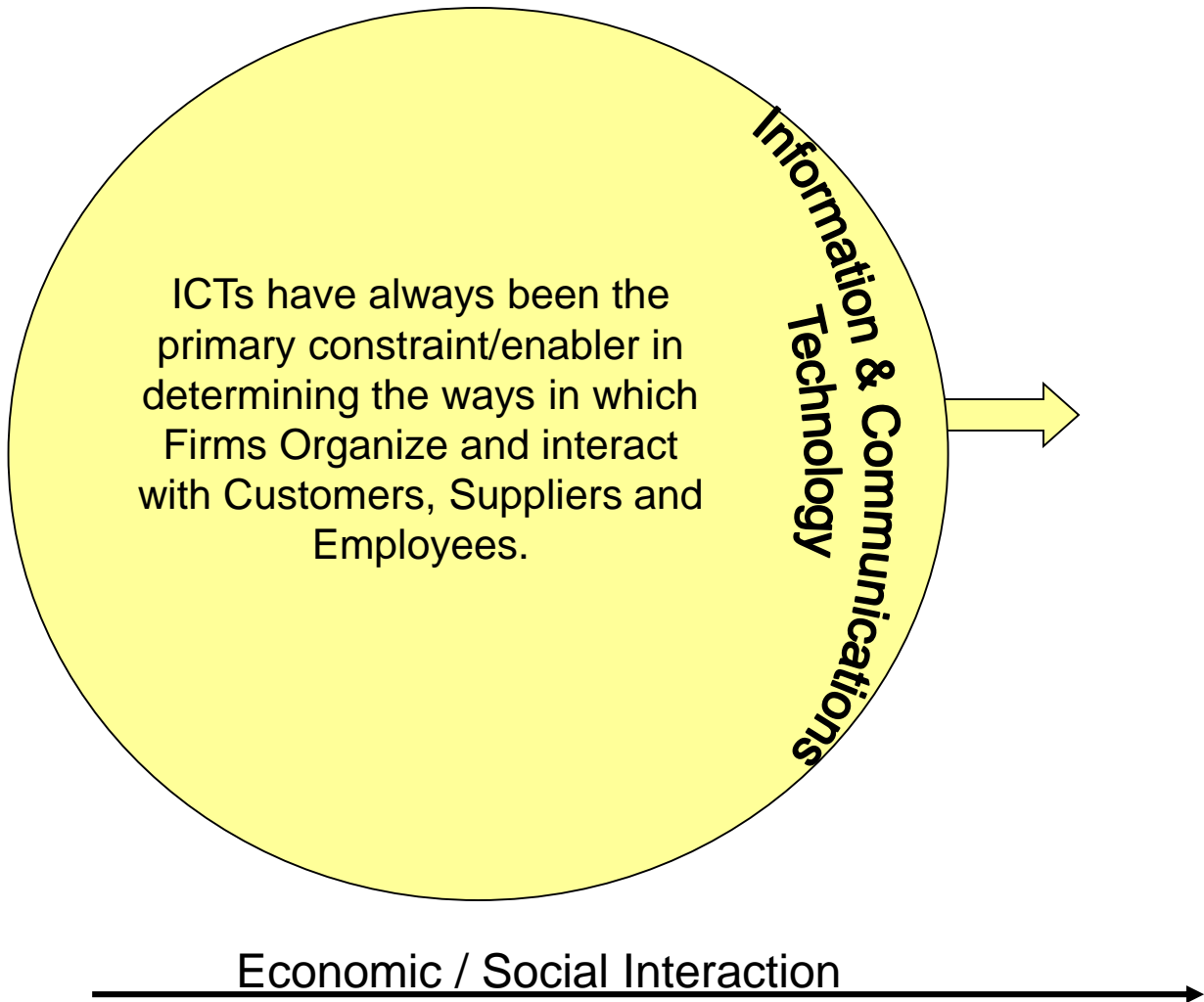
- “..humanly devised constraints that structure political, economic and social interaction. They consist of both informal constraints (sanctions, taboos, customs, traditions, and codes of conduct), and formal rules (constitutions, laws, property rights) -- North (1991)



