Managing Rural Liquidity for Digital Finance

David Cracknell

Photo credit[1]

A development colleague asked me how can rural liquidity for digital financial services be managed? This is an interesting question, that I have written around previously, but not specifically addressed. After defining liquidity management this blog outlines multiple solutions which collectively can help address rural liquidity for digital financial services.

So first – what is liquidity management? I am not keen on the term 'liquidity management' as it represents both cash management and float management each of which represent different challenges and require different solutions. But in this case the question is more nuanced it is managing rural liquidity for digital finance. The challenges for managing rural liquidity are greater simply because there are typically fewer agents, fewer customers, and fewer physical rebalancing points for agents to use. So, what can be done?

1. Carefully design your channel – using a hybrid design offers increased flexibility (cash and float)

The first issue is in design of the agent channel – whether to use your own agents 'on-us', third party or shared agents 'off-us' or a combination of both. In many cases rural agents represent several mobile money and agent banking providers. Whilst representing several providers can make cash management easier – as all providers pull from the same available cash, it can make float management much more challenging – as typically floats are not shared. One solution here is to encourage the use of agent

[1] Photo by unknown author licenced under creative commons

aggregators. In this case an aggregator manages multiple agents and can move float around as required. In this case, the challenge becomes how to actively monitor agent float levels and there are commercial solutions that can do this.

2. Understand rural cashflows and apply this knowledge in designing channels, products, and services (cash and float)

To manage liquidity, both cash and float – it is important to understand the cash flows in a specific area, when is cash required, when is it spent, where is cash required, where is cash spent? Is there a seasonality to cashflows, through the year or through the month? What is the magnitude of the cashflows? This understanding informs choice of agent, agent distribution strategy, aggregation, superagency, and the design of analytics around agency. Whilst this initial understanding will be partial, this understanding can develop significantly over time. This understanding must then be applied in designing channels – informing the ideal number and location of agents and in developing valued use cases.

3. Carefully chose, train and support your agents (cash and float)

The most important factor in a good agent network are the agents themselves. Choosing the right agents often means choosing agents who already operate businesses that generate and manage significant cash flows. These agents manage cash daily for their businesses, they are liquid. In rural areas they could be agro-dealers or local shops. The financial service provider must train agents and support them through visits, through call centres and where possible through products and services which assist the agents in their business activities. Agent apps should provide access to commissions earned.

4. Use aggregators to help manage agent float levels (float)

Aggregators manage multiple agents and usually provide agents float when required, usually upon request from the agent. However, aggregators should go further and use monitoring software to detect where increased float may be required, in this way agent float levels are maintained. Novo pay in India monitors thousands of agents' float levels on a real time basis.

5. Use data and analytics to predict likely demand for float and cash (cash and float)

Some movements in cash and liquidity are predictable. At agent level practical tools can be used such as the 1.5x stock rule which maintains that cash and float levels are kept at 1.5 times the previous days deposits and withdrawals. However, agents and aggregators should go further and predict likely demand for float and cash using historic data and knowledge of future events, festivals, month ends etc. to anticipate demand for float and cash.

6. Monitor e-float, provide e-float loans for agents to facilitate peaks in cash out (float)

Another service frequently rolled out by financial service providers are short term e-float loans which enable agents to obtain additional float when they need it. These loans enable agents to handle short term peaks in cash out. Qualification criteria can be applied to e-float loans based on the activity and performance of the agent.

7. Use super-agents to create rebalancing points closer to agents (float and cash)

There are times when an agent has excess cash, insufficient float and needs to rebalance. This can be especially difficult in rural areas where there are few physical branches. There is no ideal solution to this, but part of the solution is to carefully develop a super-agent network. Super agents handle cash and can act as agent rebalancing points. They can be rural cooperatives, distributors, some fuel stations. Geo-mapping can help service providers to determine where to place their rebalancing points considering rural transport infrastructure and actual and proposed agent distribution.

8. Watch for the local solutions that agents operate themselves (float and cash)

When travelling around rural Uganda it was common to find agents serving the two mobile networks Airtel Money and MTN. It was also common to find agents cooperating between themselves in managing float and cash – this tended to be for smaller amounts of money – but it appeared to be an active practice. Watching for the solutions that are developed locally, provides both insights on the challenges of float and cash management as well as potential solutions which can be scaled.

9. Identify and design financial services for key actors and their businesses (float and cash)

Many agents are rural shopkeepers. A rural shop generates cashflow. The shopkeeper buys goods (sometimes on credit) and sells these goods most often for cash, (sometimes on credit). These cash and credit transactions influence the cash on hand, and the future transactions which the shopkeeper will make or receive. However, typically a rural shop will have a series of smaller cash receipts and then larger payments to make for stock to distributors. A financial service provider can identify and design working capital products to support their agents and payment services which enable agents to purchase stock using their surplus float.

10. Design solutions to keep cash local (cash)

Historically cash in Kenya would move out to rural areas to facilitate commercial transactions with bulk cash management handled by the Central Bank of Kenya - distributing cash through the banking system. However, given the commercial centre was Nairobi, in a few transactions cash would make its way back to Nairobi – requiring cash to be recirculated continuously to rural areas. This was an expensive endeavour and carried significant risks.

These observations raise important questions – i. What transactions are being made between rural and urban areas? ii. Which transactions are handled in cash? iii. Which of these transactions can be handled through digital transactions whether mobile money, agent banking or account to account transactions? iv. Are there opportunities to digitise or partially digitise value chains?

11. System-wide solutions should be carefully developed only after the business case has been demonstrated and the need for these solutions is evident (float and cash)

Shared agent networks can be developed at a national level such as the network run by the Agent Banking Company (ABC) in Uganda. However, this can mean that the shared agent network runs alongside existing ‘on us’ agent networks from larger banks – which makes the business case much more difficult as the larger banks have the highest customer base and transaction volume running through their own networks.

12. Understand how agency contribute to a financial service provider’s strategy and in the delivery of rural financial services (cash and float)

Many financial institutions fail to understand how agent banking can fit into and support their overall institutional strategy. I have written about this in my blog “Understanding Agent Banking Strategy”. Furthermore, financial institutions now have the ability using agency and financial technology to re-imagine how rural finance works – I have written about this in my blog “Re-imagining rural financial services”. Understanding the strategic importance of agency helps financial institutions to determine how and where to invest in their networks of rural agents.

13. Keep innovating (cash and float)

So, we have the beginnings of a practical to do list. The list of cash and float management mechanisms provided is not exhaustive. There are other solutions which could be adopted these include developing apps which can enable agents to operate multiple providers from a single larger float which operates independently of an aggregator model.

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. David Cracknell is the Director of First Principles Consulting Limited, based in Nairobi, Kenya. He advises financial institutions, governments, policy makers and donors on financial services, including digital finance, policy and regulation, and inclusive finance.

FIRST PRINCIPLES CONSULTING

42 Riverside Drive
Nairobi
Box 76436 - 00508
Kenya
+254-733-713380

davidjcracknell
david@firstprinciples.consulting
@davidjcracknell
www.firstprinciplesinfinance.com