

While mobile banking is now part of the business landscape in many African countries, few people outside the industry are aware of the invisible underlying technology, the platform or interface that turns a mobile phone into a mobile wallet or even a virtual bank branch. To find out more, we went behind the scenes to talk to **Srinivas Nidugondi**, the vice-president of Comviva, a mobile financial solutions provider. By Alexa Dalby.

## The muscle behind mobile banking



Srinivas Nidugondi:  
mobile banking guru.

**C**omviva, based in India, is a global leader in the provision of mobile financial solutions, deployed by service providers in over 85 countries and reaching more than 850m mobile subscribers globally. It has been present in Africa for over eight years, with hub offices in Nairobi and Johannesburg and 17 regional offices across the continent. Its wide range of VAS (value added services) products, which include mobile banking, are now used in 38 African countries and over 30% of its revenue comes from the African continent.

Comviva's mobile financial solutions division is headed by vice-president Srinivas Nidugondi. Previously a banker in charge of mobile banking and mobile payment solutions at ICICI, India's second-largest bank, he has 15 years' experience of a market sector seeing explosive growth and has clear views on its future. He says, "I have been working for the past five years looking at financial inclusion and, with the mobile now really going forward, at how can we use the mobile to address both segments of the population, the banked and the unbanked. We launched the first mobile banking application four years back."

In Africa, Comviva also provides its Pre TUPS™ electronic recharge solution which one in four Africans use to keep their mobile phones topped up, and, most importantly, mobiquity™, a mobile financial platform that enables millions of people in Africa to check balances, transfer money, prepay airtime e-top ups and pay utility bills. Each telecoms operator or bank will have its own consumer brand name for the application. Subscribers in 27 African countries use mobiquity™ for mobile money and banking transactions.

Mobiquity™ services are targeted at both the banked and unbanked. Barclays is a client, using mobiquity™ as an additional way to give its existing banked customers access to their accounts, branding the application as Hello Money. "In developed markets, the intention is convenience – funds transfer on the move, checking account status, making cheques superfluous," Nidugondi says.

"It's exactly the opposite in the emerging markets. For most people, the mobile is the most advanced piece of technology they have touched, and they are comfortable with it because without it their lives would not have changed in the way they have. It's a different paradigm in Africa, South Asia and Latin America."

In Africa, those with bank accounts are a

"minority", says Nidugondi. There is a huge unbanked population, meaning many people use cash for transactions. Where regulations permit, telecoms operators are therefore in a unique position to offer basic financial services to the unbanked and underbanked. "First, they have a connect to the customer because they have a mobile device. The second advantage is their distribution reach with many agents that sell talk time. An obvious example is M-Pesa in Kenya. Here the transactions would be what we call cash in/cash out, peer to peer (P2P) transfers, topping up a prepaid account for airtime and paying utility bills."

He points out that the system of money transfer has to be flexible for both banks and mobile operators. The way it works, he says, is "a telecom operator transfers money to a distributor, the distributor in turn meets up with the retailer or the agent for the mobile money service that can be really far-flung, and then a customer puts cash in, for example, at a retailer. The whole process of transfer of money through the value chain is what I call hierarchy management. A parallel example, in the developed world, is the movement of cash from the cash vaults of banks to multiple branches in the high street."

The third component of mobile banking is storing customer accounts. "For example, for Barclays, customer accounts are stored in the core banking system in the bank. But for a network operator, the mobility" module provides access, hierarchy and customer account information. Together that constitutes what we call the mobile money ecosystem. Using these services, customers can start using financial services such as sending money back home, topping up the mobile connection, paying utility bills. The account information is stored with the mobile network operator but the escrow, the overall money pool, is with the bank." The use of this kind of integrated platform has caused, for example a manifold increase in transactions and customers subscribing to mobile money services.

#### Adapting and adopting

Comviva is one of the few companies in the industry that has a client mix of both banks and telecom companies. This is a function of the differing national regulations across Africa. "In Nigeria, for example," says Nidugondi, "a telecom operator cannot offer these financial services, so in that case we would be dealing with a bank or a third party that is a

non-mobile network operator. But once that has been identified, it's about how you can adapt and start offering services." In contrast, "In Kenya, Tanzania and Uganda, for example, it's easier for mobile network operators to offer services," fuelling the astonishing growth of mobile banking in the sub region.

