



Mobile Money for the Unbanked

A Closer look at 'ZAP' in East Africa

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This year at Mobile World Congress, Zain was presented with the 'Mobile Money for the Unbanked' Award for 'Zap', their mobile money service that was introduced in February 2009. In just one year, Zap has become the most widely available mobile money service in the world, with deployments in Bahrain, Kenya, Tanzania, Sierra Leone, Ghana, Niger, Malawi and Uganda.

But while Zain's desire to make Zap ubiquitous is clear, so far their approach to designing mobile money ecosystems has been less well documented – and perhaps a bit misunderstood. This does not come as a complete surprise: Zain has a vision for Zap that differs from the likes of M-PESA, MTN MobileMoney and their other major competitors in just about every way.

Zain's most dramatic departure from competitors – one that impacts nearly every element of their deployments – is their philosophy that Zap ecosystems should be entirely cash-free. To illustrate how this approach has fared in practice so far, this case study will examine the core elements of Zap deployments in East Africa: organizational design, service design, marketing, and building agent networks and bank partnerships.

The State of Zap in East Africa

Zap deployments across East Africa are at a critical juncture. All have signed up a significant number of customers and laid the groundwork – to varying degrees – for future success, but so far the number of registered customers regularly performing transactions is low. This is a challenge many deployments face, but in Zain's case it has come about for two distinct reasons.

First, their strategy of building cash-free ecosystems requires engagement with a greater number of players than traditional models, which is an inherently longer process. Second, Zain has invested in some areas, like registering customers and building a robust technology solution, but critically, they have underinvested in team resources, marketing, customer education, and management of agent networks – all of which have contributed to the low rate of usage for the service.

Clearly, there is an inconsistency between Zain's approach to service design – which is more ambitious in its aims than other mobile money deployments – and the way they have funded their deployments. However, Zain still has a strong opportunity to capitalize on the Zap team's early successes by investing aggressively in the service in 2010.

Despite all this, Zap still merits study; the team's approach to partnering with banks has led to a uniquely collaborative engagement model with the financial sector; their efforts to leverage SIM registration initiatives in Tanzania and Uganda have been a strategic driver of customer registration; and their distribution settlement mechanism is distinctive within Africa.

Key market data			
	Tanzania	Uganda	Kenya
Population	42 million	32 million	38 million
Mobile Penetration	45%	39%	56%
Zain Market Share	30%	18%	11%
Main Competitor (Share)	Vodacom (39%)	MTN (43%)	Safaricom (79%)
Zap Launch Date	February 2009	July 2009	February 2009
Zap Registered Users	4,000,000	250,000	1,000,000

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Organizational Design

One decision above all has played a particularly important role in shaping the first chapter of Zap's history: Zain's willingness to provide OPCOs with autonomy to design and invest in local market solutions.

Enabling Zain OPCOs to launch Zap in a suitable way for their market

Whereas many mobile money deployments are strongly influenced by group-level decision making, Zain has provided OPCOs with an enormous amount of autonomy when it comes to Zap. In their own words, Zain has "simply created a 'flexible service in a box' that our OPCOs can deploy at their own pace and in their own way."¹

Thus, each Zain OPCO has the discretion to first decide whether they'll launch Zap in their market, and if so, on what timeline. As a result, markets like Sierra Leone and Malawi, which are comparatively small markets for Zain (both in terms of population and mobile subscribers), have been among the first to launch Zap on the basis of their eager interest.

Beyond determining when Zap will launch in their market, each OPCO also influences service design. This decentralization of power accounts for the slight differences in the way Zap has been implemented in each country, as OPCOs customize the service to their unique market conditions. For instance, in Kenya – where M-PESA has conditioned an entire market that cash-in should be free – the Zap team recently eliminated fees for cash-in. Or in Uganda, the team has kept Zap transactions between registered Zain users instead of opening the service up across networks, something that has been implemented in other East African countries. Of course, at a group level Zain still provides oversight where it's necessary, making sure each deployment implements key controls, and striving to inculcate a common service design philosophy that defines the core of each deployment – but their approach still differs from competitors, who typically favour more uniformity across markets.

