

INDIA

OnMobile Global

23 September 2008



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On song for huge VAS growth

Initiating coverage with Outperform rating and TP of Rs650

- We initiate coverage on OnMobile Global with an Outperform rating and a DCF-based target price of Rs650, implying 42% upside from current levels. We are excited about the opportunities in the Indian mobile value-added service (VAS) sector as well as in emerging markets. We recommend that investors accumulate OnMobile shares to benefit from the robust growth in the mobile VAS space, likely to play out over next 2–3 years.

VAS players to benefit from secular growth in wireless

- VAS providers are a direct beneficiary of the explosive growth in Indian wireless penetration, a fallout being a continued slide in wireless ARPUs. To maintain healthy top-line growth and cushion the fall in voice ARPUs, we expect telcos to turn to and partner with VAS players to help grow earnings.
- We estimate the Indian mobile VAS opportunity to be worth Rs69bn (US\$1.6bn) in FY3/10E. Rapid growth in subs (evident in the wireless monthly net adds of 9m-plus) and a gradual and secular pick-up in the VAS share of wireless ARPU is the basis of our forecasts. China's VAS market (ex-SMS) has almost doubled to US\$8.8bn in 2007 from US\$4.6bn in 2005, implying a sharp increase in VAS ARPU as a percentage of total wireless revenue to 13.4% from 9.7% in 2005. We see India's VAS market mirroring some of this growth.

Proven record + Solid growth + Attractive valuation = OnMobile

- **OnMobile is India's No 1 mobile VAS provider, with a ~30% share of the India VAS market (ex-SMS).** It is currently valued at US\$761m. We think its entrenched customer relations with all the Indian telcos and ability to consistently deliver innovative VAS applications backed by superior technology capabilities and consumer insight will help it maintain its lead.
- **OnMobile's marquee Top 5 customers include leading Indian operators – Bharti (BHARTI IN, Rs809, OP, TP: Rs975), Vodafone-Essar (Not listed), RCOM (RCOM IN, Rs370, N, TP: Rs475), Idea Cellular (IDEA IN, Rs82, OP, TP:Rs100) and BSNL (Not listed).** It follows an intimate partnership model with telcos on revenue-sharing as opposed to one-time sale/licensing model.
- **Recent M&A transactions have opened the door for OnMobile to tap the massive potential offered by the international VAS market.** OnMobile's international revenues are likely to grow at a faster pace (FY3/08–13E CAGR of 63%) than growth of its domestic revenue (35.5%). We expect international revenues to be driven by the twin levers of 1) organic international operations and 2) product suite and client relations of Voxmobili (Not listed).
- **We forecast robust 2 year FY3/08–10E EPS CAGR of 42.5%,** led by solid topline CAGR of 58%, marginally offset by one-time dip in margin in FY3/09E.
- **OnMobile has zero debt and its operating cashflow is sufficient to meet future capex requirements.** A solid financial position and professional management team differentiates the company from the other mid-cap stocks in uncertain times. We like its consistent free cash profile from FY3/10E.

Risks – change in business model, value-destructive M&A

- 1) A shift in revenue model from revenue-sharing to licensing structure, which would negatively alter business fundamentals; 2) expensive acquisitions.

Please refer to the important disclosures and analyst certification on inside back cover of this document, or on our website www.macquarie.com.au/research/disclosures.

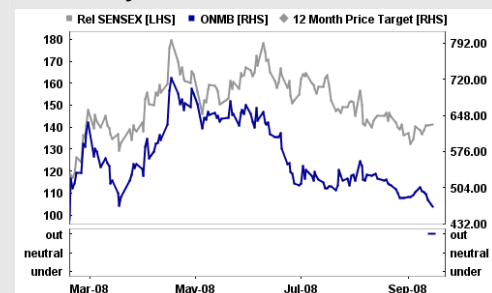
ONMB IN**Outperform**

Stock price as of 22 Sep 08	Rs	456.30
12-month target	Rs	650.00
Upside/downside	%	+42.5
Valuation	Rs	650.00
- DCF (WACC 13.0%, beta 1.0, ERP 6.0%, RFR 8.5%, TGR 4.0%)		

GICS sector	software & services	
Market cap	Rs m	26,362
30-day avg turnover	US\$m	7.1
Market cap	US\$m	575
Number shares on issue	m	57.77

Investment fundamentals

Year end 31 Mar		2008A	2009E	2010E	2011E
Total revenue	m	2,618.1	4,209.5	6,505.2	8,869.3
EBITDA	m	1,048.3	1,567.7	2,533.6	3,543.0
EBITDA growth	%	71.9	49.5	61.6	39.8
EBIT	m	792.6	1,064.0	1,693.7	2,314.4
EBIT Growth	%	69.7	34.2	59.2	36.6
Reported profit	m	604.8	929.7	1,384.5	1,790.4
Adjusted profit	m	609.2	929.7	1,384.5	1,790.4
EPS rep	Rs	11.54	15.98	23.44	29.83
EPS adj	Rs	11.88	15.98	23.44	29.83
EPS adj growth	%	98.1	34.5	46.7	27.3
PE adj	x	38.4	28.6	19.5	15.3
Total DPS	Rs	0.00	0.00	0.00	0.00
Total div yield	%	0.0	0.0	0.0	0.0
ROA	%	13.6	11.7	16.5	18.3
ROE	%	15.0	14.1	17.9	19.2
EV/EBITDA	x	24.1	16.3	10.3	7.5
Net debt/equity	%	-23.9	-15.0	-15.8	-19.2
Price/book	x	4.3	3.8	3.2	2.7

ONMO IN rel SENSEX performance, & rec history

Source: Datastream, Macquarie Research, September 2008 (all figures in INR unless noted)

OnMobile Global

Company profile

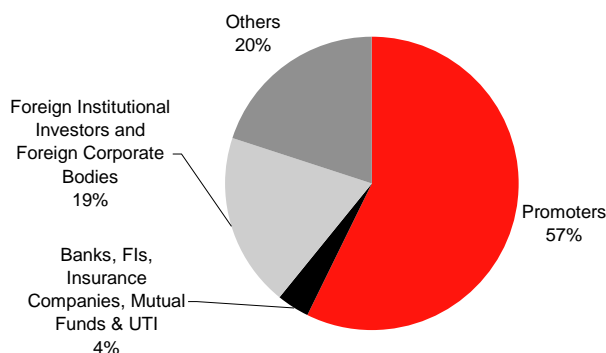
OnMobile Global is the leader in the evolving Indian telecommunications' value-added services (VAS) and software products sector, with a reach to more than 98% of India's wireless subscribers. The company is a white-label VAS player for mobile, fixed-line and media service providers, with a dominant presence in India and a growing presence in the emerging markets. The promoters consist of OnMobile Systems Inc. (OMSI, unlisted) and the company's top management. Argo Capital Management (unlisted) is the majority holder (62%) in OMSI.

OnMobile offers the entire product line across all mobile technologies like Voice, SMS, WAP, USSD (unstructured supplementary service data) and On-Device Portal. The suite of VAS products includes:

- Ring-back tones – live with over 27m active users.
- Voice portal & WAP – ring tones, Jukebox, sports, horoscopes etc.
- On-device portal & handset client with phone backup.
- Mobile marketing and corporate.
- M-commerce – ticketing, lead generation, direct marketing, m-coupons.
- Media portals & interactive TV programming.
- In-call network solutions – missed call alert, dynamic voicemail, sponsored call, voice SMS.
- Core business support – prepaid top-up, bill payment, auto dialler.
- 3G applications and VAS – location-based services, music and video streaming.

OnMobile has strengthened its product and technology portfolio by focusing on organic growth and going for selective acquisitions. We note that the September 2007 acquisition of Voxmobili has given OnMobile access to products such as phone backup, network address book and mobile paparazzi – already deployed by many global carriers including Orange (unlisted), AT&T (T US, US\$29.9, Not rated), France Telecom (FTE FP, €20.3, Neutral, TP: €18), T-Mobile (DTE GY, €10.9, Neutral, TP: €10.6), Wanadoo (unlisted), & Turkcell (TCELL TI, TL7.8, Not rated). OnMobile is now looking at revenue opportunities from these products in India, leveraging on its strong relationship with every single Indian operator with the exception of Spice Communications (SPCM IN, Rs76, Not rated). OnMobile was incorporated in 2000 and went public in February 2008.

Shareholding pattern

Fig 1 OnMobile – shareholding pattern

Source: BSE website, Macquarie Research, September 2008

On song for huge VAS growth

Indian VAS providers are proxy to rapid wireless subscriber growth

We believe value-added service (VAS) providers are a direct beneficiary of the explosive growth in the Indian wireless space. Indian telecoms operators are adding more than 9m subscribers every month and a major share of these incremental subscribers are coming from rural India. As wireless penetration grows, wireless ARPU is expected to continue to slide. To maintain healthy top-line growth and minimise the fall in voice ARPUs, we expect Indian wireless players to turn to VAS offerings to help grow their top line and maintain profitability.

Sizing up the India VAS opportunity – US\$2.7bn market by FY3/13E, up 3.5x from US\$761m base of FY3/08A

Our proprietary analysis of the Indian VAS (ex-SMS) market highlights an attractive opportunity. Our VAS (ex-SMS) market calculation is based on rapid subscriber growth and the increased share of VAS (ex-SMS) in total ARPU, partly offset by the decline in the gross ARPU. Our key assumptions are outlined below:

- Share of VAS (ex-SMS) in ARPU should rise to 7.2% in FY3/13E from 4% in FY3/08.
- Indian wireless subscriber market is expected to grow at a five-year FY3/08–13E CAGR of 21% to reach 664m in FY3/13E.
- As India's wireless penetration is expected to increase to 55% in FY3/13E, up from 28% in August 2008), gross ARPU for telco operators is expected to decline. We expect gross ARPU to fall to US\$4.94 by FY3/13E from US\$7.56 in FY3/08, representing an 8.2% CAGR decline over the five year period.

VAS in India: chimera or reality? What will it take to turn it to reality?

Investors have been sceptical about the sustainability of VAS growth and deeper penetration of VAS applications by mobile users in developing economies. Exciting applications tailored to meet consumer needs should be able to unlock tremendous opportunities, in our view. The phenomenal success of 'caller ring back tones' among Indian mobile subscribers is a testimony to our thesis, if the applications are designed to meet the latent needs of subscribers. Broadly, we believe Indian mobile subscribers are ready to pay for and sample the service, if VAS providers and telco operators are able to do the following:

- They are able to innovate and come up with services that satisfy the innate entertainment and emotional needs of the populace.
- The delivery mechanism for the applications and services are suitable for the target market, ensuring ease of use that leads to better sampling. For example, delivering music or other content through voice portals (done with speech recognition technologies) for a developing country with a large, illiterate population like India.
- Introduce pricing models that offer these services at affordable price points, keeping the income profiles in mind.
- Offering easy to access and pay for these applications or services.
- Making the applications or services handset agnostic, given that a large majority of India's installed base of handsets are for price points below US\$200.
- Tailoring applications or services tailored to 2G networks as 3G networks have yet to be rolled out in India, and even after it is rolled out in 2009, very few Indian subscribers would be able to afford 3G connectivity in the next two years.

Indian VAS market (ex-P2P SMS) is expected to be worth US\$1.6bn by March 2010

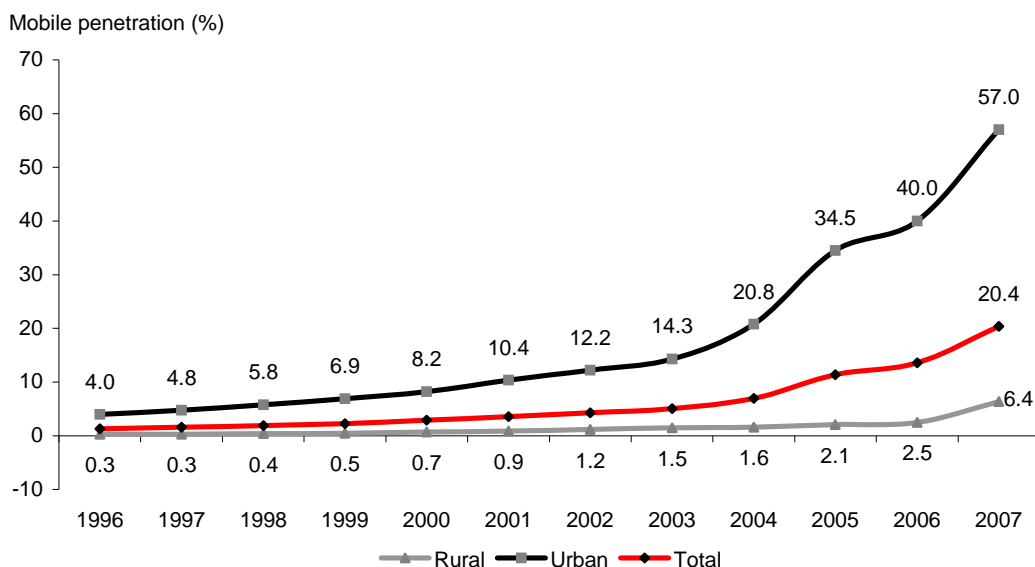
India VAS – direct play on rapid subscriber growth and higher income

We estimate the Indian mobile VAS opportunity (excluding peer-to-peer SMS, or P2P SMS) to be worth Rs69bn (US\$1.6bn) in FY3/10E. Rapid growth in subscribers (evident in the wireless monthly net additions run rate of 9m-plus) and a gradual and secular uptick in VAS share of wireless ARPU are the basis of our forecasts. This in turn should be driven by 1) greater frequency of usage of VAS applications and, 2) a higher share of the subscriber base sampling and using the VAS applications. Network coverage expansion by operators and a greater marketing push of VAS applications by telcos are near-term catalysts for the Indian VAS industry revenues.

Low wireless penetration setting the base for high growth of wireless subscribers

Our proprietary Indian wireless subscriber forecast model assumes that wireless penetration will reach 41% by March 2010. We note that wireless penetration in rural India was abysmally low at 6% while that in urban areas was at 57% (as of December 2007). Going forward, we believe a significant share of incremental wireless subscriber additions will come from rural India, which should throw up its own challenges in ramping up VAS revenues from the relatively lower-income, lower-literacy subscriber base.

Fig 2 Rural markets starting to drive wireless subscriber growth



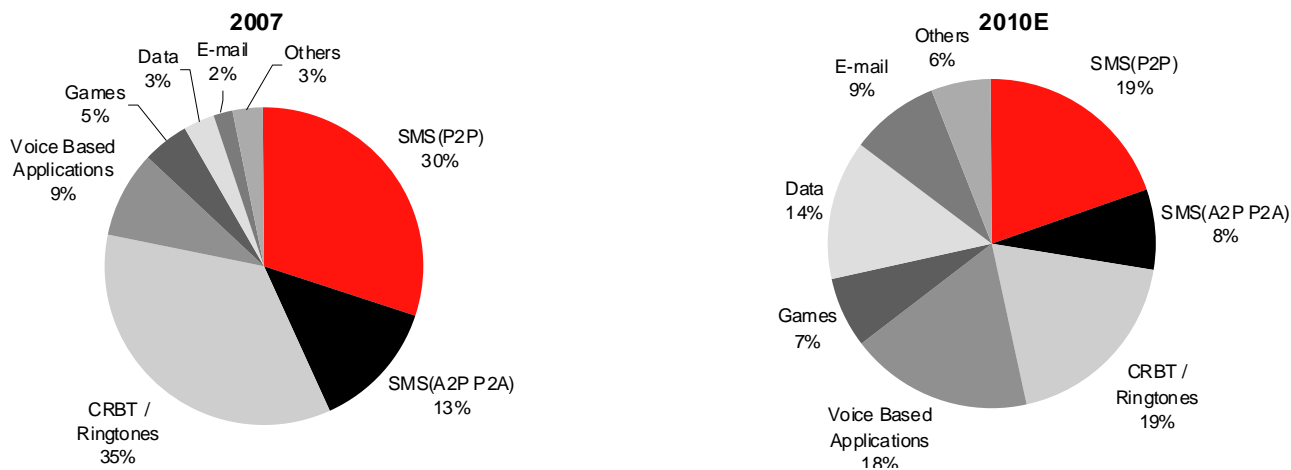
Source: TRAI, Nokia India Presentation, Macquarie Research, As of December 2007

Data and voice-based VAS applications expected to take share from SMS and RBT over the next three years

Voice-based applications as opposed to text/data-need of the Indian market

Unlike in developed economies, we believe VAS growth in India will be driven primarily by the increase in usage and the introduction of voice-based applications, as opposed to data in other markets. We note that the share of voice-based applications (including caller ring-back tone or CRBT) is expected to decline by only 7% from 44% of total VAS in 2007 (including P2P SMS) to 37% in 2010.

Fig 3 Indian VAS industry – share of P2P SMS and CRBT is expected to decline by 2010

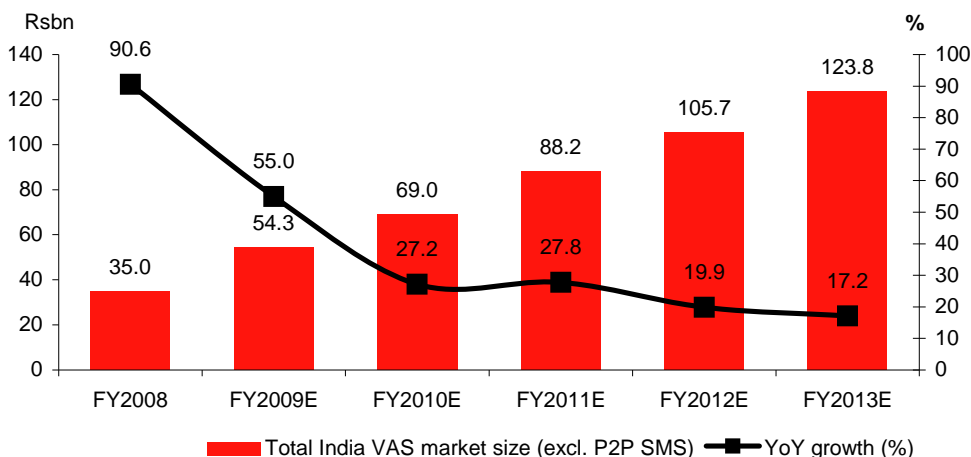


Source: BDA Advisory Services, Macquarie Research, September 2008

All this should help India’s wireless players to help stabilise fall in blended ARPU

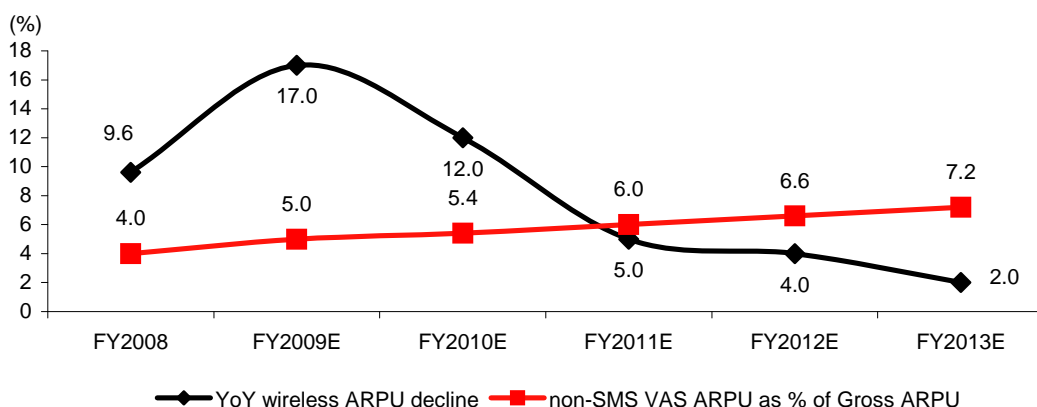
VAS revenue and share of overall ARPU are expected to grow substantially over the next 3-5 years. We estimate the Indian VAS market (ex-P2P SMS) to offer US\$1.6bn revenue opportunity in the next two years while the addressable market for VAS providers is expected to grow at a 29% CAGR over FY3/08–13E to US\$2.7bn.

Fig 4 Rapid subs growth and increase in VAS (ex-SMS) share of ARPU (expected to rise to 7.2% from 4% currently) should drive the Indian VAS market growth



Source: Macquarie Research, September 2008

Fig 5 Contribution of VAS (ex-SMS) ARPU to overall ARPU is expected to rise although gross ARPU for wireless operators is expected to fall over the years



Source: Macquarie Research, September 2008

Expect VAS (ex-SMS) ARPU as a percentage of GDP per capita to fall

Our assumption for VAS (ex-SMS) ARPU growth is conservative, as borne out by the analysis in Figure 6. Although GDP per capita is not a perfect proxy to capture the income level of telecoms subscribers in the country (since the penetration is low at 28%), the trend line does indicate that VAS (ex-SMS) spending as a percentage of total income will continue to fall from current levels, even while it delivers the robust headline CAGR of 29% (FY3/08–13E) over the next five years based on our all-India VAS revenues forecast.

Fig 6 VAS spending as percentage of per capita GDP will continue to remain low

	Mar-06	Mar-07	Mar-08	Mar-09E	Mar-10E
GDP per capita (US\$)	32.4	37.0	41.4	46.1	51.4
YoY Growth (%)		14.2	11.9	11.4	11.5
Annual non-SMS VAS ARPU (Rs)	159.6	143.2	167.0	173.3	164.7
US\$/Rs (avg)	44.2	45.1	40.1	44.5	44.3
Non-SMS VAS ARPU (US\$)	3.61	3.18	4.16	3.89	3.72
Non-SMS VAS spending as % of GDP per capita	11.1	8.6	10.1	8.4	7.2

Source: Macquarie Research, September 2008

Recommend investors to accumulate OnMobile to play the India VAS growth theme

OnMobile well-positioned to ride the growth wave

We recommend that investors play the Indian wireless VAS story by accumulating shares of OnMobile. We highlight the key reasons why it is our preferred play in the mobile VAS sector

Superior technology and R&D capabilities

The company has made significant investments in R&D and management remains committed to attracting and retaining the best talent in the industry. On its 1QFY3/09 earnings call, management reiterated its focus to invest in technology and product development at the cost of keeping margins flat.

