

WHITE PAPER

Mobile Instant Messaging: The Next Major Mobile Opportunity

Sponsored by: NeuStar

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EXECUTIVE SUMMARY

Mobile instant messaging (MIM) is the next major growth opportunity for mobile operators and is a highly flexible medium that can presence-enable services and open up new revenue opportunities in areas such as social networking, communities, blogging, gaming, advertising, and interactivity with other mobile media. Mobile operators have a unique opportunity to fully leverage their position in the mobile ecosystem with MIM through their established SMS subscriber bases and, crucially, their access to and management of a user's presence information. Many mobile operators have launched ISP IM services, some have launched their own branded services, and some have launched both. All services are driving increased data ARPU and revenue.

However, mobile operators should evaluate their strategic approaches to presence by building their own MIM capabilities and services and, at the same time, by mobilizing existing communities. Mobile operators can stay central in the rapidly evolving converged communications ecosystem by positioning MIM as a seamless and natural upgrade to SMS and building data services around it.

MARKET FORCES ANALYSIS

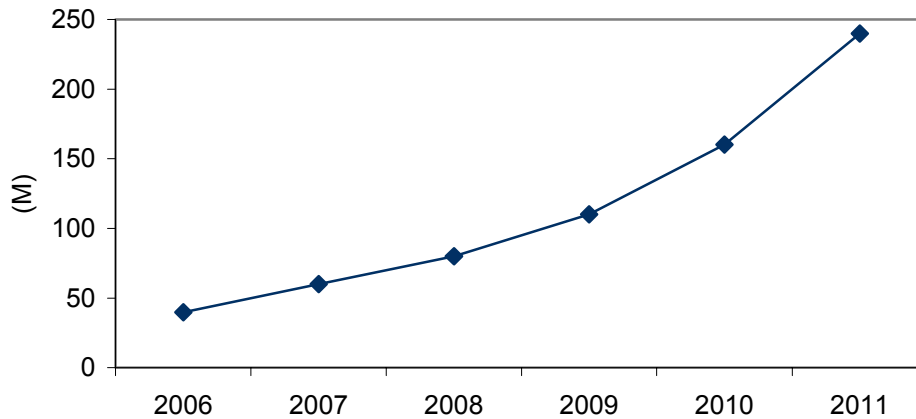
MIM opportunities should be viewed within the broader market context of existing messaging technologies, new technologies that will play an important role in messaging, existing competitors, new competitors, customers, partners, and target users.

Existing Messaging Technologies

These technologies include short message service (SMS), multimedia message service (MMS), and PC-based IM that is accessed through mobile. Mobile messaging users in the developed world are generally familiar with each of these three technologies, with global SMS penetration exceeding 80%. MIM is a highly flexible platform that is able to support these existing capabilities as well as voice (VoIP) and content sharing. As noted in Figure 1, MIM is expected to be used by 240 million people globally by 2011.

FIGURE 1

Global Mobile Instant Messaging Users, 2006–2011



Source: IDC, 2007

Emerging Mobile Technologies

IP-based services such as VoIP will play a major role in mobile messaging and the delivery of converged communications between fixed and mobile environments to provide a seamless customer experience. The availability of presence information also adds a compelling new dimension to existing services.

Existing Internet IM Services

AOL, Google, MSN, ICQ, and Yahoo! have all enabled mobile access to their IM services by partnering with mobile operators (and, in some cases, going direct), enabling members to stay connected to "buddies" through their mobile devices. As IDC has noted many times, these companies are all looking to play a central role in mobile messaging and communities.

New Services

New services will continue to emerge in the MIM space, especially those from new communities such as social networking sites, including MySpace, Bebo, Facebook, and Second Life, that seek to connect their users in new ways through mobile. They will evolve into a combination of customers, partners, and competitors.

Customers

Mobile users are looking for newer, richer, and more expressive ways to communicate with their friends and communities. This has been proven through the continued extraordinary growth of SMS messaging usage and evidenced by the increasing adoption of MIM services.