Challenges securing investment for Zap

But just as OPCOs are the ones who ultimately control what Zap will look like in their market; they also dictate how much financial support the service

will be offered. Unfortunately, when Zap launched in Tanzania and Kenya in February 2009, Zain group had not yet seen an M-PESA-like success story of their own to guide – or inspire – investment in the same way that Vodafone had. And further, Zain had not received the same type of external support that other operator groups like Vodafone, who received nearly £1,000,000 from the UK's Department for International Development (DFID), had prior to launch.²

Consequently, some OPCOs have invested too little in Zap, and this has manifested in two detrimental factors: dedicated Zap teams that are too small, and insufficient marketing budgets to educate consumers. For instance, in Tanzania the core Zap team at launch – and for the following 8 months – consisted of just two dedicated resources. Likewise in Uganda the team consists of just four dedicated resources. By comparison, GCASH in the Philippines had 15 dedicated staff prior to launch and have since grown to 40 to support their scale. This shortage of staff – and lack of budget to outsource – has hamstrung the Zap team's ability to effectively recruit, train and manage their agent network. Equally, Zap in Tanzania has suffered from an insufficient ongoing marketing budget needed to educate customers.

How Zap's Peers are Staffed

EASYPAYSA: The service was launched in 2009 with the support of 31 dedicated staff from Telenor and 40 from Tameer – not counting shared resources from both organisations.

GCASH: The service was launched with a dedicated team of 15 in 2004, and has since grown to 40. GXI also rely heavily on outsourced personnel – both at launch and today.

VODACOM M-PESA: The dedicated M-PESA team is currently 14, including resources from sales, finance and operations. For many months, Vodacom also worked with Afrikings, an outsourced agency, to manage their agent network.

MTN Uganda: Launched in 2009 with 14 permanent staff, the service is now delivered by a core team of 31 permanent staff and 14 temps.

¹ This flexibility has also made it easier for Zap to integrate with external partners.

² M-PESA: Mobile Money for the "Unbanked", Nick Hughes and Susie Lonie, 2009.

But despite launching with too few staff and a very tight budget, the Zap team has still accumulated some impressive wins. Coupled with recent international recognition for the service, Zain OPCOs are finally starting to provide Zap with the investment it needs to truly achieve scale. For instance, in the last few months, the Zap Tanzania team has grown from 2 to 10, had requests for their first radio campaign since launch approved, and have contracted an experiential marketing agency to employ 80 people that will closely manage its agent network. These promising changes suggest that Zain is finally prepared to capitalize on their powerful, award winning service.

Service Design

Zain's approach to service design is fundamentally different from its competitors. Whereas M-PESA and MTN MobileMoney deployments are typically designed with the belief that 'cash will remain king' for some time, Zain builds its ecosystems with the view that they should be cash-free – as much as possible – from the start. In pursuit of this unique vision, Zap has departed from the well-known M-PESA model in a few significant ways.

Pricing the service to encourage electronic transactions

First, their tariffs are structured to encourage customers to keep money in the system and transact electronically. This marks a key departure from the M-PESA and MTN MobileMoney pricing models which, above all else, are designed to encourage both senders and recipients to register for the service in order to benefit from a lower overall remittance cost (i.e. the total cost of a remittance is lower for two registered users, than for a registered and unregistered user). Across East Africa, the flat fees Zap charge for a money transfer – excluding the costs of cash in and

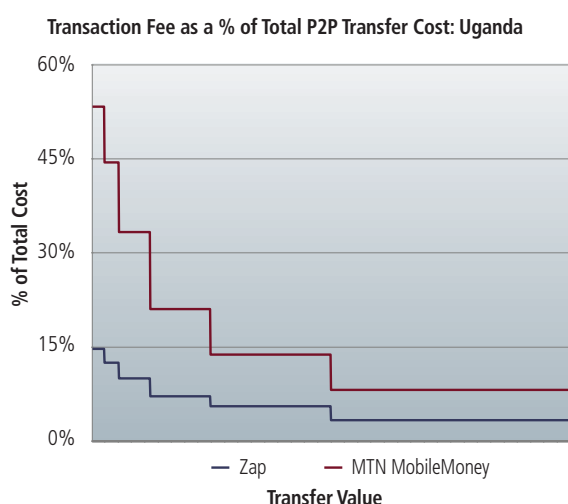
out – are lower than its competitors. For instance, in Uganda, the transaction fee for sending money using Zap is Ugsh250 (USD\$0.12), compared to Ugsh800 (USD\$0.39) for MTN MobileMoney. Zain's unique pricing model supports a number of elements of their strategy (we'll address how it fits into distribution later), but when it comes to service design their intent is clear: keep the transaction fee low so customers can use money within the electronic – cash-free – ecosystem.