Incubated by Infosys, with competent management team at the helm

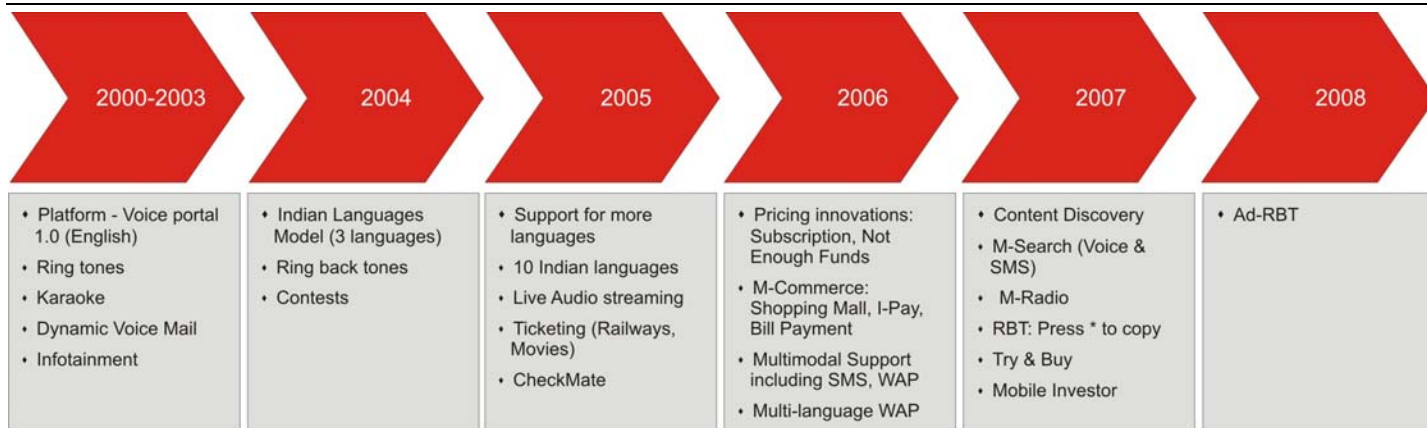
OnMobile was incubated by India’s leading IT service company, Infosys Technologies (INFO IN, Rs1,630, Outperform, TP: Rs2,000). We expect OnMobile to maintain similar levels of corporate disclosure and adhere to the highest ethics of corporate governance as established by Infosys. We do however highlight the ongoing litigation between OnMobile’s parent company, OnMobile Systems, Inc (OMSI) and Infosys, which was mentioned in OnMobile’s IPO prospectus. Infosys holds 18% stake in OMSI, which is the majority shareholder of OnMobile (holding 44% shares of the listed company). The dispute pertains to the structure of OnMobile’s IPO that will likely result in double taxation for Infosys and other India-based investors. The matter is still under consideration.

Top management has rich industry experience in their respective fields (Refer to Appendix 1 for detailed management profiles).

Innovation, the mantra that drives the company

OnMobile recognises that, to survive in this business, constant innovation is critical. The technology behind a successful application is not difficult to be copied by competitors in a matter of a few months, and in order to retain its top position, OnMobile would need to deliver on this front. OnMobile’s consistent track record of innovation inspires confidence in its ability to stay ahead of the curve (Figure 7).

Fig 7 OnMobile – proven track record in new product innovation



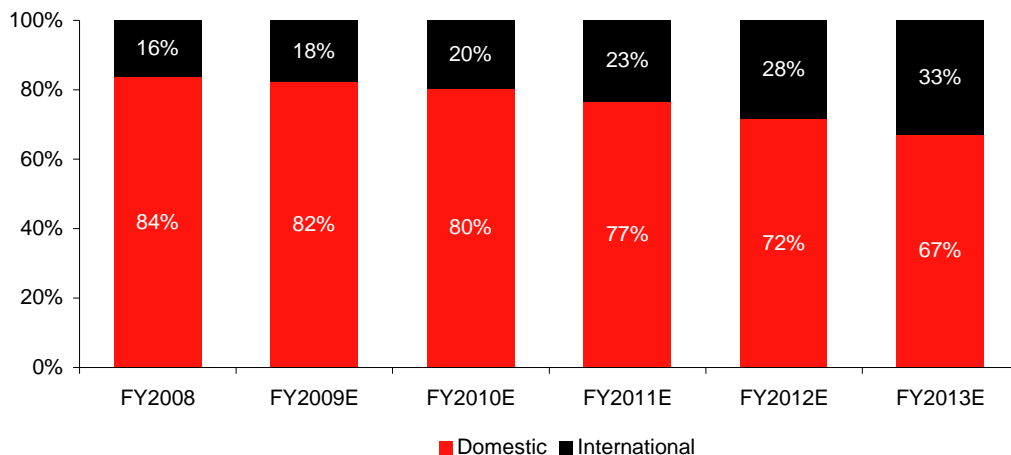
Source: Company data, Macquarie Research, September 2008

Well-diversified revenue streams reduce business risk

Geographic diversification – international operations to grow faster than domestic

OnMobile’s inorganic growth strategy has been focused on giving it a strong foothold in the international markets. Its recent acquisition of Telisma, a leading provider of software speech technologies, should help it accelerate the development of Speech Recognition Language Models for the emerging markets. Our revenue model assumes the share of international revenues will grow to 33% in FY3/13, from the current 16%.

Fig 8 International revenues expected to grow to 33% of total revenues in FY3/13 from the current 16%

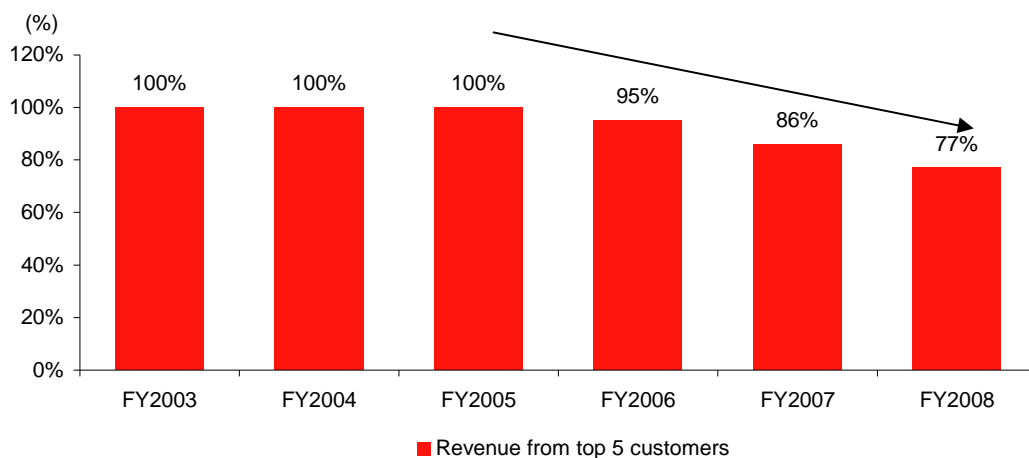


Source: Company data, Macquarie Research, September 2008

Client diversification – top 5 customer contribution has declined to 77% from 100% three years ago

India’s top five telecoms operator-clients contribute 77% of OnMobile’s total revenue. We think expansion in the international markets has been instrumental in OnMobile reducing its customer concentration risk.

Fig 9 OnMobile – revenue concentration from top five clients has declined in the past three years

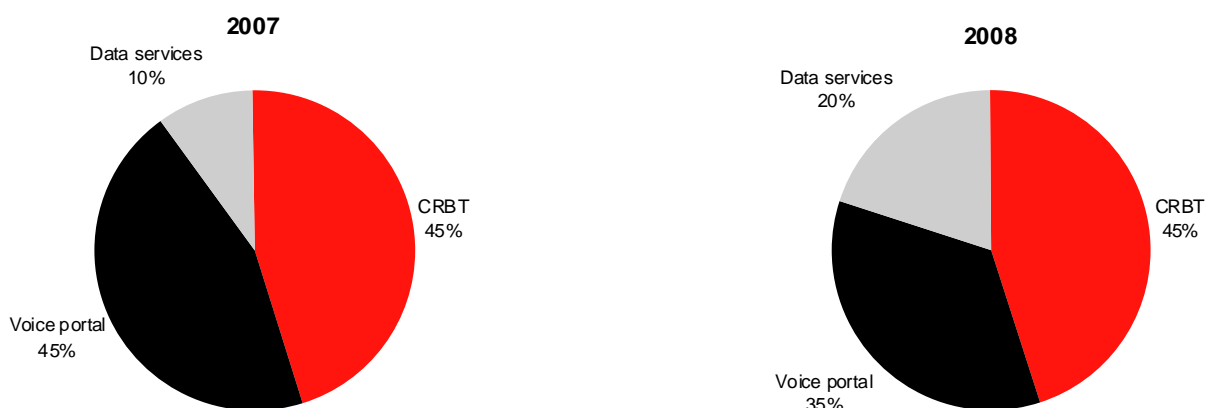


Source: Company data, Macquarie Research, September 2008

Product diversification strategy at work, new applications likely to alter product mix

OnMobile's most successful application – caller ring-back tone (CRBT) – contributes 45% to total revenue. Although CRBT is expected to remain as the primary driver for revenue in the near term, the launch of new applications can dramatically alter product mix in the future. The success of new VAS applications is difficult to predict, but OnMobile's proven track record and investment in R&D should help the company achieve product diversification. We note that data services has gained revenue share from voice portals in 2008.

Fig 10 Product revenue mix – data services expected to garner higher share of revenues



Source: Company data, Macquarie Research, September 2008

Myths and reality about the mobile VAS sector and OnMobile

In this section, we attempt to address key investor concerns, which we think are largely misplaced.

Myth 1: The business has low entry barriers

We see mobile VAS as a business that needs deep expertise to develop innovative applications and one that requires a high degree of collaboration between the IT systems of telecoms operators and the VAS service provider. Both of these require large investments in R&D and IT systems and building a credible track record over time with telecoms operators. More often than not, the VAS provider will have servers and infrastructure sitting right in the heart of a telecoms company's core network, which means that it is difficult, time-consuming and expensive to change the VAS enabler/provider frequently. Hence, we do not believe that the mobile VAS business has low entry barriers.

Myth 2: Revenue share of VAS providers will fall over time

Our revenue model has assumed that OnMobile's revenue share is in the 20–23% range, that is, at the middle of company guidance range of 20–25%. Management has maintained that it has modelled the business to align it with the interests of telecoms operators, where OnMobile makes money in the revenue-sharing model, only if the telco sees enhanced revenues and usage from OnMobile's applications and services. OnMobile believes that as long as it continues to deliver steady top-line growth to telcos with reasonable revenue share in the prices, it is unlikely that its customers' will focus on cutting costs by trying to penny-pinch through cutting the already modest revenue share of its business partners.

Case study – OnMobile replaces Bharti Telesoft as Bharti Airtel's CRBT provider in the four South Indian circles

OnMobile was chosen to execute the largest hot swap of CRBT for Bharti Airtel in the four South Indian circles from provider Bharti Telesoft, which is a group company of Bharti Enterprises, the sponsor of Bharti Airtel. The implementation started in 4Q FY3/08 and was completed over a six-month period by the end of 1Q FY3/09. Management has indicated that the response so far has been good, but it would take a little time to quantify the financial impact.

Robust earnings growth and positive free cash key highlights

We forecast strong two-year FY3/08–10E earnings CAGR of 42.5% for OnMobile. Steady top-line growth (two-year FY3/08–10E CAGR of 58%) and stable EBITDA margins (~40%) should help OnMobile to maintain earnings momentum.

OnMobile is FCF positive (FY3/09E FCF is negative due to a one-time payment to the holding company). For a high-growth company like OnMobile, this is a remarkable achievement and enhances investor confidence in the business model in the current uncertain environment.

Our FY3/09 and FY3/10 estimates are below consensus although consensus is not fully reliable due to poor mix

Our estimates are below consensus on all financial metrics for all three forecast years, primarily due to our conservative revenue growth assumptions and lower-than-consensus margin assumptions. There could be upside to our FY3/10 and FY3/11 forecasts as we gain more visibility on the core business in India and evidence of the ramp-up in contribution from Voxmobili (which OnMobile acquired in September 2007) to OnMobile's top-line growth.

Only six brokers cover OnMobile, of which only three are international research houses.

Our earnings estimates are conservative; we are 5% below consensus for the next two years

Fig 11 OnMobile – Macquarie vs consensus estimates

	FY3/09E	FY3/10E	FY3/11E
Revenue			
Macquarie estimate	4,210	6,505	8,869
Consensus	4,363	6,518	9,182
Macquarie estimate below Consensus	-3.5%	-0.2%	-3.4%
EBITDA			
Macquarie estimate	1,568	2,534	3,543
Consensus	1,763	2,683	3,802
Macquarie estimate below Consensus	-11.1%	-5.6%	-6.8%
PBT			
Macquarie estimate	1,343	2,033	2,676
Consensus	1,446	2,092	2,905
Macquarie estimate below Consensus	-7.1%	-2.8%	-7.9%
EPS			
Macquarie estimate	15.98	23.44	29.83
Consensus	16.74	24.58	33.39
Macquarie estimate below Consensus	-4.6%	-4.6%	-10.7%

Source: Bloomberg, Macquarie Research, September 2008

SWOT analysis – client engagement and strong R&D pose entry barriers

<p>Strengths</p> <ul style="list-style-type: none"> ▪ Strong R&D capabilities ▪ Industry leader in Indian markets ▪ Focused management team ▪ Proven track record 	<p>Weakness</p> <ul style="list-style-type: none"> ▪ Low visibility on earnings growth beyond next two years ▪ While mobile commerce and mobile advertising remain long-term opportunities, these are fledgling in terms of revenue contribution right now and in the near term
<p>Opportunities</p> <ul style="list-style-type: none"> ▪ Expansion in international markets ▪ Low VAS penetration in India ▪ 3G network launches planned by all the large Indian wireless operators in 2009 	<p>Threat</p> <ul style="list-style-type: none"> ▪ Telco operators insisting on shift from recurring revenue share to one-time licensing fee model ▪ Value-destructive acquisitions

Source: Macquarie Research, September 2008

OnMobile's strong R&D base and client-engagement model poses high entry barriers

OnMobile has replicated the revenue share-based IT outsourcing model being increasingly adopted by telcos in India, mainly Bharti Airtel, Vodafone-Essar and Idea Cellular. OnMobile is partnering the telcos on a revenue share-based model, where it plays the role of content aggregator and technology enabler, which involves taking care of VAS-related end-to-end software, hardware and network requirements of its telco customers. However, it has not stopped at just outsourcing, as is largely the case in the IT industry. It has gone beyond the offshore-centric model adopted by IT services companies and turned into a strategic one by placing its proprietary hardware, software and IP assets right in the heart of a telco's core network and mobile switching centre.

- **Managed services:** OnMobile enables carriers to run 'lean and mean' VAS operations. OnMobile embeds its software applications with the carrier's network infrastructure. In addition to this basic function, OnMobile integrates its applications with other core areas such as billing, service management, customer care, etc.

Further, OnMobile provides the hardware systems required for running all such software services. It also takes care of maintenance services accompanying hardware and software systems. Consequently, carriers need not make large-scale financial and manpower commitments towards VAS-related operational areas.

- **Strategic partner:** OnMobile's relationship with clients is not restricted to tactical issues. In fact, its partners trust it with high-level services such as content management and also include it in decision-making processes.

As content manager, OnMobile is responsible for content planning and procurement. It also handles revenue-sharing and intellectual property matters on behalf of its customers.

OnMobile also assists its clients in identifying new business opportunities in the VAS space. After such analysis, OnMobile develops new products and services, enabling customers to leverage on emerging opportunities to the optimum.

What does all this translate to? High entry barriers for a new player

Such a close relationship cements OnMobile's position with its existing clientele and acts as high entry barriers for new players.

- **Focus on R&D capabilities helps OnMobile to stay ahead of competition.** To replicate OnMobile's offerings, new players have to invest heavily in software development and hardware facilities. This would involve a huge investment of money and time.
- **OnMobile well entrenched in the IT DNA of operators.** Carriers have integrated their systems with OnMobile and as such, the entry of new players would require carriers to modify the same, which they would be less inclined to do given the complexities involved.

- **Leadership position and relationships with operators help in new product development.** OnMobile's deep relationship with service providers helps it to quickly introduce new products, reducing its time-to-market and differentiating itself from its competition.

Valuations – DCF-based TP of Rs650

We use DCF as our primary valuation benchmark; target price of Rs650, upside of 42%

42% upside to stock price from current levels

Our DCF-derived target price for OnMobile is Rs650. We believe DCF is the best way to capture the long-term value of the company given its relatively nascent operations and high growth rate over long periods (EPS CAGR of 30% over five years). We note that our target price is ~11% below its 52-week high of Rs723, highlighting our conservative valuation on the stock.

▪ Why we think DCF is the best tool for valuing this company and not PER?

- ⇒ The basis for a PER multiple is difficult to define due to the limited size of its peer group. In addition, PER valuations have a limited utility as the limited trading history of seven months makes it difficult to compare against OnMobile's own historical valuations
- ⇒ A DCF-based valuation captures the full potential of the business over the next 6–9 years. Given that OnMobile is currently in a high-growth, high-investment phase, we believe DCF captures the long-term potential of the company more accurately.
- ⇒ At our target price of Rs650, the stock trades at 27.7x FY3/10E EPS.

Fig 12 Multiples at our target price

	PER (x)		EV/EBITDA (x)	
	FY3/09E	FY3/10E	FY3/09E	FY3/10E
OnMobile	40.7	27.7	21.4	13.5

Source: Bloomberg, Macquarie Research, September 2008

- **Stellar EBITDA growth, we forecast five-year 2008–13E CAGR of 40%.** OnMobile is expected to deliver steady EBITDA growth, both in the medium term and even over a 10-year period. We note that our model has built in no margin expansion and our long-term margin assumptions for OnMobile are 40%, in line with current margins.
- **We expect OnMobile will consistently deliver positive free cashflows starting FY3/10E despite its high growth.** Solid top-line growth, stable margins and zero debt would help OnMobile generate positive free cashflow in the future. A strong and sound balance sheet leaves ample room to take on leverage in the medium term to finance acquisitions.

Our DCF inputs are conservative, but deliver a target price of Rs650, (42%upside)

We have assumed a discount rate of 13% for OnMobile's DCF analysis, derived from a risk-free rate of 8.5%, equity risk premium of 6% and beta of 1. The company currently does not have any debt on its balance sheet but the red herring prospectus filed at the time of IPO indicated a pretax cost of debt at 11%.

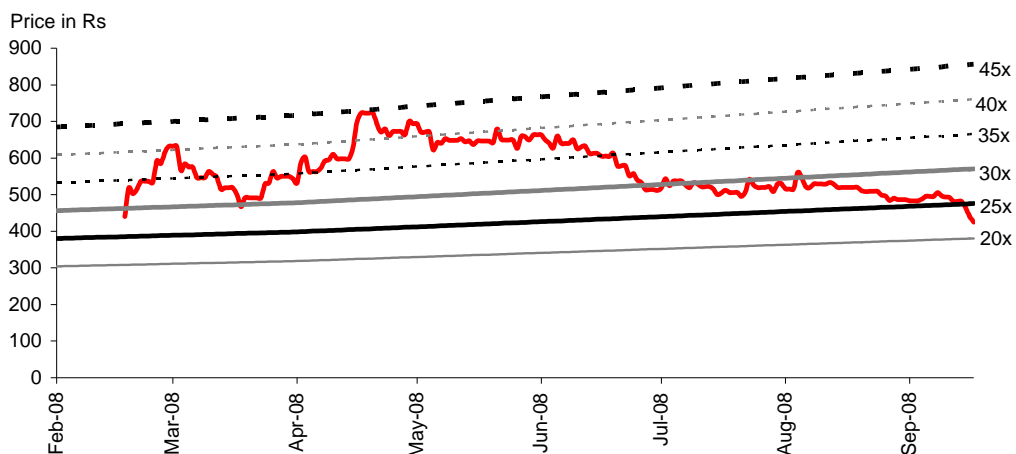
Our DCF assumes 4% terminal growth and 13% WACC

Fig 13 Key DCF assumptions

Parameters	
WACC (%)	13.0
Risk free rate of return = Rf (%)	8.5
Equity risk premium (%)	6.0
Beta	1.0
Cost of equity = Re (%)	14.6
Cost of debt = Rd (%)	11.0
FCF Growth from 2020 to perpetuity (%)	4
DCF Fair Value (Rs)	650

Source: Macquarie Research, September 2008

Fig 14 OnMobile now trades at its lowest ever PER valuation of ~22x one year forward while it has traded at an average of 33x in its limited trading history



Source: Bloomberg, Macquarie Research, September 2008

Fig 15 OnMobile – DCF Valuation

Year-end Mar (Rs m)	2009E	2010E	2011E	2012E	2013E	2014E	2015E	2016E	2017E	2018E	2019E	2020E	
EBITDA	1,568	2,534	3,543	4,530	5,650	6,839	8,161	9,436	10,775	12,173	13,655	15,169	
Growth (% YoY)	50	61.6	39.8	27.9	24.7	21.1	19.3	15.6	14.2	13.0	12.2	11.1	
Tax expense	(413)	(649)	(886)	(1,063)	(1,305)	(1,573)	(1,890)	(2,205)	(2,573)	(2,998)	(3,485)	(4,015)	
Change in working capital	(1,113)	(641)	(609)	(553)	(697)	(720)	(784)	(715)	(725)	(726)	(742)	(716)	
Cashflow from operations	42	1,243	2,048	2,914	3,648	4,546	5,487	6,516	7,477	8,448	9,427	10,439	
Capital expenditure	(842)	(1,301)	(1,774)	(2,211)	(2,687)	(3,167)	(3,677)	(4,016)	(4,316)	(4,571)	(4,786)	(4,937)	
Interest income	279	340	362	309	370	449	559	700	892	1,135	1,435	1,799	
Free cashflow	(521)	282	636	1,012	1,330	1,828	2,368	3,201	4,054	5,012	6,077	7,301	
Growth (% YoY)	(291.6)	(154.1)	125.5	59.1	31.4	37.4	29.5	35.2	26.6	23.6	21.2	20.1	
Discount rate (%)	13.0%	WACC calculation											
Total PV of free cashflow till 2020 {a}	11,969	Risk free rate of return = Rf (%)					8.5	Equity risk premium					6.0
		Beta					1.0	Cost of equity = Re (%)					14.6
		Unadjusted cost of debt (%)					11.0	Cost of debt = Rd (%)					7.5
Terminal growth (%)	4.0%	Equity = We					78.00	Debt = Wd					22.00
FCF in FY3/20	7,301	WACC = Re x We + Rd x Wd					13.0%						
Exit FCF multiple (X)	11.5												
Terminal value	84,041												
Implied Exit EV/EBITDA Multiple (X)	5.5												
PV of terminal value {b}	21,608												
Total company value {a}+{b}	33,577												
Net debt/(cash)	(4,247)												
Value to equity holders	37,824												
Equity Value (Rs/share)	650.0												
		WACC											
			650	11.0%	12.0%	13.0%	14.0%	15.0%					
		Terminal Growth	3.0%	814	699	610	538	480					
			3.5%	850	725	629	552	491					
			4.0%	891	754	650	568	503					
			4.5%	938	787	674	586	516					
			5.0%	994	825	700	605	530					

Source: Macquarie Research, September 2008

Fig 16 Peer group comparison not relevant as there are very few listed mobile VAS players and the ones mentioned below differ from OnMobile in terms of product suite and operating dynamics

Company	Ticker	Price (Icy)	Market Cap (US\$ m)	EV (US\$ m)	Margin FY3/ 2008	EV/EBITDA	EV/EBITDA	PER (x) FY3/ 2009	PER (x) FY3/ 2010	Content cost	Asset Turnover (x) FY3/ 2008
						(x) FY3/ 2009	(x) FY3/ 2010			(as % of revenue) FY3/ 2008	
OnMobile - Outperform	ONMB IN	456.3	580.0	460.1	40.0	13.3x	8.3x	28.6x	19.5x	8.9%	0.29x
Tanla Solutions - not rated	TANS IN	187.4	412.2	302.3	43.9	3.9x	2.8x	7.8x	6.0x	8.8%	0.68x
Buongiorno - not rated	BNG IM	0.8	122.4	237.1	10.4	4.8x	4.2x	6.7x	5.1x	27.1%	0.65x
Netease.com - not rated	NTES US	24.6	3,136.6	1,980.2	63.6	7.1x	6.7x	15.3x	13.9x	6.1%	0.50x
Sohu.com - not rated	SOHU US	65.1	2,500.4	2,481.2	35.7	13.8x	11.1x	17.7x	15.1x	9.2%	0.69x
Sina.com - not rated	SINA US	41.9	2,325.2	1,926.9	na	18.6x	13.3x	26.7x	20.3x	12.6%	0.41x
Tencent Holdings - not rated	700 HK	62.1	16,332.8	91,763.9	50.9	27.0x	20.2x	44.9x	32.9x	28.3%	0.66x
Comp2us - not rated	078340 KS	8010.0	71.2	43.8	37.2	4.2x	3.5x	9.3x	7.5x	19.0%	0.64x
Danal - not rated	064260 KS	1895.0	26.8	33.2	na	na	na	na	na	na	1.01x

Note: EV/EBITDA and PER for all other stocks based on Bloomberg consensus estimate except for OnMobile.

