

Exploiting the backyard

Realising the future of messaging by assuring a sustainable business

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Introduction

For mobile operators, text messaging is the only truly successful data application with volumes increasing year on year. However, ongoing price erosion has caused increased pressure on margins. Ever since the mobile industry recognised this, it has been frantically searching for revenue growth opportunities in new services. However Ovum concludes¹ that no other single service has been able to get even close to the text messaging revenues of today. Even in 2009, 80% of worldwide messaging revenues will be generated by SMS².

“Although the range of mobile messaging services available has become richer and more diverse during the 2000s, ‘messaging’ is still overwhelmingly dominated by a single, 15-year old service: SMS”

Ovum, May 2008

Besides exploring options to substitute text messaging revenues operators may need to consider a more evolutionary approach. In this case text messaging is used as a starting point. Future revenue growth can be reached through differentiation and the creation of new business on the existing text messaging channel. Mobile messaging has not reached its limits and the time is right to leverage the unique values of mobile messaging beyond person-to-person traffic. A wide range of service providers are eager to reach 3.5 billion mobile subscribers at any given time.

Acision believe that messaging revenues have the potential to double by 2012 reaching a market size of \$ 165 billion.

The truth behind the demise

The success of text messaging is often attributed to its ease of use, reliability and transparent pricing. Yet, some argue that rich internet based messaging services will take over its dominant position in a few years time, leaving text messaging to become obsolete.

This rather negative outlook is inspired by a few notable trends: First of all, mobile broadband coverage has increased dramatically³. At the same time the market share of internet enabled mobile devices in western countries has already surpassed the 25% mark⁴.

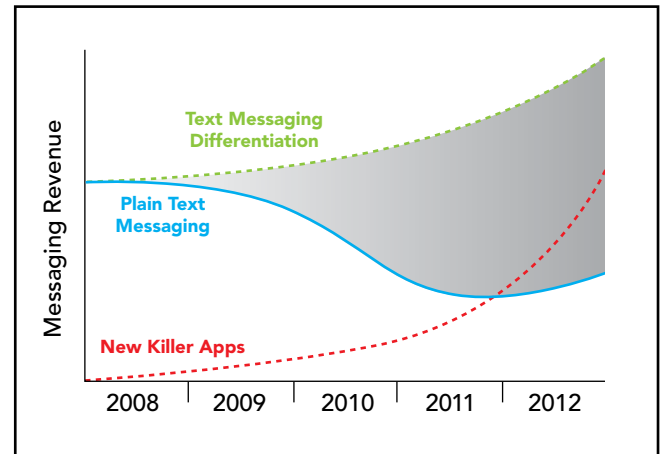
These two trends alone encouraged internet brands to claim their stake in the mobile domain. Consequently some say that text messaging will soon be superseded by a range of internet based services. Ultimately these services would be available anywhere, offer a richer experience and become fully ad sponsored.

The truth of the matter is that text messaging is not showing any signs of demise. In actual fact analysts have drastically increased their text messaging volume predictions. In May 2008, nine months after its latest forecast, Ovum increased its volume predictions on text messaging for 2011 by over 60%.

The popularity of text messaging has turned it into a key operator tool for subscriber acquisition and retention. This has in some cases already resulted in near flat fee pricing. The truth behind the demise is therefore not in volumes or usage, but is more related to the operator's margins.

Differentiation drives margin growth

Back in 1908 Henry Ford stated that his customers can buy a car "in any color they want as long as it's black". This was in a time that car manufacturers were still focused on breaking open a new market. Over the past 15 years, most operators have acted similarly when positioning text messaging as a new service. In recent years however, messaging has reached mass market adoption and is commoditising.



To address this challenge, operators need to do what every business does when faced with commoditisation. Instead of waiting for new killer applications that might ramp up revenues in the long run a more practical approach is required. To address commoditisation, Ford started producing a wider range of car models. Similarly, operators need to differentiate the mobile messaging portfolio. Differentiation requires further refining of the service positioning to address the different messaging needs of various user segments.

At the same time it is crucial to avoid disruption of SMS's key asset: simplicity. Confronting subscribers with complex features easily results in poor adoption rates. It is a matter of innovating within the user's comfort zone.

