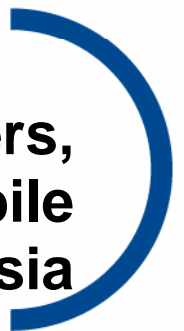




The Emerging Giants, Growing Tigers, Mature Dragons and Future Now of Mobile Messaging in Asia

White Paper



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1 The Emerging Giants, Growing Tigers, Mature Dragons and Future Now of Mobile Messaging in Asia

Mobile messaging has seen greater growth in Asia than in the Western World, partly because it is a more cost effective way to communicate than voice, and because the mobile communications culture has evolved to be predominantly based on text messaging. The mobile market in Asia varies hugely from country to country as the region includes some of the most advanced mobile networks in the world, as well as some of the fastest developing networks, which are in the early stages of mobile evolution.

This article investigates the different markets in the region and explains how some newer service providers are leapfrogging even the most advanced operators in terms of low-cost, high-performance messaging infrastructure which meets the demands of diverse Asian consumers, and enables service providers to offer consumers extremely reliable, robust services at bargain prices, while maintaining the average margin per user.

1.1 Common themes across Asia

Consumers in Asia are highly price sensitive and SMS messaging is more economical than voice calls, particularly when roaming. The highest price sensitivity is amongst fifteen to twenty-one year olds; SMS messaging is used constantly by this group and a new texting language and culture with its own acronyms has evolved.

As in most parts of the world, mobile operators experience a large spike in messaging activity during special occasions such as the World Cup, Chinese New Year and voting during high viewership programs such as Singapore Idol. Messaging spikes occur daily at rush hour and at lunchtime when people pour into noisy food courts. Consumers expect text and multimedia messages to arrive almost instantly, as 80 per cent of handsets are always switched on. The infrastructure therefore cannot afford to be congested at peak times when messages need to be delivered instantly.

Operators need a messaging infrastructure that can balance the messaging load on the SMSCs (Short Messaging Service Centres) to support these peaks. However, the mobile infrastructure around Asia varies widely and corresponds with how long mobile networks have existed in the countries.



We have identified four mobile market segments in Asia that consider the mobile penetration, subscriber characteristics and network infrastructure. They are grouped as the Emerging Giants, Growing Tigers, Mature Dragons and Future Now; based on the messaging behaviour and state of evolution of the marketplace. The various segments are described below.

1.2 Emerging Giants

The Emerging Giants, defined in part by a mobile penetration of less than 20 per cent, and a large population (up to 2.1 billion), include India, Pakistan, Sri Lanka, rural China, Vietnam and Cambodia. Competition to win non-mobile customers is high and business is won by offering bundled packages of text and voice minutes. Since many consumers have not used mobiles before it is difficult for operators to differentiate through more advanced value added services.

Subscribers are using their first entry-level handsets and haven't started to upgrade. They are extremely price sensitive, hence a reliance on messaging and voice. Technical competency is low, with users experimenting by sending text messages and downloading ring tones. The payment model is primarily based on pre-paid because consumers do not want to commit to a subscription based model and many do not have bank accounts.

Since their initial roll-out, operators in the Emerging Giants market segment have not expanded their networks so the messaging infrastructure is struggling to keep up with the fast growing volume of SMS messages being sent. Often operators in these countries have no way of knowing if messages being sent are successful, so they look to suppliers and consultants from the more developed mobile markets for guidance on how to grow their networks and expand their infrastructure in a cost effective manner.

Interesting cases are occurring in India, Sri Lanka and Indonesia, where operators started off with a small infrastructure. These markets took some time to take off but when they did, operators invested in the latest technology, such as HSDPA (High-Speed Downlink Packet Access) and intelligent messaging routers to enhance productivity. This clever investment has enabled them to leapfrog operators in more advanced markets with less efficient, higher cost legacy infrastructure. This has led to them being able to offer lower prices to the market that in turn has provided a springboard to creating very fast growth in demand among new mobile subscribers.

Airwide Solutions has seen significant growth in messaging infrastructure in these emerging markets based on the above behavioural characteristics. These will continue to grow at a rapid pace and new innovations like the first delivery attempt router will help in enhancing messaging productivity and economics.