"The other thing that is very interesting in these countries, for corporation and companies with a reasonably large number of employees, is that salaries can be transferred into mobile accounts. Outside Africa, for example, it's done in the garment industry in Cambodia. In Africa, it's happening in various countries including Tanzania and Kenya."

He continues, "In an African context, P2P access to basic financial services is so poor that the mobile is the only way to bridge those requirements or problem areas and the volume of transactions has suddenly increased."

But mobile banking technology can do much more than that. "It's really solving a couple of problems. One is obviously the access. But along with that, you are actually doing a lot of cost saving. The movement of cash and the security of cash is a big problem. And at the same time, there is an opportunity for service providers – being banks and telecom operators – to make revenues."

"When you move from a cash economy to an electronic economy, a lot of transaction income or revenue is generated. When money is transferred, a fee is charged to the consumer. When the consumer makes a utility bill payment, the utility company gives a payment to the service provider, because it has been saved from having to handle cash."

He adds: "Once you have an explosion of merchants coming onto this network, you can also see traders – like in the Western world or in India or anywhere where there is a card payment network – paying a fee to service providers and the same thing is expected in Africa as well. We feel that a lot of income and revenue opportunities are suddenly being opened up."

Mobile banking can also be a boon to banks, he argues: "While the overall emphasis can be on basic banking and financial services for the underbanked and unbanked, it should not be overlooked that the bank segment also wants convenience, an easy way to make transactions. Mobile banking can also make a difference for the bank, so it's about the bank finding the right value proposition and starting to offer services."

France Telecom's Orange Money is a major Comviva banking platform in West Africa.



"Banks should look at return on investment and at actively pursuing these kinds of services. Big banks have an understanding of alternative channels but a lot of local banks have still not got that full handle on it."

#### Future expansion

The next logical step, he says, is to open up the hitherto restricted mobile loop.

"Currently, all these programmes are proprietary, or 'closed loop'. You need to be a customer of one of the service providers to do a transaction. But I believe 'interoperability' is the next driver in the African context. Once I can bring interoperability, I can increase the whole number of transactions."

He explains the concept of interoperability: "With a handful of mobile network operators offering their services, it means that each operator has a limited share of the overall market, so it only reaches that percentage of the population. But once interoperability comes in, suddenly anyone is able to transfer funds anywhere and it becomes a much more virtuous ecosystem. As we evolve, it's certainly going to happen."

"I'll give you two examples. One is the card networks. They started off being closed loop

but now with Visa and MasterCard, everything is becoming interoperable and that's the only way to move forward."

"The second example, from a telecoms perspective, is that earlier SMSs were not interoperable, you could not contact someone using another provider. When SMS services became interoperable, suddenly you saw an explosion of SMS (text) usage. When that happens, it's a question of cooperating and trying to take the services to the next level – which is interoperable standardisation."

How can this be achieved? "We are talking to customers and regulators to give a fillip to the ecosystem. To benefit from the mobile money and mobile banking market, it's a question of how to bring in those changes which are beneficial to everybody. Our company includes people, like myself, from the banking industry, so we have seen how this works in traditional banking."

"For us, mobile banking is, of course, a technology product, but it's more about the thoughts and experience that go into making the product than the technology itself. You

have to try to make it feature-rich, to stay ahead of the curve. The most challenging point is trying to infuse good features while making the technology simple and flexible, and that's where we always try to be different."

#### Challenges ahead

Nidugondi says: "The market is competitive and one of the most hyped currently, so there are a lot of players coming in. I'm sure there will be consolidation in the next two to three years. Long term, I believe there will be two, three or four big players, who work with an ecosystem approach. You have to ensure that your product can connect to multiple dealers and merchants, so if a customer comes on board, they suddenly have a huge network by which they can go quickly to market and offer services to the consumers. Once you do that, you can definitely be ahead of the curve."

But the main challenge, he concludes, "is that the industry is evolving, coming out with new features and thoughts on a continuing basis. You keep getting new services to work with. So you really need to be on your toes." ■