Perspectives: Wireless Data ARPU

Wireless industry's growth continues unabated into 2H 2006. The 1st 6 months of 2006 marked several milestones. GSM subscribers worldwide crossed the 2bn mark and the industry is going to gain its quickest billion subscribers and cross 3bn subscribers within the next 24 months.

China crossed the 400m subscriber mark while India crossed the 100m mark and became the 4th largest wireless market within a matter of a couple of years of hockey-stick growth.

Carriers worldwide are reaping benefits of such a phenomenon – some more than others. Chetan Sharma Consulting looked at carriers in over 40 countries and analyzed their ARPU – the key industry metric by which carriers are measured in the financial markets. Understanding of ARPU dynamics is critical to all in the mobile ecosystem.

While voice ARPU (Average Revenue per User) continues to drop, data ARPU's importance keeps on rising. As 3G is becoming pervasive, so are the non-messaging data applications which is having a direct impact on carriers' bottom-line. This paper will take a look at the ARPU trends worldwide and focused on the leaders. Finally, we will take a closer look at the US market, analysing the numbers for the big 4 carriers.

BY CHETAN SHARMA
EDITED BY LUNITA S V MENDOZA

ARPU represents how much an operator is making from every user every month. Though ARPU is not the best indicator of the financial health of the operator, it is one of the most consistent ones across carriers, the one you can use to compare competitors, gain a sense of trend line, and do some forecasting.

Following Chetan Sharma Consulting's popular Wireless Data ARPU paper that was released in 2005, the firm analysed carrier ARPU numbers from 40 countries including developed and mature markets such as Japan, Korea, UK, and US to high-growth markets such as China, India, Brazil, Russia, to some of the developing markets such as Eastern Europe and South Africa. Our specific focus was on data ARPU as it represents the growth part of the equation.

Who's ahead?

It wasn't a surprise that Japan continues to lead the pack. Its average data ARPU has been hovering over US$15 which is over 27% of its overall ARPU. It should be noted that the overall ARPU in Japan is declining just like in almost every major market. There were a few exceptions. Only 6 countries recorded an increase in ARPU with Canada and Korea leading at $3 per subscriber; an increase from end of 2004.

Chile, Brazil, Taiwan, and Mexico reported modest gains. The biggest loser was Nigeria dropping almost $23 from Q404. In fact, it has dropped a whopping $70 since 2001, the biggest such drop. Even some of the western markets are feeling the heat; Switzerland and Finland both reported double digit drops ($13 and $12 respectively). Even the mighty Japan reported an $8 drop from 2004 levels. The US average ARPU declined marginally to $53.

As shown in Figure 1, Japan still leads in the data ARPU though the gap is closing with each passing quarter. In fact, carriers from Philippines have a much higher % data ARPU than anybody else with over 45% of the carrier revenues coming from data services (though the data ARPU is only $2.7). The US for the 1st time crossed the 10% and $5 barrier and is making good incremental gains every quarter. We will discuss the US market in more detail a bit later in this paper.

In terms of data ARPU change, majority of the countries are experiencing higher data ARPU with US leading in terms of absolute dollar amount. The average US data ARPU was up over $2.1 from a year ago, followed by Canada, Hong Kong, Korea, and New Zealand.

Figure 2 shows the matrix of wireless data as a percentage of total revenues vs. wireless data ARPU in USD for some of the major carriers worldwide[2]. It is no surprise that NTT DoCoMo and KDDI lead the pack – having done ground breaking work in this space since 1998. NTT DoCoMo is by far the leader by earning over $1bn/month from data services. Their stated goal is to derive 80% of their revenues from data services by 2010[3].

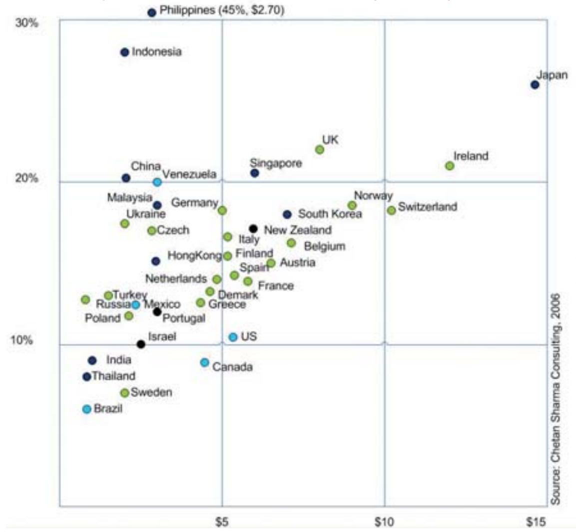
The gap between the Japanese operators and the rest is closing fairly rapidly. Since our last research on the subject, several other operators such as 3 in Australia and UK and SK Telecom in Korea are narrowing the gap. The big 4 US carriers – Cingular, Verizon, Sprint Nextel, and T-Mobile are gaining ground as well as 3G takes a foothold in the US. As reported in our "3G – Hitting the Mass Market" paper, US market is priming for 3G growth by early 2007. As of mid-2006, there were already over 7m 3G subscribers in the US.