Source: Bloomberg, Macquarie Research, September 2008. Closing prices as of September 22, 2008

*VAS industry in India
is in its nascent stage
and still evolving*

Key risks to our thesis

Telco operators insisting on shift from revenue share to licensing structure

OnMobile's business model is based on a revenue-share arrangement with its customers. Any change to this arrangement would alter the business fundamentals negatively, which forms the basis of our forecasts and valuations. Even so, we see very low probability of a shift in OnMobile's revenue model.

Telcos themselves moving into VAS applications in future

Investors have expressed concerns about telco players themselves entering the VAS provider space. We see a limited possibility of this happening as Indian telecoms operators have focused on developing their core competencies and outsourcing parts of the business that are not core to the business, which remain spectrum management, network build-out, marketing and distribution points of presence, billing and new business initiations in the triple play and enterprise/wholesale spaces. We note that telecoms operators that have forayed into the mobile VAS space have met with limited success in the past. (Refer to our Case study Please see Case study – OnMobile replaces Bharti Telesoft as Bharti Airtel's CRBT provider in the four South Indian circles).

Value-destructive acquisitions

OnMobile has focused on strengthening its product and technology platform by growing inorganically. Large premiums for future acquisitions could result in value destruction for OnMobile. (Refer to the "Mapping the inorganic growth trajectory" section in this report.)

Innovation in this business is difficult to assess at investor level

To remain ahead of its competition, we believe OnMobile needs to consistently develop new VAS applications that will result in significant ARPU enhancement for telco operators.

Slower-than-expected pick-up of VAS applications in India

Subscriber response to VAS offerings has been encouraging but that is no proof for future success of VAS applications, as the consumer behaviour of the incremental mobile user coming from rural India is yet to be explored.

Financials: Solid growth profile

Better asset turnover should expand ROEs (17.5% in FY3/11E vs 9.9% now)

- We forecast OnMobile's ROEs to expand by 760bp over a three-year period due to better asset turnover and moderate expansion in EBIT margins. Growth in the business will help OnMobile to achieve economies of scale and have a higher asset turnover ratio.

Fig 17 Moderate increase in EBIT margins and better asset turnover will result in ROE expansion

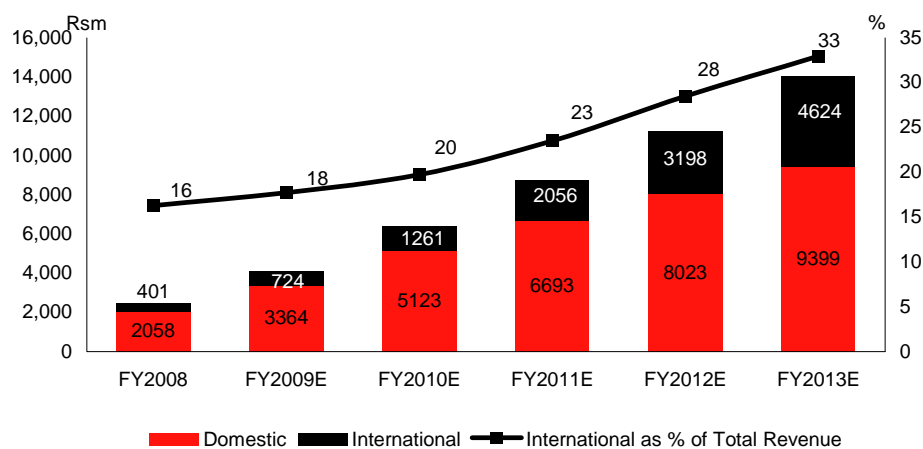
Dupont Analysis	FY3/08	FY3/09E	FY3/10E	FY3/11E	FY3/12E	FY3/13E	FY3/14E	FY3/15E	FY3/16E	FY3/17E	FY3/18E	FY3/19E	FY3/20E
EBIT margin (EBIT/sales) (%)	30.3	25.3	26.0	26.1	25.5	25.1	25.0	25.1	25.1	25.4	26.0	26.6	27.3
Asset turnover (sales/assets) (x)	0.3	0.5	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6
Financial leverage (assets/equity) (x)	1.5	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.3
Interest burden (pretax/EBIT) (x)	1.1	1.3	1.2	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.2	1.2
Tax burden (net/pretax) (%)	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Return on average equity (%)	9.9	13.2	16.4	17.5	17.3	17.5	17.4	17.3	16.8	16.4	16.1	15.8	15.4
Ratios													
ROE (%)	9.9	13.2	16.4	17.5	17.3	17.5	17.4	17.3	16.8	16.4	16.1	15.8	15.4
ROCE (%)	15.8	13.6	18.6	21.1	22.3	23.6	24.6	25.8	26.5	27.7	29.2	30.8	32.5

Source: Macquarie Research, September 2008

International revenues will drive long-term top-line growth

Currently international revenues contribute close to 16% of OnMobile's revenue. We note this is expected to grow to 33% by FY3/13. We expect international revenues to form close to 23% of total revenues by FY3/11E, in line with management's guidance of 25%.

Fig 18 OnMobile's entry in new international markets and Voxmobili acquisition will increase the share of international revenues



Source: Company data, Macquarie Research, September 2008

International revenues are expected to increase their share in total revenues by two-fold in next five years

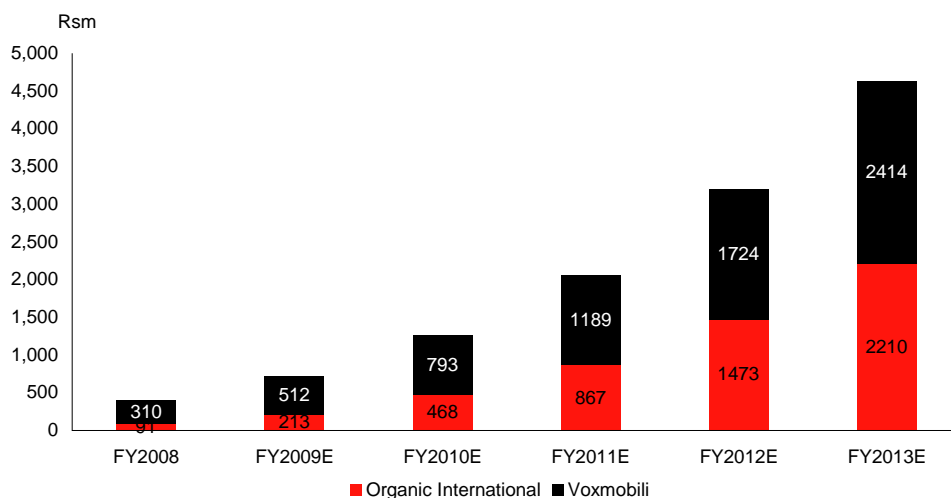
Domestic revenues to increase to US\$204m by FY3/13E

We forecast domestic revenues to grow at a five-year (FY3/08–13E) CAGR of 35.5%. This is based on a FY3/08–13E CAGR of 20.6% in wireless subscribers and an increase in non-SMS VAS ARPU share to 7.2% in FY3/13E of gross ARPU from 4% in FY3/08. The positive impact from subscriber growth and the increased share of non-SMS VAS is offset by an 8.2% CAGR FY3/08–13E decline in gross ARPU.

International revenues riding high on twin drivers of organic international operations and Voxmobili business strength

We forecast OnMobile's international revenues to grow to US\$100m by FY3/13E at a five-year CAGR of 63.1%. Our international revenue forecast is based on an 89.4% FY3/08–13E CAGR in core international revenues and a 50.8% FY3/08–13E CAGR in Voxmobili revenues.

Fig 19 Voxmobili share of international revenue should stabilise at ~50% of total international revenues in the long term



Source: Company data, Macquarie Research, September 2008

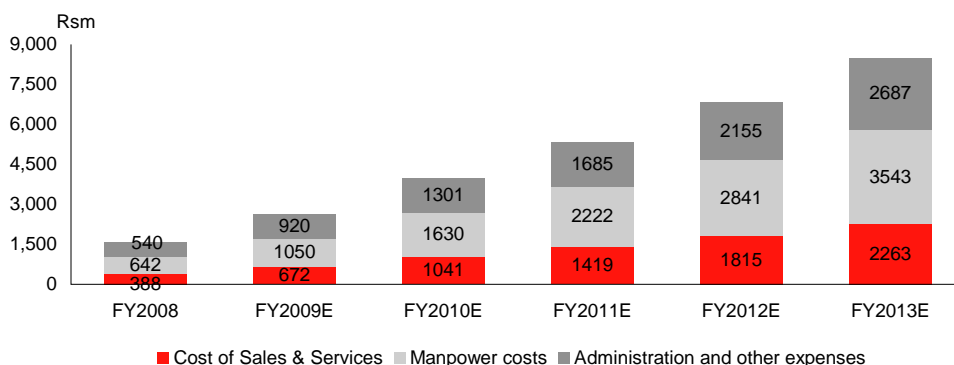
Manpower costs are the single biggest cost element in this business

Content costs and personnel costs make up 60% of total costs

The OnMobile cost structure has three main components – cost of sales and services (includes content costs and other sales & services expenditure), manpower costs and administration and other expenses.

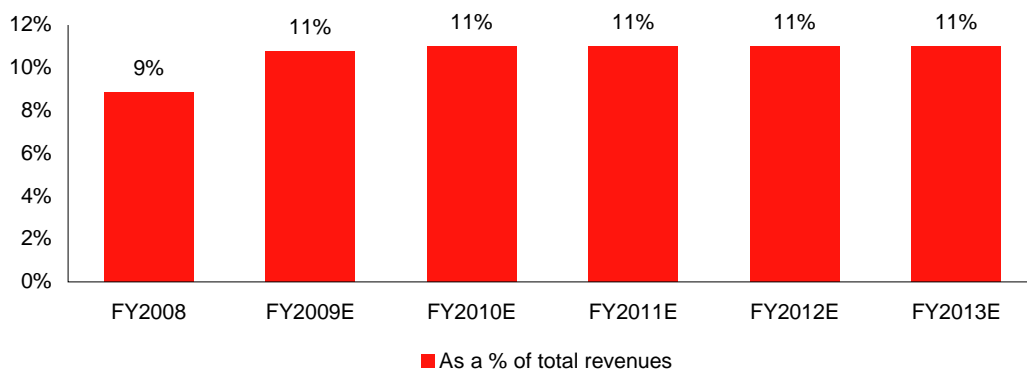
Content costs as a percentage of revenues have varied between 10.7% (in FY3/07) and 8.9% (FY3/08) for the past two years. We expect content costs to increase to 11% of revenues this year (FY3/09) and remain at this level. Our financial model assumes manpower costs to remain at 25% of revenues, though, in the long term there is scope for manpower costs as a percentage of revenues to decline as economies of scale play out. We have assumed administration and other expenses to stabilise at 19% of revenues in the long term, but in the near term this is going to be high due to acquisition-related integration costs.

Fig 20 Expect manpower costs will continue to be the biggest cost component at 25% of revenues



Source: Company data, Macquarie Research, September 2008

Fig 21 Content cost expected to remain at ~11% of revenues



Source: Company data, Macquarie Research, September 2008

R&D costs make up 8–10% of revenues, expected to remain at these levels

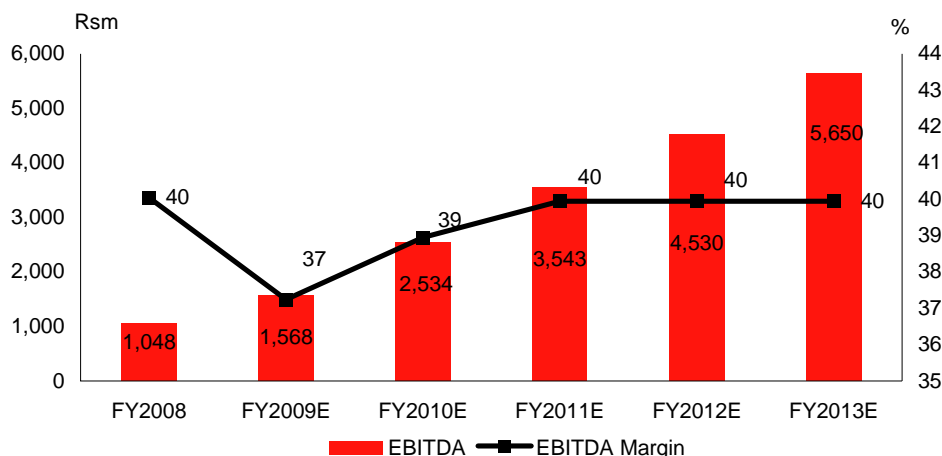
R&D costs primarily include personnel costs of engineers involved in R&D and software used for R&D purposes. OnMobile spent close to 8–10% of its revenues on R&D in FY3/08 (vs ~7% in FY3/07). This is expected to remain flat or could increase as a percentage of revenues as OnMobile continues to invest in R&D for growth.

EBITDA margins are likely to remain flat at 40%

We have built in moderate margin expansion for OnMobile and see little downside risks to our long-term margin estimate of 40%. We are assuming FY3/09 margins of 37% to account for integration-related costs. This is lower than management guidance for near-term EBITDA margins (38–40%).

Our financial forecasts have assumed flat EBITDA margins

Fig 22 We have factored in no expansion in OnMobile’s EBITDA margins

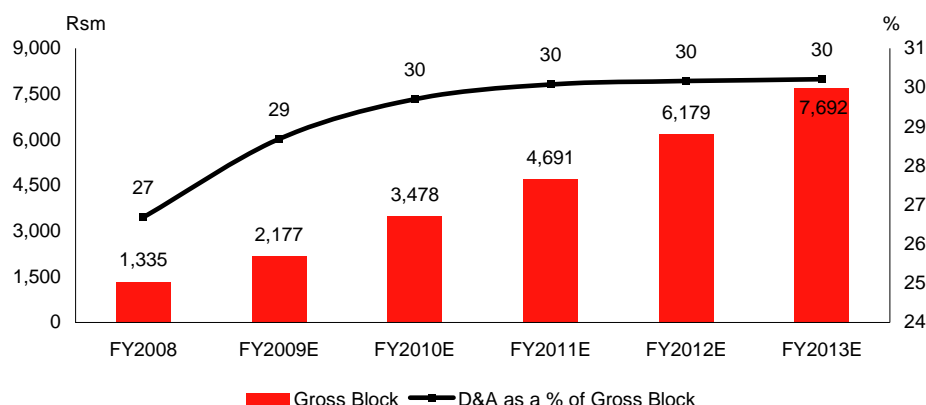


Source: Company data, Macquarie Research, September 2008

OnMobile has conservative depreciation and amortisation policy

OnMobile depreciates a majority of its assets over a three-year period. Computer and electronic equipment (depreciated over a three-year tenure) forms close to 80% of the company’s gross block. Our D&A forecasts assume yearly depreciation to remain close to 30% of average gross block, at the high-end of the company’s guidance of a 28–30% range.

Fig 23 Depreciation and amortisation as a percentage of gross block is expected to be ~30%



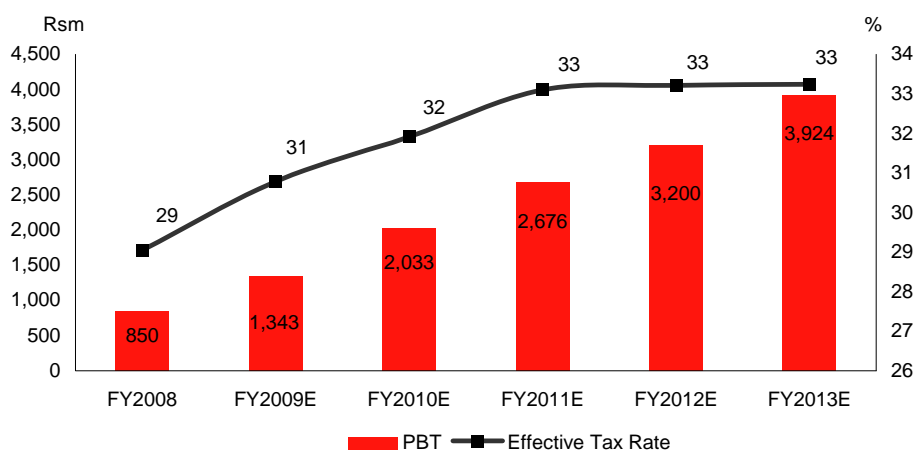
Source: Company data, Macquarie Research, September 2008

Voxmobili's carry forward losses will run-out in FY09E

Effective tax rate should increase to 33% by FY3/11E

OnMobile's domestic business is a full tax payer. Even so, on a consolidated basis the company is likely to report a lower tax rate in FY3/09 due to the carry forward losses at Voxmobili and potential STPI tax benefits due to a ramp-up in international revenues.

Fig 24 Carry-forward losses on Voxmobili will run out in FY3/10E

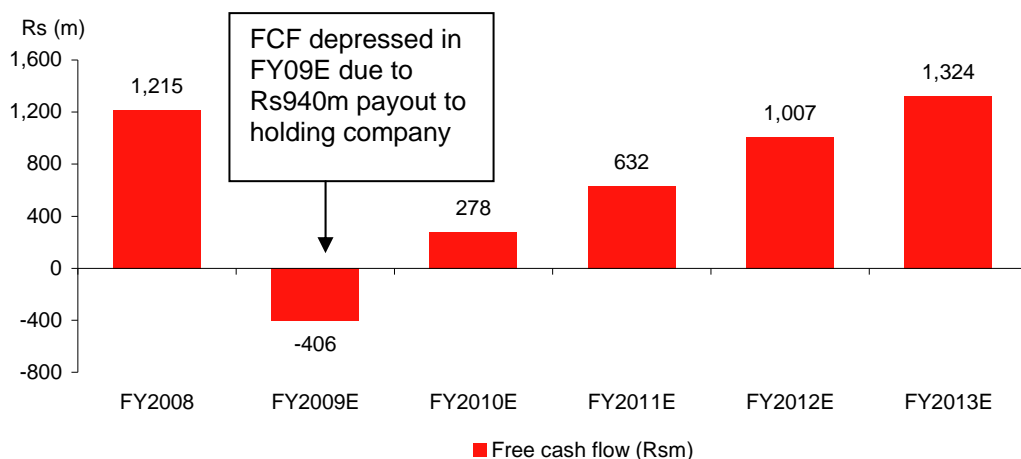


Source: Company data, Macquarie Research, September 2008

Majority of the capex is on computer and electronic equipment

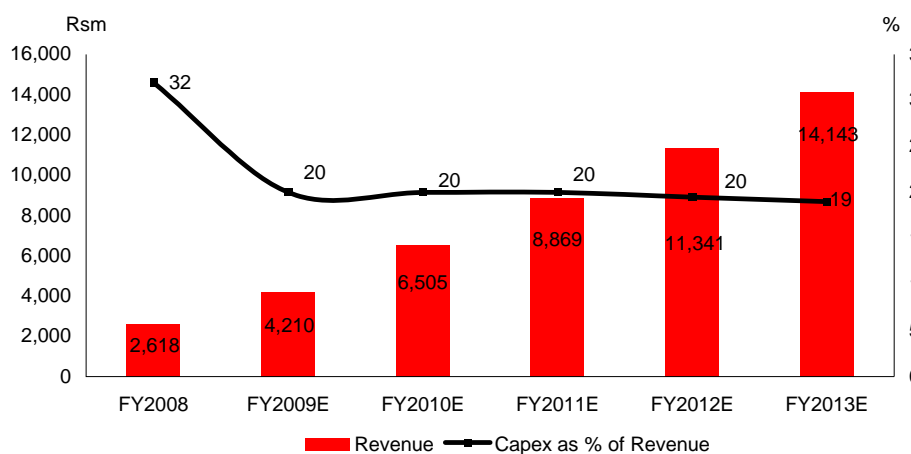
The bulk of the capex in this business is on technology hardware that is used to enable the VAS applications. Our capex forecast assumes 86% of annual capex towards purchases of computer and electronic equipment. These assets are depreciated over a three-year period, which we see as conservative.

