

M-COMMERCE



The background is a vibrant blue world map. Several hands in black silhouette are shown holding different types of payment instruments: a gold card with a signature, a blue card with a signature, a silver mobile phone, and a green card with a signature. A yellow sleeve is visible on the right side. A horizontal orange line is at the top.

GOES MASS

Over half-a-dozen micro-payments firms have set up operations in India, even as the subscriber base is fast reaching the 20 million-mark. With RBI finalising guidelines pre-paid mobile payments are set for mass adoption like never before, writes **Aarti Gupta**. In a companion piece, **Anu Saraf** points out that mobile value-added services are one of the fastest-growing segments within the telecom sector.



Six months ago, 53-year-old Anand Shrivastav put in place a unique eco-system for his mobile payment service venture, Beam. Among the merchants who service customers for him via accounts activated through mobile pre-paid cards are a curious lot: an ice-cream seller in Amritsar, a milk vendor in Ludhiana and some random roadside eateries in the Hindi heartland.

It goes without saying that none of these vendors could ever hope to be wooed by the Mastercards, Visas and Amexes of the world, for they accept payments even smaller than US\$ 2. In a matter of months, 10,000 merchants have enrolled, catering to an impressive 500,000 subscribers – and counting – that the start-up has acquired by reaching out to half of the country's 600-odd districts.

Shrivastav has done his math all right. He plans to pump in over US\$ 40 million in the next two to three years, by when he expects to tote up an estimated 2 million subscribers and 50,000 merchants at the very minimum. That is the level that the entrepreneur reckons should help Beam break even, much like other such ventures, if not faster.

Shrivastav's Beam is among a small but growing breed of enterprises that is finally making m-commerce a reality at the grassroots in the country, much like in the rest of the developing world, and making a smart business case out of servicing the mobile cash needs of the 'un-banked' at

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Ajay Adiseshann
managing director, Paymate

micro levels.

Now that cell phones have shown how dramatically the need to communicate for those at the bottom of the pyramid can be explored, a whole new industry has been emerging that's seeking to vest the power to transact in the handset of the poor. With mobile connections poised to touch the 500-million mark by December, companies have realised that these phones can be the next big device for ratcheting up sales of other products and services.

Until recently, service providers sought out city residents with services such

as movie and rail ticket bookings, utility and Direct-to-home (DTH) payments and sundry recharges through the mobile device.

Going forward, it is innovative services for the hinterland, such as accessing government benefit distribution, cash transfers and purchases of smaller amounts, opening a bank account, paying insurance premium – often doing it as simply as by sending a text message – that will determine who is in the business for the long haul. In a few business models, the entire system is cash-less, there is no software to be downloaded, no need to be logged in, yet all transactions fully accounted for.

Regulatory approval for the industry came in April this year with the Reserve Bank of India (RBI), issuing detailed guidelines on pre-paid instruments whereby entities proposing to operate payments system are required to seek authorisation from the central bank's Department of Payment and Settlement Systems.

According to industry sources, at least 20-odd players of all types – banks, telcos and technology providers – have queued up for launching services. The process should be over by end of this year and by early 2010 the current 'warming-up' mode should see all-out action.

A look at some numbers helps get the perspective. There are 200 million bank accounts in India, but considering the much bigger set of cell phone users, the potential for m-commerce companies

is as large as 300 million (mobile users without a bank account) at the very basic level.

Rajiv Arora, director, Financial Information Network and Operations Ltd (FINO), pegs the potential much higher at 600 million, considering how even those with bank accounts in rural areas do not get to use them due to distance and a variety of other factors.

Says Ajay Adiseshann, managing director and founder, Paymate, one of the early starters that launched m-commerce service in 2006: "Payments through mobile could boost financial inclusion many times over, without even deploying any additional platform or incurring additional capex."

Beam's Shrivastav agrees the potential is all there waiting to be tapped in the 600,000-odd villages, which is where the incremental penetration has been coming from lately. With people commuting as much as 15-20 km to reach a bank in rural India, he sees the biggest promise in remittance as a service.

Agrees Adiseshann, "Banking and remittances is the endgame." That is hardly surprising, considering that India Post transfers over US\$ 1.75 billion per annum through money orders/postal orders, still the only mode of money transfer in parts of India.

With a subscriber base of 15 million and a size variously estimated from tens of millions of dollars to hundreds – companies keep the numbers close to their chest as break-even still eludes most –

We are seeing a clear adoption of technology that micro-payment players enable.

Rajiv Arora
director, FINO

the micro-payment industry is still in its infancy.

But it is only a matter of year or two that it should become robust and established, says Adiseshann. E-commerce is a multi-billion dollar market in Europe and the US, says Sourabh Jain, ceo, ngpay, "but the demographics in India will dwarf both those markets"

The industry, however, is groping for the right business model, says Sanjay Swamy, ceo, mChek, Bengaluru. As there are primarily three kinds of entities involved in offering pre-paid m-commerce and e-commerce, the business can be classified similarly.