One would also notice that operators in India and China are making from data revenues as a percentage but not in absolute dollars as the price pressure continues. It is interesting to note that while the tariffs in these markets are lowest in the world, operators are reporting over 40% EBITDA[5] margins, which is unheard of in the western markets. This clearly points to the uniqueness of various markets and differences in cost structures and operations.

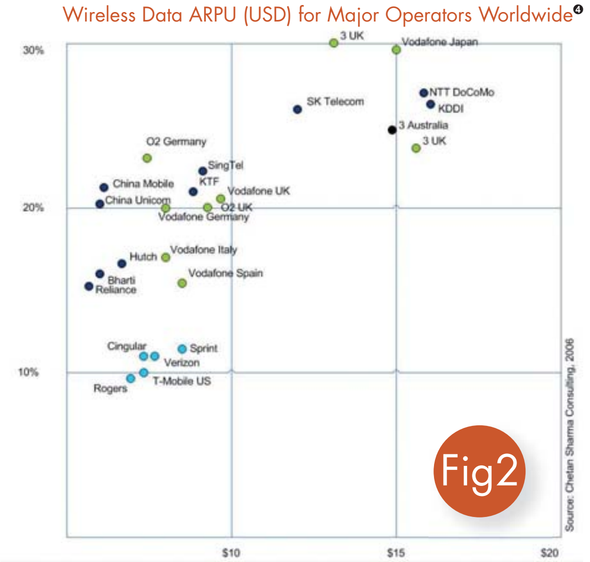
The US market

US continues to be the highest revenue generating market in the world. As shown in Figure 3, US carriers netted over $43bn in revenues in 2005, more than double of their Japanese counterparts and more than the

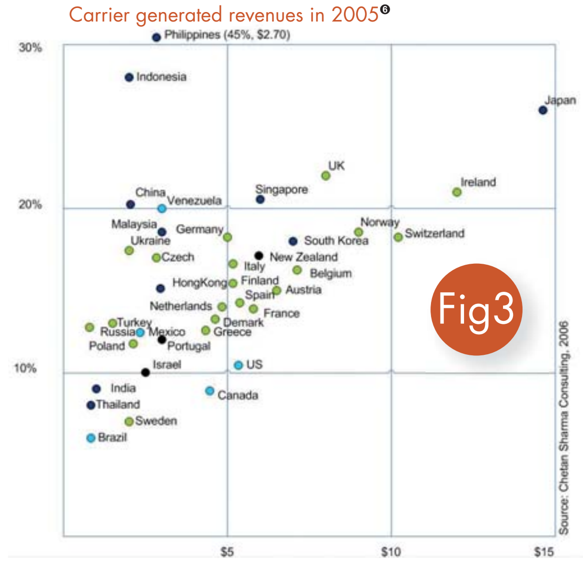
Average Wireless Data ARPU (USD) by Country[1]



Wireless Data ARPU (USD) for Major Operators Worldwide[2]



Carrier generated revenues in 2005[4]



[1] Source: Chetan Sharma Consulting, Analyst reports, Government data
[2] The data revenues include revenues from content as well network usage.
[3] Source: NTT DoCoMo.
[4] Source: Chetan Sharma Consulting, Analyst reports, Government data
[5] Source: Sunil Mittal, CEO Bharti, July 4th 2006
[6] Source: Chetan Sharma Consulting, Analyst reports

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emerging 4 BRIC nations of Brazil, Russia, India, and China combined.

While most of the major western markets have experienced decline in ARPU, US ARPU has held somewhat steady around $53-55. Figure 3 sums up the state of the US market right now. Voice ARPU is declining and data ARPU is barely making up to keep the ARPU at $53. The US market clearly has very high potential for data applications and we can expect the data ARPU to show signs of growth quarter-over-quarter.

This is due to several factors but the primary one being that carriers are waking up as data ARPU is starting to account for over 10% of their revenues, and with the promotion of data services, these carriers are starting to organise internally to respond to the opportunity. There is more awareness in the market, better phones, advent of 3G and enhanced services; all leading to the rise in the data revenues. In 2005, data revenues topped $8.6bn, up from $4bn in 2004[7]. In 2006, the data revenues numbers are expected to exceed $14bn[8].

