

THE THREE PILLARS

What does the sluggish take-up of NTT DoCoMo's FOMA network mean for the rollout of 3G networks worldwide? Richard Kennedy takes a timely look at the Japanese market

Of the many success stories in the short history of wireless, NTT DoCoMo's i-Mode must come close to the top of the pile. The service has long been a byword for exponential growth, innovation and satisfied subscribers.

At a time when European operators and investors were having second thoughts about 3G business models, i-Mode's success seemed to say they were right to invest their billions in high-speed mobile data networks. Not that i-Mode technology was high-cost or high-speed, but NTT DoCoMo's swelling subscriber base seemed to imply a pent-up demand for non-voice services over mobile networks.

In fact, the i-Mode model was so successful there seemed a strong argument for turning it into an international phenomenon. So while NTT DoCoMo forged ahead with ambitious plans to launch the world's first W-CDMA based 3G network in Japan, it also set about exporting i-Mode variants to the US, Germany, the Netherlands, Britain and Thailand. At the time, few in or out the industry appeared to doubt the wisdom of this strategy, although the costs involved were staggering. It's been reported that the operator has invested US$14.8 billion in overseas expansion.

Then in October 2002 the company announced an astonishing 95 per cent drop in half-year profits. The full-year earnings forecast was scaled back by close to two-thirds and 3G service take-up projections slashed from 2.15 million to 320,000 subscribers. It was also reported that company president Keiji Tachikawa had announced he was taking a 20 per cent pay cut.

Mainstream media response to these events has been fairly predictable. Most commentators appear to have relished the fall from grace, suggesting that they saw it coming and that the Japanese operator's problems represent yet another blow to the prospects for 3G networks worldwide. This lurch from the specific to the general in pursuit of a headline is commonplace.



However, what's more surprising is the extent to which such negative press about NTT DoCoMo had been pre-empted in the Japanese trade papers over the past few months.

The West's obsession with i-Mode has made it easy to believe that for the past couple of years NTT DoCoMo has been building its empire in the absence of serious competition. In fact, Japan's leading operator has two serious rivals that have engaged in aggressive, targeted technology investment and service innovation in an effort to carve themselves a larger piece of this lucrative market. And in a 3G context, the most dangerous of these players has presented significant obstacles to NTT DoCoMo's efforts to build its next generation subscriber base.

Until recently, in the minds of analysts, investors and probably even subscribers, KDDI had always been seen as the underdog. Borne of a merger of three companies (including a former state carrier) and lumbered with an old-fashioned PDC network, KDDI never looked good alongside its slicker more media-friendly competitor. However, perceptions began to change when Japan's number two invested in a cdmaOne (IS-95) network that, as well as providing improved voice quality, also enabled the operator to offer customers roaming services in North America and much of Asia. In addition, the company launched its WAP 2.0 service on its 'au' branded data network in December 2001.

At first, the carrier seemed to struggle to capitalise on its new network resources. Consumers continued to be concerned about overly complex service portfolios and confusing billing models. In January 2002, Credit Suisse First Boston telecom analyst Mark Berman is reported to have voiced concerns about KDDI's continued preoccupation with making the most of its old network. 'KDDI is trying to compete, especially with J-Phone [Japan's increasingly successful number three carrier], by offering special discounts to students. But [instead] it should market the fast cdmaOne data services to high-end users and give its existing PDC users a good incentive to migrate to cdmaOne, thus unifying services.'

To its credit, KDDI's strategists appear to have listened and responded to this widespread market criticism. On 1 April 2002, KDDI launched WAP services over a CDMA2000 1XRTT network that boasted downstream data speeds of 144kbps and upstream transmission of 64kbps. Web access was via the company's EZweb portal. Although CDMA2000 1XRTT is not recognised by the ITU as a 3G technology, it's certainly perceived as such in Japan where KDDI's 'au' fast data offering is considered a straight competitor to NTT DoCoMo's FOMA service.

