



Factors and Principles that Stimulate FinTech Growth: A Case of Safaricom Company in Kenya

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ABSTRACT

Financial technology (FinTech) continues to receive much attention and promises to transform financial services industry. As this technology emerges there is a strong conviction that it will reduce costs and create new opportunities to the participants. And, although the development of FinTech is still in early stages, many believe that it will define and shape the future of the financial services industry, and at the same time increase participation by those who have until recently been under- or un served. Fin tech is evolving in an environment that portents intense competition and there is a doubt of outright success in this space. Various factors, both internal and external, will impact on this rather highly fluid product providing technology. Survival in this market will rely on how best a participant positions oneself and meet customer expectations. This article demonstrates some key factors that determine the success of FinTech firms in this competitive industry. Some of these factors, termed the LASIC (low margin, asset light, scalable, innovative and compliance easy) principles have been mentioned. FinTech companies could benefit from applying some of the ideas presented in this article to their businesses. We surveyed key firms in the financial sector investing and innovating new FinTech products. Safaricom was singled out and it's LASIC basic principles isolated to illustrate how its success relies on these principles. The conclusion drawn is that in the ever changing financial environment consumers represent a key focal element. Firms should strive to manufacture products that meet the expectations of the changing needs of customers in the financial market- personalized services that provide convenience, security and connectivity. Connectivity can be achieved through smart phones, wirables and across radio signals. The financial market needs an integration of both social linkage and financial inclusion. FinTech expansion does not evolve in a vacuum. There will always be government and its agents ready to institute regulatory processes to protect both consumers and service providers. It is important to point out that regulation should be pro- tech rather than anti-tech. The regulations created should encourage growth of technologies like M-PESA because of the benefits that come with such technology.

Keywords: FinTech, financial inclusion, low margin, asset light, scalable, innovative, compliance

Fintech is an innovative financial technology that provides financial services via mobile and internet. With the rapid adaptation of internet technologies firms keen on penetrating new frontiers are cashing in on FinTech to actualize their dreams of conveniently meeting their customers' expectations. The genesis of FinTech can be traced in the West with the developments in decentralized internet protocols for money with crypto currencies, which allow for low transaction costs and cheap international transfers. Pioneer products in FinTech start-ups are Bitcoin or block chain related, with venture capital investments in such start-ups nearly doubling from U.S.\$133 million in Q4 2014 to U.S.\$229 million in Q1 2015. There are also developments in other nonpayment-related FinTech services, such as crowd funding, and peer-to-peer (P2P) lending. Realizing that there are potential opportunities associated with FinTech giants such as Apple and Google are staking their investments in the mobile payment market. Apple is using the concept of Apple Pay with Google adapting Google Pay. Google has begun to work closely with Verizon, AT&T and T-Mobile to have the Google Wallet payments app preinstalled on Android phones sold by these carriers. Similar to other payment companies, it is also acquiring technology and intellectual property from the carriers' joint-venture, Soft card (formerly Isis Mobile Wallet) payments, as announced on 23 February 2015. Neither Google nor the telcos were able to fully take off without cooperating with each other and they have come to realize the advantages of working together. This phenomenon is not restricted to Western countries. In the East, giants in the internet industry, such as Alibaba and Tencent, are rising to become providers of banking services with branchless banks such as Ant Financial and WeBank (David Lee Chuen, 2015). These technologies not only enhance the financial services sector, but also provide wider access to banking and financial services. FinTech services are booming in China with numerous P2P lending providers. As of the first half of 2015, there were 2,028 P2P platforms in China, which has made RMB 683.5 billion in loans with RMB 208.7 billion outstanding [Lee (2015c)].

In East Africa Safaricom provides financial services via M-pesa platform with several micro products which make financial intermediation possible at all levels of the financial sector. The growth of FinTech can be attributed to several factors at play which continue to stimulate entry of new firms with increased investment into this sector. These factors are referred to as LASIC principles and they form the major key factors discussed in this paper. LASIC factors discussed here include: (i) low margin (ii) asset light (iii) innovative and (iv) compliance easy. The paper discusses LASIC principle in section two while in section three M-pesa platform is singled out as a case of a successful business which exploits the LASIC principle either directly or indirectly. Benefits accruing from Fin Tech are discussed in the last section demonstrating that increased adaptation of FinTech augments financial intermediation arguably because it helps to bypass repressive regulatory policies associated with traditional money transfer systems.

The LASIC principle

The LASIC principle defines five important attributes of business models that can successfully harness financial technology therefore achieving a sustainable social business for greater financial intermediation. These attributes are : low margin, asset light, scalable, innovative and compliance easy.