1.3 Growing Tigers

The Growing Tiger markets of Asia include Thailand, Malaysia, the Philippines and urban China. These countries have a population of up to one billion people and mobile penetration of between 20 and 70 per cent. These markets are overcrowded with many service providers competing to win new business from competitors, as well as attracting new first time mobile users in rural areas.

Subscribers in the Growing Tiger markets choose service providers based on their past or friends' service experiences. People are upgrading to new mobile handsets as they are becoming more of a fashion accessory, and ring tones and wallpaper downloads are growing in popularity.



The Growing Tigers are migrating from voice to data based communications. In the Philippines (the largest SMS market in the world and with only 40 per cent penetration), SMS is now the preferred method of communication. SMS is also an event-based phenomenon here, with presidential campaigns entirely run on SMS, for example.

Innovative messaging initiatives will be adopted by these markets where the key objective is to provide customers with a unique messaging experience. Routers will play an important role in reducing the cost per message, balancing the load and enhancing the quality of the user experience.

1.4 Mature Dragons

The Mature Dragons, including Singapore, Hong Kong, Malaysia, Taiwan and Australia, have between 70 and 100 per cent mobile penetration. These markets are virtually the same as those in Western Europe, with operators facing the same issues of reducing customer churn and increasing average revenue per user. These markets are driven by new technology with 3G networks on the rise and application-to-person messaging growing as big brands realize the marketing potential of the mobile phone.

The Mature Dragons are slightly less price sensitive compared to the rest of Asia with consumers considering quality of service, feature options as well as price. Therefore operators here need to measure the successful delivery of text and multimedia messages as well as choosing messaging infrastructure that allows them to offer services such as spam control and virus protection. Consumers regularly upgrade to new handsets to keep up with the growing trends of new enablers and sharing mobile content such as music and video. Business people in Asia spend lots of time travelling throughout the region and SMS is far more cost effective than voice when roaming, also accounting for its popularity.

Many Operators in the Mature Dragons are still using legacy infrastructure that was deployed in the 1990s. Although operators can expand and add new infrastructure, in doing so they are building on old and less efficient technology. This infrastructure often includes a large number of SMSCs. Operators' margins are eroding because the price of messaging is being driven down by consumer demand and competitive offerings. Operators must therefore reduce their operating expenses through the use of advanced messaging technologies, including flexible gateways and routers to more effectively load-balance messaging traffic, and synergizing applications across their networks.

1.5 Future Now

The Future Now markets such as Korea and Japan are a type of Mature Dragon where the mobile operators are the leaders in rolling out new mobile services. Their infrastructure and services act as examples, which cascade throughout the world. Next generation messaging is already starting to happen, particularly with consumers becoming comfortable with interactive messaging and mobile email. I-mode in Japan has been so successful that it has led to a lower penetration of home PCs because consumers feel the high cost of investment is not worth it. However, these are not interoperable systems and use a closed architecture model - so it is difficult for the Future Now operators to gain the full benefits of faster deployment of revenue-generating services, higher performance and operating cost reductions that are available through true next generation IMS (IP Multimedia Subsystem) networks in the rest of the world.



1.6 **Watching mobile evolution**

The dynamics of the Asian markets are fascinating. Each market type has its own messaging ecosystem in terms of consumer attitudes to price, technology and fashion as well as operator advancements to the supporting mobile infrastructure in response to subscriber demands and attitudes. It is very interesting to see how messaging infrastructure, and in particular, flexible messaging routers, are helping the advanced markets to increase margins and improve service, while catapulting operators in the emerging markets up the value chain.

Operators in the Emerging Giants and Growing Tigers are learning from the successes and mistakes in mobile history of operators in the Mature Dragons and elsewhere in the world. The Mature Dragons act as a place marker to compare the development within the region and with the rest of the world, while the Future Now shows the way in terms of technology innovation and consumer adoption. We see a trend where technologies and solutions in Future Now markets will cascade down to the other developing markets, and this cycle will continue.

The challenges for successful and productive messaging solutions are based on the consumer behaviour and need for enhancing economies of messaging so that as the messaging volumes expand the operators' margin per message is protected.

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