Partners

Content provider partners are also focused on IM, especially in providing better end-user experiences by integrating presence-enabled information and location-based capabilities across devices.

WHAT MOBILE USERS WANT AND NEED

Creating a rich and compelling customer experience should be the starting point for new product development, so mobile operators should consider their MIM strategies first from the viewpoint of their mobile user customers' demands — what do their customers want and need? Customer needs include:

- ☒ **Integration and flexibility.** Mobile users want MIM that is fully integrated into their device contact lists and with other applications such as social networking sites and mobile browsers. In addition, they want MIM that has the flexibility to meet their evolving communications needs — such as the ability to instantly share a picture or a media file with contacts who are participating in a MIM session.
- ☒ **Media sharing.** Easy and flexible media sharing is a key unmet need of mobile users that MIM is ideally suited to address. IDC research has shown that a substantial segment of the mobile user population wants to share media content, and IDC believes that these mobile "content sharers" will play a key role in evangelizing mobile media content and applications through viral sharing, especially in response to MIM presence information available through their address books.
- ☒ **Presence information.** Real-time presence information is one of the most important features and key differentiators of a MIM service. When mobile users allow their presence information to be shown, it is an invitation to initiate a MIM session and serves as a powerful tool to foster and support mobile communities based on MIM.
- ☒ **Support of communities.** MIM is a key way to foster and support mobile communities. Accessibility and sharing of presence information among mobile users are key privileges that help define communities of people with common interests that can self-organize around a particular set of friends, coworkers, or topic of interest. Because presence information indicates availability to exchange messages, it helps drive additional messaging exchanges and consequent mobile operator revenue.

KEY MIM TARGET USERS BY DEMOGRAPHICS AND CURRENT TECHNOLOGY

For mobile operators, it is important to understand the needs of key MIM target groups to ensure that MIM is properly marketed, packaged, and tarified to achieve market success. Key early MIM target user groups include:

- ☒ **Teenagers.** Teenagers and university students are two of the most important mobile early adopter user groups, and they are early adopters of MIM. For teenagers, immediate mobile connectivity with their friends is key, along with the ability to express their individual personalities. This means that MIM must be both mobile-mobile and mobile-fixed, with the ability to include emoticons and other forms of personal expression. In addition, MIM aimed at teens should include tariffing that incorporates unlimited or very high bundles of messages, given teenagers' heavy use of messaging and the need to stay within spending limits that are often set by parents.
- ☒ **University students.** University students live in two environments — their university environment and their home environment with family and friends from their preuniversity schools. This means that several MIM communities incorporating as many contacts as possible will be very important to this segment. Because university students typically explore different study and career fields, support of mobile communities is particularly important for these users as they seek to exchange information and ideas with like-minded people.
- ☒ **Young professionals.** Young professionals are typically independent in the world and must balance their professional and personal lives. Keeping in contact with friends in limited free time and while on the move is important, as is the ability to meet new friends and date. In addition, young professionals are interested in using technology in the workplace, making this group ideal for MIM adoption in the enterprise. For instance, young professionals are typically very comfortable initiating an IM session rather than a phone call, which can allow better multitasking at the office while in meetings or on conference calls.
- ☒ **Dynamic parents.** Parents are showing increasing interest in messaging services such as MIM to stay in touch with their children, friends, and family and, especially, to stay connected to the office. Many parents will also be pushed by their children to adopt MIM services as the preferred way to communicate with them. Parents are also finding that mobile services such as MIM are allowing them to better organize their personal lives while staying productive in their working lives.

However, as MIM is introduced to mobile users, it will enter a market of existing messaging applications, current behaviors, and preexisting end user expectations. Therefore, it is important to consider the needs and expectations of existing messaging user groups, and thinking in terms of existing technology use is helpful.