One is the mobile banking cart, which is led by players such as Paymate, who have forged relationships with 25 banks,

or US-based Obopay, which launched India operations in February 2008 in collaboration with six banks. They basically capitalise their relationships with banks and loosely work like their extension counters.

The second cart is led by telecom service providers such as Airtel, which has launched the service due to the user interface created in the mobile phone by mChek. The third are players with their own wherewithal, be it technology or payment infrastructure, for offering services, such as ItzCash or Beam.

A lot depends on what is the primary driver of a player's business. As the focus until now has mostly been on payments, the mobile payments industry has remained focused on cities.

ItzCash is a case in point; it started with DTH payment collection, first for Zee and then for all DTH players and within no time went on to launch a pre-paid card that helped recharge phones, pay electricity bills, water bills and eventually even file property tax online.

Its tie-up with 3,500 merchants ensures it is doing well in all of the above areas. It clocks upwards of 70,000 transactions a day, the largest by a non-bank category, which rake in an estimated US\$ 1.75 million a day. ItzCash handles two-thirds of all online payments for utilities. It may be a payments solution company, but has scaled up services so rapidly that it currently offers 5,000 services.

"It's not about the card," says Surya,

HOW IT WORKS

Micro-payments essentially mean transacting small sums of money digitally and then making payments by aggregating them all together. In India, however, even individual transactions get processed singly.

This is how the system broadly works. A customer registers and activates an account by sending an SMS and then tops up her account through a stored-value pre-paid card to avail of a variety of services or to purchase goods. The revenue comes in the form of the commission that

the micro-payments company charge merchants and subordinated service providers, which could be a utility, a bank or a telco.

Margins surprisingly could be as robust as that for plastic money – 0.5 per cent to 3 per cent – depending on service and the volumes, making the mobile-based pre-paid payments a compelling business case. But since transactions are typically small in value – the average ticket size being around US\$ 8.5 – micro-payments need to be a volume play in the long-term.





“but about benchmarking it to services.” Other companies including mChek and Paymate too have followed suit by first focusing on high-ticket transactions in cities.

But they are increasingly latching on to retail, tying up with the smallest of shopping outlets to be able to offer the full bouquet of services in cities. Paymate, for example, has built one of the biggest pre-paid platforms – 15,000 merchants of which 3,000 are online.

But to make out a true case for mass adoption of mobile payments players need to actually reach out to the hinterland. FINO is doing just that. It aims to deliver a slew of financial services comprising savings, loans, insurance and remittance needs to be made available to the base-of-the-pyramid customer to ensure their financial inclusion.

Towards this end, it provides a standardised and shared pan-India infrastructure to banks, micro-finance institutions, insurance companies and other

AT THE TAKE-OFF STAGE

There are a few broad pointers as to what makes the take-off of the m-payments business so imminent. One is the pace at which numbers are growing.

Essel group company ItzCash, one of the largest players, has been doubling its base every two to three years and is currently 6-million-subscriber strong.

Mumbai-based biometric-enabled smartcard solutions provider, FINO, for example, has enrolled more than 6 million people within three years of starting out. It added the last million in 38 days flat.

Bangalore-based mChek, which launched three years ago, is doing something like 50,000 transactions a day. It has clocked one million registrations for the m-commerce services it launched for Airtel in June 2008, leading the partner telco to comment: “We strongly believe that m-commerce will be one of the top three services offered over mobile

in the future; and going forward it has the power to facilitate a paradigm shift in the way consumers do commercial transactions and business.”

So while the credit cards industry with some 10-12 million ‘unique’ (discounting multiple card factor) users and debit cards at over 100 million users may have taken 20 years to become mainstream, the mobile payments industry is going to take just one-fourth that time as the switch from cash to electronic system



gets ingrained, says Naveen Surya, managing director, ItzCash.

Inflection point is three to five years away at the outside, he feels. The speed with which players are expanding services and looking to indoctrinate customers to look beyond convenience and bill payments, and more importantly, seeking to tap the vast hinterland opportunity now more than ever before is more proof of which way the industry is headed.

mChek is adding five to 10 services a month, points out Sanjay Swamy, ceo of the firm. FINO plans to shortly launch its rural initiative for banking and remittances. Even for government benefit distribution under schemes such as the National Rural Employment Guarantee Act (NREGA) or the social security pension scheme, says FINO’s Arora, “we are seeing a clear adoption of technology that micro-payment players enable.”



government entities, reducing the cost of client acquisition on the one hand and ensuring door-step delivery of financial services to the rural un-banked masses.

Equipped with bio-metric devices, its 4,000 correspondents in 1,200 locations perform each of the teller's functions. FINO is currently reaching out to 4 million financially excluded households. It is enrolling more than 20,000 people every day for mainstream banking.