Launching with multiple services, so customers don't need to cash-out

Second, whereas M-PESA deployments typically feature money transfer as the primary – and often only – service at the time of launch, Zain choose instead to promote multiple services. Zain reason that P2P transfers alone, which typically end with a recipient converting e-money back to cash, are not enough to deliver on their vision of a cash-free ecosystem. Instead, Zain position Zap as "Much more than Money Transfer" and typically promote some combination of money transfer, airtime top-up, bill payments, and merchant payments. By doing so, Zain provide consumers with options to use their electronic money rather than instantly convert it back into cash.

Focusing on corporate customers as key ecosystem participants

Third, Zain focus disproportionately on serving corporate customers as a means of securing strategic sources and uses of funds. In Tanzania – where a quarter of the small Zap team focuses on B2B and C2B initiatives – this strategy has resulted in partnerships with Coca Cola and OILCOM. Both projects are currently at pilot stage, but it's easy to see how Zain hopes they'll play a strategic role in creating a cash-free ecosystem. For instance, the C2B element of Zain's partnership with OILCOM enables Zap customers to pay for their fuel using e-money, while the B2B element then enables each OILCOM fuelling station to use Zap to pay their suppliers, bank or head office using e-money. Thus, Zain believe corporates like OILCOM occupy a strategic position in the ecosystem – as both a retail recipient and B2B payer of e-money – and will help complete their vision of a cash-free ecosystem by promoting Zap both to consumers and partner businesses.



Creating the option to link Zap e-wallets to bank accounts

And finally, Zain were the first deployment to enable users to link e-wallets to bank accounts to further facilitate their vision of a cash-free ecosystem. This approach has implications for both agents and end customers. For instance, agents become less reliant on cash as a means of loading their e-wallets as they can instead simply transfer funds when needed from a linked bank account. Additionally, customers can avoid the need to convert e-money into cash when they receive a transfer – they can instead seamlessly deposit it into a bank account.

Without a doubt, building a cash-free ecosystem 'from day-one' is a more complex and expensive task than the one taken on by the likes of Vodafone and MTN. If nothing else, the fact that Zain has taken on this task underscores just how vital it is for their teams to be adequately resourced.

Marketing

Zap's decision to promote multiple services at once has prompted a great deal of industry debate – but a separate issue has equally defined their marketing approach: lack of budget.

Without budget, ability to educate customers is limited

Across East Africa, Zap teams have struggled to secure the budget required to launch marketing campaigns to build sufficient awareness and understanding for the service. And while the Kenyan market is already relatively sophisticated, small marketing budgets have had particularly dire consequences in less mobile-money-literate countries like Tanzania and Uganda. Vodacom, Zain's main competitor in Tanzania, has recognized the need to invest in education and has supported M-PESA with regular radio, TV, billboard, POS merchandizing and below-the-line activation campaigns, but Zain has barely invested in marketing Zap since their initial launch.

Linking Zap to SIM registration drives customer adoption

Still, over 4 million Zain subscribers have registered for Zap in Tanzania, making it one of the largest deployments in the world by way of registered customers. So how has the Zap team achieved this scale in the absence of adequate marketing support? A number of marketing strategies have played a role, but one in particular has been most successful:

linking Zap to SIM registration activities. In Tanzania, and more recently Kenya, telecoms regulators have implemented requirements for operators to collect personal information about each of their mobile subscribers – and fortunately for Zap, this information mirrors data they'd otherwise collect when registering a new Zap user. Thus, Zain has used SIM registration campaigns as an impetus for Zap registration, and vice versa.

This strategy has been expensive – Zain pay agents and freelancers about Tshs1,500 (USD\$1.10) for each customer that they register and few actually use the service immediately – but it has also positioned Zap for potential success. For instance, it will now be possible to target these registered customers with promotions to encourage actual use of their e-wallet. Additionally, their early SIM registration efforts will likely improve Zain's future return on marketing and education investment as more prospective users will be able to follow through on their interest without encountering a registration barrier.

Leveraging partners to promote Zap

Beyond linking Zap with SIM registration activities, Zain has also leveraged their B2B and C2B partnerships to drive adoption. For instance, OILCOM has branded each pump in their fuelling stations with Zap materials and plan to provide discounts to customers who pay using Zap. Additionally, electric and water companies who accept Zap as payment have launched above and below the line marketing campaigns, which have helped build awareness and vital credibility in the eyes of cautious prospective customers.

