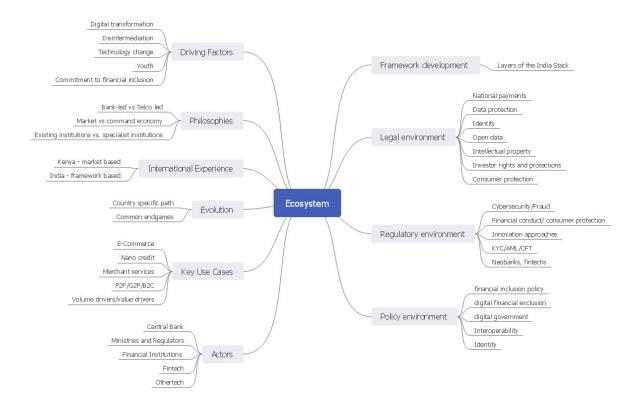


Enabling Ecosystems for Digital Finance

David Cracknell



Mobile money and agent banking have significantly increased financial access across Africa and Asia through creating access to basic accounts operated through agents and mobile devices. However, whilst Kenya and Ghana lead adoption in Africa, other countries have moved forward much less quickly. Part of the reason Kenya and Ghana have moved ahead relates to the creation of enabling ecosystems for digital finance. This blog provides insights into an enabling ecosystem, through examining, regulatory attitudes, competition, ecosystem drivers, financial technology, and digital identity. It highlights how policy and the philosophies driving policy makers and regulators influence ecosystems. It looks at future drivers, the factors which will influence ecosystems moving forward.

<u>Regulatory environment</u>: Regulators and policy makers enable mobile money and agent banking, their attitudes towards the operation of mobile money through mobile network operators — telco-led or through banks, bank-led have a significant impact on the extent and speed of outreach. Where bank-led approaches are mandated growth can be slower as banks fail to leverage the huge existing customer base, and distribution network of the MNOs. In response to slow outreach - some countries such as India and Nigeria — reregulate mobile money operations and facilitate the creation of supervised payment banks.

In facilitating the transition to digital finance, the capacity of the regulator, typically the payment systems department, must develop in competencies and scale. In addition, enabling regulation must include the development and/or modification of guidelines and capacity in risk management, cybersecurity, data protection, fraud, and outsourcing.

Regulatory overlap occurs and can have a defining impact. In the DFS ecosystem, the relationship between the Central Bank, the Telecommunications regulator is important, specifically in defining how mobile money regulation is to be applied. However, as systems evolve other relationships emerge including competition regulation, data privacy regulation, and consumer protection. As the ecosystem develops, and as government digitises, intra regulator and intra ministry coordination and cooperation becomes critical.

Once in operation and at scale, the role of the regulator evolves to supporting and stimulating innovation, often through 'test and learn' approaches and 'sandboxes', and through ensuring that issues related to digital financial access, and consumer protection are addressed.

Over time, as there is disintermediation within the financial sector, facilitated in part through financial technology, issues arise in relation to how to regulate financial conduct. This creates pressures for alternative regulatory forms such as the so called 'Twin Peaks' model — dividing supervision and financial conduct, and for a move towards principles-based regulation which the MAS is experimenting with.

These questions on the regulatory environment are fundamental to ecosystem development, but are uniquely challenging and justify international collaboration between regulators and policy makers, such as through the Alliance for Financial Inclusion (AFI), the G20, etc.

<u>Competitive environment</u>: The competitive environment has significant implications for the development of the ecosystem. Where there is a single dominant mobile money operator, the mobile money ecosystem can develop rapidly around the operator. This happened with Safaricom's M-Pesa in Kenya, and to a lesser extent with bKash in Bangladesh. However, Safaricom was much quicker than bKash to build banks into its ecosystem, creating widespread interoperability through its own platform.

Where there are several equally sized providers, then interoperability between providers through a third entity can boost transactions over the whole system, as in Tanzania. Where there is de facto duopoly the competitive environment can encourage providers to create competing ecosystems and a mentality of keeping transactions 'On Us' at the expense of growing transactions nationally.

Legal environment: The legal environment can be especially complex and demanding with a different path depending on the legal systems in use – for example Roman, Dutch and British law defines what is illegal, verses Spanish or French law, which defines what is legal. Constraints are often country specific and relate to the legal process – how legislation is passed into law, how long it takes, and the degree to which there is direction verses delegated responsibilities to regulators. For example, historically, Kenya has a process of making small legal changes annually through amendments to the Finance Act, which facilitates small incremental changes. In Rwanda if there is political support, laws can change rapidly. In Zambia, constraints on legal drafting have delayed legislative updating. In Kenya, higher degrees of regulatory autonomy have facilitated ecosystem development over some neighbouring countries.