US Wireless Carriers: Data as % of Total ARPU[11]

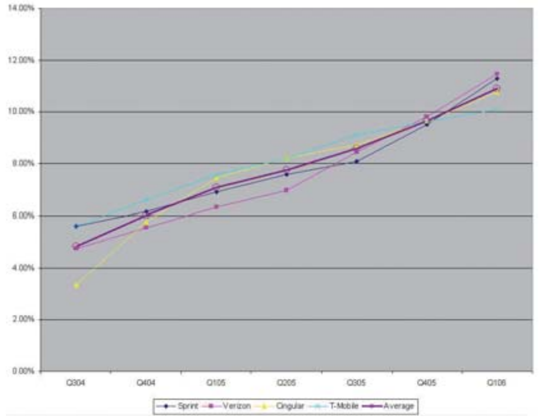


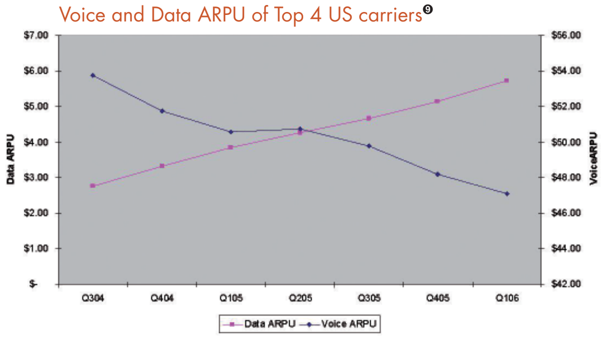
Fig4

For the last several quarters, each of the top 4 US carriers has seen growth in their data revenues with Sprint Nextel being the leader topping $7 in Q106 (Figure 4). The average data percentage of the revenue is around 11% and is expected to keep on increasing both due to the decline in voice revenue and increase in data revenues for the foreseeable future. By 2010, data revenues will account for 25 – 30% of US carrier revenues. Even the most optimistic carriers would have found it hard to believe this only a few months back.

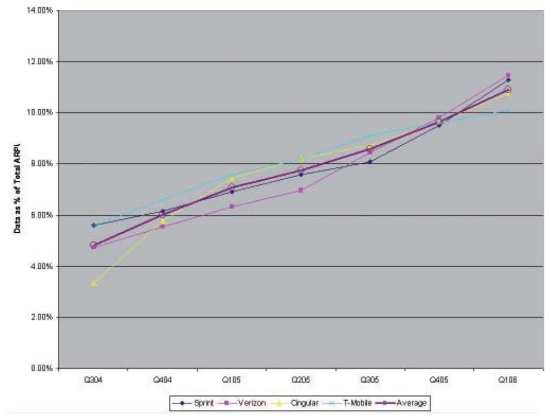
Another interesting trend in the US market is that CDMA carriers have had higher ARPU than their GSM brethren consistently and CDMA carriers lead in the data ARPU numbers as well. However, with some of the major operators shifting to UMTS/HSDPA[12], it will be interesting to see if this trend continues.

The good news is that wireless data usage is on the rise. However, to translate usage into revenues, one still has to be innovative, offer differentiated solutions, and put strong emphasis on consumer user experience, education, and marketing the services (not the technology), and provide good customer care. It is also clear that higher wireless data ARPU is directly correlated to creative business models that empower the entire ecosystem, device customisation that enhances user experience and brand loyalty, and applications and services that benefit the customers. **WW**

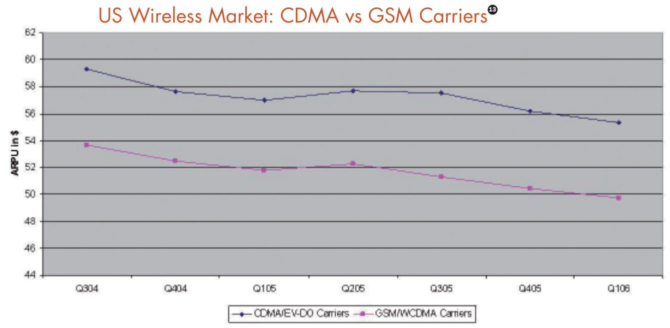
Voice and Data ARPU of Top 4 US carriers[9]



US Wireless Carriers Data ARPU Trend[10]



US Wireless Market: CDMA vs GSM Carriers[13]



❼ Source: CTIA
❽ Source: Chetan Sharma Consulting
❾ Source: Chetan Sharma Consulting
❿ Source: Chetan Sharma Consulting

⓫ Source: Chetan Sharma Consulting
⓬ Prominent among them are KTF and SK Telecom. Reliance in India is also contemplating a complete switch to GSM.
⓭ Source: Chetan Sharma Consulting