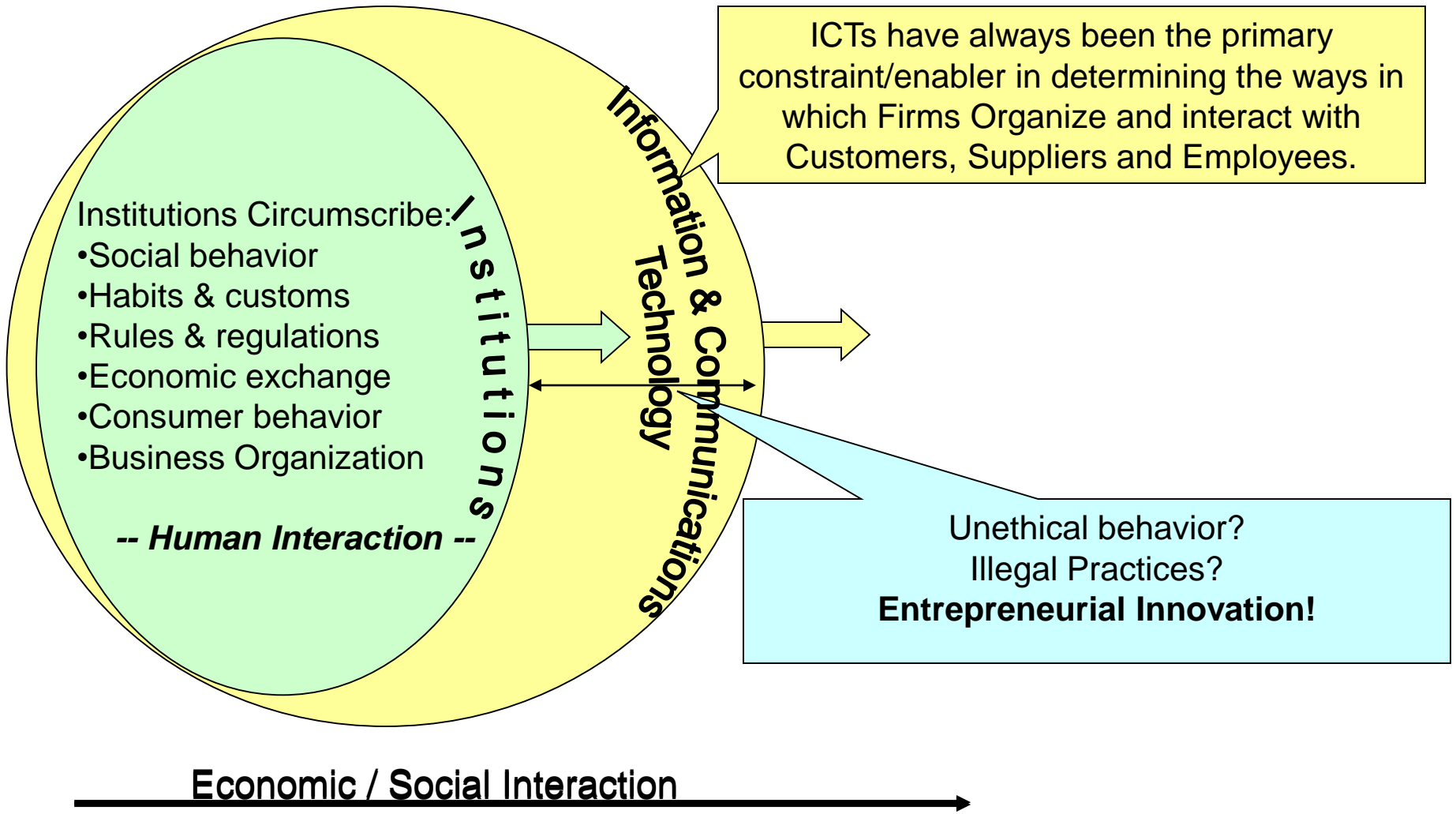
<b>Institutional Level</b>	
<b>I. Social Context</b>	Informal Institutions: Customs, Traditions, Norms Ethics/Morality
<b>II. Institutional Environment</b>	Formal institutions: (Polity, Judiciary, Regulatory) where the formal rules of the game are articulated through political, legal and bureaucratic structures
<b>III. Institutions of Governance</b>	Economic institutions where the structures, rules and practices explicitly related to economic activity are defined and conducted. (Organization of Industry, markets, hierarchies, regulation)

Economic / Social Interaction →

# Institutions & Technology Interdependence



# Institutions & Technology Interdependence



Institutional Artifacts  
- Legislation, Regulations, Guidelines

# Key Institutional Artifacts

## Kenya

- The Central Bank of Kenya Act (2003) gives CBK broad oversight mandate over payment systems
- CBK's agency guidelines issued in 2011
- National Payment Systems Act (2014) to regulate mobile transfers

## Jamaica

- Electronic Money Order Act (2006) of the BOJ along with the Electronic Transactions Act (2006) – established electronic money as business of banks
- Payment Clearing & Settlement Act (2010) gives BOJ responsibility for oversight of national payment systems
- Guidelines for Retail Payment Services (2013)
- Banking Services Act (2014) – Omnibus Legislation that provides Agent banking framework; Regulations still being developed

# Some Preliminary Conclusions...

- Legislation/Regulations and Technology are interdependent institutional actors
- Path Dependency influences Institutional effects
- Moderately loose regulatory structure facilitated the development and success of the M-Pesa system
- Conservative Regulation can be the enemy of Innovation
- Ideally: Regulatory response should adopt an incremental, adaptive and proportionate approach, that balances multiple goals of *financial inclusion, innovation and entrepreneurship* while maintaining *stability of the financial system*
- *Institutions matter*: The legislative & regulatory framework imposed will determine the rate of development, scalability & scope of MFS entrepreneurial initiatives