- ☒ **Heavy SMS users.** Heavy SMS users will have several key needs when it comes to MIM. First, they will want to maintain the ease of use associated with SMS and to maintain contact with people still using SMS. They will also need an easily understood tariffing structure that does not imply that they will be financially punished by migrating from SMS to MIM and then begin exchanging substantially more messages. In practice, this means that like teenagers, they will want readily understood tariffing for heavy MIM usage and will likely be intolerant of MIM pricing that is identical to SMS pricing on a per-message basis.
- ☒ **ISP IM users.** Fixed ISP IM (chat) users want to be able to access and use the same existing contacts, contact groups, and availability status whether they are using their mobile devices or their PCs. They will want to see a similar ability to customize their MIM with emoticons, backgrounds, and avatars. Due to the flat-rate access nature of the Internet, this group in particular will likely not find per-message charges attractive; rather, this important early adopter group will probably be most receptive to flat-rate usage tariff packages.
- ☒ **Social networking and dating communities.** Dating services were among the first social networking services to incorporate IM functions. It will become important for social networks and other community users to be able to send instant messages and share presence information. It is also important that they can establish alternate MIM identities for specific use with mobilized data services, so as to maintain privacy. In addition, this group will want to be able to create more detailed personalized MIM profiles that convey additional personal information depending on the community that they are in at that time.
- ☒ **Gadget adopters.** Early adopters of the latest mobile devices will want to see MIM clients already embedded on their devices or be able to easily download MIM clients to their latest devices. Because these key MIM target users tend to change devices frequently, it will be especially important to allow easy transfer of MIM contact lists, MIM group lists, and personal profile information from current devices to new devices to create a smooth customer experience and encourage future upgrades to the latest available devices.

STRATEGIES TO DRIVE CONSUMER MIM ADOPTION

As mobile operators consider strategies to drive consumer adoption of MIM, they should consider five key strategy components: mobile devices, activation tools, contact lists, attractive extensions to MIM functionality, and how to market MIM to consumer mobile users. Each of these key strategy elements is discussed in detail in the following sections.

Mobile Devices

To maximize the total addressable market (TAM) for MIM, mobile users must have MIM capabilities on their mobile devices. This is typically accomplished in one of three ways:

1. **Preloaded clients.** Third-party applications can be loaded during manufacture. They are typically installed in the same location as downloaded applications. Some applications are given a top-level menu link that maximizes discovery and ease of use. Some applications have the ability to run in the background, which saves on battery power and enables phone users to do other things. The network access settings are also preconfigured, which removes another barrier to the user. These applications are typically specified by the operator in terms of branding, features, and services.
2. **Native clients.** These applications are developed by manufacturers such as Nokia, Sony Ericsson, Motorola, and LG according to industry standards. They are an integral part of the phone and typically are well placed in the user interface for ease of use. Network access settings are sometimes preconfigured, but often they have to be configured manually by the user or via a Web-initiated configuration message.
3. **Downloadable clients.** These applications are downloaded onto the mobile device in the same way as mobile games. In markets where mobile devices are not subsidized and specified by mobile operators, downloadable clients are a very effective way to reach the user with an operator-specified application.

Activation Tools

- ☒ **Download, configuration, and upgrade.** These capabilities are important where a download strategy is used to remove adoption barriers and maximize service take-up.
- ☒ **Download server.** A user typically accesses a download server via a service Web page. After following a link, the user is presented with a URL link that, when clicked, connects the user with the download server. Phone model detection is usually automatic, and the user is provided with the relevant application.
- ☒ **WAP Push.** A mechanism sends the user a relevant download link via SMS. Clicking on the link connects the user to a download server by opening the browser.
- ☒ **Activation from WAP portals and Web portals.** This provides a link from the operator's Web page on the MIM service. The user clicks on the link to download the client to the mobile phone.

