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WHICH ONE, TO WHERE?



# Distribution networks - the heart of mobile money

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The secret of mobile money systems is the distribution network behind them - the innumerable merchants working with mobile operators to top up pre-paid airtime minutes and the point-of-sale (*POS*) terminal, the automatic teller machines, ATMs that serve the same purpose. It is at these points that one deposits money in the system or takes it out. It is this distribution system that is changing the lives of millions of people who never before had access to the banking system.

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Distribution networks have many different forms and definitions. Content distribution networks are commonly used to deliver online content and media on the Internet. Other types of distribution networks play a vital role in the delivery of utilities such as electricity, fuel to power industries and residences, water, communications services and the like.

There are many examples of distribution networks for consumer products from large retail chains such as Wal-Mart and Tesco to global enterprises such as Coca Cola.

A mobile network also has a distribution network - an ecosystem of agents, sub-agents, retailers, and street-sellers (merchants),

selling products for the mobile operator. Mobile phone recharge, for example, needs a widespread distribution network. In today's mobile networks, distribution networks have little visibility and few control mechanisms. Distribution networks in a mobile network are fundamentally a set of businesses functioning as a unit, interacting with the shared market of mobile subscribers, providing transaction services, and building a common set of relationships.

## ColaLife

As an example of maximizing distribution networks, blogger Simon Barry, while working on a British Aid programme in 1988

realized the power of Coca Cola's distribution network when he looked for methods to bring medical aid to people Africa's rural regions. He asked Coca Cola to use their distribution channels - which are amazing in developing countries - to distribute rehydration salts. By dedicating one compartment in every ten crates to the rehydration remedies, lives could be saved.

Barry's 'life-saving compartment' efforts resulted in ColaLife. ColaLife is a voluntary social movement backed by thousands of supporters through a Facebook group dedicated to the project. ColaLife opens Coca Cola's distribution channels in developing countries to save lives, especially children's

lives, by carrying much needed 'social products' such as oral rehydration salts and high-dose vitamin A tablets.

Barry highlighted the inherent power and force that a distribution network can provide a community in need of medical aid. Many distribution networks have the capability to deliver more than what they are delivering today. As an example, electrical grids designed to provide power have been augmented to provide Internet connectivity. Mobile networks have been transformed to deliver more than just voice signal, and now carry valuable data to people in regions where other forms of communications infrastructure cannot reach. Innovation and technology often plays a key role in the transformation of distribution networks by helping markets leapfrog the historical development patterns that the developed markets followed to get where they are today. A direct leap to a new technology, wireless communications for example, can have a revolutionary impact upon local economies and the lives of the people.

## The distribution network sub-economy

Today, distribution networks generally depend upon loosely managed financial systems without the sort of control mechanisms needed to ensure the proper distribution and delivery of financial products. Mobile distribution networks, though offer mobile subscribers ways to recharge their mobile accounts and, more importantly, are a key feature of the mobile operator's revenue generation system.

The 'pre-paid minute recharge' distribution networks mounted by mobile operators are increasingly being pressed into a service the mobile operators never expected - as the backbone of a financial system that provides banking services. In many developing regions of the world, most of the people are 'unbanked' - few have ever even seen the inside of a bank - but the values stored in the mobile phone can be transferred to others or used as payments if the operator installs the appropriate controls and transfer systems.

Not all mobile distribution networks are the same. Some operators may have simple hierarchies with a maximum of five major distributors, while others may have more than a couple dozen. Operators may have their own branded distribution network or sell through other major networks. What is important, though, is the range the distribution network can span - as deep hierarchy can encompass

hundreds to thousands and, in some regions, even millions of merchants.

Understanding merchant requirements and usage behaviours are the key to ensuring adoption of a new service offering. Providing a broad range of terminal capabilities to merchants also ensures a robust offering for all the types of merchants within the distribution network ecosystem.

Understanding the distribution network equates to understanding an operator's business and understanding what has to be brought to the table to better drive their business.

Modelling a mobile transaction distribution network requires a deep understanding of how it is organised and functions. A robust model can help one to find evolutionary solutions that bring profound changes with little disruption. Key elements to understand include:

- the distribution chain
- hierarchy
- logical layers and groupings
- groups and accounts
- partitioning
- terminals
- access control rights, permissions and policies
- commissions and taxes
- money cycle control
- key usage characteristics of the merchants

A distribution network normally includes a number of separate businesses functioning as a unit and a set of relationships fundamentally underpinned by a common technological platform; it operates through an exchange of information, resources, and artefacts. A single-switch mobile transactional architecture can provide this capability, along with the ability to create and control a wide range of network topologies. By adopting such an approach, mobile operators can provide mobile-money services with ease and empower the distribution network to stimulate incremental revenue, while positioning their communications networks and distribution networks for the next wave of mobile financial services.

Mobile money solutions work with a wide range of electronic, transaction-based applications enabling subscribers to recharge their mobile airtime without the use of physical cards or vouchers, facilitate peer

to peer (P2P) money transfers and pay bills electronically, and the like, using a variety of channel interfaces.

## Where do we go from here?

Mobile money is the wave of the future. Mobile payments will transform the lives of unbanked consumers, letting them pay bills using their mobile phones instead of spending hours in queues and will bring operators significant new revenue streams. The unbanked community is huge; in 75 per cent of the world's countries, most citizens have no access to banking facilities. The GSMA estimates that mobile money presents a five billion dollar market opportunity.

To take advantage of this opportunity, mobile operators need only make the most of the networks they now use to recharge prepaid airtime minutes. The recharge distribution system can be readily modified to handle such services as bill payment and mobile money-transfers. These services not only meet a vital market need, they provide operators with important cost reductions and generate lasting, significant, revenue streams.

Electronic recharge systems can save as much as 60 per cent compared to traditional scratch-card or voucher-based systems. Mobile electronic top-up and payment applications can be economically deployed and integrated using the thousands of POS, ATM and/or PCPM (*public cash and payment machine*) terminals already installed in existing networks to 'top-up' mobile accounts and give users unparalleled access to financial products and services.

There are many examples of distribution networks that revolutionise the services and products that corporations provide to their customers. ColaLife is an example of how a distribution network can even provide life-saving support in previously unreachable regions.

Technology gives us better products and services, but it is the distribution systems that brings these advances to businesses and, ultimately, to us - and make life work better for all. ●