By gradually differentiating mobile messaging, operators will ensure text messaging relevance across their entire subscriber base and increase overall revenues in the short run. To realise the required margin growth it is crucial to minimise the costs associated with service differentiation. With simplicity being a key success factor this is not an issue.

Exploiting the backyard

To identify areas for growth it is first of all important to recognise the operator's main markets and how operators serve them. Generally mobile operators have focused on serving three main markets: residential, business and wholesale:

- The first two markets have been the main source of revenue for the operator. By delivering communication services, operators have been able to realise a return on the immense investments in network equipment. This revenue is referred to as subscriber revenue.
- Ranked third is the operator's wholesale business. Traditionally this business focuses on providing bulk access to a limited number of third parties. This revenue is referred to as channel revenue⁵.

Over time these traditional revenues stream have come under increased pressure. Government regulations are aimed to stimulate competition. This has paved the way for many mobile virtual network operators (MVNO's) and the reduction of roaming tariffs. Additionally, alternative mobile networks such as WiFi have caught the attention of internet brands such as Google. In this competitive landscape it is almost impossible to hang on to a walled garden⁶ approach.

To complement traditional revenue streams, cooperation with channel partners may be the most important vehicle to drive subscriber as well as channel revenues. Key to this cooperation is to offer partners controlled access to the text messaging infrastructure. This enables the enormous opportunity to exploit mobile messaging to a much wider audience. Ideally the operator could also serve a broad range of internet service providers, businesses, software developers and advertisers. This vision on the text messaging business is the principle of exploiting the back yard.

Based on this vision, Acision defined a text messaging strategy aimed at doubling the messaging revenues in the next four years. This strategy consists of five key elements that will drive subscriber and channel revenue.




Figure 1 A modular strategy to double mobile messaging revenues

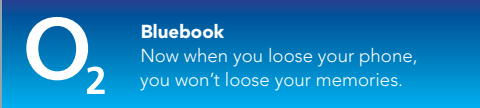
1. Personalise the messaging experience

By offering personalised messaging services, operators are able to charge for a number of new features that are already proving to be effective. Currently a vast majority of subscribers is using multiple messaging services next to plain text messaging. Through e-mail and instant messaging, users get increasingly familiar with new messaging features such as automated replies, forwarding and signatures, threaded messaging and presence information. Acision found⁷ that the demand for personalized messaging is tremendous. Acision's research indicated that 30% of Italian and 57% of Filipino respondents are extremely or very likely to use such features. Initial launches of personalised messaging services indicated a growth potential of up to 15% on text messaging revenue.

Auto-copy
One example of such a personalised service launched by Singtel and Maxis in 2008 is Auto-copy. This service automatically forwards copies of received text messages to another phone number or e-mail address.



The online message store
Offering online access to stored text messages is a promising way to move text messaging in the fixed domain. This is what O2's Bluebook, the award winning text messaging innovation, is all about. Based on O2's full control over the text messaging delivery chain, it enables users to send, receive and access stored text messages via the Bluebook portal.



The list below presents a number of personalisation features and their relevance for typical subscriber segments:

Personalisation feature	Business Users	Teens	Young Adults	Parents
Black and white listing	•	•	•	•
Automatic replies	•	•	•	•
Ad insertion	•	•	•	•
Online message store	•	•	•	•
Auto-copy	•		•	•
Group messaging	•	•		
Block SMS during school		•		•
Location alerts		•		•
Enrich text with multimedia		•		
Parental control				•
Prioritised message delivery	•			
Auto signatures	•			
Authentication	•			

Successful brands such as Coca Cola take into account three key factors to effectively launch a differentiated offering: targeting, simplicity and brand value. This may be a beneficial approach for operators to consider:

- **Make a targeted offer**


The above features will only be successful when applied in a relevant context. A message store for example, can be an interesting youth proposition. However, the chances for youth to adopt the service would definitely be better when integrated with popular social networks. For business users, a message store could be more relevant when integrated with Microsoft Outlook™.

- **Keep it simple**


As mentioned before, users value text messaging for its simplicity. As such, users will expect any features on top of it should not hurt the overall experience in this respect. For example: A web interface or an on device portal can help users to manage their personal black list.

