Deconstructing the Mobile Money Value Chain through Cloud to Create New Business Opportunities

Alberto Jimenez, Prasanna Vanguri
There is a reason why cloud computing has become such a transformational alternative for businesses across multiple industries. It offers companies the opportunity to completely shift their technology cost model, focus on their core business, and compete with flexibility and quality. In an industry such as mobile money—new, unpredictable, potentially massive—these benefits can provide the strategic edge necessary to compete in a challenging market.

But mobile money is a unique industry in that its success depends upon developing cross-industry partnerships across a less-than-well-defined value chain. For the most part, this involves a single bank or mobile network operator (MNO) attempting to manage all components of the value chain, partnering reluctantly when required by regulation. For some providers with significant market share, like Safaricom in Kenya (M-Pesa), this approach works. For most providers, developing these partnerships will be critical to offering a compelling mobile money service. In this case, a mobile payments platform delivered over the cloud can not only shift a provider’s cost structure, but their entire business model. A highly interoperable cloud can serve as a platform for standardization and collaboration across the mobile money ecosystem. By easily interconnecting multiple players, the cloud allows providers to create entirely new business models. A bank can partner with three MNOs to enable multiple channels and with a supermarket chain to expand the reach of its agent network. Consequently, the cloud deconstructs the value chain allowing providers to focus on their core competencies and take on the commensurate risk and return.
Transformation

Business transformation through innovation
- Creation of new business models
- Enablement of speed and innovation
- Support for new levels of collaboration

Efficiencies

The evolution of information technology
- Elimination of up-front investment and reduction of costs related to in-house IT
- Scalability to support unrelenting growth
- Rapid implementation of new functionality

The private single model

This is the simplest business model for the delivery of mobile payments. It seeks not to reinvent the existing model, but streamline it, and as such exploits the IT-focused benefits of the cloud. This model is ideal for companies like Safaricom – far-reaching, dominant in market presence, and in a relatively open regulatory environment. The provider takes on the risk, responsibility and return of most components of the value chain and the role of partners is diminished. The cloud platform enhances the business through IT efficiencies, flexibility in growth and cost reduction.

Benefits:
Adopters of the private single cloud achieve significant cost savings, risk reduction and flexibility in growth. The following are IT-focused benefits that make cloud a compelling delivery model for efficiency:
- Minimal upfront investment
- Costs aligned with income
- Reduction of operational risk
- No need to invest in platform for peak volumes
- Distribution of investments across multiple parties through shared infrastructure
- Effective response to changing customer requirements
- Effective response to changing regulatory environments

In addition to these benefits which apply to cloud users regardless of their business model, the private single model offers a provider full control of the service and maximum return. The provider can draw from all potential revenue sources associated with mobile money: transaction fees, float, network fees and value-added services.

Who should adopt this model?
The flipside to full control of the service and its revenue is the responsibility associated with every component of the value chain. This model will, therefore, only appeal to large institutions with enough market presence and breadth of capabilities to take on this risk. MNOs looking to adopt this model must have:
- A broad enough distribution network of agents for account opening and cash in/cash out
- A large enough customer base to reach the necessary “tipping point” of adoption

A regulatory environment that allows MNOs to issue e-money and agents to conduct financial transactions

Private shared

In a private shared model, the value chain leverages the core strengths of both MNOs (distribution networks) and banks (cash management capabilities). It will be prevalent in regulatory environments where banks will continue to maintain exclusivity on the conversion of cash to e-money (e-money issuance).

In this model, the cloud provider enables the interaction between the MNO and the bank by providing an end-to-end platform that supports the business functions performed by both parties.

Benefits:
Adopters of the private shared model can extract additional benefits:
- Focus on core business activities
- Avoid additional risks from performing new business functions
- Enter the mobile money space even if regulatory environment restricts business activities performed by participants
- For MNOs, they can enter the mobile money space even if they do not have the skills to perform core activities
- For banks, they can enter the mobile money space even if they don’t have a large distribution network and access to unbanked customers through traditional channels

Who should adopt this model?
This model should be adopted by banks and MNOs looking to continue focusing on performing core activities and avoiding additional operational and financial risks. Also, in some markets, where regulation restricts the activities that can be performed by these players, this model provides a framework for collaboration between two parties with fundamentally different business goals.