After earlier, somewhat muddled service offerings, the carrier now seemed to find its focus. It aggressively went after the i-Mode subscriber base, targeting young, hip early adopters with a small set of extremely targeted applications that included photo messaging, video clips, GPS and the usual array of games. It was a simple, easy to understand service proposition backed by a shrewd marketing campaign.

The figures speak for themselves. Within a month, the service had gained a respectable 334,100 subscribers, which hit the one million mark on 23 June 2002. By October the same year, just seven months after launch, KDDI's new service had notched up an impressive three million plus subscribers. To put this into context, by the same point in the year NTT DoCoMo's W-CDMA-based FOMA service was still struggling to reach the 150,000 mark.

Local commentators maintain no single factor accounts for KDDI's runaway success in the market NTT DoCoMo had marked down as its own. In May 2002, Mobile Media Japan argued a marketing strategy that emphasised handsets and features rather than the

technology was playing a major role helping KDDI gain customers in the high-speed data market. 'Simply avoiding the harsh 3G (sic) limelight until it has proven itself in the market' seemed a key element for success.

Coverage has also made a significant contribution to KDDI's dominance of this market. Commentators perceive FOMA coverage as patchy and metro-centric, while KDDI has the confidence to market a close to nationwide offering that has found favour with analysts and subscribers alike. The 'au' service area is expected to reach 90 per cent of Japan's population by the end of 2002. In addition, KDDI's decision to deploy dual mode handsets seems to have worked in its favour, enabling subscribers to access services in the few areas not covered by its fast data network.

It's interesting to note that marketing a service with lower data speeds than its competitor hasn't appeared to damage KDDI's progress. While the FOMA network offers theoretical speeds of 384kbps/2Mps, KDDI's combination of 64/144kbps coupled with ubiquitous coverage and the perception of greater reliability appears to be seen as the stronger proposition.

Having gained significant market advantage, KDDI plans to mark the first birthday of its fast data services with a soft launch of a CDMA 1xEV-DO 2.4Mbps data service in April 2003. This, according the ITU, will be a true 3G offering and a commercial launch in the Tokyo region is scheduled for November the same year. The company has also announced a target of seven million '3G' (ie, fast data) subscribers by March 2003, and at its present rate seems set to meet expectations. KDDI is also quite clear about where those new subscribers are going to come from. In the words of the company's general manager Toshio Maki: 'By chipping away at DoCoMo.'

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In the medium term, it's likely to be the reaction of content developers that holds the key to the enduring appeal of service portfolios. For the moment, the cutting edge players have their sights on the KDDI subscriber base simply because that's where the numbers are. However, it would be ridiculous to underestimate NTT DoCoMo's strengths in this area given the company's history and the size and organisation of the i-Mode developer community.

Yet once again, the Japanese number two has been quick to adopt any strategy that might give it an edge in this relentlessly competitive market. The Japanese content community has long complained about the time it takes to formalise their relationship with any of the major carriers. In July 2002, KDDI unveiled plans to simplify the notoriously tortuous registration process for companies wanting to link up to the company's EZweb portal, while at the same time offering a third party billing mechanism to unofficial sites.

Although J-Phone is the smallest of Japan's three main carriers, its impact on the market should not be underestimated. With its core shareholders Vodafone and Japan Telecom, the company has a reputation for innovation and extremely strong branding strategies. At the beginning of 2002 when KDDI's fortunes wavered, J-Phone briefly slipped into the number two spot. KDDI soon recovered, but the warning signs didn't go unnoticed by commentators and analysts.

One of the keys to J-Phone's positive market image has been the rise and rise of its sha-mail product. Launched in June 2001, the service enables subscribers to take a sha-mail picture with a mobile camera and send it as an email attachment. In addition to being able to push pictures to other J-Phone subscribers, users are also able to send photos to the customers of other Japanese operators.