Fig 25 Free cashflow will be depressed in FY3/09E due to one-time cash outflow to the erstwhile holding company



Source: Company data, Macquarie Research, September 2008

Fig 26 Capex as a percentage of revenue: Expected to remain at 20% for the next three years

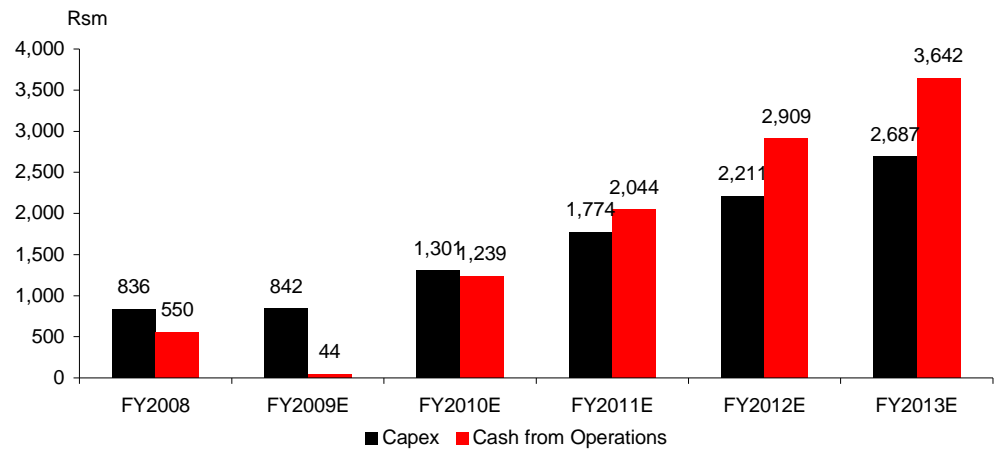


Source: Company data, Macquarie Research, September 2008

Operating cashflows are sufficient to take care of future capex needs

Cashflow from operations sufficient to meet capex requirements

OnMobile is generating sufficient cash from its operations to meet its future capex requirements. FY3/09E cashflow is depressed due to a one-time cash outflow to the erstwhile holding company post the IPO. The company’s balance sheet is debt free and leaves ample room to lever up for potential acquisitions. We expect capex to remain at 20% of revenues in the near term and expect it to decline in the long run as telco subscriber growth slows down.

Fig 27 Cashflow from operations sufficient to fund capex requirements from FY3/10E onwards

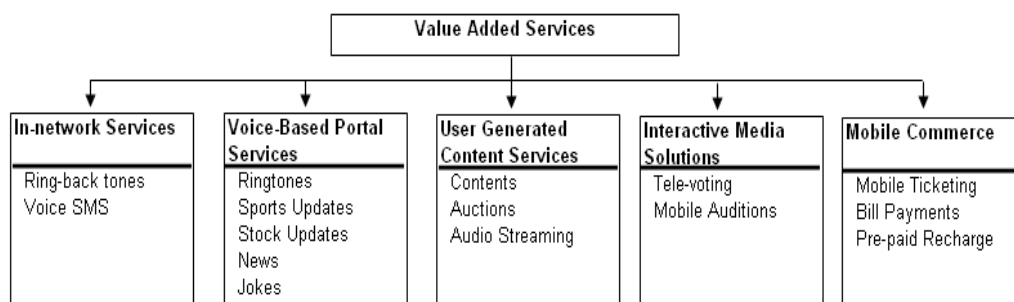
Source: Company data, Macquarie Research, September 2008

VAS: Demystifying the growth engine

All that you need to know about MVAS: different ways of disaggregating the VAS applications

Mobile value-added services (MVAS) at a broad level can be defined as any service which is not part of the basic cellular services bundle and has to be subscribed to or activated by the wireless subscriber. We can classify the VAS industry on different parameters. Notable among these is segmentation based on (1) the type of service – traditional (caller ID, itemised billing, SMS) or modern services (m-commerce, m-advertising, m-entertainment), (2) the basis of technology platforms on which these services are offered (2G, 2.5G or 3G), and (3) voice-based or non-voice based services.

Fig 28 Value-added services – customers are spoilt for choice



Source: Macquarie Research, September 2008

What is different about non-SMS VAS?

Peer-to-Peer SMS is a commoditised service and 100% of revenues are kept with the telecoms operator. Whereas, in case of other VAS services, like Caller Ring Back Tones, the revenue paid by end-user is shared between cellular operators, content aggregator and platform providers and content owners.

Why VAS? Quantifying the worldwide opportunity

Mobile usage has come of age and subscribers are constantly looking at personalising their handsets and services. Itemised billing and Caller Identity services which were categorised as VAS a few years earlier are now delivered as basic services. In the international markets, technology, user acceptance and regulatory policies differentiate VAS adoption. This makes it difficult to define the scope of VAS (as to what constitutes VAS and what does not) and the size of the opportunity for VAS due to the loose definitions of VAS and differing standards adopted by different operators while reporting VAS data/revenues. *Informa Mobile* sizes up and projects the VAS opportunity in the following manner:

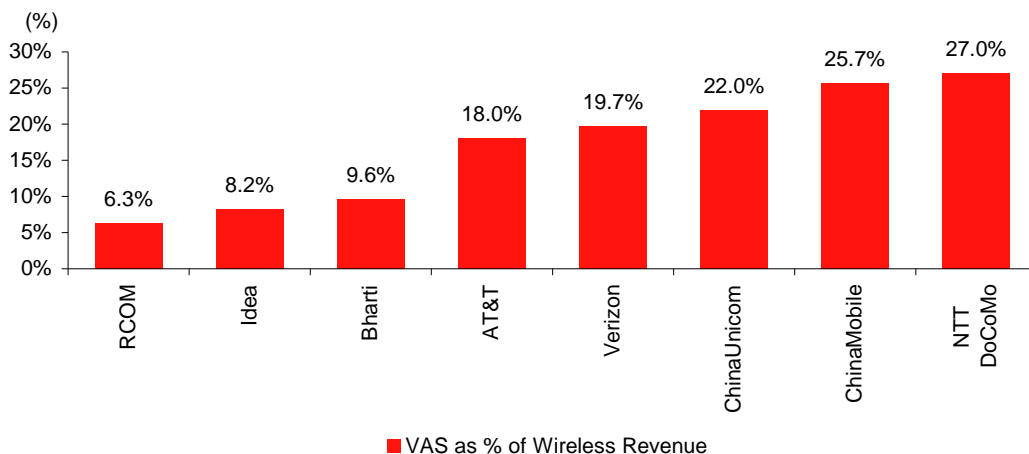
- Global mobile entertainment revenues are expected to rise to US\$31.2bn by 2012, up from US\$15.6bn in 2007
- The largest segment in terms of revenues is currently mobile music and this will remain the case throughout the five-year forecast period
- The largest growth will come from mobile broadcast TV services, which will likely generate US\$4.8bn by 2012
- The US represents the largest market for mobile content currently at US\$2.77bn and this will grow to US\$4.63bn by 2012
- India, Brazil, China and Russia are expected to show the most growth over the five-year forecast period, with compounded annual growth rates of 31.5%, 27.3%, 22.6% and 21.6%, respectively.

Indian Telcos have enough headroom for a potential increase in VAS' share of Gross ARPU

Contribution of MVAS to the Global Telcos' top line is significant

Data services and other non-voice value-added services are seen contributing immensely to the total wireless revenue in global markets. China sees growth from broadband services, Japan from i-mode, mobile conferencing, video calling services and India from voice aided VAS services.

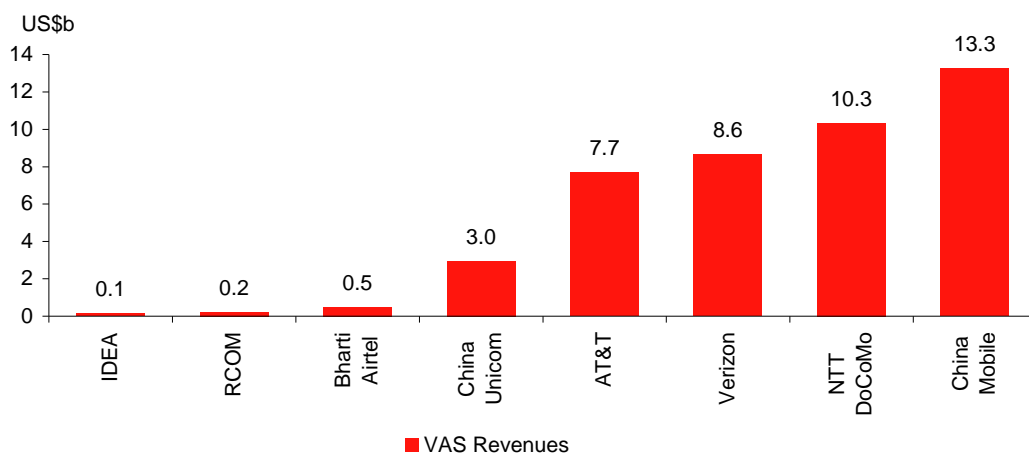
Fig 29 VAS (including SMS) revenue share for Indian telcos has room to grow



Source: Company data, Macquarie Research, September 2008

The VAS space looks even more compelling to us when we translate the above percentage revenues earned by leading telecoms players across the globe in the absolute dollar amount. We acknowledge that given the ambiguity attached with the definition of VAS, the market for non-SMS and non-internet surfing applications will be smaller than what the data below suggests. Even so, in our view the addressable market pie still remains attractive.

Fig 30 Quantifying the VAS opportunity – multibillion-dollar market



Annual data for Indian players for Mar.'08 year end. For all other players annual data for Dec.'07 year end.

Source: Company data, Macquarie Research, September 2008

Low Internet PC penetration has helped the growth of VAS in China

A comparative study of China, Korea and India

Innovative service offerings in the Chinese and Korean markets have resulted in VAS growing its contribution to the telecoms operators' top line in these countries. China and Korea have been through similar product life cycles with value-added service offerings in the form of music, broadband, games and other information services. Figure 31 below shows the comparison of these three key markets on various VAS parameters.

Fig 31 Innovative VAS offerings have increased the share of VAS as a % of total revenues in China and Korea

Country	China	Korea	India
Mobile penetration	41.60%	91.30%	28.10%
VAS depth	22-25%	3%; 25% (if data services are included)	6-9%
3G Roll-out	Not yet	CDMA2000 1xEV-DO, Live since Jan 2002	Not yet
Non-voice product line	SMS, WAP, Stock Market News, MMS, Colour Ring Tones, Voice Mails, Agricultural Info, Music club	VAS : Caller-ID, global roaming services Data services: SMS, wireless internet, game downloading (High speed games, GXG service), music services (MeiOn) etc.	Voice services - RBT, CRBT, Voice portals, Voice search etc. Data services - SMS, WAP, Subscription services like (Stock News, Jokes, Astrology, sports updates etc.), m-advertising, m-marketing , m-commerce services
Business model	Revenue Share- 15% for telcos if standard offering 30% if telcos do customer service 50% if telcos co-brand with service provider	Service providers are small and fragmented	Revenue share - 60-70% telcos 15-20% Content aggregators 15-20% Content providers
VAS growth %	25-32%	~11% overall, 2-3% growth for data services	40-45%
VAS growth drivers	Wireless broadband services, 3G roll-out, Olympics value-added services	Global roaming, other data services	M-advertising, m-marketing, industry consolidation, regional language services, 3G roll-out

Source: Macquarie Research, September 2008

Chinese VAS market – growth seen across the board

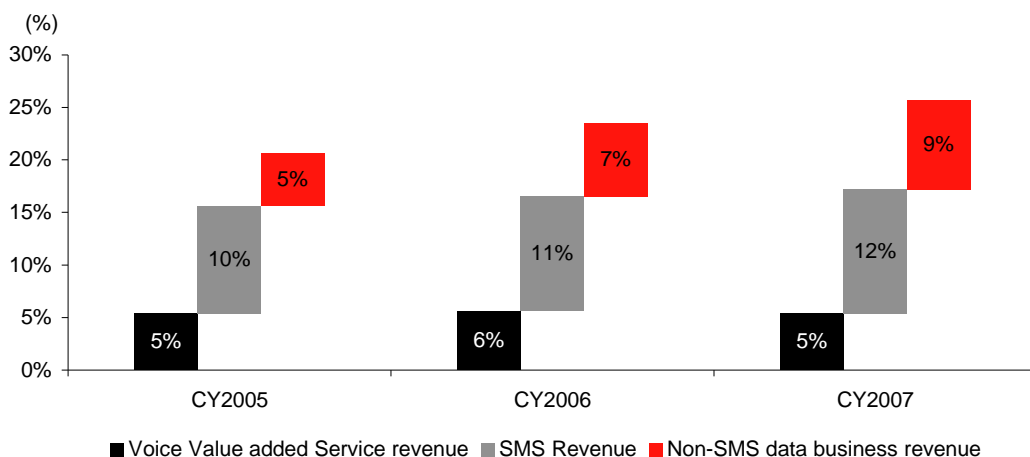
- Based on our study we have identified three key drivers of VAS growth in China.
 - ⇒ **Low internet PC penetration:** Chinese wireless operators have seen decent traction with its subscribers who wish to access information available on the internet through their mobile phone.
 - ⇒ **VAS offerings that have resonated well with rural subscribers:** Subscriber growth in China is driven by increased penetration in rural China. Chinese wireless operators have been able to drive VAS offerings in spite of driving rural penetration by introducing customised data feeds for farmers.
 - ⇒ **2009 Olympics:** Wireless operators had lined up series of VAS offerings (eg, live sports broadcasting) for the recently concluded Olympics in Beijing. These services could increase the sampling of VAS applications by subscribers and be a key driver of such services in future.

Non-SMS VAS contributes 14% to total revenues for China Mobile

China Mobile – a brief case study on the most impressive VAS success story

Mobile VAS trends at China Mobile (941 HK, HK\$84, OP TP: HK\$89) are a good pointer towards the potential that lies ahead for Indian telecoms operators in the mobile VAS space.

Fig 32 China Mobile’s share of non-SMS VAS has grown to 14% from 10% 2 years ago



Source: Company data, Macquarie Research, September 2008

China Mobile's total VAS revenues come from three major segments – (a) SMS revenues, (b) Voice VAS and (c) Non-SMS data. The Non-SMS Data Business segment grew the most at 46.3% in 2007. The pace of the growth can be attributed to the excellent response to Agricultural Information Service and the increased usage of WAP. WAP revenues are growing at 30%+ as mobile broadband services are lapped up given the background of low penetration of Internet on computers in many geographic regions.

Fig 33 China Mobile – non-SMS data business segment is the biggest driver of VAS growth

Growth Trend – Revenues

China Mobile(in RMB bn)	2006	2007	Y-o-Y Growth
SMS Revenue(a)	32.20	41.93	30.2%
Voice VAS (b)	16.42	19.41	18.3%
Non-SMS Data Business(c)	20.68	30.25	46.3%
VAS Revenue(a+b+c)	69.30	91.60	32.2%

Source: Company data, Macquarie Research, September 2008

Korea – technology shows the way

- ⇒ **VAS and data services make up 25% of total revenues:** Caller-ID and global roaming services are the only services that are defined as VAS in Korea. Applications like SMS, music services, etc. are categorised as data services. We expect VAS to grow at 11% YoY and other data services at 3% YoY in the Korean market.
- ⇒ **Watch out for innovative services led growth:** M-RFID (Mobile Radio Frequency Identification Device) – a service that helps users discern products by gathering information through mobile RFID scans – and T-Interactive – a service that customises mobile screens for a comfortable viewing experience – are innovative offerings in Korea.
- ⇒ **3G migration underway, will pave way for new applications:** 3G migration started in March 2007 in Korea and the process is still underway. We expect applications like GPS to take off once subscribers move onto the 3G network.

India VAS – attractive opportunity

Indian telecoms players currently have 6–10% of their total wireless revenues coming from VAS. Peer-to-Peer (P2P) SMS represents 50–55% of this revenue pool. Effectively, excluding commoditised P2P SMS applications, VAS revenues stand at 4–5% of telecoms operators’ total wireless revenues.

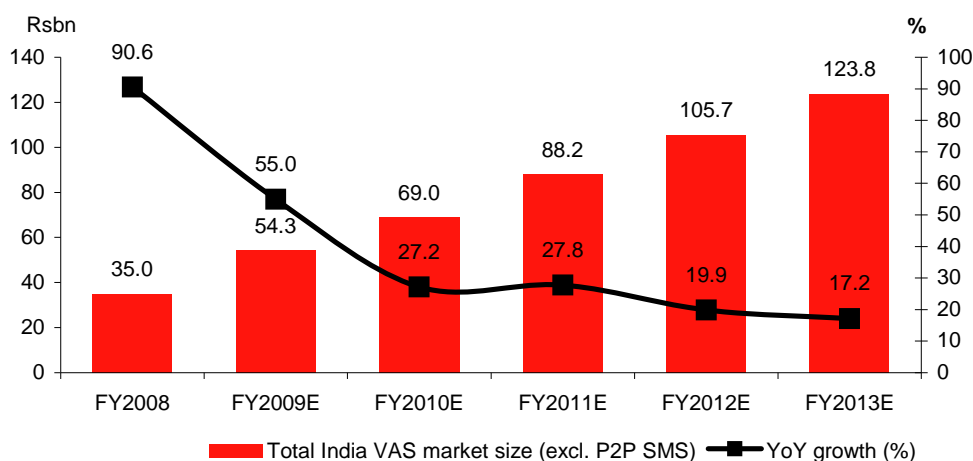
Indian VAS industry poised to be US\$2.7bn industry in FY3/13E

We note that limited third party data and time series industry data available on the mobile VAS industry makes independent validation and revenue forecasting difficult for investors and analysts. Unlike authenticated wireless data given out by TRAI and DoT periodically, very little authenticated data on the mobile VAS sector and individual VAS players is available. Based on our proprietary analysis, we expect the Indian telecoms VAS market to be US\$2.7bn by FY3/13E.

Indian VAS industry is expected to grow at 29% FY08–13E CAGR

We expect India to have substantial revenues from VAS, riding on music, Cricket and data services like high-speed broadband, m-commerce, m-advertising segment post 3G roll out. Rural penetration would also help the Indian VAS segment as voice-based search through IVR (Interactive Voice Response) are likely to be popular among the illiterate rural users. Service Providers are seen ramping up their voice-based offering in multiple Indian languages.

Fig 34 Rapid subs growth and increase in non-SMS share of ARPU will drive Indian VAS market growth

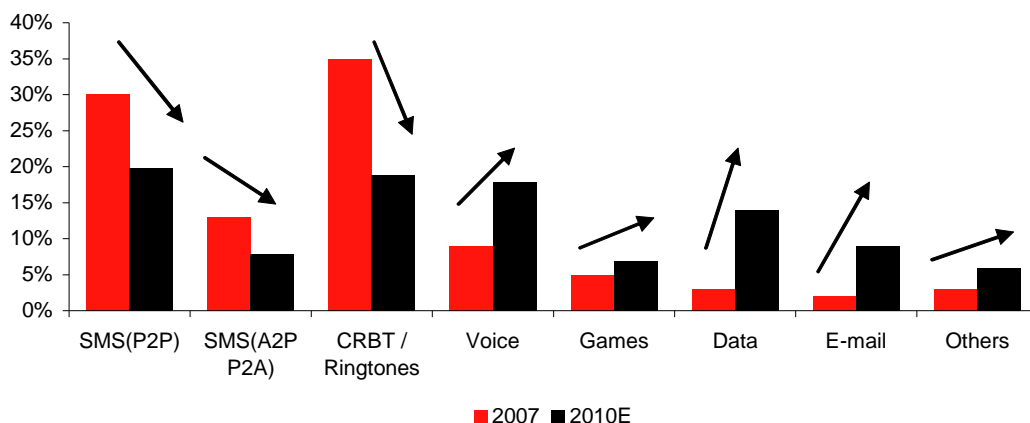


Source: Macquarie Research, September 2008

Data and e-mail-based VAS applications will take share away from SMS by 2010E

We note that as the Indian VAS industry evolves, the share of SMS is set to decline from current highs of ~50%. An industry report by telecoms consultants has pointed to voice and data applications to take share away from SMS and CRBT/Ring tones.

Fig 35 VAS revenue breakdown – ‘Infotainment Service Set’ to grow in India

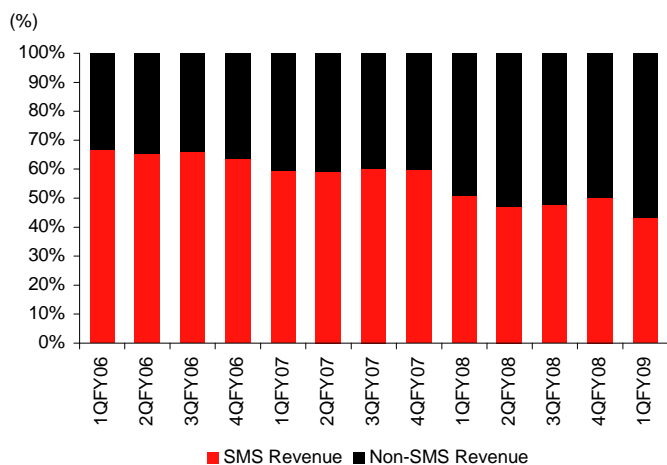


Source: BDA Report, Macquarie Research, September 2008

SMS share in total VAS pie is declining for the top two Indian telcos

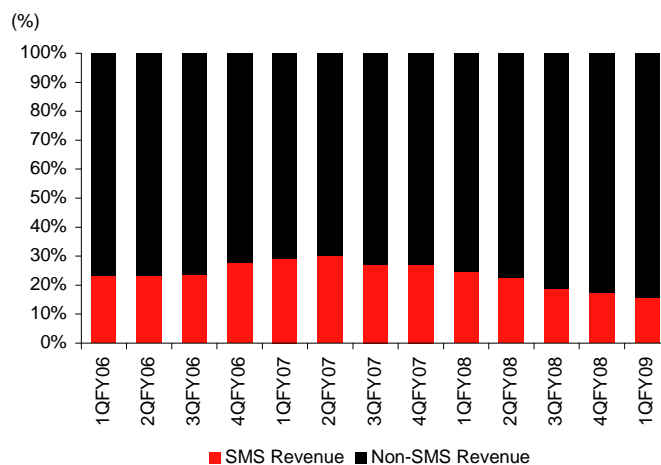
The share of P2P SMS (as % of non-voice wireless revenue) has been declining for both the top players in Indian telecoms. We believe this is an indication of the growth coming from non-SMS value-added services. The trend is expected to continue with the role out of 3G services.