Public anchor

In a public anchor model, benefits of cloud interoperability can drive business transformation and innovation. This model has a large player such as a multinational bank, MNO or government working with a technology provider to jointly offer a cloud service to mobile money providers in a given region.
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Banks typically do not have the distribution network necessary to run a successful private single mobile wallet service. However, banks can still leverage the cloud to offer mobile banking services to its existing clients. In this case, the cloud would offer transaction management services integrating with the bank’s own core banking system and reaching customers through a telco agnostic channel such as SMS, downloadable application or mobile internet.

The special situations required to manage a successful private single model are increasingly rare, which is why banks and MNOs have been moving toward partnership models.

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Public anchor

In a public anchor model, benefits of cloud interoperability can drive business transformation and innovation. This model has a large player such as a multinational bank, MNO or government working with a technology provider to jointly offer a cloud service to mobile money providers in a given region.
The anchor organization offers an essential service to the market; such as a banking license for e-money issuance in markets where this is required to offer mobile money services.

In this example, multiple MNOs would be able to join the cloud and leverage the banking license to offer mobile payments to their customers. Other players can join as well: supermarket chains, post offices, lottery houses, etc., can leverage the cloud to join in as cash in/cash out agent networks and provide other services. Other banks can then join the same cloud to offer service to their customers, ATM cash in/out points and value added services.

This model is also attractive for governments looking to actively enable a country-wide interoperable mobile payments ecosystem. The government, as a large neutral entity, extends a true utility platform for the participants of a mobile money ecosystem. In this model, the operational costs of the providers of services (banks, MNOs, retailers) are very low given the economies of scale developed by the central, neutral entity.

The public anchor option provides a robust, structured model for mutually beneficial collaboration. By leveraging the core competencies of multiple players, this model offers a compelling value proposition to both providers and users.

**Conclusion**

Although we expect to see examples of all three models deployed in the market in the short-term, we believe the interoperability benefits of the public anchor model will help accelerate customer adoption and shorten payback periods. In some markets with dominant market share players, the private models have sufficient scale to generate a network effect across the user base; but for the most part, markets are fragmented (largest provider with less than 50% market share) and would benefit from cloud enabled collaboration.

With emerging markets individuals still conducting over 90% of all transactions in cash, mobile money is poised to be a multi-billion dollar industry in the next three to five years. The ability of providers of mobile financial services to optimize the value chain through symbiotic partnerships and effective use of technology will be the single most important success factor in this space.

### Benefits

- Broad, interoperable network provides high value to users
- Multi-channel access through multiple providers
- Revenues aligned with risk as specific partners could take on isolated value chain activities
- Access to important pieces of the value chain (in the bank anchor example, this is the banking license for e-money issuance, but can be a proprietary network channel or a broad distribution network as well)

### Who should adopt this model?

- Banks and MNOs in fragmented markets without enough scale to offer a compelling mobile money network alone
- MNOs in regulatory environments that require banking licenses
- Supermarket chains, post offices, lottery houses, gas stations, etc., looking to increase foot traffic and develop new revenue streams (in regulatory environments where agent banking is allowed)
- Third parties (retailers, marketers) looking to provide value added services to a broad base of shared customers
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Alberto Jimenez is a Mobile Payments SME with IBM Global Business Services. He currently leads several mobile banking and payments initiatives globally for IBM. He has more than 12 years of experience in banking strategy and business development work, both as a consultant and a corporate practitioner. Prior to IBM, he did equity research and business development work for Prudential Securities. Mr. Jimenez sits on the advisory board of the Mobile Money Transfer Association.

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Alberto Jimenez and Prasanna Vanguri previously released the white paper “Cash Replacement in Emerging Markets: The FISA Approach.”