- **Preserving the brand value**

Coca Cola keeps investing in its brand name and puts it in front of every differentiated product. In terms of popularity SMS deserves a position close to the world's biggest brands. Operators would be well advised to leverage its value instead of neglecting it.



Manage your SMS with



Differentiation makes brands successful

An effective launch of personalised messaging services cannot fully rely on market positioning alone. The market positioning needs to be backed with an enabling solution. From that perspective, a number of prerequisites need to be in place to introduce differentiated messaging services:

- Enable personalisation - Provide access to features on a subscriber level
- Improve time to market – Ensure flexible and quick deployment of relevant messaging features.
- Avoid network complexity to hamper future time to market - Centralise management of business rules and subscriber preferences
- Improve cost structure - Prevent overcomplicating the architecture by consolidating network assets (for instance SS7 stack, routing technology and storage)
- Cater for growth - Ensure reliability and scalability in case differentiated services are heavily adopted.

2. Extend mobile messaging to fixed

Besides the mobile phone, many subscribers daily use a range of fixed devices such as PCs and TV sets. When offering access to text messaging on these devices, the barrier to use text messaging would be even lower. What's more, the interface of many fixed devices is less limited and offers a range of enhancement that could easily improve the user experience of text messaging. Besides improving the customer experience, this also offers benefits for the operator.

A fixed extension to text messaging offers the operator a viable entry for service revenues in the fixed domain. The additional user interface may also produce additional text messaging usage chargeable by the operator. The enhanced user interface may improve advertising effectiveness and the user's abilities to personalise the messaging experience. Finally, delivery of text messages could be done over 3rd party bearers such as a cable or DSL internet connection. This could substantially reduce costs as it would relieve the operator's radio network.

To illustrate the opportunity and the way to practically approach it, a number of messaging scenarios is provided beneath.

Widgets as extension to SMS

PC and web based widgets enable users to access an application without having to install a separate program. The advantage is that web developers and users alike have full control over where to position certain third party applications. This drastically limits the barrier to use such applications. It is therefore not a surprise that in June 2008 alone over 600 million people communicated through widgets. If operators were to allow access to text messaging through widgets it would enable them to increase the value of text messaging and help realise the opportunities mentioned above.

Instant messaging as extension of SMS

When faced with the instant messaging concept, most people will have dominant brands like Windows Live Messenger and Yahoo! Messenger in mind. In recent years however, the IM landscape is getting ever more diverse. A long list of social networks, mail providers, niche communities and mobile operators has launched their own IM services. Operator IM may not be a new killer application but could well act as a logical extension of mobile messaging for mobile and fixed internet users. Key operators throughout the world recognise this and have deployed a combined messaging service.



To extend the reach of text messaging to the fixed domain, the following prerequisites need to be in place:

- Enable service convergence - Bridge messaging bearers to enable users to communicate with each other irrespective of the underlying technology
- Preserve the known service experience of text messaging - Translate addresses, mimic sessions and deliver unsupported content along alternative messaging channels
- Prevent reliability on foreign networks - Take control of the messaging experience for subscribers on both own and foreign networks.

3. Use messaging to mobilise the web

Usage of the internet among teenagers has grown to a staggering 12.5 online hours per week⁸. Yet the average teenager is available at least 112 hours per week through his mobile phone. In other words, teens are almost 10 times more likely to be available through their mobile phone. According to Ofcom⁹, UK's national telecoms regulator, over 12% of households have disconnected their landline and are mobile-only. Clearly the mobile channel is a crucial link in enabling people to interact. This fact has also reached service providers. As a result a value added services market has taken shape since the 1990s. However, there is still a large number of (internet-based) service providers that do not mobilise their service offering through mobile messaging.

The barrier for many internet service providers to use mobile messaging as a delivery channel is significant due to a number of obstacles:

1. Application providers need to sign a large account contract to get access. These contracts are aimed at selling discounted bulk access. For services with relatively small user groups, the accompanying upfront investments do not outweigh the possible benefits of experimenting and identifying profitable mobilise services. The current business model needs to be complemented with an alternative model that is aimed at this Long Tail¹⁰.
2. The mobile messaging channel is too diverse and too telco specific. Most operators do not use IT standards that are generally accepted in most development communities (i.e SOAP, XML, etc).
3. It is too difficult for developers to access network assets such as user identity, location and charging capabilities. The mobile channel can only add value if developers get simple and direct access to these assets.