Fig 36 Bharti – declining SMS share in non-voice revenues



Source: Company data, Macquarie Research, September 2008

Fig 37 RCOM – SMS share stays low in non-voice revenues



Source: Company data, Macquarie Research, September 2008

Feeding the value chain will ensure feeding off the value chain

VAS services are often delivered on multimodal platforms such as SMS, MMS, WAP and USSD, which are supported by entities in the value chain from content source to end usage. In Figure 38, we present a schematic representation of a typical VAS value chain.

Fig 38 VAS value chain – OnMobile focuses on the aggregation to platform provider stages of the value chain



Source: Macquarie Research, September 2008

Content providers: Content can be in the form of musical tracks, video footages and weather information. From an enterprise standpoint, the content includes promotional material from a marketing company to publicise advertising content. User-generated content (UGC) like voice messages, music compositions also form a major source of content.

The content provider business thrives in two segments.

- **Giants:** The mobile platform is another revenue-generating avenue for the big media players, Internet portals, etc. Though the revenue contribution from mobile services is low (typically 1–2%), the content providers use this platform as a promotional tool. These players end up in talks with major content aggregation players and do not worry about managing deals directly with telcos. Reputed content aggregators score above smaller players on this front.
- **Pure players:** Few players develop their content business surrounding mobile platforms and thrive on user acceptance. The quality of content is the key differentiator to these players. They enter into revenue-sharing agreements with content aggregators and telecoms operators. For example, 'Ganesha speaks' is an astrology service provided in the mobile platform as a subscription service.

Aggregators: They gather content from content owners and content creators, and standardise it in a format compatible with mobile transmission. Billing solutions will also be handled here as this is the hub at which content unifies. Aggregators form an important link in the value chain providing market access to both Content Providers and Network Operators. Further, multiple content providers and multiple network operators have a single point of contact enabling them to access wider market with content depth, eg Tanla Mobile in UK.

Application developers: Gathers aggregated content and develops applications to make the content available in mobile downloadable format. Flexible solutions often take time to develop. Applications often end up with contributions from multiple developers amid strategic partnerships, eg OnMobile's implementation of Nuance Speech Solutions. Aggregators often function as technology enablers developing applications. Considerable technical expertise is needed to be successful in the telecoms software domain.

Platform providers: The applications developed can be transferred to end-users in many formats like SMS, MMS, USSD and WAP. Robust platforms support the multimodal formats such as voice, data and graphics. Unlike data services, voice services require the host platform to be integrated into the carrier network. This physical integration is a rigorous process with redundancy built into the system to ensure continuous server uptime. Agreements are in place as to the liability of the damages caused, eg damages that result from undesired/unsolicited content promotion would rest with content providers/content aggregators and liabilities that arise out of the failure of services may rest with the telco operator.

Carrier operators: Telecoms operators who service end-users, eg Bharti Airtel.

End user: Subscribers of the services floated by the telcos.

Telco operators' share is as high as 60–70% in the Indian market

Typically, VAS players participate in more than one of the above activities which influence their bargaining power and define longstanding relationships in the value chain. On the other hand, a few entities could be bypassed in the value chain to deliver services. For example, an aggregator can transmit a service to the users using the USSD capabilities of GSM phones without the intervention of the network operator. However, such cases are remote.

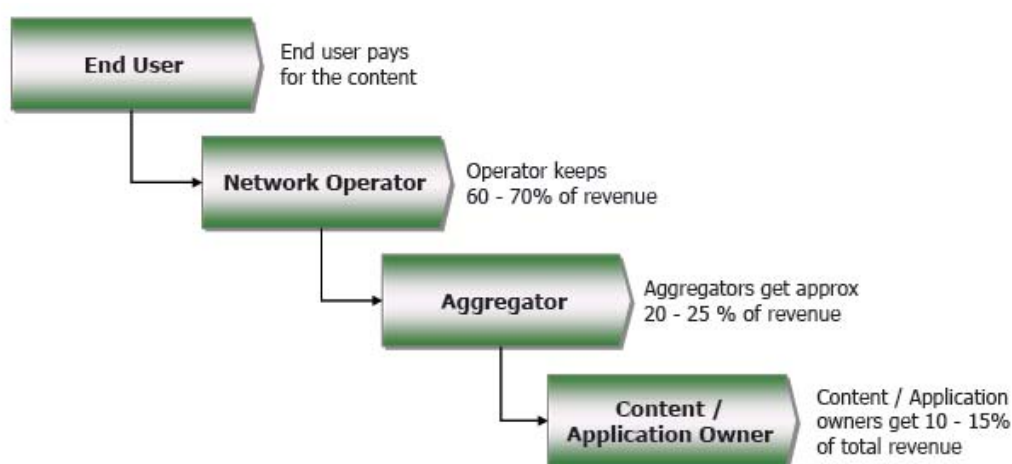
Revenue model

End users typically subscribe to the services in two formats:

- By paying a fixed amount, say Rs30 per month for music track downloads.
- On a pay per download basis, say Rs3 per min per download.

The revenue generated is shared among the participants in the value chain on the basis of a pre-defined percentage.

Fig 39 VAS value chain – aggregators have 20–25% revenue share



Source: BDA, Macquarie Research, September 2008

Carrier operators in India typically garner around 60–70% of the share, citing higher user acquisition cost and network operating costs. This scenario might not last long, as the telecoms market is expected to stabilise and carrier operators would recover their initial investments. Competitive pressure will then drive operators to concentrate on low churn rates and better value offerings, leading to network operators demanding lower revenue share to be ahead of competition.

The content owner's share, however, would differ based on innovation and market acceptance.

OnMobile has one of the widest VAS offerings among Indian VAS players

Integrated players will be winners

Fragmented players in the VAS Industry mostly offer services as individual modules. There are very few integrated players offering end-to-end VAS solutions with the breadth and depth of VAS offerings. Figure 41 examines in detail the VAS product portfolio across different VAS service providers. We believe OnMobile has one of the widest suites of VAS products. A wide array of applications enabled by a single VAS provider helps telco operators to manage their vendor relationships more efficiently.

How can stakeholders help to increase VAS awareness, penetration?

Network operators: They have concentrated on subscriber acquisitions to drive growth. Competitive pricing has demanded the undivided attention of telco managements. As a result, until last year we had seen limited VAS promotion. Of late, however, we have seen Indian operators aggressively pursue VAS opportunities (including Reliance’s ‘Bus Batan dabao’ and Vodafone’s Live Music campaigns). Such initiatives ensure increased VAS subscription revenues.

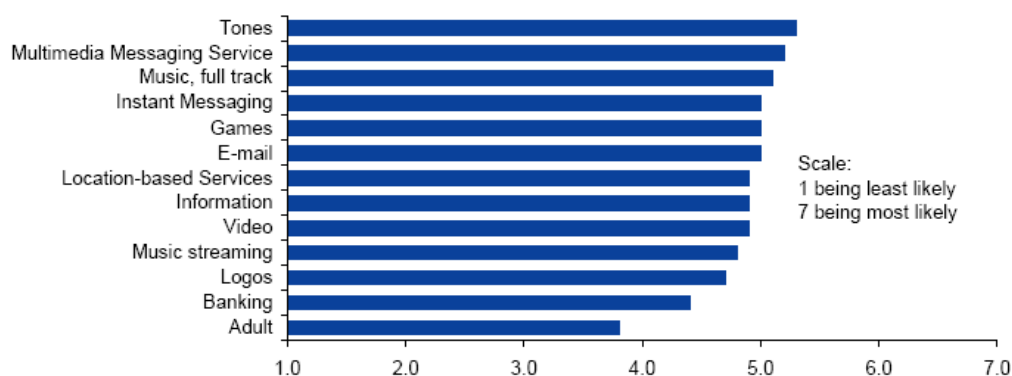
Service providers/platforms providers: They not only need to come up with innovative service offerings but also to develop end-user-friendly enabling technology. In addition, VAS providers need to have little complexity in the system architecture for telco operators.

Device makers: Samsung, for one, has incorporated the ‘mobile tracker’ feature in its range of mobile phones, which tracks lost mobiles through an SMS mechanism. Carrier operators took the lead and converted this into a VAS offering, resulting in recurring revenue. Applications like these need to be well-advertised to help grow the industry.

Regulatory authorities can promote VAS by constructive regulations that will increase VAS awareness. Rural penetration should also result in significant voice-enabled VAS revenues.

Users should be willing to pay for VAS services in the market. The ease of use of VAS services and affordability will determine acceptance and desirability levels, in our view.

Fig 40 User interest and willingness to pay for selected VAS – ring tones and MMS screen at the top



Source: Gartner, Company data, Macquarie Research, September 2008

Fig 41 VAS offerings from various MVAS players in India – OnMobile’s portfolio stands out

	OnMobile	ACL-Wireless	BhartiTeleSoft	IMImobile	Mobisy	Paymate	Tanla	Webaroo	Zestadz	Ziva Software
SMS	Provides voice SMS	M-Chat- SMS Chat Application; MSISDN forwarding, masking of sender ID, Wap push support, DRM content support, adv. routing & scheduling algorithms					SMS Centre handles SMS delivery in the P-P, A-P and P-A segment SMS direct broadcast is offered which can operate without an SMSC SMS Chat, SMS voting enabled under the ITV(Interactive) services	SMS GupShup		
Social networking services	Mobile Paparazzi solution (yet to be launched in India): Users can connect and upload pictures, content to blogs, online albums and social networking sites.	1. Frenzo™, S-networking & instant messaging service 2. PhotoMate-photo sharing service 3. Yahoo! Mobile IM: Yahoo IM on mobiles		UnlSpace™ automates complexities of content sharing on mobiles. Helps upload, share and sell content via. SMS, MMS, WAP, 3G video call				Webaroo 2 for windows, Allows subscription to RSS Feeds, video downloads		Peepal Network™, social networking for reviews, tagging, music sharing. Etc.
Search services	Msearch supported by 1. N-grams support & Phonetic filters (accommodates spelling, pronunciation errors) 2. Abbreviations & acronyms 3. Collaborative filtering (recommends related content if search criteria unmet) 4. Multilingual Dynamic Grammar Generation (support multilingual search in case a requested song is in any of the 15 regional languages)							Search Radar Tool, WikiSlice to search content on Wikipedia		Manas Platform™, works on language independent 'Answer Engine'

	OnMobile	ACL-Wireless	BhartiTeleSoft	IMImobile	Mobisy	Paymate	Tanla	Webaroo	Zestadz	Ziva Software
m-advertising	Mobile marketing solution provided through a dynamic filter that directs advertiser's messages to a subscriber chosen on pre-defined set of profile parameters.			Ad-Ring™ is industry's first integrated M-Ad platform. Multi format ad campaigns can be delivered over SMS, MMS, voice, WAP, RBTs and videostreaming			BroadCast Manager can be used to send bulk messages to customised users. Has the ability to provide reports, statistics in real time. MINT provides mobile portal solution that enables brands to reach out to customers		Allows to embed contextually relevant ads. Into SMS, Mobile Sites, J2ME Applications and games.	Chits Platform™, that provide direct benefit to users based on their usage patterns.
Voice services	<ol style="list-style-type: none"> 1. Voice Portals: Leader in deploying speech recognition based systems in multiple languages. 2. RBTs: Provides 'press * to copy' feature for RBTs, CRBTs 3. Voice Mail, missed call alerts 4. Voice SMS 5. Music services: ringtones, music cards, jukebox service 	Advanced speech Recognition, 3G-324M video calling, caller-ID support, audio recording, DTMF Detection, CSD and SIP interrouting, Inbound/ Outbound dialing	<ol style="list-style-type: none"> 1 Voice portal service replaces human operators with automated solution. 2 'Colour ring-back tones' allow customers varied tones according to mood, taste, environment. 3 Chatting tunes: Background Melody (BGM) can be added to conversations. 	<ol style="list-style-type: none"> 1. Provides complete RBT services like platform, service, content and support. 2. Interactive voice portals, video streaming, video mail, video on demand, mobile tv with channel encoding services, voice applications like chat, competitions, celebrity chat are provided. 			<ol style="list-style-type: none"> 1. SS7 voice mail server supports telephone prompts with features like greetings, re-recording etc. 2. HDMS supports CRBTs, videomails, speech portals 3. Optimal voice routing solutions are implemented 			
Application platforms	MMP2500 (Multi Modal Platform) is the core platform facilitating smooth operations of OnMobile's applications	Multi Modal Platform (MMP), provides multi applications, multibearer telecoms platform; maintains open unified interface, and thus compresses time to deliver a new service		DaVinci Service Delivery Platform (SDP™) can be integrated through open protocols covering data, voice services, content management, delivery & billing integration, promotions and content bundling.	MobiTop platform offers 'Rich Web 2.0' apps deployment. Currently enabling Internet based deployment of applications.		Aggregator Platform offers services like SMS Gateway, EMS, MMS Gateway, micro payment facility, Interactive TV services, CMS, video gateway and billing services.			
m-commerce	<ol style="list-style-type: none"> 1. Mobile ticketing enables enquiry and booking of movie tickets 2. Pre-paid recharge is enabled 3. Bill payments using credit card feature 					SMS based mobile payment services- movie, airline tickets, send flowers & gifts, pay at restaurants, retail stores; -->PIN , Alpha code technology for better security				

	OnMobile	ACL-Wireless	BhartiTeleSoft	IMImobile	Mobisy	Paymate	Tanla	Webaroo	Zestadz	Ziva Software
Directory services	Phone Backup services to integrate mobile data with Outlook and to have common backup storage for retrieval.					iContactBook, to be launched soon				
Browsing services							MINT is a WAP Builder tool that creates WAP sites. These sites are in mobile compatible format for internet browsing.	Webaroo Mobile Client, Downloadable application		
Managed VAS services			<p>1. NOC (Network Op. Centre)- Manages operator's telecoms network</p> <p>2. Managed VAS- MST team manages VAS portfolio.</p> <p>3. Cust. care interface.</p>	<p>1. Manages connectivity for SMS, MMS through various gateways and service platforms.</p> <p>2. Provides carrier grade msg. Platform and gateways, CMS, Voice platforms. Service creation applications, Interactive portals, RBTs and videostreaming.</p>						
Content management			<p>CMS for operators, MVNOs, content aggregators to manage pf of digital content and offers multimodal access to content via SMS, MMS, IVR, etc.</p>	<p>CMS offered as a web based application, on a hosted revenue share model. Can handle multiple content type, content providers, and channels.</p> <p>Content APT (adaptation, porting and testing) mobile studio develops & adapts content - ringtones, wallpapers, themes, screensavers, videoclips, videotones.</p>			<p>CMS enables monetisation of rich media content on any device and in any format by hosting, managing and billing the content. Users can manage royalties, digital rights, and payments. Multiple languages are supported</p>			

	OnMobile	ACL-Wireless	BhartiTeleSoft	IMImobile	Mobisy	Paymate	Tanla	Webaroo	Zestadz	Ziva Software
Others	<p>As part of managed services model, supports media companies to set up contests in the form as below</p> <ol style="list-style-type: none"> 1. N-day contests (start date to enddate) 2. Regular (questions categorised) 3. Cricket (category listings are sequential) 4. Time based contests (Questions vary based on time settings) 						<ol style="list-style-type: none"> 1. Offshore development and Infrastructure support services are provided 2. Telemetry (auto meter reading) and telematic (vehicle location service) solutions are developed 3. Campaign management-marketing, product promotions, quizzes, auctions/voting campaigns are enabled 			

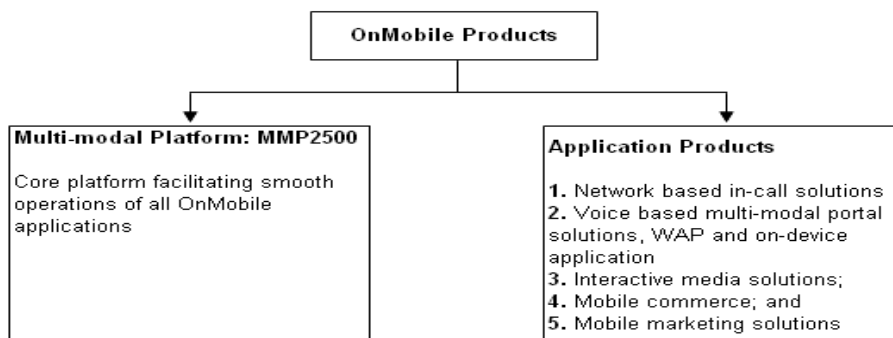
Source: Company data, Macquarie Research, September 2008

OnMobile product suite

Since its inception seven years ago, OnMobile has developed sophisticated telecoms value-added software products and applications. Its product portfolio comprises a large number of VAS-oriented applications and can be broadly classified as two categories: multimodal platform (MMP2500) and application products.

The two product categories generate huge synergies and serve most of the requirements of end mobile users and the telecoms service providers. An exhaustive product portfolio provides end-users with all the desired features. Since OnMobile's application products result in little or no gap with their VAS offerings, telecoms service providers are saved from the effort of tying with different players for different services.

Fig 42 OnMobile – product offerings



Source: Company data, Macquarie Research, September 2008

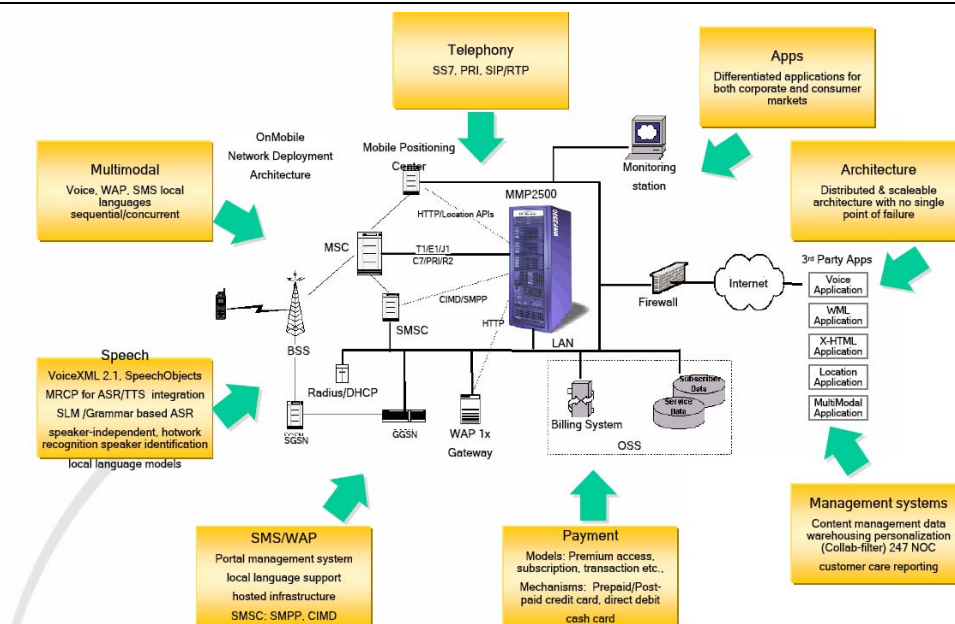
OnMobile's Multi-modal platform serves as the core platform for all of its VAS applications

Multimodal platform MMP2500 – the backbone of VAS offerings

The multimodal platform – MMP2500 – serves as the core platform on which all of OnMobile's application products operate. It allows service providers to deliver various applications across multiple delivery modes (such as voice, SMS, MMS and WAP), using a single platform and thereby cutting operating and capital expenses. Such a modular solution further strengthens OnMobile's sales pitch to network operators.

The platform comprises standard hardware sourced from different vendors and software designed by OnMobile. The software supports all the delivery modes (such as data, graphic, voice and WAP) and is technology (GSM, CDMA) and handset agnostic.

Fig 43 MMP2500 platform at the core of OnMobile's applications



Source: Company data, Macquarie Research, September 2008

Simplifying the complex delivery mechanism

Before delving into details of OnMobile's MMP2500, we think it is better to briefly discuss the multimodal concept as it will give investors a better understanding of the value added by MMP2500.

Imagine an end-user using a simple VAS-like ring tone download. He can interact with systems at the carrier's end (ie, input his choices and receive output) either by typing in text, browsing through the graphics or simply giving voice-based commands. Hence, a service provider should provide VAS through all interaction channels to maximise its VAS revenues. However, providing a VAS with multiple interaction options is much easier said than done. Network operators must have appropriate platforms in place that support the delivery of applications across different delivery modes.

The delivery mode aspect becomes more complex in markets like India with many languages. A service provider thus has to support multiple modes across all the different languages. If a service provider were to put in different operating platforms for different modes (ie, a platform each for voice, data and graphics), this would not only add to cost but also significantly to operational complexities. Envisioning service providers replicating the 'multiplatform' structure for all the languages highlights the benefits accruing from a smart platform that overcomes integrations issues involved in offering multimodal VAS.

Some of the distinguishing features of MMP2500 are:

- Enables delivery of software applications through multiple channels such as voice, data (SMS) and Internet (WAP).
- Supports multiple languages including ten of India's leading vernacular languages.
- Enhances users' mobile commerce experience by supporting multiple payment options (debit card, credit card or direct debit).
- Supports various payment and subscription models (premium access, pay-per-use, pay-per-transaction and time-based models) to suit subscribers' convenience to the maximum extent possible and, thereby, increase adoption of VAS.

We think that with features like compatibility with 13 languages, MMP2500 provides a high degree of customisation to service providers without any incremental capital investment. Multiple payment options give MMP2500 an edge in the mobile commerce market as well.

Application products

The VAS industry is highly fragmented. Most of the players focus on certain segments of the industry and lack a multimodal dimension. Thus, most of the players lack width (in terms of segments covered) and breadth (delivery options for each of the applications). OnMobile, with its multiproduct and multimodal offerings, has a definitive edge over most of the industry incumbents. OnMobile's multiproduct and multimodal product line offers two advantages to the carriers: (1) with a comprehensive VAS product line, there are no or little gaps in VAS offerings of the carriers, enabling them to maximise their VAS-based revenue; (2) since all the services are coming from a single vendor, carriers are relieved of the tasks of pooling services from different vendors. Thereby, they can focus on their core activities.