The challenge facing every country, is the pace of change and what this means for the development of a supporting legal environment. This can be seen clearly in National Payments Acts. Historically, this

legislation changed infrequently and was simply updated to incorporate international developments in payment systems. However, today, National Payments Acts define the roles and responsibilities of a range of new actors which are vital for the functioning of the financial system and the incorporation of new entities — called Payment Service Providers and Technical Service Providers. They provide powers that enable these entities to be acknowledged and appropriately supervised.

Ecosystem drivers: Ecosystem drivers are those 'use cases' which drive transactions and stimulate adoption. Whilst the 'opportunity set' of ecosystem actors may be relatively constant, the drivers that matter in specific economies differ and reflect the enabling ecosystem in each country. In Nigeria – foreign currency transactions and ecommerce lead; in Kenya – sending money home, merchant services and nano credit came first. In East Africa generally, PayGo services for electricity have stimulated not only solar power but a new form of short term, loan guarantee against a functioning electricity supply. Not all ecosystem drivers are socially acceptable – the role of mobile money in facilitating gambling is an example.

In countries with widespread social protection mechanisms a key ecosystem driver has been Government to Person (G2P) subsidies. The challenge is how G2P payments can be used to stimulate wider adoption of digital financial services, and not just a withdrawal transaction.

Perhaps the most significant recent ecosystem driver has been Covid-19. A reluctance to handle cash has stimulated cashless transactions. Use cases around e-health, e-education, e-commerce, have been given a significant boost. Faced with high cost to income ratios and rising bad debts – the incentive for banks to digitise for cost control and efficiency has increased dramatically.

<u>Financial technology</u>: A healthy financial technology industry is both stimulated by a well-developed ecosystem and further develops that ecosystem. Regional hubs in China, Singapore, India, Kenya, Nigeria, and South Africa are driving change outside Europe and the USA. Nairobi's 'Silicon Savana' is home to 25% of Africa's agricultural technology industry. Singapore's thriving fintech industry is a major factor in driving the Monetary Authority of Singapore to consider new forms of regulation.

<u>Digital Identity</u>: The Maya declaration committed signatories to promote financial inclusion. Huge increases in account ownership have been achieved through mobile money and agent banking facilitating access to financial services. In this transition, digital identity facilitates e-KYC, third party assisted account opening, and reliable and legally enforceable digital signatures.

<u>Policy Imperatives</u>: Policy has significant impact on how a digital ecosystem develops. For example, Kenya's digital government initiatives through its e-citizen portal have dramatically simplified business registrations, licenses, and permits. It has stimulated process integration between government departments - which is ongoing. The Better than Cash Alliance – goes further and supports the digitisation of Government receipts and payments as a key driver in moving towards 'cash lite'. So national policies in respect of digitisation and in respect of digital finance can significantly increase the speed and depth of the development of the digital finance ecosystem.

Philosophies: Policy imperatives towards the ecosystem are guided by two approaches

i. Bank-led vs MNO led: Under bank led approaches control of payments is retained within formal regulated financial institutions. MNO led approaches effectively differentiate between financial services and payment services. A middle ground has been the development of 'payment banks' for example in India and Nigeria, that seeks to exploit the flexibility and outreach of MNOs with the control and risk management of financial institutions. ii. Market led vs Interventionalist: Market led approaches wait for market forces to stimulate collective actions, for example, the Pesalink bank to bank payment platform in Kenya, or the shared agent initiative of the Uganda Banker's Association. Interventionalist approaches see the state subsidising national infrastructure, for example the India Stack.

Future Drivers:

So, given these factors what will drive the future:

- 1. Supportive digital government and digital finance policies: Continued transition to digital government, including government to person and person to government payments. A policy framework towards digital finance which addresses emerging issues such as cybersecurity, open data, data protection, consumer protection and digital financial exclusion.
- 2. Regulatory flexibility: Facilitating and enabling new solutions to be developed, tested, and rolled out efficiently. A poorly implemented or supported sandbox can become a constraint to development. Increasingly regulators need to be responsive to issues of financial conduct either through developing new regulatory forms such as financial conduct authorities or/and through issues-based regulations and guidelines.
- 3. Shared platforms: Software as a Service approaches will have a profound impact on the financial sector, for example, enabling even smaller institutions to operate competitive services, safely, through Banking as a Service.
- 4. Adoption of blockchain: Beyond the cybercurrency debate, blockchain will have profound impact on the financial sector, through facilitating commercial transactions and through unlocking capital, through collateral registries and land registries.
- 5. International co-operation: Given the rapid pace of change international cooperation and initiatives such as the Alliance for Financial Inclusion, and interest groups such as the GSMA become even more important in creating international standards and approaches in a timely manner.

This blog is one of a series of blogs, should you wish to sign up to receive additional blogs, please write to David Cracknell at david@firstprinciples.consulting

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