At Global Messaging 2008, Yahoo¹¹ called on mobile operators to introduce new revenue models for mobile messaging services. Yahoo envisaged mobile operators sharing revenues from advertising and messaging with internet service providers. "Where members of the ecosystem are adding value, they should be compensated commensurately" said Jeff Pedig, senior director for business development at Yahoo Connected Life. Operators may not be standing in line to follow this trend. It is nonetheless clear that many operators are engaging in carefully selected partnerships with internet brands. For such partnerships to be successful, both partners need to provide a value add. In this case it is in the operator's interest to monetise unique assets of the mobile network. A number of examples that illustrate this best are provided below.

Charging as a value driver

More and more operators are offering connectivity to IM communities such as Windows Live and Yahoo! Messenger. By doing so, they enable partnering internet brands to leverage the operator's ability to charge subscribers.

**Reach as a value driver**

Leading social networks (SN's) such as Facebook have an adoption rate of up to 20% in the US. The opportunity for partnering offers operators and SN's the ability to reach the other 80% of users through their channel of preference: mobile messaging. A key Acision customer that recognized this opportunity is Globe thru its UPD8 offering.

**Identity as a value driver**

Blyk is exploiting use of subscriber data to advertisers like Coca Cola. This way, advertisers are more likely to reach the right users at the right moment in time.

**Location as a value driver**

KPN brand Hi enabled location as an extra dimension to someone's presence in the social network Hyves. The user simply sends a text with his mood and the operator adds his location before it's published in Hyves.



Even though promising, most of these partner propositions are still rather fragmented. This easily leads to increased network complexity. It is important that the operator is able to connect thousands of third parties that will all assist in shaping an innovative services portfolio. This requires an underlying network that was specifically designed to meet this demand. The business requirements for the enabling text messaging architecture should therefore involve:

- Embrace internet standards – Enable (internet) service providers with standard interfaces to enable mobility
- Open up – Expose key network assets to thousands of third parties (e.g. billing, location, user context and profile)
- Seize control – Enhance message control to address security and quality threats caused by a more 'open' network
- Aim to improve quality of experience – Enable quality of experience from third party application to end user device.

4. Mobilise business applications

On average 5.5% of patients do not show up at a doctor's appointment. A simple text messaging reminder would substantially reduce this number of no-shows and the associated costs. Incentivated, a mobile marketing agency, may have encountered a similar no-show percentage at UK based optician Specsavers. After proposing a simple SMS reminder service they have helped the optician to generate USD 8 million in savings. However, most small companies seem to have little intention to use the text messaging channel to realise similar improvements. What is holding these companies back?

Operators have addressed the mobile enterprise opportunity mainly through technological innovations such as the wireless application protocol (WAP) and push e-mail. This has resulted

in a plethora of device specific applications with low reliability and high integration costs. Consequently enterprise mobility has brought little or no productivity improvements for the average business.

The Specsavers example illustrates that the real opportunity may be much closer than the solutions implemented so far. Combining the reach and reliability of text messaging with the relevance of data in enterprise applications promises a quantum leap in enterprise productivity. Some examples that illustrate this best are provided below.

Mobilising access to ERP and CRM systems

SAP, the world's leading vendor of applications for enterprise resource planning software sold to over 43,000 businesses, recently announced partnerships with handset vendors including RIM, the maker of Blackberry™. As SAP recognizes an increased need of users to get information in real-time the aim is to develop 'pushed' SAP applications using mobile e-mail. SMS connectivity is also possible through additional software such as SAPconnect. According to SAP, the final stage of the mobile strategy would be to enable business users to push data from their SAP CRM applications directly to customers.



SMS to protect and serve

Mumbai Police can access driver records from the roadside by SMS and check a driver's previous convictions. By querying the database via SMS, offenders' records can be accessed preventing repeat offenders to slip through the net and logging new offenders immediately.



Dramatically improve productivity beyond basic SMS access

The above examples all use a standard "large account" interface to access the text messaging channel. In order to drive revenue, operators should provide more than plain SMS access. Just imagine what a combination of location information, charging capabilities and the user's profile could add to the examples provided above?