Fig 44 discusses all the application products.

Fig 44 OnMobile has exhaustive VAS applications package to offer telco operators

Application category	Description / sub-category
Network based in-call solutions	<p>Applications embedded in network operators' infrastructure, billing systems, customer care and other systems</p> <ul style="list-style-type: none"> • Ring-back tones: Enable callers to listen to ring-back tones (which can be songs, voice-recorded clips, live updates etc.) <p>OnMobile introduced innovative 'Press * to copy' feature in 2007 that lets callers select the ring-back tune of the person they are calling as their own ring-back tune. This way, OnMobile can tap the impulsive demand and has simplified the tone selection procedure as well. Both factors likely to increase adoption of service</p> <p>As of 31 August 2008, OnMobile had more than 30m users using ring-back tones applications</p> <ul style="list-style-type: none"> • Voicemail and missed call alerts: Notifies user of missed calls and voicemail received when the handset was switched off, out of range or engaged on a call • Voice SMS: Uses voice instead of text, overcoming the limitations of conventional SMS messages such as character limitations and lack of support for vernacular languages.
Voice-based multimodal portal, WAP and on-device applications	<p>Applications installed on the handset; adds to functionalities of handset by embedding data services directly into the handset; provides users with continuous access, even when not connected to the network</p> <ul style="list-style-type: none"> • Music Solution: Enables downloading of music-related content (ring tones, songs, music messaging, music jukebox, etc.) using multiple channels <p>OnMobile sources and aggregates the content through licensing agreements with music label companies, royalty agencies and other content providers on behalf of its customers, ie telecoms service providers. However, in some cases, telcos aggregate content directly.</p> <ul style="list-style-type: none"> • Information and entertainment solutions: Provides multimodal access to entertainment content (eg movie updates, sports update, jokes etc.) and Information content (eg stock updates, news) • User-generated content solutions: Includes social networking applications like find-a-friend where a user can search the profiles of other users available on OnMobile's database and contact the potential friend using SMS or voice. <p>This category includes content solutions designed by OnMobile for players in telecoms, media and other sectors.</p> <p>OnMobile can also conduct on-mobile auction using WAP and SMS channels.</p>
Interactive media solutions	<p>OnMobile has developed special solutions for media players (such as television broadcasters, newspapers and radio stations etc) that enable media companies to interact with their target audience. These solutions provide media companies with unique numbers and audience can send across their responses to these numbers, either as text or voice. SMS voting methodology followed in reality television programs like Indian Idol best exemplifies usage of such solutions. Revenue earned from the end-user subscribers is shared between the carrier, the media companies and OnMobile.</p>
Mobile commerce solutions	<p>OnMobile offers complete mobile commerce solutions. Apart from providing the technology for mobile commerce solutions, it carries out content and pricing management; ties up with credit card or debit card infrastructure; and at the same time integrates any new merchant or service provided by its customer.</p> <ul style="list-style-type: none"> • Mobile ticketing: OnMobile has tied up with PVR, Shringar Cinemas and INOX Leisure in 9 cities. Its solution lets users enquire about the tickets and book the same. • Pre-paid recharge: This solution enables service providers offer their users the option of recharging their mobile phones anytime and anywhere. • Bill payment: OnMobile has tied up with Airtel to allow users to pay utility bills from their mobile phones using credit cards.
Mobile marketing solutions	<p>This solution enables OnMobile's customers to send messages to target consumers about promotions or product launches by OnMobile's customers. The major advantage here is that OnMobile's customers can select the right consumer pool out of OnMobile's database and optimise their advertising budgets.</p>

Source: Company data, September 2008

Phone Backup and Mobile Paparazzi likely to succeed in India

Figure 45 summarises the entire product suite from Voxmobili. We believe the 'Phone Backup and Restore' and 'Content Upload' applications are most attractively placed from an Indian market perspective.

Phone Backup and user-generated content upload will provide big opportunity in the Indian market.

Fig 45 Voxmobili product suite – Phone Backup and Mobile Paparazzi expected to have good acceptance among Indian user base

Solutions	Products	Services
Phone Backup & Restore	Personal information management	Business Development
Content Upload	Synchronisation	Integration
Synchronised Address book	Messaging	Education
Push Email	Storage	Customisation
		Technical Support

Source: Company website, Macquarie Research, September 2008

Phone back up services – securing the mobile data

OnMobile's Phone Backup provides a simple way of backing up over-the-air the user's mobile handset content such as phone numbers, SMSes, pictures, ring tones, music and videos. In the event of loss, theft, damage, mistakes and phone upgrade, the saved data is restored on any supported device based on the handset's data capabilities. OnMobile provides an online web and WAP portal access to telecoms operators' subscribers to manage their phone's data and service. The end-user can visualise the backed up content and access advanced features such as the contact's booklet printing, album creation or application remote control.

Mobile Paparazzi – capitalising on the popularity of social networking sites

Some of the most popular places on the Internet today are blogs, social networking sites and online photo albums. But despite the popularity of such sites, on-the-go photos and videos are still untapped opportunities for mobile operators. Uploading of user-generated content could provide mobile operators a new revenue source, in our view. OnMobile's Mobile Paparazzi application is an interesting application that helps in uploading user-generated photos and videos to the most popular blogs and sites.

MMP platform and ‘Press [*] to copy’ highlight R&D capabilities

OnMobile has invested heavily in developing its R&D capabilities

OnMobile has an impressive research and development track record. Its in-house developed multimodal integration platform – MMP2500 speaks volumes about OnMobile’s R&D capabilities.

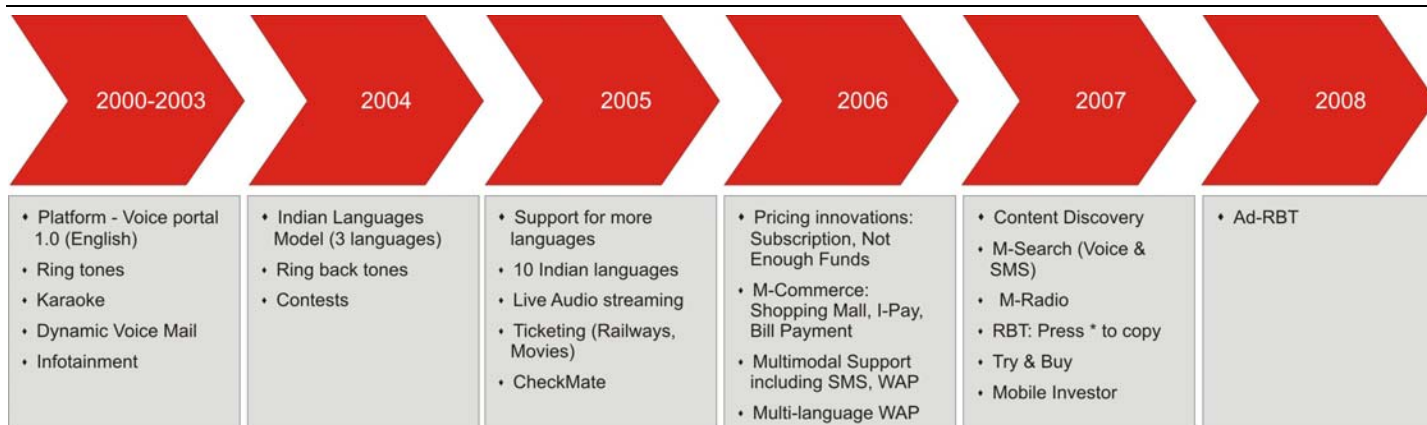
It has further leveraged its R&D competencies and designed innovative solutions such as:

- **Delivery of applications in Indian vernacular languages:** The user can access services in ten different languages.
- **Press [*] to copy:** A ‘press [*] to copy’ feature that lets callers select the ring-back tune of the person they are calling as their ring-back tune.
- **Audio streaming:** OnMobile’s audio streaming solutions deliver content from a live event, even on a 2G network. In normal cases, users have to install streaming software on their handsets to receive live content. However, through audio streaming, OnMobile has moved the streaming software to its own network platforms from users’ device. Now, users can access live content from anywhere and through any device.

All the aforementioned solutions work towards enhancing the end-user experience and, consequently, augment the adoption of VAS leading to higher revenue for service providers.

We believe that OnMobile will keep on introducing new and user-friendly applications that in turn help it maintain an edge over its peers.

Fig 46 Proven track record in innovation of new products

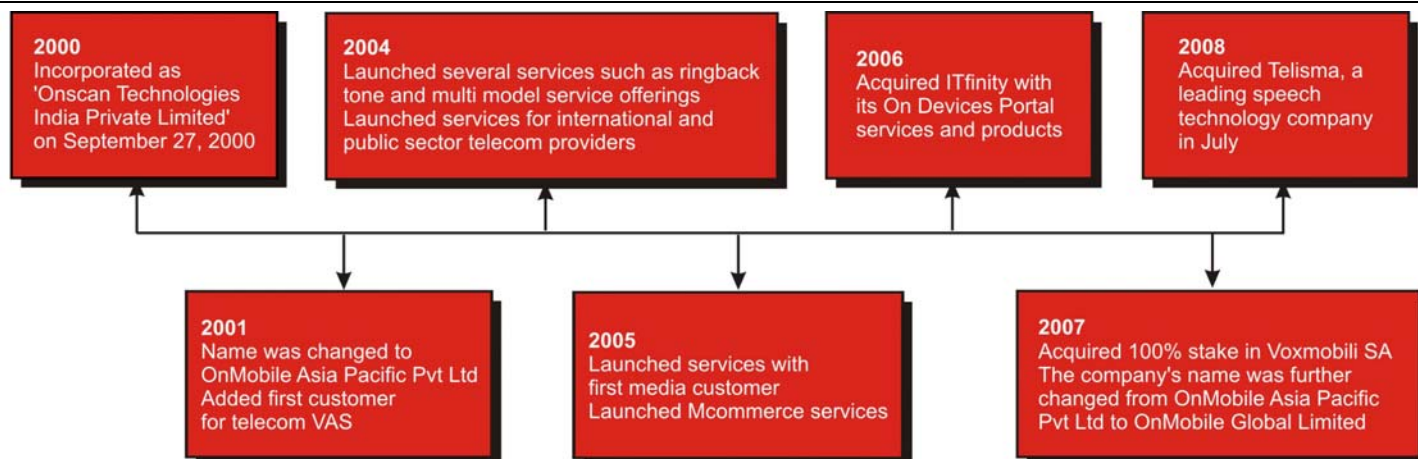


Source: Company data, Macquarie Research, September 2008

Mapping inorganic growth trajectory

OnMobile has undertaken several strategic steps to transform itself into India's leading VAS provider in eight years. The business has expanded both organically and inorganically. Figure 47 highlights the key milestones in the company's exciting growth path.

Fig 47 Voxmobili acquisition will help OnMobile to establish its presence in international markets



Source: Company data, Macquarie Research, September 2008

OnMobile has been actively pursuing M&A to expand into international markets

OnMobile management has focused on scaling up its business by acquiring companies for either strengthening its product portfolio (Voxmobili) or for augmenting its underlying technology platforms (Telisma). Its past four acquisitions have enabled OnMobile to expand its product line and services portfolio to new territories and technological advancements. The company's tactical initiatives also include standardisation of services, irrespective of technologies and handsets.

Acquisition of ITfinity – December 2006

OnMobile acquired a 51.0% stake in ITfinity Solutions, a mobile technology software specialist, in December 2006. The company also entered into a merger-cum-share purchase agreement with ITfinity's promoters to acquire the remaining 49.0% stake. The acquisition enhanced OnMobile's software, hardware and program package offerings.

Acquisition of Voxmobili – September 2007

In line with the initiatives to fuel overall growth inorganically, OnMobile acquired Voxmobili in September 2007. The buyout of Voxmobili brought its well established clientele in Europe and the US to OnMobile. In addition, Voxmobili's phone back-up, synchronised address book and Mobile Paparazzi solutions are highly reliable, customisable and scalable. The company plans to leverage on these capabilities of the acquired entity to strengthen its multimodal platform. OnMobile intends to deliver its multimodal portfolio, with the integration of these services to its own carrier customers as well as Voxmobili's existing and prospective customers.

Acquisition of Ver Se Innovation – October 2007

OnMobile acquired a 51% stake in Bangalore-based software company Ver Se Innovation for Rs22m on 26 October 2007. As part of the agreement, OnMobile agreed to a capital commitment of Rs66m in further equity or debt instrument. The main objects of Ver Se include carrying on the business of designing and developing vertical search and recommendation services on mobile and handheld devices.

Acquisition of Telisma – July 2008

The addition of Telisma's standards-compliant speech recognition products and expertise will enable OnMobile to accelerate its penetration into fast-growing emerging markets by developing new speech-recognition language models. This technology enables quick and easy access to mobile applications and content, and also strengthens OnMobile's mobile applications product suite.

Telisma was created in August 2000 as a spin-off from France Telecom's Research and Development Laboratory, funded by leading European venture capital firms. Telisma has a team of around 40 employees including nine PhDs and 18 engineers and has its operations in Europe and India. Telisma's core products centre on language processing software used by telecoms operators and enterprises for simple, intuitive interactivity with voice portal applications and customer care. Telisma has in-depth Intellectual property of over 200 man-years of speech technology as a result of in-house R&D. This provides a solid foundation for launching new language models and enables quick launches of new voice-based services around the world.

Fig 48 OnMobile's acquisition strategy has focused on strengthening products and technology platform

Target company	ITfinity Solutions	Voxmobili	Ver Se Innovation	Telisma
Date of announcement	22 December 2006	11 September 2007	26 October 2007	1 July 2008
Consideration	Rs195m (US\$4.4m)	€22.3m (US\$35m) in cash and issuance of 0.42m equity shares	Rs22m (US\$0.6m)	€12m(US\$18m)
Target company profile	ITfinity is a mobile technology firm based in Mumbai, India. It provides SMS and MMS solutions to enterprises and wireless operators.	Voxmobili specialises in personal mobile data management software.	The main objects of Ver Se include carrying on the business of designing and developing vertical search and recommendation services on mobile and handheld devices.	Telisma is a leading provider of software speech technologies. The company's Automatic Speech Recognition (ASR) software, teliSpeech Recogniser, is a scalable, carrier-grade ASR solution.
Impact on OnMobile	<ul style="list-style-type: none"> Helps OnMobile to develop mobile data products 	Voxmobili's core products listed below offer attractive revenue opportunity in Indian markets Synchronised address book Phone backup Mobile Paparazzi	Strengthens the innovative product pipeline	<ul style="list-style-type: none"> Accelerates the development of Speech Recognition Language Models for emerging markets Synergy between Telisma's depth in core speech and language processing technology & OnMobile's extensive multilingual application development expertise

Source: Company data, Macquarie Research, September 2008

Financial statements

Fig 49 OnMobile – annual income statement

Particulars	FY3/07	FY3/08	FY3/09E	FY3/10E	FY3/11E	FY3/12E	FY3/13E
Revenues							204.3
Telecoms VAS	1,280.6	2,459.1	4,088.7	6,384.4	8,748.5	11,220.2	14,022.6
y-o-y growth, %	63.2%	92.0%	66.3%	56.1%	37.0%	28.3%	25.0%
Domestic	1,216.6	2,058.5	3,364.3	5,123.2	6,692.8	8,022.7	9,398.7
y-o-y growth, %	55.0	69.2	63.4	52.3	30.6	19.9	17.2
International	64.0	400.6	724.4	1,261.2	2,055.8	3,197.5	4,623.8
y-o-y growth, %	na	41.5	80.8	74.1	63.0	55.5	44.6
(% of Telecoms VAS revenues)	5.0	16.3	17.7	19.8	23.5	28.5	33.0
Other Services	49.1	159.0	120.8	120.8	120.8	120.8	120.8
y-o-y growth, %	18.7%	223.8%	-24.0%	0.0%	0.0%	0.0%	0.0%
Other services as % of total revenue	3.7	6.1	2.9	1.9	1.4	1.1	0.9
Total Revenue	1,329.7	2,618.1	4,209.5	6,505.2	8,869.3	11,341.0	14,143.4
y-o-y growth, %	60.9	96.9	60.8	54.5	36.3	27.9	24.7
Operating Expenses							
Cost of Sales & Services	237.2	388.3	672.5	1,040.8	1,419.1	1,814.6	2,262.9
y-o-y growth, %	93.1%	63.7%	73.2%	54.8%	36.3%	27.9%	24.7%
(% of total revenues)	17.8	14.8	16.0	16.0	16.0	16.0	16.0
Manpower costs	270.5	642.0	1,049.7	1,629.8	2,222.1	2,841.3	3,543.4
y-o-y growth, %	135.4%	137.4%	63.5%	55.3%	36.3%	27.9%	24.7%
(% of total revenues)	20.3	24.5	24.9	25.1	25.1	25.1	25.1
Administration and other expenses	212.1	539.6	919.6	1,301.0	1,685.2	2,154.8	2,687.2
y-o-y growth, %	81.1%	154.4%	70.4%	41.5%	29.5%	27.9%	24.7%
(% of total revenues)	16.0	20.6	21.8	20.0	19.0	19.0	19.0
Total Operating Expenses	719.8	1,569.8	2,641.9	3,971.7	5,326.4	6,810.7	8,493.6
y-o-y growth, %	102.9	145.3	68.3	50.3	34.1	27.9	24.7
(% of total revenues)	54.1	60.0	62.8	61.1	60.1	60.1	60.1
EBITDA	609.9	1,048.3	1,567.7	2,533.6	3,543.0	4,530.3	5,649.8
<i>EBITDA Margin</i>	<i>45.9</i>	<i>40.0</i>	<i>37.2</i>	<i>38.9</i>	<i>39.9</i>	<i>39.9</i>	<i>39.9</i>
y-o-y growth, %	29.4	71.9	49.5	61.6	39.8	27.9	24.7
Depreciation	142.9	256.0	503.7	839.8	1,228.6	1,639.5	2,095.1
EBIT	467.0	792.3	1,064.0	1,693.7	2,314.4	2,890.8	3,554.6
EBIT Margin	35.1	30.3	25.3	26.0	26.1	25.5	25.1
y-o-y growth, %	20.9	69.7	34.3	59.2	36.6	24.9	23.0
Finance charges	0.2	17.0	0.0	0.0	0.0	0.0	0.0
Other income	43.4	74.7	279.2	339.7	362.0	309.4	369.8
y-o-y growth, %	3882.4%	72.1%	273.8%	21.7%	6.5%	-14.5%	19.5%
Profit Before Taxes (PBT)	510.2	850.0	1,343.1	2,033.5	2,676.3	3,200.1	3,924.4
Taxation							
Provision for taxation	167.6	246.9	413.5	649.0	885.9	1,063.0	1,304.8
Provision for taxation as % of PBT	32.8	29.1	30.8	31.9	33.1	33.2	33.2
Profit After Tax							
Profit After Taxes (PAT)	342.6	603.0	929.7	1,384.5	1,790.4	2,137.1	2,619.7
Y-o-Y Growth	38.8%	76.0%	54.2%	48.9%	29.3%	19.4%	22.6%
Share of Profit of Minority interest	5.5	0.0	0.0	0.0	0.0	0.0	0.0
Profit After Taxes (PAT) and Minority Interest	337.1	603.0	929.7	1,384.5	1,790.4	2,137.1	2,619.7
PAT Margin (%)	25.4	23.0	22.1	21.3	20.2	18.8	18.5
Adjusted Earnings Per Share (Rs.)							
Basic	12.4	12.5	16.2	24.1	31.2	37.2	45.6
Diluted	6.7	11.5	16.0	23.4	29.8	35.0	42.9
No. of shares							
Weighted average shares outstanding:							
Basic	26.6	47.9	57.4	57.4	57.4	57.4	57.4
Diluted	49.0	51.9	58.2	59.1	60.0	61.1	61.1

Source: Company data, Macquarie Research, September 2008

Fig 50 OnMobile – annual balance sheet

Particulars	FY3/07	FY3/08	FY3/09E	FY3/10E	FY3/11E	FY3/12E	FY3/13E
Assets							
Current Assets							
Project Work in Progress	0.0	10.6	8.5	13.2	18.0	23.0	28.6
Sundry debtors	539.3	989.7	1,326.3	2,049.6	2,794.4	3,573.2	4,456.1
Cash and bank balances	211.7	1458.8	1,053.2	1,330.7	1,962.3	2,969.6	4,294.0
Other current assets	5.4	12.5	12.5	12.5	12.5	12.5	12.5
Loans and advances	479.1	947	1,146.7	1,772.1	2,416.1	3,089.4	3,852.8
Total Current Assets	1,235.3	3,419.1	3,547.2	5,178.1	7,203.4	9,667.7	12,644.1
Fixed Assets							
Gross Block	580.6	1,335.2	2,177.1	3,478.2	4,691.4	6,178.8	7,691.8
Less : Accumulated depreciation	288.4	539.9	1,043.6	1,883.4	2,551.3	3,466.8	4,387.7
Net Block	292.2	795.3	1,133.5	1,594.8	2,140.0	2,712.0	3,304.1
Add: Capital Work in Progress	42.9	113.4	-	-	-	-	-
Total Fixed Assets	335.1	908.7	1,133.5	1,594.8	2,140.0	2,712.0	3,304.1
Investments	1,018.2	3,193.7	3,193.7	3,193.7	3,193.7	3,193.7	3,193.7
Deferred tax Assets	0.0	-	-	-	-	-	-
Goodwill on Consolidation	204.8	1,367.9	1,367.9	1,367.9	1,367.9	1,367.9	1,367.9
Total Assets	2,793.4	8,889.4	9,242.4	11,334.5	13,905.0	16,941.3	20,509.9
Liabilities and Shareholders' Equity							
Current Liabilities							
Sundry creditors							
for capital items- due to Holding company	73.3	66.8	66.8	66.8	66.8	66.8	66.8
for capital items- due to others	42.0	37.5	37.5	37.5	37.5	37.5	37.5
for expenses	129.2	543.2	796.2	1,251.4	1,751.1	2,332.4	2,908.8
Deferred revenue	1.1	11.7	11.5	17.8	24.3	31.1	38.7
Credit balance in bank account	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other liabilities	52.4	1,080.0	161.9	243.4	326.4	417.3	520.4
Income Tax	376.7	594.1	614.0	653.4	705.4	767.5	843.7
Fringe Benefit Tax (Net)	3.3	0.2	20.1	52.7	97.1	154.0	224.8
Employee Benefits	10.1	49.9	81.6	126.8	172.8	221.0	275.6
Other Provisions	34.9	77.2	94.3	141.8	190.2	243.2	303.3
Total current Liabilities	722.8	2,460.6	1,883.9	2,591.5	3,371.6	4,270.8	5,219.7
Debt							
Secured Loans	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Unsecured Loans	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Debt	-	0.0	0.0	0.0	0.0	0.0	0.0
Other Long Term Liabilities							
Deferred Tax Liability	29.9	39.3	39.3	39.3	39.3	39.3	39.3
Due to erstwhile shareholders of ITfinity Solutions	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Deferred Payment Liability	0.0	278.6	278.6	278.6	278.6	278.6	278.6
Stock Options Outstanding	0.0	1.4	1.4	1.4	1.4	1.4	1.4
Account							
Minority interest	13.9	0.0	0.0	0.0	0.0	0.0	0.0
Total Other Long Term Liabilities	43.7	319.3	319.3	319.3	319.3	319.3	319.3
Shareholders' Funds							
Share Capital	36.5	574.1	574.1	574.1	574.1	574.1	574.1
Reserves and Surplus	1,990.2	5,535.5	6,465.2	7,849.6	9,640.1	11,777.2	14,396.9
Total Shareholders' Funds	2,026.8	6,109.5	7,039.2	8,423.7	10,214.1	12,351.3	14,970.9
Total liabilities and stockholders' equity	2,793.3	8,889.4	9,242.4	11,334.5	13,905.0	16,941.3	20,509.9