But what FINO's Arora is most excited about is being an active participant in the government benefit distribution schemes. A 20-35 per cent savings in cost in setting up a network for NREGA (annual outlay of over US\$ 8.5 billion), in addition to plugging the leakage, makes eminent sense for it to be done via m-payment firms.

All the leading m-payment players are consequently focused on building a lean distribution model that can keep costs to the minimum. Even though FINO has 7,000 outlets (and projected to rise to 10,000 in the next few months), its smart model of mobile business correspondents with biometric devices works as the winning edge.

These are early days and right now everyone is focused on building the

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managnig director, ItzCash

architecture. ItzCash is expanding reach to 2,000 towns from about 1,800-odd at present. It follows the FMCG distribution model: its 1,800 distributors reach out to an impressive 200,000 outlets. In addition

there are 20,000-odd outlets with IT infrastructure to offer a complete bouquet of services.

Paymate, which unlike FINO, is completely mobile and electronic-driven, has been assiduously investing in building the entire e-payment system: 25 banks, 150 multiplexes, 150 utilities, 150 multiplexes in addition to other merchants.

Clearly, establishing any financial service takes time and it is encouraging to see that most players are currently busy perfecting the bread-and-butter core business. Profitability can wait, they say, because it takes a couple of years to break even. With the exception of FINO, which is cash-positive three years after it launched service, all others are negotiating a fresh round of funding till the tip-off happens into positive territory. ItzCash is expecting it to happen next year and Paymate in 2011.

Until then, mobile payment companies have quite a bit of challenge on hand, educating the customer about all that the system can accomplish by merely sending an SMS. Says Surya of ItzCash: "We are witnessing the advent of e-commerce and m-commerce; the real transformation will be seen over the next few years."

ROLLING OUT NEW TUNES



Bharti Airtel, the country's largest telecommunications operator, sprang a surprise earlier this year when it declared that Music Bharti, its division for mobile entertainment, was the country's largest music company with revenues significantly higher than those of its nearest music industry leader.

Reliance Communications, the country's second-largest operator, recently came up with its version of a sachet packing, offering ring-back tones and news alerts on a daily pricing model, instead of monthly.

Says Akshay Kumar, senior executive vice-president, Reliance Communications: "Earlier we experimented with introducing games on a daily pricing basis and this worked very well for us, so we are now extending this initiative. Daily pricing helps to make our value-added service (VAS) options more accessible to a large segment of the population."

The mobile value-added service (VAS) business is indeed emerging as a powerful new segment within the telecommunications sector and is poised to grow phenomenally. Leading telecom

players are aggressively expanding their VAS offerings.

New entrants in the GSM space Tata DoCoMo (the GSM platform of Tata Teleservices Ltd) and Airtel (with its per-second billing and VAS offerings) have also opted to use VAS in order to differentiate themselves from the other operators.

Says Vijay Shekhar Sharma, ceo, One97, a leading player in the VAS space in India: "Voice has become the most easily perishable differentiator in the mobile space today. VAS allows operators

VAST GROWTH POTENTIAL

THE mobile value-added services (VAS) business has been growing phenomenally in India, with service providers launching exciting new products with regular frequency. VAS is popular among telecom majors as it helps them draw additional revenues.

Traditional revenues from voice calls in India are among the lowest in the world, thanks to the rock-bottom tariffs. Average revenue per user (ARPU), a standard industry measurement, is down to US\$ 4.3 a month, a 50 per cent fall in about two years.

Mobile phone operators are eagerly awaiting the roll-out of 3G services as it would enable them to offer a host of high-speed value-added services to subscribers. At present, there are nearly 100-odd VAS products on offer,

but less than half-a-dozen are popular among subscribers.

They include caller ring back tunes, music downloads, game-based applications, interactive voice response and messaging services.

The Internet and Mobile Association of India (IAMAI) estimates that mobile VAS revenues add up to almost US\$ 2 billion. The industry, which comprises about a hundred players, is estimated to expand at a compounded annual growth rate (CAGR) of 44 per cent over the next two years.

The IAMAI has identified three different segments in the VAS sector – entertainment VAS (games, movie clips, jokes, etc), info VAS (news, sports and weather updates) and mCommerce VAS (mobile banking and payment).

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Akshay Kumar
senior executive VP, Reliance
Communications

to not only get better realisations from customers, but also helps to ensure that they stay on the network.”

In a country where more than 90 per cent of the mobile connections are pre-paid, customer-stickiness is a major issue for most operators. The VAS space is consequently the most happening and has witnessed a lot of action in the recent past.

The segment is estimated to fetch revenues of around US\$ 1 billion and is growing at 40 per cent annually, accounting for almost 10 per cent of operator revenues. The Cellular Operators Association of India (COAI) estimates that

this percentage will double in the next three years.