Distribution

Even with their service design vision of a 'cash-free ecosystem from Day One', Zain recognize that the success of Zap will ultimately hinge on their ability to build, incentivize and manage an effective distribution network. In this sense, they pursue the exact same goals as any other deployment: to create a network that is ubiquitous, low-cost, trusted, and liquid.

With limited resources, distribution challenges arise

Zap's ability to execute on their plans to build an effective distribution network has been constrained by limited resources. In Tanzania for instance, the shortage of staff and budget has created many serious

challenges. First, to recruit and train agents, the Zap team has had to rely on existing Zain sales staff – and while they were generally enthusiastic about the product, most simply lacked the time and incentive to invest in properly training and supporting new agents. As a result, many agents were poorly trained and quickly became inactive.

Zain also faced challenges closely managing the agents that they have been able to retain. For instance, while they are able to monitor the e-money balances of each agent, the Zap team has little capacity to actually take action based on what they observe. Thus, instead of a Zap distribution manager or outsourced agency personally visiting agents in need of support, Zain has had to try and solve problems remotely and incentivize agents to adhere to liquidity management guidelines with draws and promotions.

Engaging airtime dealers to offset resource shortages

But even in the absence of resources, Zap teams have innovated to create the most effective distribution networks possible – and in some markets, this has meant working closely with airtime dealers. For instance, in Uganda – and increasingly Kenya – Zap teams have taken the first step of converting each airtime dealer outlet into Zap agents. In Uganda, this strategy has delivered many well branded, liquid agents in strategic positions. In the coming months, some airtime dealers in Uganda and Kenya will play an even more sophisticated role in Zap's distribution strategy by monitoring and managing liquidity for each of their sub-agents. This tactic has been used successfully by other mobile money deployments – even those with adequate resources – to ensure agent networks are well managed. Unfortunately, the option to task airtime dealers with key distribution responsibilities has not been available to the Zap team in every market – like in Tanzania, where dealers have uniformly declined to engage for unrelated reasons.

Zap isn't the first deployment to face resource challenges or engage their airtime dealers when building, designing and managing their agent network – but there are additional elements of their approach that are distinctive within Africa.

Vision to deliver Zap through 'Merchants' – and not just 'Agents'

The first is their belief that the moniker of 'agent' is out of place in Zap's proposed cash-free ecosystem, so they have adopted the term 'merchant' as an alternative. In Zain's view, a conventional 'agent' is a business that has been recruited by a deployment for the exclusive purpose of offering cash-in and cash-out services. A Zap 'merchant', on the other hand, is a retailer or wholesaler that will otherwise be dealing extensively in e-money – accepting it from customers and using it to pay suppliers – and hence will logically offer Zap users cash-in and cash-out services.

It's too early to tell whether Zap distribution networks will ultimately be comprised of 'merchants', or simply conventional 'agents', but some early trials illustrate how they hope this model will work at scale. For instance, Zap Tanzania's partnership with Coke currently enables mini-distribution centres to pay their master distributors using Zap. This partnership could lead to a massive number of merchants being created in its second phase if mini-distribution centres begin encouraging the retailers who pay them to use e-money – because at that point it would also make sense for retailers to accept e-money as payment from their customers to avoid the need to load their e-wallets. Without question, converting businesses into cash-free 'merchants' is much more time consuming, complex and expensive than persuading a business to simply add cash in/out to their service offering and become an 'agent'.

Responding to prospective agent feedback when designing commission settlement

The second, and perhaps most distinctive, feature of the Zap agent network relative to competitors like M-PESA and MTN MobileMoney is their approach to commission settlement, which stems directly from their effort to provide a strong value proposition to agents. Zap agents are paid their commissions in cash by the customer each time they perform a transaction, whereas M-PESA agents are paid electronically in one lump sum in arrears by the mobile operator. The difference between these two models is significant: Zap agents take responsibility for levying a discretionary fee each time a customer cashes in or out, whereas M-PESA agents do not (their customers are instead charged via an automatic electronic deduction when they cash out).³

³ It's also interesting to note how this is at odds with Zain's view of creating a cash-free ecosystem.

How Bank Partners Enable Different Elements of Zap's Approach to Service Design

1. Zap designed with a belief that ecosystem should be cash free – as much as possible – from the start...

... so integrate with multiple banks so customers and agents can move funds between e-wallet and bank account, reducing reliance on cash.