Source: Company data, Macquarie Research, September 2008

Fig 51 OnMobile - annual cashflow statement

Particulars	FY3/07	FY3/08	FY3/09E	FY3/10E	FY3/11E	FY3/12E	FY3/13E
Cashflow from operating activities							
Earnings before taxation	510.2	850.3	1,343.1	2,033.5	2,676.3	3,200.1	3,924.4
Adjustments:							
Depreciation and amortisation	143.5	255.6	503.7	839.8	1,228.6	1,639.5	2,095.1
Interest income	(7.9)	(9.7)	(279.2)	(339.7)	(362.0)	(309.4)	(369.8)
Yield on investments	(35.1)	(56.7)	0.0	0.0	0.0	0.0	0.0
Loss/(Profit) on sale of assets	0.0	1.6	0.0	0.0	0.0	0.0	0.0
Provision for doubtful debts	0.0	53.4	0.0	0.0	0.0	0.0	0.0
Profit on redemption of investments	0.0	(0.1)	0.0	0.0	0.0	0.0	0.0
Unrealised foreign exchange (Gain) / loss	(1.8)	50.9	0.0	0.0	0.0	0.0	0.0
Finance Charges	0.2	17.1	0.0	0.0	0.0	0.0	0.0
Others	2.5	(2.4)	2.1	(4.6)	(4.8)	(5.0)	(5.7)
Operating profit before working capital changes	611.7	1,159.9	1,569.8	2,528.9	3,538.2	4,525.3	5,644.1
Changes in current assets and liabilities							
Sundry debtors	(184.2)	(418.4)	(336.6)	(723.3)	(744.9)	(778.7)	(882.9)
Loans and advances	(16.5)	(141.0)	(199.4)	(625.4)	(644.0)	(673.3)	(763.4)
Current liabilities and provisions	148.4	254.2	(576.7)	707.6	780.1	899.1	948.9
Income taxes including FBT paid during the year	(211.4)	(305.0)	(413.5)	(649.0)	(885.9)	(1,063.0)	(1,304.8)
Net cash generated from operating activities (a)	348.0	549.7	43.7	1,238.8	2,043.5	2,909.4	3,641.9
Cashflow from investing activities							
Purchase of fixed assets and change in capital work-in-progress	(263.6)	(836.2)	(841.9)	(1,301.0)	(1,773.9)	(2,211.5)	(2,687.2)
Proceeds from sale of fixed assets	10.1	9.1	0.0	0.0	0.0	0.0	0.0
Investment in subsidiaries	0.0	(1,064.5)	0.0	0.0	0.0	0.0	0.0
Sale/ (Investment) in securities	(1,192.5)	(2,158.6)	0.0	0.0	0.0	0.0	0.0
Interest income	6.6	9.7	279.2	339.7	362.0	309.4	369.8
Yield on investments	34.9	44.2	0.0	0.0	0.0	0.0	0.0
Others	(10.0)	(2.5)	113.4	0.0	0.0	0.0	0.0
Net cash used in investing activities (b)	(1,414.5)	(3,998.8)	(449.4)	(961.3)	(1,411.9)	(1,902.1)	(2,317.4)
Cashflow from Financing activities							
Proceeds from issuance of share capital	1,225.3	3,793.8	0.0	0.0	0.0	0.0	0.0
Issue charges	0.0	(72.5)	0.0	0.0	0.0	0.0	0.0
Net proceeds from issuances of share capital	1,225.3	3,721.4	0.0	0.0	0.0	0.0	0.0
Redemption of preference shares	0.0	(33.0)	0.0	0.0	0.0	0.0	0.0
Proceeds / (repayment) from Short term Borrowings	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Finance charges	(0.2)	(17.1)	-	0.0	0.0	0.0	0.0
Others		992.7	0.0	0.0	0.0	0.0	0.0
Dividends paid during the year	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dividend tax paid during the year	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Net cash used in financing activities (c)	1,225.1	4,663.9	0.0	0.0	0.0	0.0	0.0
Net change in cash and cash equivalent	158.60	1,214.81	(405.68)	277.55	631.60	1,007.26	1,324.44
Cash and cash equivalents at beginning of the year	53.1	211.7	1,458.8	1,053.2	1,330.7	1,962.3	2,969.6
Cash acquired on acquisition	0.0	32.4	-	-	-	-	-
Cash and cash equivalents at the end of the year	211.7	1,458.8	1,053.2	1,330.7	1,962.3	2,969.6	4,294.0

Source: Company data, Macquarie Research, September 2008

Appendix 1: Key management profiles

Arvind Rao – CEO and co-founder

Arvind is CEO and co-founder of OnMobile. Prior to co-founding OnMobile, he was the managing director of technology investments at Gilbert Global Equity Partners. His experience of 18 years in wireless telecommunications and the emerging technologies sector also includes strategic counsel to high-tech clients at McKinsey & Co. In addition, Arvind worked with an affiliate of the Soros fund management group, The Chatterjee Group. There, he guided investments from private equity, venture capital and strategic public investments in technology and wireless telecommunications sectors, globally.

Mouli Raman – CTO and co-founder

Mouli is the CTO and co-founder of the company. He is responsible for defining end-engineering – its products and services. Mouli previously worked as associate vice-president and head of the Internet products group at Infosys Technologies. He brings in a vast experience of 19 years in the field of engineering and management in the software industry and his areas of specialisation include wireless and mobility.

Rajesh Moorti – CFO

Rajesh has more than 17 years of global experience and is responsible for the financing and accounting department at OnMobile. Prior to joining OnMobile, Rajesh worked with the Sara Lee Corporation, Unilever and Godrej in India, Netherlands and the UK.

Sandhya Gupta – head of M&A, investment and strategy

Sandhya has over 10 years of experience in financial services and capital markets industry. At OnMobile, she carries the overall responsibility for M&A and strategic investments for the company, including international acquisitions, minority acquisitions, equity-related partnerships and joint ventures. Prior to joining OnMobile, Sandhya worked with Citibank and Galaxy Entertainment as vice-president for investment.

Pratapa Bernard – head of marketing and product management

Pratapa has over 16 years of sales, marketing and management experience in information technology, communications and telecoms products and services. As head of marketing and product management, Pratapa is responsible for the company's marketing activities and oversees the planning and execution of its product strategy. Prior to joining OnMobile, Pratapa spent over eight years at IBM and held various positions of responsibility including as country manager for e-business solutions.

Amit Dey – head of sales and business devt, Europe and Americas

Amit has more than 17 years of experience in telecoms, automobiles and plant automation. In the last 12 years, he has been in the telecoms industry covering the core network business for five years and VAS business for last seven years – product development, content development, technology tie-ups and business development are his forte.

Sanjay Bhambri – head of sales and business devt, APAC and MEA

Sanjay is responsible for customer acquisition, engagement and ongoing revenue management in his region. He has more than 12 years of sales, marketing and technology experience from varied industries including information technology, communications and telecoms. Prior to joining OnMobile, Sanjay worked with Hughes Network Systems as regional sales director for APAC, where he cultivated long-term relationships with Fortune 500 companies that translated into substantial revenues.

Sandeep Ganguly – head of accounts, Indian private operators

Sandeep has over 14 years of sales and marketing experience in the telecoms industry. In his current profile, he is responsible for business development and account management for the private telecoms operators in India. Prior to joining OnMobile, he spent over nine years in Hughes Communications India, where he was instrumental in launching the Internet Data Centre and Virtual Private Network services.

MV Rajesh – head of media business

Rajesh has over 14 years of experience that span across the telecoms VAS, digital media, advertising and marketing industries. He is responsible for business development and strategic initiatives for media-based VAS at OnMobile. Prior to joining OnMobile, he was the planning director in mOne Worldwide, the digital arm of GroupM Media. A media planner by profession, he has served in three of the top five advertising agencies in the country: J Walter Thompson (formerly Hindustan Thompson Associates), Mudra Communications and Ogilvy.

Sidharth Sharma – head of accounts, public telecoms operators

Sidharth has more than eight years of global experience in telecoms and IT. His strength is in managing large incumbent operator relationships and building relationships with government bodies. At OnMobile, he is responsible for business development and account management for public telecoms operators in India. He provides assistance in client engagements in other countries as required.

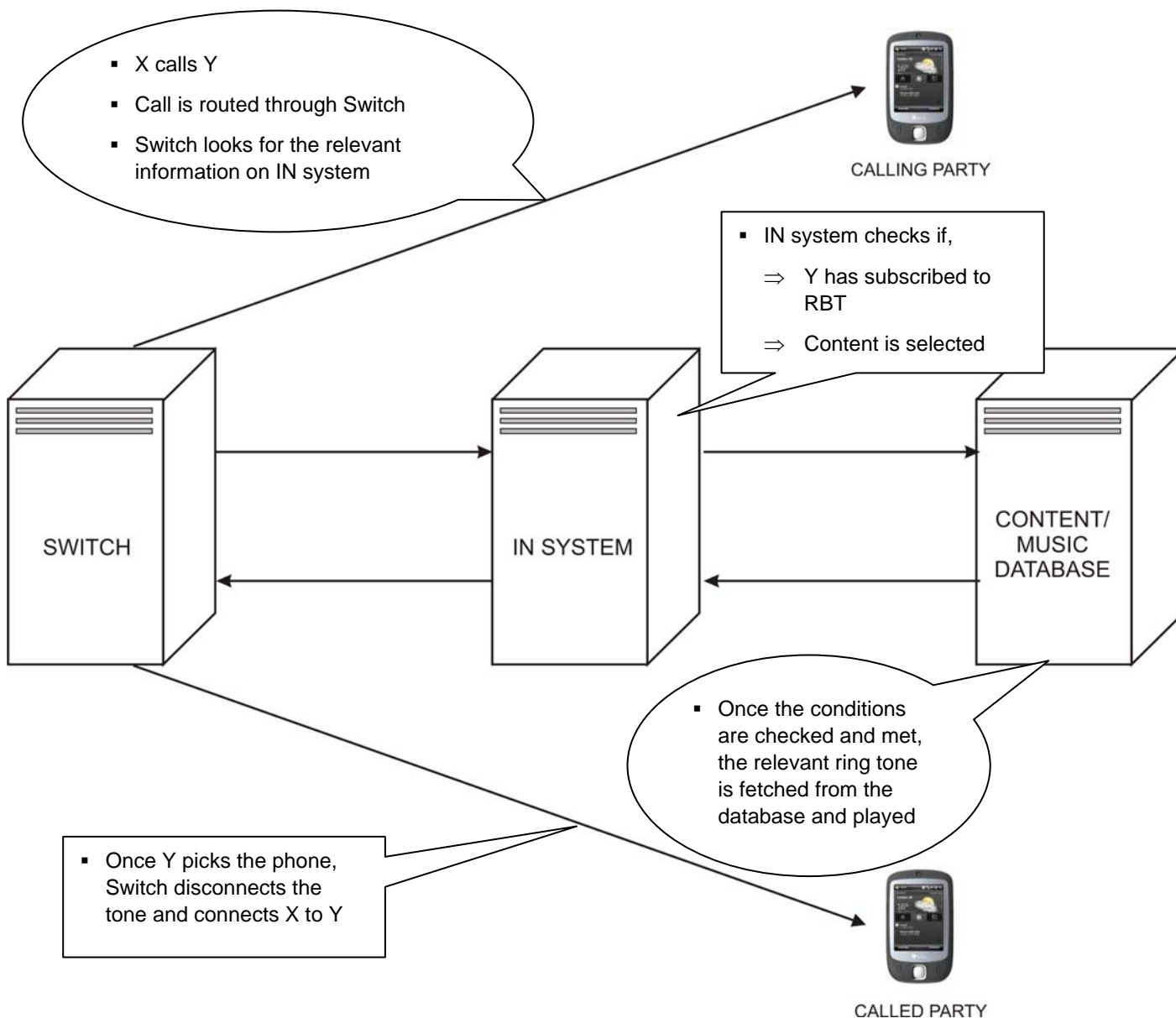
Debraj Tripathy – SBU head, mobile marketing

Debraj has over 13 years of experience in media and advertising. A media planner by profession, Debraj has worked with blue-chip advertising businesses, international and national: Unilever, IBM, Cadbury's, Seagrams, GE, Asian Paints, Hero Honda. In his current profile as the mobile marketing SBU head, he is responsible for developing mobile marketing products and services, including m-advertising and taking them to market. Prior to joining OnMobile, Debraj was the MD at Sieger Solutions, a 100%-owned subsidiary of Deccan Chronicle Holdings.

Appendix 2: How the products work

The OnMobile platform provides interaction between the VAS applications, service providers' network and the end-user. The platform receives requests from the network and delivers the content sought by the subscriber through the desired channel. OnMobile deploys its platform at the mobile switching centre of the operator, where the platform interacts with other hardware such as the telephony server, database server and application server to deliver the requested VAS application (see Figure 52).

Fig 52 Schematic explaining the underlying technology for ring-back tones



Source: Company data, Macquarie Research, September 2008

Appendix 3: Phone back-up

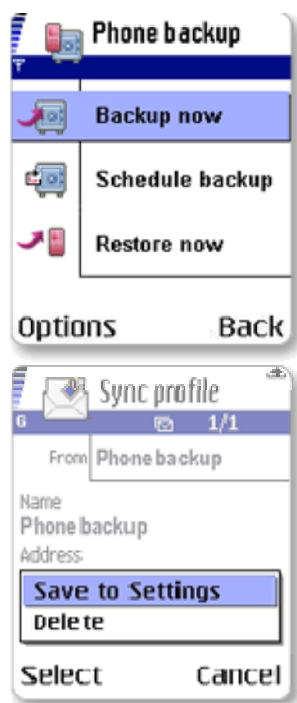
Phone Backup provides a simple way of backing up over-the-air the user's mobile handset content such as: phone numbers, SMS, pictures, ring tones, music and videos. In the event of loss, theft, damage, mistakes and phone upgrade, the saved data are intelligently restored on any supported device based on the handset data capabilities.

Fig 53 Phone back-up and restore services offer attractive propositions in Indian markets



Back up any OMA DS-based handset or smartphone

Based on OMA DS 1.2 (SyncML) and Voxsync Smart® technology, Phone Backup is available for a wide range of devices including J2ME, Nokia 60 series, Windows Mobile, Sony Ericsson, Motorola and LG Phones. As a pioneer of wireless synchronisation solutions, Voxmobili ensures complete compliancy to existing and future OMA DS (SyncML) specifications.



Back up anywhere, anytime, any phone content

Phone Backup is designed to be simple and intuitive. The subscriber uses either the native syncML client or the back-up mobile application to save all phone data. Voxmobili's solution offers several ways to save the phone's content in just two keystrokes. As well, remote back-up (from the network), scheduled and automated back-up options reinforce the user's peace of mind.

Easy OTA provisioning and set-up

Voxmobili provides tools and wizards to ease self-care and remote service activation: OMA CP/DM, SyncML OTA settings, WAP Push for client download and automatic application update. From OSS/BSS and Web interfaces, the service can be updated.



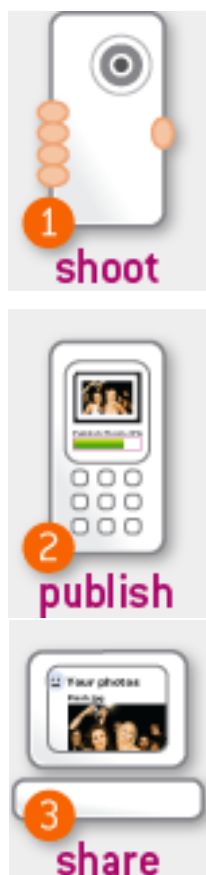
Online access

Voxmobili provides an online web and WAP portal access to an operator's subscriber to manage a phone's data and service. The end-user can view the backed-up content and access advanced features such as the contact's booklet printing, album creation or application remote control.

Source: Company data, Macquarie Research, September 2008

Appendix 4: Mobile Paparazzi

Fig 54 Success of social networking sites point to market opportunity for similar applications on handsets



- Huge installed base of camera phones provides opportunity to take advantage of the popularity and prevalence of blogs and social network sites.
- The application provides quick and easy uploads to the most popular blogs and sites.
- It is possible to personalise shots with tags or descriptions and the photos can be published to several sites at once.

Source: Company data, Macquarie Research, September 2008

Appendix 5: Buongiorno case study

Company profile

Buongiorno (BNG IM, €0.92, Not rated) is an Italian VAS company focused on growing through acquisitions. With its latest acquisition of iTouch (a market leader in the distribution of mobile entertainment products and services), Buongiorno believes it has become the No 1 provider of mobile entertainment, information, messaging and marketing services. For 1H08, it reported total revenue of €158 (up 84% YoY), EBITDA of €16.3m (up 96% YoY) and a consolidated net profit of €2.4m.

Fig 55 Buongiorno focused on inorganic growth to consolidate its position



Source: Company data, Macquarie Research, September 2008

BNG operates in two segments: mobile value-added services (consumer services), which are circulated using the global brand BLINKO, and through partnerships with leading telcos and media groups. The other segment is digital marketing services, also known as sponsored content (marketing services).

Operations in 53 countries and access to 2bn mobile subs

BNG is the market leader in Europe and is one of the top three players in eight of the world's most important regions. BNG is present in Russia and the Asia Pacific (India, China, Indonesia, Vietnam and the Philippines) through a joint venture with the Japanese group Mitsui and Co. BNG has 38 offices and business in 53 countries in five continents, direct connections with +100 telcos and access to over 2bn mobile customers.

Growth drivers in place

BNG sees a big opportunity for activating entertainment on 2.5bn mobile phones. It considers iTunes, Nokia Ovi and Amazon as the new shopping malls of entertainment. For 2008, BNG considers the following as its main drivers:

- Opportunities in mobile marketing (US\$2.7bn market potential).
- Web progression: Convergent WAP/web chat/dating.
- Geographic footprint: B2C in Brazil, Argentina, Chile and Mexico. APAC: B2C in India, B2B in Philippines, Vietnam and B2C in Australia. Call TV expansion.
- Innovation: Stronger Blinko brand and new product profile.
- Size: Integrating iTouch and using the synergies.

For the near future BNG considers the following as overall market growth drivers:

- Increasing number of mobile users worldwide.
- Mobile broadband penetration.
- iPhone/Android.
- Fixed mobile convergence.

Fig 56 Product details – wide variety of offerings

Blinko: Mobile internet digital store	The interface is encouraging and has a user-friendly social networking layer. It comes with a CRM system to extend customers' lifetime and stickiness to the brand.
Better music store	It has a broad catalogue that comes from four major and independent labels offering a full clip for mobile and PC for better music finding.
Social networking: BING messenger	Launched in 2007 a fast and inexpensive system offering free download and usage, with more than 5m messages sent per week.
Ability to move contacts between desktop and handset and vice versa	Users can create, edit and publish contact lists both online and on-handset. New editing tools allow web pages to be captured, edited and sent via e-mail or MMS to a contacts list. Up/sideload media between platforms can be done.
Media partnership	The site integrates current web feeds to provide real-time news updates that remain in the client's control. Additional features include fast turnaround of client's advertisers' microsite. Future developments include additional classified sections and billable games in the download section.
Call TV	Over 6,000 hours of live TV. Now a customer base of 2m (in 14 months). Hosts interactive game show that involves the audience from the comfort of their living room.