- ☒ **Configuration server.** This typically resides within the mobile operator's network and is used to configure network access points (NAPs) for various applications such as MMS and browsers. The access point manages user registration to services and data billing rates. A user typically accesses a Web page, selects a device, enters a phone number, and receives a configuration SMS message.
- ☒ **Manual configuration.** Manual configuration is done via the "Settings" menu on the phone. This is a tedious operation and is normally used only as a fallback to using a configuration message for new devices where an over-the-air (OTA) message is not yet available.

Contact Lists

Easy creation of MIM contact and group lists is of critical importance in driving consumer adoption and usage of MIM. Because MIM and presence information is associated directly with existing contact lists, it is important to ensure that contact lists can be both easily migrated among devices and updated for MIM. These mechanisms can include:

- ☒ **Integration with mobile device address books.** Directly integrating MIM with the mobile device address book is one of the most effective ways to communicate MIM availability to mobile users and encourage MIM usage. Integrating MIM presence indicators into address book contacts and making "send a MIM" a standard available option whenever a user clicks on a contact can be highly effective ways to make MIM an attractive messaging option that is more likely to be used by mobile customers.
- ☒ **Migration of address book contacts to MIM contact lists.** For MIM clients that do not integrate with device address books, address book contact lists can often be imported into the MIM client's contact list. This can be easily accomplished by many MIM clients, which saves mobile users from having to manually reenter contact information and again makes MIM more likely to be used by mobile subscribers.

MIM as a Highly Flexible Medium

MIM is by a nature a highly flexible medium. Extensions to MIM functionality and integration with other mobile services should be key considerations as mobile operators develop their own branded MIM solutions. Key opportunities include:

- ☒ **Chat.** Chat communities are an obvious opportunity because they harness the natural desire of people to connect with one another around common interests and are proven to increase usage. This will be particularly important for mobile operator-branded MIM, which can help drive community formation within the mobile operator customer base and which can provide a key customer "stickiness" factor over time. Dating communities are a natural first-market opportunity and can be seen as a subset of the mobile chat market. University students and young professionals are generally accustomed to meeting potential dating partners and friends online, and mobile dating is a natural evolution of this behavior pattern for these key MIM target users.

- ☒ **Communities.** Social networks such as MySpace, Bebo, Facebook, and Second Life are anticipated to be major messaging growth opportunities over the next several years. MIM and the community vendors will play a central role in enabling the core need to communicate and share between PCs and mobile devices.
- ☒ **Gaming.** Games represent another natural MIM integration opportunity, as multiplayer mobile gaming is expected to experience strong growth over the next several years. Indeed, extending the online gaming community experience to mobile represents another natural mobile extension of online usage behavior. In addition, game developers and advertisers are very interested in using opportunities such as MIM to understand and solicit gaming users' experiences with and opinions about games or advertise products and services within the games themselves.
- ☒ **Advertising.** Mobile advertising is another emerging mobile market opportunity ideally suited for MIM. Incorporating advertising into MIM service is highly attractive to advertisers who are seeking to reach the mobile community, to solicit customer feedback, and to foster the creation of communities around brands and products. Advertisers may be interested in sponsoring MIM services and support communities, which would serve as another driver of consumer MIM adoption.
- ☒ **"Infobuddies."** Information service providers can deliver personalized integrated content to MIM users. This feature can provide personalized real-time updates on weather, sports, traffic, stock quotes, and other information from their MIM address books.
- ☒ **Blogs.** Closely related to chat and communities are mobile blogs. MIM is also well suited to foster and support mobile blogging because MIM supports message exchanges, group contact lists, and media sharing, which are all key components of mobile blogging. In addition, advertisers have begun placing advertising on blog sites that serve the readers and participants they seek to reach.