Low profit margin

Low profit margin is a driving force in Fin Tech businesses. Consumers in the market are price sensitive and strive to cut on costs. They look for cheaper internet services and cheaper internet service providers. Experimenting consumers go for free pilot trials saving on expenses. Fin Tech firms use the principle of critical mass accumulation. This principle is applied at the initial phase of technological innovation where a firm strives to harness a substantial size of the market to reach a safe threshold of the clientele. Subsequently these firms engage in costly activities monetizing the venture through channels like advertising of the innovation, collecting subscription fees or consumer data analysis. Constant effort is needed to ensure lock in of users through the reinforcement of network externalities and the increase in switching costs. Profit margins will remain low at the user level. The objective is to obtain many users and attain profitability through low margins and high volumes of sale. Another low profit margin strategy is that FinTech firms capitalize on an existing clientele with already acquired handsets who readily start consuming the technology without the firms necessarily investing in such handsets. This cuts costs from the side of the firm. An increased use of phones in the market means a multiplication of consumers which increases revenue to the firms in the long run.

Asset light business

Asset light businesses can avoid increasing costs by utilizing an existing infrastructure. Innovative and scalable firms can incur low marginal costs by using an existing system in the market such as the mobile phone which can manage data, transact business, pay bills, analyse and process data (e.g. bank statements) which relatively reduce costs.

Scalability

The scalability concept should be appreciated in the context of a firm growing and expanding its operations in the market while holding costs at a low level. When a firm develops new technology such a venture brings down costs in the long run. As the volume of operations scale up online the need for physical outlets is greatly reduced. The concept of scaling also incorporates expansion of technology in its definition. As the market operations grow so to do the new technology which expands bringing economies of scale including efficiency, speed and security to users.

Innovative

Asset light businesses are able to be innovative and scalable without incurring large fixed costs on assets. This results in relatively low marginal costs, which reinforces the first principle of “low profit margin.” One can add on to an existing system (such as the mobile phone) that depreciates quickly but offers an alternative revenue source (such as an internet phone messaging service) at low marginal costs. By riding on existing infrastructure, fixed costs and initial setup costs can be minimized.

Ease of compliance

Reduced state regulations and minimal red tape, a friendly legal framework create a stimulating enabling environment for further innovations and product improvements. Government's role should be that of nurturing new Fin Tech firms and minimizing controls. Strict patents, high taxes stifle the FinTech environment eventually driving up operational costs. Firms operating in an easy to comply environment find it easy innovate.

Safaricom's M-pesa case

How does safaricom apply the LASIC principles?

M-PESA (pesa means money in Swahili) is a mobile money transfer service launched in 2007 and it has the widest coverage in urban and rural Kenya. It drives financial intermediation by providing money transfer services, local payments and international remittance services easily with a mobile device. M-PESA has since then expanded to Tanzania, Afghanistan, South Africa, India and Eastern Europe with varying degrees of success. The M-PESA service is provided by telecommunications service provider, Safaricom. As of 2017, Safaricom had a customer base of 38.7 million and 34% of airtime top-ups were made directly thorough M-PESA. It has successfully penetrated 90% of Safaricom's telecom customers. M-PESA accounts for 18% of Safaricom revenue and its agents employ more than 140,000 workers. M-PESA has 130,000 agents, 122,000 merchants (50000 + active), and 19 million registered customers (12.2 million active). Since its conception, M-PESA has expanded to more than money transfer services. M-Shwari (a paperless banking platform with loan services by M-PESA) has 3.6 million active customers with KES4 billion in deposits and KES1.2 billion worth of loans issued per month with nonperforming loans at only 2.7% (SafariCom Annual Report And Financial Statements 2017). Other key services include Lipa Na M-PESA (cash payments for goods and services) and Lipa Kodi (rental payment to landlords). There are various reasons behind M-PESA's widespread adoption and success:

- Safety:** eliminates the risks associated with handling cash for both customers and merchants
- Reduced costs:** eliminates losses associated with receiving fake currency
- Enhanced record keeping:** transaction records are readily accessible (even transaction statements).
- Short and flexible settlement cycles:** allows timely collection
- Acceptance of low value transactions:** as little as KES10
- Lower costs:** avoids high point of sales (POS) and remittance fees

How each of the LASIC principles applies to M-PESA's business model.

Low-profit margin

In the initial stages, M-PESA had to attract both customers and merchants to participate in their network. It faced a chicken-and-egg problem; merchants are only interested in networks with an established customer base and vice versa. Safaricom's initial investment in its marketing efforts is estimated to be as high as U.S.\$25 million to U.S.\$30 million in its first two years [Mas and Radcliffe (2010)]. M-PESA only charges its customers for "doing something," such as money transfers or withdrawals. There are no fees for registration or deposits, and there is no minimum deposit; even the SMS that are used to deliver the service are free of charge.