Source: Company data, Macquarie Research, September 2008

Appendix 6: VAS offerings in India

Fig 57 VAS offerings by Indian players – complex pricing models

Provider	Services	Charges
Bharti Airtel	Ring back tone	Depends on circle and type of plan
	Astrology	30/Month
	Ring tone	One time charge of Rs10
	Caller tunes	20 Download + 30 Monthly Rent
	Cricket updates	30/month
	Dial-A-Service	3/Min
	Song catcher	20 Download + 30 Monthly Rent
	STD/ISD Code search	
	Dictionary Service	
	Phone Backup	Rs0.30/ Month
	Download Wallpapers	Rs10.0/ Wallpaper
	Download Themes	Rs30.0/ Theme
	Download Movie Games	Rs30.0/ Movie Game
	Download Animations	Rs15.0/ Animation
	Download Videos	Rs30.0/ Video
	Download Games	Rs50.0/ Game
	GPS on BlackBerry	NA
	Call Management	15/Month
	MMS	5/MMS
Voice Mail	49/month+Call Charges	
Vodafone Essar	Caller tunes	Rs30.0/ Month
	Copy Caller tunes	Rs30.0/ Month
	Ring tone	Depends on circle
	Background Music service	
	Videotone	
	News updates	
	Call Filter	
	Astrology	
	News Alerts	
	Dictionary	
	Dial-A-Service	
	Vernacular Bills	
	Download Wallpapers	Rs13.0/ Wallpaper
	Download Themes	Rs13.0/ Wallpaper
	Call Management	
	MMS	
Call Conference	Standard rate or30p/min whichever is higher	
Shaadi.com		
BSNL	Call Management	
RCOM	Call Management	
	Download Wallpapers	Rs15.0/ Download
	Download Themes	Rs25.0/ Download
	Download Movie Games	Rs5.0/ Download
	Download Animations	Rs15.0/ Download
	Download Videos	Rs10.0/ Download
	Download Games	Rs99.0/ Month for pack of 3 games
	Ring tone	Rs15.0/ Tone
	Caller Tunes	NA
	Cricket Mania	Rs15.0/ Match (For full match)
	Astrology	Varies
	News	Rs15/5 minutes
	Dictionary	NA
	Language Translation	NA
	Gas Booking	NA
	MMS	
	Missed Call Alert	
Voice Mail		

Provider	Services	Charges
Idea Cellular	Call Management Animation Games Information through Text Download Wallpapers Download Themes Cricket Alerts Ring tones Copy Dialer Tones Background Music Astrology Logos Group talk m-chat	Rs50.0/ Month Rs7.0/- Rs30.0/ Month Rs20.0/Month Rs6.99/ Minute NA
Tata Teleservices	Song Download Missed call alerts Cricket Update Astrology Download Games Download Wallpapers Welcome Tunes	Rs50.0/ Month Rs0.60/ Minute Rs30.0 / Month Rs29.0-149.0/- Rs10.0/- Rs6.0/ Minute

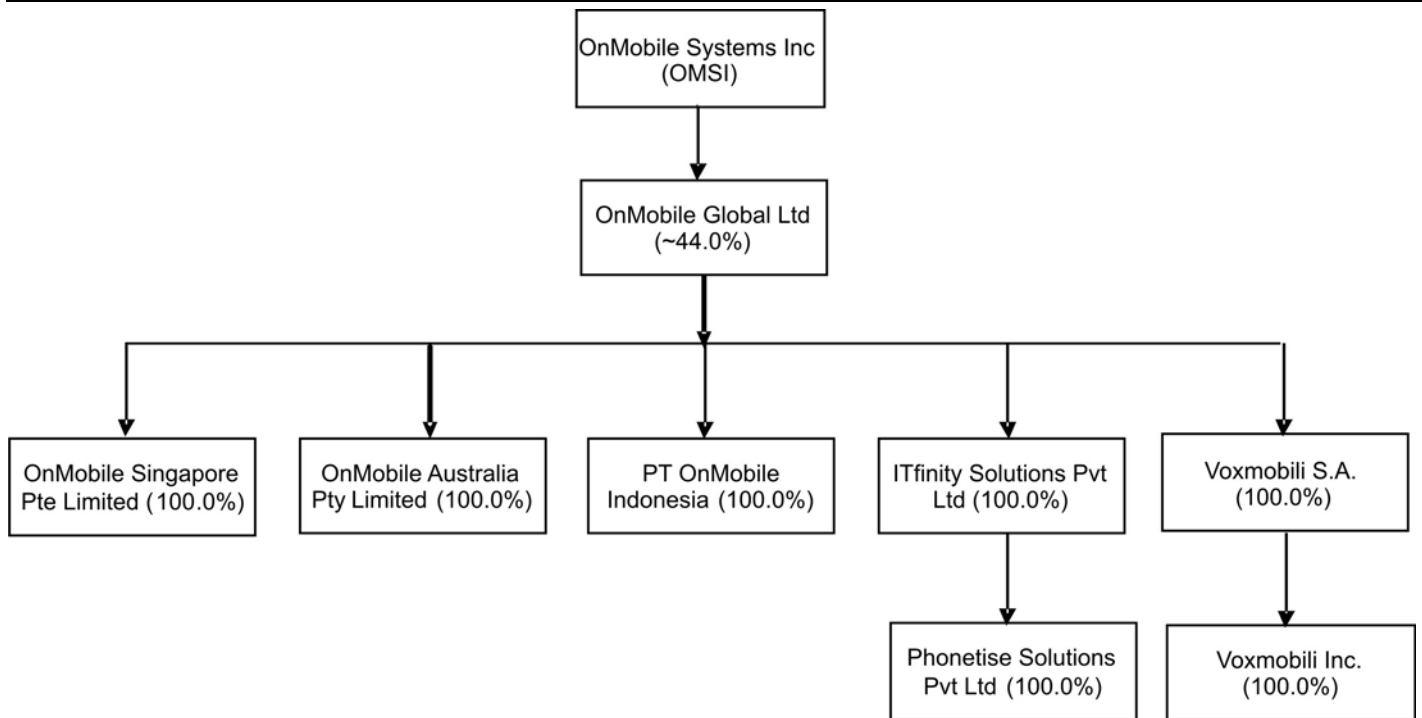
Source: Company data, Macquarie Research, September 2008

Fig 58 VAS service matrix – Bharti, Vodafone and RCOM have the widest choices

Services	Airtel	Vodafone	BSNL	RCOM	Idea	Tata Tele
Astrology	Y	Y		Y	Y	Y
Background Music		Y			Y	
Call Filter		Y				
Call Management	Y		Y	Y		
Caller tunes	Y	Y		Y	Y	Y
Cricket updates	Y	Y		Y	Y	Y
Dial-A-Service	Y	Y				
Dictionary Service	Y	Y		Y		
Download Animations	Y	Y		Y		
Download Games	Y			Y		Y
Download Movie Games	Y			Y		
Download Themes	Y	Y		Y	Y	
Download Videos	Y			Y		
Download Songs	Y			Y		Y
Download Wallpapers	Y	Y		Y		Y
Gas Booking				Y		
GPS on BlackBerry	Y					
Language Translation				Y		
MMS	Y	Y				
News Updates		Y		Y		
Phone Backup	Y					
Ring tones	Y	Y		Y	Y	
Ring back tone	Y					
Song catcher	Y	Y			Y	
STD/ISD Code search	Y					
Vernacular Bills		Y				
Videotone		Y				

Source: Company data, Macquarie Research, September 2008

Fig 59 Corporate structure of OnMobile Global Limited



Source: Company data, September 2008

OnMobile Global (ONMB IN, Outperform, Target price: Rs650.00)

Quarterly Results					Profit & Loss						
		1Q/09A	2Q/09E	3Q/09E	4Q/09E		2008A	2009E	2010E	2011E	
Revenue	m	779	952	1,165	1,314	Revenue	m	2,618	4,210	6,505	8,869
Gross Profit	m	643	799	985	1,111	Gross Profit	m	2,230	3,537	5,464	7,450
Cost of Goods Sold	m	136	152	181	204	Cost of Goods Sold	m	388	672	1,041	1,419
EBITDA	m	209	362	465	532	EBITDA	m	1,048	1,568	2,534	3,543
Depreciation	m	92	126	126	160	Depreciation	m	256	504	840	1,229
Amortisation of Goodwill	m	0	0	0	0	Amortisation of Goodwill	m	0	0	0	0
Other Amortisation	m	0	0	0	0	Other Amortisation	m	0	0	0	0
EBIT	m	117	236	339	372	EBIT	m	793	1,064	1,694	2,314
Net Interest Income	m	85	70	70	55	Net Interest Income	m	57	279	340	362
Associates	m	0	0	0	0	Associates	m	0	0	0	0
Exceptionals	m	0	0	0	0	Exceptionals	m	-4	0	0	0
Forex Gains / Losses	m	0	0	0	0	Forex Gains / Losses	m	0	0	0	0
Other Pre-Tax Income	m	0	0	0	0	Other Pre-Tax Income	m	0	0	0	0
Pre-Tax Profit	m	202	305	409	427	Pre-Tax Profit	m	845	1,343	2,033	2,676
Tax Expense	m	-50	-86	-118	-160	Tax Expense	m	-240	-413	-649	-886
Net Profit	m	152	220	291	267	Net Profit	m	605	930	1,384	1,790
Minority Interests	m	0	0	0	0	Minority Interests	m	0	0	0	0
Reported Earnings	m	152	220	291	267	Reported Earnings	m	605	930	1,384	1,790
Adjusted Earnings	m	152	220	291	267	Adjusted Earnings	m	609	930	1,384	1,790
EPS (rep)		2.61	3.78	5.00	4.59	EPS (rep)		11.54	15.98	23.44	29.83
EPS (adj)		2.61	3.78	5.00	4.59	EPS (adj)		11.88	15.98	23.44	29.83
EPS Growth yoy (adj)	%	-13.9	24.9	-0.2	461.2	EPS Growth (adj)	%	98.1	34.5	46.7	27.3
						PE (rep)	x	39.5	28.6	19.5	15.3
						PE (adj)	x	38.4	28.6	19.5	15.3
EBITDA Margin	%	26.8	38.0	39.9	40.5	Total DPS		0.00	0.00	0.00	0.00
EBIT Margin	%	15.0	24.8	29.1	28.3	Total Div Yield	%	0.0	0.0	0.0	0.0
Earnings Split	%	16.3	23.7	31.3	28.7	Weighted Average Shares	m	52	58	59	60
Revenue Growth	%	38.4	69.2	44.7	91.0	Period End Shares	m	57	58	59	60
EBIT Growth	%	-39.2	22.3	5.6	331.8						
Profit and Loss Ratios					Cashflow Analysis						
		2008A	2009E	2010E	2011E		2008A	2009E	2010E	2011E	
Revenue Growth	%	96.9	60.8	54.5	36.3	EBITDA	m	1,057	1,568	2,534	3,543
EBITDA Growth	%	71.9	49.5	61.6	39.8	Tax Paid	m	-305	-413	-649	-886
EBIT Growth	%	69.7	34.2	59.2	36.6	Chgs in Working Cap	m	-305	-1,113	-641	-609
Gross Profit Margin	%	85.2	84.0	84.0	84.0	Net Interest Paid	m	0	0	0	0
EBITDA Margin	%	40.0	37.2	38.9	39.9	Other	m	103	2	-5	-5
EBIT Margin	%	30.3	25.3	26.0	26.1	Operating Cashflow	m	550	44	1,239	2,044
Net Profit Margin	%	23.1	22.1	21.3	20.2	Acquisitions	m	-1,064	0	0	0
Payout Ratio	%	0.0	0.0	0.0	0.0	Capex	m	-836	-842	-1,301	-1,774
EV/EBITDA	x	24.1	16.3	10.3	7.5	Asset Sales	m	-2,150	0	0	0
EV/EBIT	x	31.8	24.1	15.4	11.4	Other	m	51	393	340	362
Balance Sheet Ratios						Investing Cashflow	m	-3,999	-449	-961	-1,412
ROE	%	15.0	14.1	17.9	19.2	Dividend (Ordinary)	m	0	0	0	0
ROA	%	13.6	11.7	16.5	18.3	Equity Raised	m	-3,794	0	0	0
ROIC	%	31.0	15.8	19.3	21.8	Debt Movements	m	0	0	0	0
Net Debt/Equity	%	-23.9	-15.0	-15.8	-19.2	Other	m	8,458	0	0	0
Interest Cover	x	nmf	nmf	nmf	nmf	Financing Cashflow	m	4,664	0	0	0
Price/Book	x	4.3	3.8	3.2	2.7	Net Chg in Cash/Debt	m	1,215	-406	278	632
Book Value per Share		106.4	121.0	142.6	170.2						
					Balance Sheet						
		2008A	2009E	2010E	2011E		2008A	2009E	2010E	2011E	
Cash	m	1,459	1,053	1,331	1,962	Cash	m	1,459	1,053	1,331	1,962
Receivables	m	990	1,326	2,050	2,794	Receivables	m	990	1,326	2,050	2,794
Inventories	m	11	9	13	18	Inventories	m	11	9	13	18
Investments	m	3,194	3,194	3,194	3,194	Investments	m	3,194	3,194	3,194	3,194
Fixed Assets	m	909	1,134	1,595	2,140	Fixed Assets	m	909	1,134	1,595	2,140
Intangibles	m	1,368	1,368	1,368	1,368	Intangibles	m	1,368	1,368	1,368	1,368
Other Assets	m	960	1,159	1,785	2,429	Other Assets	m	960	1,159	1,785	2,429
Total Assets	m	8,889	9,242	11,335	13,905	Total Assets	m	8,889	9,242	11,335	13,905
Payables	m	648	900	1,356	1,855	Payables	m	648	900	1,356	1,855
Short Term Debt	m	0	0	0	0	Short Term Debt	m	0	0	0	0
Long Term Debt	m	0	0	0	0	Long Term Debt	m	0	0	0	0
Provisions	m	77	94	142	190	Provisions	m	77	94	142	190
Other Liabilities	m	2,055	1,208	1,413	1,645	Other Liabilities	m	2,055	1,208	1,413	1,645
Total Liabilities	m	2,780	2,203	2,911	3,691	Total Liabilities	m	2,780	2,203	2,911	3,691
Shareholders' Funds	m	6,110	7,039	8,424	10,214	Shareholders' Funds	m	6,110	7,039	8,424	10,214
Minority Interests	m	0	0	0	0	Minority Interests	m	0	0	0	0
Other	m	0	0	0	0	Other	m	0	0	0	0
Total S/H Equity	m	6,110	7,039	8,424	10,214	Total S/H Equity	m	6,110	7,039	8,424	10,214
Total Liab & S/H Funds	m	8,889	9,242	11,335	13,905	Total Liab & S/H Funds	m	8,889	9,242	11,335	13,905

All figures in INR unless noted.

Source: Company data, Macquarie Research, September 2008

Important disclosures:

Recommendation definitions**Macquarie - Australia/New Zealand**

Outperform – return >5% in excess of benchmark return (>2.5% in excess for listed property trusts)

Neutral – return within 5% of benchmark return (within 2.5% for listed property trusts)

Underperform – return >5% below benchmark return (>2.5% below for listed property trusts)

Macquarie – Asia/Europe

Outperform – expected return >+10%

Neutral – expected return from -10% to +10%

Underperform – expected return <-10%

Macquarie First South - South Africa

Outperform – expected return >+10%

Neutral – expected return from -10% to +10%

Underperform – expected return <-10%

Macquarie - Canada

Outperform – return >5% in excess of benchmark return

Neutral – return within 5% of benchmark return

Underperform – return >5% below benchmark return

Macquarie - USA

Outperform (Buy) – return >5% in excess of benchmark return

Neutral (Hold) – return within 5% of benchmark return

Underperform (Sell) – return >5% below benchmark return

Recommendations – 12 months

Note: Quant recommendations may differ from Fundamental Analyst recommendations

Volatility index definition*

This is calculated from the volatility of historic price movements.

Very high–highest risk – Stock should be expected to move up or down 60–100% in a year – investors should be aware this stock is highly speculative.

High – stock should be expected to move up or down at least 40–60% in a year – investors should be aware this stock could be speculative.

Medium – stock should be expected to move up or down at least 30–40% in a year.

Low–medium – stock should be expected to move up or down at least 25–30% in a year.

Low – stock should be expected to move up or down at least 15–25% in a year.

* Applicable to Australian/NZ stocks only

Financial definitions

All "Adjusted" data items have had the following adjustments made:
Added back: goodwill amortisation, provision for catastrophe reserves, IFRS derivatives & hedging, IFRS impairments & IFRS interest expense
Excluded: non recurring items, asset revals, property revals, appraisal value uplift, preference dividends & minority interests

EPS = adjusted net profit / *efpowa**

ROA = adjusted ebit / average total assets

ROA Banks/Insurance = adjusted net profit / average total assets

ROE = adjusted net profit / average shareholders funds

Gross cashflow = adjusted net profit + depreciation

*equivalent fully paid ordinary weighted average number of shares

All Reported numbers for Australian/NZ listed stocks are modelled under IFRS (International Financial Reporting Standards).

Recommendation proportions – For quarter ending 30 June 2008

	AU/NZ	Asia	RSA	USA	CA	EUR
Outperform	41.88%	66.96%	66.13%	50.82%	71.01%	43.00%
Neutral	42.96%	16.30%	22.58%	44.26%	24.64%	48.00%
Underperform	15.16%	16.74%	11.29%	4.92%	4.35%	9.00%

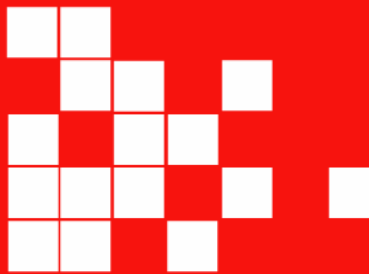
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Nadine Javellana (Philippines) (632) 857 0890
Matthew Smith (Taiwan) (8862) 2734 7514
Alastair Macdonald (Thailand) (662) 694 7741

Chemicals/Textiles

Scott Weaver (Taiwan) (8862) 2734 7512
Jal Irani (India) (9122) 6653 3040
Christina Lee (Korea) (822) 3705 8670
Sunaina Dhanuka (Malaysia) (603) 2059 8993

Conglomerates

Gary Ping (Asia) (852) 2823 3557
Leah Jiang (China) (8621) 2412 9020
Kenneth Yap (Indonesia) (6221) 515 7343
Ashwin Sanketh (Singapore) (65) 6231 2830

Consumer

Mohan Singh (Asia) (852) 3901 1111
Jessie Qian (China, Hong Kong) (852) 2823 3568
Charles Yan (China) (8621) 2412 9033
Unmesh Sharma (India) (9122) 6653 3042
Sarina Lesmina (Indonesia) (6221) 515 7339
Duane Sandberg (Japan) (813) 3512 7867
Toby Williams (Japan) (813) 3512 7392
Heather Kang (Korea) (822) 3705 8677
HongSuk Na (Korea) (822) 3705 8678
Edward Ong (Malaysia) (603) 2059 8982
Alex Pomento (Philippines) (632) 857 0899
Linda Huang (Taiwan) (8862) 2734 7521

Emerging Leaders

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Hiu-Lui Ko (China) (852) 2823 4704
Minoru Tayama (Japan) (813) 3512 6058
Robert Burghart (Japan) (813) 3512 7853
Heather Kang (Korea) (822) 3705 8677
Scott Weaver (Taiwan) (8862) 2734 7512

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Inderjeetsingh Bhatia (India) (9122) 6653 3166
Christopher Cintavey (Japan) (813) 3512 7432
Janet Lewis (Japan) (813) 3512 7475
Michael Na (Korea) (822) 2095 7222
Sunaina Dhanuka (Malaysia) (603) 2059 8993
David Gambrell (Thailand) (662) 694 7753

Sales

Regional Heads of Sales

Peter Slater (Boston) (1 617) 217 2103
Michelle Paisley (China, Hong Kong) (852) 2823 3516
Ulrike Pollak-Tsutsumi (Frankfurt) (49) 69 7593 8747
Thomas Renz (Geneva) (41) 22 818 7712
Ajay Bhatia (India) (9122) 6653 3200
Stuart Smythe (India) (9122) 6653 3200
Chris Gray (Indonesia) (6221) 515 7304
K.Y. Nam (Korea) (822) 3705 8607
Lena Yong (Malaysia) (603) 2059 8888
Gino C Rojas (Philippines) (632) 857 0761
Greg Norton-Kidd (New York) (1 212) 231 2527
Luke Sullivan (New York) (1 212) 231 2507

Insurance

Mark Kellock (Asia) (852) 2823 3567
Seshadri Sen (Asia, India) (9122) 6653 3053
Makarim Salman (Japan) (813) 3512 7421

Media

Jessie Qian (China, Hong Kong) (852) 2823 3568
Shubham Majumder (India) (9122) 6653 3049
Prem Jearajasingam (Malaysia) (603) 2059 8989
Alex Pomento (Philippines) (632) 857 0899

Oil and Gas

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Scott Weaver (Taiwan) (8862) 2734 7512
Jal Irani (India) (9122) 6653 3040
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Edward Ong (Malaysia) (603) 2059 8982
Sunaina Dhanuka (Malaysia) (603) 2059 8993
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Trevor Buchinski (Thailand) (662) 694 7728

Pharmaceuticals

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Property

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Eva Lee (China, Hong Kong) (852) 2823 3573
Tata Goeyardi (Hong Kong) (852) 2823 4077
Unmesh Sharma (India) (9122) 6653 3042
Chang Han Joo (Japan) (813) 3512 7885
Hiroshi Okubo (Japan) (813) 3512 7433
Tuck Yin Soong (Singapore) (65) 6231 2838
Elaine Cheong (Singapore) (65) 6231 2839
Corinne Jian (Taiwan) (8862) 2734 7522
Patti Tomaitrichitr (Thailand) (662) 694 7727

Resources / Metals and Mining

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YeeMan Chin (China) (852) 2823 3562
Rakesh Arora (India) (9122) 6653 3054
Adam Worthington (Indonesia) (6221) 515 7338
Polina Diyachkina (Japan) (813) 3512 7886
Christina Lee (Korea) (822) 3705 8670
Scott Weaver (Taiwan) (8862) 2734 7512

Technology

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Kishore Belai (India) (9122) 6653 3046
Damian Thong (Japan) (813) 3512 7877
David Gibson (Japan) (813) 3512 7880
George Chang (Japan) (813) 3512 7854
Yoshihiro Shimada (Japan) (813) 3512 7862
Yukihiro Goto (Japan) (813) 3512 5984
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Michael Bang (Korea) (822) 3705 8659
Patrick Yau (Singapore) (65) 6231 2835
Andy Kung (Taiwan) (8862) 2734 7534
Chia-Lin Lu (Taiwan) (8862) 2734 7526
Daniel Chang (Taiwan) (8862) 2734 7516
James Chiu (Taiwan) (8862) 2734 7517
Nicholas Teo (Taiwan) (8862) 2734 7523

Telecoms

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Shubham Majumder (India) (9122) 6653 3049
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Giles Heyring (Singapore) (65) 6231 2888
Mark Duncan (Taiwan) (8862) 2734 7510
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Michael Newman (Tokyo) (813) 3512 7920
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Sales Trading

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Mona Lee (Hong Kong) (852) 2823 3519

Transport & Infrastructure

Anderson Chow (Asia, China) (852) 2823 4773
Jonathan Windham (Asia, China) (852) 2823 5417
Tim Bacchus (Asia, China) (852) 2823 3586
Wei Sim (China, Hong Kong) (852) 2823 3598
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Utilities

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Alex Pomento (Philippines) (632) 857 0899

Commodities

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Adam Rowley (4420) 7065 2013
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Max Layton (4420) 7065 2000
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Data Services

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Convertibles - Roland Sharman (852) 2823 4628
Depository Receipts - Robert Ansell (852) 2823 4688
Derivatives - Tim Connolly (852) 2249 3380
Futures - Tim Smith (852) 2823 4637
Hedge Fund Sales - Darin Lester (852) 2823 4736
Structured Products - Andrew Terlich (852) 2249 3225