Launching and Marketing MIM

MIM offerings will enter a mobile marketplace that is crowded with mobile messaging and content options. Therefore, developing a strong and comprehensive MIM marketing campaign will be key for mobile operators, especially to drive the viral adoption that has proven central to the success of SMS and other mobile services such as ringtones. A comprehensive MIM marketing campaign should include the following:

- ☒ **SMS and MMS broadcasts.** SMS and MMS broadcasts are an underleveraged customer education tool. While simple SMS broadcasts can alert users to MIM's availability and value proposition, more sophisticated MMS broadcasts can include short demonstration videos that show how MIM works and provide links to application download sites. Indeed, MMS can also be used as a customer service tool to demonstrate how to sign up for MIM, how to establish and transfer contact lists, and how to manage presence information. Because almost all phones are SMS capable, and most new phones sold today are MMS capable, mobile operators should be able to use SMS and MMS to reach their entire customer bases.

- ☒ **Employees as service ambassadors.** Mobile operators often overlook their own employees — other than sales staff in retail store locations — as key ambassadors for new services. Encouraging all employees to show friends and family members new mobile applications such as MIM, demonstrating how MIM works, and then using MIM with their contacts can serve as key "ignition points" for MIM to begin the process of viral adoption.
- ☒ **Universities/colleges.** Universities and colleges are also key places to begin MIM marketing efforts because they represent a natural community of mobile users who in turn have common interests that revolve around fellow students and university issues. For instance, including demonstration kiosks at student unions and working with university clubs and publications to establish issue-specific MIM contact groups can be good ways to introduce MIM to the key university market segment.
- ☒ **Venues.** Venues such as sports events, music concerts, and community events are also key opportunities to drive MIM awareness and adoption. The music industry has consistently turned to venue events such as concerts to drive awareness and adoption of ringtones, ringback tones, and music tracks and to drive participatory messaging in the events by displaying text messages from concertgoers. These would be natural settings in which to promote new advanced MIM services.
- ☒ **Print.** Posters and billboards are an effective way to educate mobile users about new applications such as MIM, particularly when they communicate the message via graphics versus a lot of text.
- ☒ **Shops and points of sale (POS).** Shops and POS remain perhaps the single most effective way to drive adoption of new mobile consumer services and will likely prove so for MIM as well. POS staff can both discuss MIM with and demonstrate MIM to potential customers, allow customers to try MIM, and sign up customers for plans — all in a single interaction.
- ☒ **Online communities.** Online communities can prove to be key MIM early adopter market segments, and therefore they should be key targets of MIM marketing campaigns. Some examples are user communities among services such as MSN, Google, Yahoo!, Facebook, and dating sites.

NEUSTAR PROFILE

For almost a decade, NeuStar has provided the fixed and mobile communications industries with innovative and essential registry and addressing services upon which mobile operators, wireline service providers, and enterprises have come to rely to offer new services, increase revenue, and increase efficiencies within their networks.

NeuStar established itself as a leader in guiding and developing the standards used today for wired, mobile, and Internet services. NeuStar's role in telecommunications evolved rapidly as the North American telecommunications industry, with FCC oversight, looked to NeuStar to manage local number portability in a neutral and efficient manner. This ensured uninterrupted service for consumers who wanted to keep their telephone numbers while being able to easily switch service providers for the first time. This also ensured that existing service providers were able to continue their cooperation in providing end-to-end connections between people and communities everywhere.

At the same time, NeuStar anticipated the change and disruption that would occur in the communications industry as a result of new technologies and evolving standards — particularly those associated with IP. NeuStar began to build services and infrastructure to enable the convergence of the IP world with traditional telecommunications services, first with its entry into the global DNS infrastructure business and the launch of the .biz top-level Internet domain, which was followed closely by the addition of .us.

NeuStar has been instrumental in the development of critical industry standards, whether SMS, MMS, IM, Session Initiation Protocol (SIP), or other next-generation messaging platforms. In particular, NeuStar coauthored the specification for ENUM, a key enabling standard that ensures that telephone numbers can be accurately and efficiently used to reach new IP services such as photo sharing and IM. Additionally, members of the NeuStar staff were key authors of the SIP standards, which serve as the basis for next-generation IP telecommunications networks that operators and enterprises deploy today.