M-PESA has also largely maintained its transaction fees for the first three years, choosing to charge a fixed price for a different range of amount transacted. Safaricom pays high commissions to retail outlets acting as its agents. In 2010, a store could earn about U.S.\$5.70 per day (if it conducts 60 transactions), which is equal to twice the prevailing daily wage for a clerk in Kenya [Mas and Radcliffe (2010)]. By keeping fees low and commission high, M-PESA fostered a well-developed network. Combined with the large marketing efforts in its initial years, this kept M-PESA's profit margins low but also helped to create the critical mass that was imperative to its success. In 2017 SafariCom profits stood at sh.45 billion.

Asset light

M-PESA utilizes existing retail stores as cash-in or cash-out agents, reducing infrastructure and deployment costs, and provides greater convenience to its customers. The agent model is light on assets and does not require any brick-and-mortar investment. Money in M-PESA accounts are deposited at commercial banks and the interest earned is diverted to M-PESA Foundation (a not-for-profit organization focused on promoting education, health and environmental conservation). This eliminates the need for infrastructure required to manage cash deposits, keeping M-PESA asset light.

Scalable

The agent system that M-PESA adopts also makes it scalable. The same system can be replicated across many regions with minimum costs. The M-PESA is built on the existing technology of mobile phone SMS. As mobile phone adoption increases in the countries where it operates, its reach also extends. Both customers and agents only need a mobile phone to participate in the M-PESA network; there is no need to distribute bank cards or point of sales systems since the mobile phone is functionally equivalent [Mas and Radcliffe (2010a)]. This technology allows M-PESA to expand its customer base quickly without incurring any large setup costs.

Innovative

M-PESA is the first to offer P2P payments through mobile phone SMS. Through this Innovation, the reliance on cash is heavily reduced. M-PESA can be used to pay bills, save and withdraw money, pay

for public transport, pay monthly insurance premiums, receive pensions or social welfare payments, or receive loan disbursements and repay them electronically. Companies can also use M-PESA to pay salaries [Mas and Radcliffe (2010b)]. Partnering with Kenya's largest ATM service provider, PesaPoint, customers can now make withdrawals from their M-PESA accounts from any Pesa Point ATM and no bank card is required [Mas and Radcliffe (2010b)]. Lipa Na M-PESA is a cashless merchant service that allows small and medium enterprises to effortlessly collect and manage cashless payments from M-PESA's significant customer base [Safaricom Limited (2014)].

In 2012, a virtual banking platform, M-Shwari, was introduced, which allows M-PESA users to operate savings accounts, earn interest on deposits and borrow money using their mobile phones [Community-Currency Knowledge Gateway (2015) and Consultative Group to Assist the Poor (CGAP) (2015)]. By using Subscriber Identification Module (SIM) card technology, M-PESA is able to offer its services through simple SMS and does not require its customers to use smart phones. This innovation allows it to gain widespread adoption in emerging economies like Kenya. By continuing to innovate beyond just payment services, M-PESA has retained its large user base and will continue to be a major player in mobile financial services. (David Lee Kuo Chuen *et al.* (2014).

Compliance easy

M-PESA operates mainly in emerging and developing countries, governments of which recognize that such technologies can promote financial inclusion and choose to adopt a lighter regulatory treatment than traditional banks. The Central Bank of Kenya (CBK) Act [Mas and Radcliffe (2010b)] gives the CBK the discretion to "formulate and implement such policies as best promote the establishment, regulation and supervision of efficient and effective payment, clearing and settlement systems." In 2009, the CBK determined that mobile money is not a banking service but a low-value retail money transfer service, which put to rest the questions about the legality of mobile money and reaffirming the Government's strong support for financial inclusion [Muthiora (2015)].

National Payment Systems (NPS) regulations were officially issued in 2014 by the Kenyan government. This allowed mobile phone operators to continue operating under their existing structures, creating minimum disruption to mobile money services (as long as roles and management are clearly separated) [Muthiora (2015)]. NPS regulations also provide for detailed consumer protection, requiring service providers to have disclosure mechanisms and open channels for consumer redress, while maintaining the privacy and confidentiality of consumer data.

It is compulsory in Kenya for citizens of more than 18 years of age to hold national identity cards. This helped to facilitate the know your customer (KYC) process for M-PESA. With central bank support and clear regulations in place, consumers are more likely to trust and use mobile payment service providers. Identity cards also made the KYC process easy. Support from the Government is important for M-PESA's success (David Lee, 2015).

Summary

M-PESA

Unlike Alipay that built up its user base from e-commerce, M-PESA expanded its services from telecom service to financial services. It is known that customers are sticky and defaulting on phone bill payment will be a lot more inconvenient than defaulting on a loan payment. Given its large user base, M-PESA has successfully increased its margin by expanding its range of financial services from payments, lending and micro finance. Utilizing an innovative approach to mobile money, M-PESA has kept its business costs low and its operations scalable while keeping its prices affordable for its consumers. On top of that, it received much government support due to the very nature of the business, which is to encourage financial inclusion. M-PESA's business model exhibits the LASIC principles and how they can contribute to the success of a good FinTech business.

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