J-Phone has worked hard to ensure sha-mail aficionados remain loyal to the service through a constant stream of add-ons and enhancements. For example, the service now includes the instantly popular @sha-mail album service, which allows users to save photos on the J-Sky internet service so they can create and display personalised photo albums. With the launch of packet services, in March 2002 J-Phone extended sha-mail to include 'movie sha-mail', a service that enables users to send and receive emails with attachments containing audio/video messages up to five seconds long. Although image quality is just the right side of workmanlike, the service has found favour with the Japanese youth market and subscriber numbers reached the one million mark nine months after launch.

It would be difficult to overstate the role played by sha-mail in J-Phone's medium term strategy. According to a company report, 'Notwithstanding the slowdown in market growth, J-Phone Vodafone consistently captured a higher percentage of net customer additions in each month in the period compared to its cumulative market share. This can largely be attributed to the strength of the brand and the popularity of camera and internet enabled handsets.' The report goes on to describe the role played by the massive range of sha-mail handsets in attracting customers and reducing churn.

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From a western standpoint, the Japanese subscriber's capacity to embrace brands and services like i-Mode and sha-mail and make them their own prompts incredulous envy. In the case of J-Phone, the carrier has also found significant support from handset vendors, with around 20 types of sha-mail photo-capable handsets, along with four video messaging devices. However, as both NTT DoCoMo and Vodafone/J-Phone attempt to roll out hit Japanese service offerings in European markets, a number of commentators have expressed doubts about the portability of the products. Roaming and interoperability issues that are readily resolved in a closed market like Japan are likely to prove more problematic elsewhere.

On the high-speed data front, J-Phone is clearly lagging behind its rivals. Although full-scale trials began in the Tokyo 1 metropolitan area at the end of June 2002, commercial services were not scheduled for launch in major metros until December 2002. This is in keeping with Vodafone's global policy of sticking with 3GPP compliant technology. 'J-Phone is committed to bringing to the market a superior 3G service that is fully compatible with international global standards, giving Japanese customers unparalleled access to similar international networks,' explains Darryl Green, J-Phone president. 'In order to deliver this to our customers, we have decided to extend our trial services to ensure the necessary software modifications. This will allow implementation of a seamless worldwide compatible commercial service when launched.'

It remains to be seen whether the data speeds, interoperability and international roaming capabilities promised by J-Phone 3GPP compliance make up for the head start currently enjoyed by its competitors. However, the carrier's brand strengths and the popularity of its products mean it might well turn out to be the dark horse in the high-speed mobile data market in the months ahead.

Technology issues to one side, J-Phone continues to build market share. In September 2002, NTT DoCoMo's i-Mode posted 34.88 million subscribers, KDDI's EZweb 11.15 million and J-Phone's J-Sky 11.08 million.

Running third, however close, isn't usually a cause for celebration. But in one very important respect J-Phone should be regarded as Vodafone's jewel in the crown. According a September 2002 interim report, the Japanese carrier currently enjoys the highest ARPU of any company within the Vodafone Group. The success of its data and content products has meant that data and SMS revenues exceeded 20 per cent of service revenues in August and September 2002. However, it's interesting to note that the positive effect this had on data ARPU was more than offset by the decline in voice ARPU.

With the voice-as-commodity trend now an accepted fact of life, J-Phone president Darryl Green is on record as believing that for Japan at least 3G revenue streams mean ARPU figures will, at best, remain stable. 'Keep in mind that in Japan, our ARPU level is about two to three times higher than the average in Europe... We already have a high base in Japan.'

Contrary to the views of doomsayers and pundits, NTT DoCoMo's difficult year simply means the company has had a difficult year – not that 3G is dead in the water. Indeed, the Japanese experience tends to suggest that the new technology combined with thoughtful marketing and well-targeted products can have an extremely positive impact on flagging fortunes.

Furthermore, it is clearly absurd to write off the creators of i-Mode on the basis of a poor half-year performance. In its local market, this is the operator that still has more than twice as many customers as its closest rivals. This is the company that has taught the global industry the importance of customer focus and the value of pushing brand and services ahead of technology.

Underestimate them at your peril. ■