In 2003, NeuStar competed for and was selected to operate the increasingly popular U.S. Common Short Code (CSC) Registry on behalf of CTIA - The Wireless Association. NeuStar continues to operate the Registry, a natural extension of its role as a trusted neutral administrator of critical shared industry resources. The CSC Registry serves as the master database of short codes for all participating CTIA member operators. This database includes all short codes that are currently available for assignment. Therefore, NeuStar plays a central role in almost any industrywide mobile outreach and advertising campaign that includes the use of short codes.

NeuStar has made two significant strategic acquisitions. With the addition of UltraDNS (now called NeuStar Ultra Services), NeuStar provides managed DNS services — including more top-level Internet domain operations, both internal and external to enterprise networks. With a strong foothold in IP, top-level Internet domain name management, management of CSCs on behalf of CTIA, and DNS management, NeuStar has defined and successfully developed its mobile strategy, including interoperability support for MMS across mobile service providers.

In November 2006, NeuStar announced the acquisition of Followap, one of the leading providers of mobile instant messaging, presence, and interconnect services with key market presence in Europe and Asia. As a result of this acquisition, NeuStar offers a full suite of products that support both a single operator's deployment of MIM services and interoperability between mobile operators. As a result, a subscriber's buddy list can include subscribers who use a different mobile operator. Such MIM interoperability can mirror the interoperability that allowed SMS to become a mass-market solution. As IDC noted in its syndicated research published at the time of the NeuStar-Followap acquisition announcement, the Followap acquisition represents a strong move for NeuStar as a leading provider of MIM, presence, and interconnect to operators worldwide. In addition, the Followap acquisition places NeuStar in a central role in enabling converged communications — especially in the mobile messaging space.

VENDOR CHALLENGES

Every solution provider faces challenges that are common to all players within a particular industry sector and challenges that are specific to an individual company.

NeuStar is particularly well-positioned with its unique portfolio of capabilities and assets, which at their core are based upon a combination of strong IT expertise, relationships with service providers in every industry sector, and the company's trusted role as a neutral administrator of critical industry resources. The increasing complexity of mobile applications and their reliance on IT solutions, as well as the increasing reliance on mobile communications by both consumers and enterprises, mean that broad industry trends continue to work in favor of NeuStar.

In terms of competitive positioning, NeuStar faces competition from traditional competitors such as VeriSign and increasing competition from companies such as Oracle and Sybase. The mobile messaging space is generally highly competitive, with companies ranging from Sybase 365 to Yahoo! and AOL seeking to play central roles. As IDC has previously noted in its syndicated research, NeuStar has been very strategic in its efforts to serve the telecommunications industry and to develop and implement IP and mobile strategies. NeuStar will need to continue to focus its efforts on standards definition and deployment in support of the GSMA Personal IM initiative while continuously developing new service offerings to remain competitive over the longer term. IDC has noted that the acquisitions of UltraDNS and Followap are strong steps in that direction.

CONCLUSION

Mobile operators should look to MIM as the next major messaging growth opportunity. MIM is a highly flexible medium that drives additional service and revenue opportunities, including:

- ☒ Mobile chat
- ☒ Communities
- ☒ Blogging
- ☒ Advertising
- ☒ Infobuddies
- ☒ Interactivity with entertainment applications such as games and TV

MIM also represents a unique opportunity for mobile operators to fully leverage their position in the mobile ecosystem through their relationships with mobile customers and their ability to determine mobile customer locations. A key benefit of MIM for operators is their access to mobile presence information, which can be leveraged to create innovative new revenue-generating services. To date, many mobile operators have largely ceded the MIM opportunity to ISP IM providers. However, IDC believes that mobile operators around the world should reevaluate their strategic approaches to MIM and seek to build their own branded MIM capabilities and offerings that in turn drive the broadest possible market and revenue opportunities and ensure that mobile operators stay central in the rapidly evolving MIM ecosystem and market.

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