VAS operations in the country can be divided into two main segments: SMS-based and music-based, the latter comprising chiefly of caller ring-back tones and music search.

A recent innovation in the space has been the use of voice to enable search. Comviva recently tied up with Nuance Communication to facilitate better voice access that will allow greater intake of VAS content in India. Voice-based ‘Song Search’, a service that was released recently, will enhance subscriber’s searches related to music content with

the power of their enhanced voice recognition ability.

Says Sangeet Chowfla, chief strategy officer, Comviva: “Voice recognition will enable higher VAS penetration in all segments. We recognised voice as a major factor in boosting the growth of VAS, but till now we were not able to use it effectively as there was lack of proper voice recognition software.” The software, developed by Nuance allows better voice recognition across several languages and dialects.

Adds Manoranjan Mohapatra, ceo, Comviva, “Voice-based services in VAS are the key to providing exceptional consumer



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experiences – and we are expecting ‘Song Search’ to impress mobile users. We anticipate that the design and flexibility of the system, combined with the accuracy of recognition rates, will make it significantly easier for consumers to find and download the songs they want.”

According to Chowfla, “with this service, beyond the ubiquitous killer application SMS, subscribers can send a text or voice message to callers when unavailable to talk, they can entertain callers with a tune, surf the web or get information using voice commands, top-up their pre-paid accounts, download or listen to music or receive alerts about traffic-jammed streets.”

Apart from voice, another key focus area for VAS is the enterprise segment. Companies are looking at moving the processes to the mobile from personal computers. This has special significance for the banking, financial services and insurance (BFSI) sector, retail, logistics and media.

“This will cut down request processing time, and enable sales executives to meet and capture more customers,” predicts Vinish Kathuria, chief operating officer, Spice Digital. The company, earlier known as Cellebrum, has set up a new R&D facility in Bengaluru to develop solutions targeted at the enterprise segment.

The higher processing power of new generation handsets and their enhanced memory is encouraging consumption of higher quality media. Full-track music downloads is a reality and video download and streaming is becoming an increasingly viable service. As 3G services are gradually rolled out in India, there will be scope to offer multimedia applications including video services such as movie trailers, sporting highlights and video chat, surveillance and messaging services.

The ability to download applications on many different handsets carrying open application environments is triggering a rise in specialised services, which were earlier hampered by proprietary handset environments.

Mobile VAS is expected to transform subscriber experience, providing exciting new opportunities in music, entertainment, information, gaming and m-commerce services. For the service providers, it will be yet another lucrative stream of revenue in an increasingly competitive industry. 🌈



EXPANDING GLOBAL FOOTPRINT

MANY telecommunication service providers in India are planning to aggressively expand in the VAS space. These include Tata DoCoMo, the GSM brand of Tata Teleservices – in which Japanese mobile major DoCoMo has a 26 per cent stake – and Comviva (formerly Bharti Telesoft).

Tata Teleservices offers nearly 150 VAS products and plans to expand its bouquet almost six times in the near future. According to Anil Kumar Sardana, managing director, Tata Teleservices, the company expects its revenue share from VAS to go up to 20 per cent in a couple of years from 14 per cent at present.

Its Japanese partner offers a wide range of VAS in Japan and the Tata joint venture plans to introduce several of them in India.

Tata DoCoMo recently partnered with Microsoft to launch Windows

Mobile 6.5 applications on cell phones. The application features 'Windows Market Place for Mobile,' enabling easy access to more value-added services.

The company plans to open 100 'Dive In' stores over the next six months across India, offering customers access to a host of VAS. According to Deepak Gulati, president, Tata DoCoMo, the stores aim to create a user experience, showcasing the mobility of the future.

NTT DoCoMo also plans to set up a new global research and development centre in India, together with Tata Teleservices. Sardana points out that this would be DoCoMo's sixth R&D centre; the others are located in Japan, China, the US (two) and Germany. The Indian R&D centre would develop innovative and customer-friendly VAS.

Comviva, a leading provider of integrated VAS solutions for mobile operators in emerging markets, has

deployed solutions for over 100 mobile operator customers in over 80 countries. The company's investors include Bharti Enterprises, Sequoia Capital and Cisco.

Sangeet Chowfla, chief strategy officer, says the company has achieved critical mass as a product company with a strong international presence. Comviva expects a 30 to 40 per cent growth in revenues in the current fiscal, with its international business accounting for two-thirds of its revenues.

The company is signing framework agreements with several leading global telecom operators, which would enable it to offer integrated VAS solutions to their customers. While its footprint covers the entire globe, Comviva is expanding operations in South-East Asia, Africa and Latin America. It is setting up three hubs in Dubai (to cater to the Middle East and Africa), Bangkok (South-East Asia) and Mexico City (Latin America)