Thousands of SAP developers would be able to push information not only to 19¹² million Blackberry users but to 3.5 billion SMS users irrespective of the device and network capabilities. This would move well beyond SAP's mobile strategy. Businesses would be able to push or schedule information based on location, availability, handset capabilities and user profile. As for more local services like the implementation of the Mumbai policemen: they would not only be able to access offender information. They could also ask police assistance via SMS from colleagues closest to the offender or send security alerts to citizens in a certain part of the city.

To realise this immense opportunity, the operators messaging architecture should have a number of prerequisites in place:

- Embrace IT application standards – Enable enterprise developers and application vendors with standard interfaces to enable mobility
- Seize control – Provide controlled access to key network assets such as location, user profiles and charging applications.
- Ensure enterprise grade service levels – Ensure end-to-end control of the message flow
- Make it measurable – Enable reporting against these service levels to any of their partners

5. Set up a mobile marketing business

“Over time, we will make more money from mobile advertising” said Google’s chief executive Eric Schmidt when asked about the possibility of mobile computing taking off. He adds: “Not now, but over time”. In the same interview, Schmidt stated that advertising on mobile platforms will be much more targeted than it currently is on the desktop. The key to this promise lies in the fact that the mobile device provides an intimate, direct and interactive communications channel. Schmidt believes mobile advertising revenues for Google will ultimately outstrip traditional web advertising.

In the meantime operators can already play a pivotal role of mobile operators in the mobile advertising value chain. They own the customer relationship and access channels, the advertising inventory, the location information and the customer profile. This profile is much more than the phone number. It involves usage behaviour, demographics and content preferences. Furthermore the operator controls the main vehicle for the digital dialogue: mobile messaging. According to IAB, 95% of text messages are opened compared to 25% of emails. What’s more, according to O2 30% of mobile users have used a short code to respond to adverts in other media. This puts mobile operators in a very strong position indeed when competing for advertising budgets.

At the same time operators are often anxious to protect existing service revenue streams. Ultimately these revenue streams may well remain the most substantial part of their business. To date mobile advertising is making slow but steady progress towards the forecasts of becoming a USD 19 billion dollar industry. According to eMarketer, in 2007 the worldwide spending on mobile advertising totalled USD 2.7 billion. This is just under 0.4% of the 2007 worldwide mobile market which Informa Telecoms & Media estimated to be worth USD 740.5 billion. In other words advertising revenues will never be sufficient to replace service revenues but are a welcome supplement for operators. However, without their involvement the whole concept of mobile marketing is simply not going to get off the ground.

With their involvement however, mobile operators are uniquely positioned to monetise the best advertising inventory in the world. Combining customer location and profile enables the delivery of unprecedented levels of advertising relevance and reach. By addressing the essential enablers mentioned above, the competitive position of operators in the advertising market will be second to none. This will allow them to actually build a USD 19 billion revenue stream.

Business requirements for the text messaging architecture:

- Comply to media planning standards – Acknowledge media planning requirements of the advertising community
- Monetise mobile messaging as a vehicle for advertising – Scale advertising up to deliver substantial revenue levels by monetising messaging as mobile advertising inventory.
- Drastically increase advertising inventory – Enable advert insertion as part of the existing communications streams
- Provide end user control – Deploy mechanism for subscriber opt-in, coupled with some level of reward
- Increase advertising relevance – Provide relevant advertising based on a customer’s identity and full context (location, usage, device capabilities, etc).

Building the future on solid ground

Acision believes that messaging revenues have the potential to double by 2012 reaching a market size of \$ 165 billion. This revenue growth can be reached through differentiation and the creation of new business on the text messaging channel, with limited, incremental investments to warrant margins.

Acision proposes a modular mobile messaging growth strategy, that consists of five elements:

1. Personalise the messaging experience
2. Extend mobile messaging to fixed
3. Use messaging to mobilise the web
4. Mobilise business applications
5. Set up a mobile marketing business

These five elements have led to the definition of a number of prerequisites for the underlying messaging architecture. Some operators may recognise and have even tried to address any of the requirements. However, in most cases this has involved point solutions for third party integration, service creation and personalisation. In specific scenarios this may have led to reduced delivery times, improved abilities for web integration and eased the service creation process. From a holistic messaging view however, this more often led to increased network complexity, redundant storage and stack usage and not to forget the associated operational costs.