2. Zap service designed to be used heavily by corporate customers...

...so need to offer them options to manage liquidity at bank branches from multiple banks, since corporate customers often have outstanding lines of credit and need to route flows through a bank – or may simply transact too aggressively for a typical agent. In Tanzania, Zap even sources B2B leads from their bank partner.

So why did Zain choose this settlement model? Several factors contributed to their decision, but the most significant was their desire to bolster the Zap value proposition to agents. When designing Zap, the team studied their East African markets and found that agents raised three complaints with the way they were paid commissions. First, agents complained about the amount of time it took to be paid – that is, they expressed a desire to be paid in real time rather than at the end of a month. Second, agents complained that when they received an electronic deposit at the end of the month, it was too difficult to understand how much they were really making from the service – or if the payment was even accurate. And third, rural agents whose cost of managing liquidity was higher than those in urban areas expressed a desire to have the option to adjust their fees accordingly.

Thus, Zain decided to remove themselves completely from the process, and have attempted to make commission settlement instantaneous and transparent. This approach has been popular with some agents (it's difficult to say whether they represent a majority), and it has helped the Zap team conserve OPEX since they don't need to employ staff to deal with agent concerns each time they are paid. Of course, this strategy also comes with some challenges. From a customer experience perspective, some argue that 'recommended' fees make it difficult for customer to understand how much the service

really costs, although anecdotally, most urban agents do seem to simply charge the recommended fees. Additionally, some high traffic agents are not always pleased to spend time negotiating with a customer over how much the service should cost – while a queue forms in their store.

Bank Partnerships

Zain's approach to engaging bank partners has resulted in a service that's difficult to classify as either conventionally bank-led or mobile operator-led. And indeed, to classify Zap as either would neglect the fact that Zain and its bank partners equally make significant contributions in delivering the service. Across East Africa, Zain has engaged closely with banks in the delivery of Zap. And not just out of altruism: Zain recognize that banks play an important role in delivering key elements of their approach to service design.

For instance, given their objective of serving corporate customers, many of whom will transact too frequently and aggressively for a typical Zap agent, Zain has sought out banks to manage liquidity. Additionally, to create a truly cash-free ecosystem Zain believe that a mobile money service cannot ignore the financial flows already taking place in the existing financial sector – hence the ability to link Zap e-wallets to accounts at any partner bank. Banks have even proved valuable in some markets as a source of leads for Zap's B2B team, often identifying prospects and supporting Zap's effort to enrol them in the service.

At scale, Zap will offer significant value to banks

It's clear that banks make an important strategic contribution to the Zapecosystem – but what incentive do they have to participate in the first place?

Assuming Zap achieves scale, a lot. Zain has designed a multi-bank partner strategy in which any bank can benefit from the system in accordance with their objectives. For instance, in Tanzania any high quality bank interested in increasing their deposits can become a 'sponsor bank' and hold a Zap trust account, while others more concerned with earning transaction revenue can become a 'non-sponsor bank' and earn fees each time a customer or agent moves money from their account to an e-wallet. And finally, banks that have a large network of branches can become a 'correspondent bank', and earn income

in exchange for offering up their branches as cash in/out locations.

Additionally, Zain has designed Zap to help their bank partners better serve existing customers – and also attract new ones. That is, bank partners who don't have mobile banking services of their own – and even some who do – can offer Zap to existing customers as a value added service. And banks seeking to attract new customers benefit from Zain's commitment to encouraging each Zap agent to open a bank account as a means of managing their own liquidity.

Zain isn't the first mobile operator to offer up float and transaction revenue as benefits to prospective bank partners, but some elements of their approach are uniquely 'bank friendly'. For instance, from the beginning Zain has invited multiple partners to serve as sponsor banks and benefit from holding Zap trust accounts. To date, few other deployments have adopted this approach so willingly: some have done so only after their sole trust account became too large, and Ghanaian deployments have done so to appease regulatory guidelines.

Aside from the potential for massive benefits, banks have also found it simple to integrate with Zap and manage the service – so the costs of partnering are very low. For instance, Citibank, the first Zap Tanzania sponsor bank, has not had to add any headcount to support Zap and were able to complete technical integration in a matter of weeks. This ease of integration and management exemplifies the experience partners have had working with Zap across East Africa, and stems from Zain's effort to create a flexible technology solution that can be modified easily and safely to work with any type of partner.

Conclusion

Zain's Zap is a service with a great deal of potential. By investing in customer education, distribution and customer activation, Zain has an opportunity to capitalize on some of the early progress made in East Africa in the first year of operation.



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