To address these issues, Acision believes that today's messaging architecture should be designed to meet the following overall prerequisites without disruption to the current model:

• **Minimise total cost of ownership**

The most comprehensive cost reduction will be reached by consolidating the messaging architecture. This can be realised in multiple phases that will all provide efficiency benefits in their own right. First of all operators should investigate options to centralise the use of messaging stacks and storage. When reaching higher throughput levels, an upgrade to a blade based architecture can be an important step forward. Investigation of cost efficiency measures should not be limited to text messaging though. Network consolidation is possible across all messaging platforms. If the solution enables a service convergence strategy even more comprehensive cost reductions can be assured.

• **Drastically reduce of time-to-market**

Operators are under increased competitive pressure from other mobile networks, MVNO's and internet service providers. Consequently operators need to put more emphasis on differentiation and need to reduce the time to market of new functionality. To achieve this, operators need to offer standardised access to advanced text messaging functionality. Traditionally, much of this functionality was an integral part of SMSC's. Making this functionality available in reusable components will significantly simplify design, building and testing of new functionality.

• **Provide third party access to the mobile channel**

A key lesson internet brands have taught the mobile industry is that it pays to involve early adopters in designing products. On the internet large developer communities already interact heavily with early adopters. By providing these communities controlled access to text messaging functionality operators can involve themselves in this process. From a technical perspective this involves creation of open application interfaces (API's) that meet the technical standards of the IT industry.

• **Differentiate on service level**

The key interest of third party service providers will be to maximise revenues. In this case the most appropriate price point needs to be balanced with the required quality of experience¹³. Offering the means to control this quality of experience, improves the operators chances to effectively differentiate from competition. Besides complying with quality of service criteria (i.e. latency and uptime), this could involve criteria such as precision of subscriber location, level of detail in subscriber usage data, etc. By positioning as a preferred partner for delivering quality services to the end user, operators can maximise channel revenue.

• **Ensure content control and protect user data**

Ever since subscribers started to send text messages, the mobile network has been challenged with security threats. The need for security measures will only grow as third party service providers are offered access to common text messaging functionality. The aim is to provide a high level of security against minimal operational costs. To make this possible security measures should be enabled on subscriber and content level. Secondly, policies should be managed centrally for the both operator's own and third party services.

With these prerequisites in place, mobile operators will be able to successfully differentiate their mobile messaging portfolio. A key success factor is the operator's willingness to open up their network in a controlled manner while taking the responsibility to ensure quality of service. In the end exploiting backyard is only possible if the garden is no longer walled.

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1. Source: 'Blended Messaging' by John Delaney (Ovum, May 2008)
 2. Source: 'Messaging forecasts and methodology' by Michele MacKenzie (Ovum, May 2008)
 3. A simple search for "3g network coverage" results in a long list operator announcements of 3G coverage expansions
 4. United States has caught up with Western Europe in the adoption of 3G with 28.4 percent of American mobile subscribers having 3G devices versus 28.3 percent in the largest countries in Europe. The number of U.S. subscribers with 3G enabled devices has grown 80 percent to 64.2 million during the past year.
Source: ComScore, September 2008
 5. Channel ARPU is "Revenue from delivering 3rd party services/products through the last mile [the mobile network] to the end user." Source: Vision Mobile, 2008
 6. An exclusive set of communication or information services provided for users in order to control a portion of the respective service value chain.
 7. Conclusions were based upon research among subscribers in GB, Italy, Germany, Russia, Philippines, Malaysia, Singapore and Indonesia. Source: Ipsos MORI (on behalf of Acision), November 2006
 8. "Tween & Teen Lifestyle Report", Youth Trends Inc., March 2008
 9. Source: <http://www.ofcom.org.uk/research/cm/cmnr08/england/england.pdf>
 10. The phrase The Long Tail was first coined by Chris Anderson to describe the niche strategy of businesses, such as Amazon.com, that sell a large number of unique items, each in relatively small quantities.
 12. On 25 Sep 2008, RIM announced the number of BlackBerry subscribers has reached approximately 19 million (Source: Blackberry Second Quarter 2008 results)
 13. A subjective measure of a user's opinion as to how a total product met his expected and/or desired experience.

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