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# **Carrier Branded Instant Messaging: Opportunities and Business Models**

***A VIRTUALTHERE WHITEPAPER***

**September 2001**

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# Carrier Branded Instant Messaging

## *PREFACE*

This document is intended to help wireless network operators position instant messaging services, and aims to raise the awareness of the opportunities and business models associated with a carrier branded instant messaging service.

The reader is presented with a view on how instant messaging services can increase ARPU and customer loyalty while reducing churn by using a proven technology platform which protects investments in existing network infrastructure and service applications.

## *EXECUTIVE SUMMARY*

The penetration of mobile communication services continues to reach all time highs, but can mobile network operators continue to grow their revenue at these unprecedented rates?

We at VirtualThere believe the answer is yes, provided that wireless network operators continue to offer new services and features that are innovative, reliable and which capture the public's imagination while creating new appetites and trends.

At the heart of this strategy is a new breed of messaging services that enable mobile subscribers to send and receive instant messages between users, regardless of the sender or recipient's choice of device, network, language, or even physical location.

The positive impact of an instant messaging service for a wireless network operator is to increase per-user revenues, keep customers loyal and to reduce costly levels of churn.

Operators selecting VirtualThere's Espresso messaging platform can build on their existing network and messaging infrastructure to deploy high impact services immediately, while protecting their investment in the uncertain future. Furthermore, operators can be assured that unique carrier-centric features such as:

- Carrier-grade reliability
- Extensive scalability (single and multiple server configurations)
- Support for different delivery channels (web, SMS, WAP, i-mode)
- Broad device support (handsets, smartphones, PDAs, 2-way pagers)
- Flexible development environment (Open APIs and SDK)

will ensure a rapid return on investment and opportunities for future growth.

## ***INSTANT MESSAGING – MARKET OPPORTUNITIES***

### **Background**

In the Internet world, instant messaging has been the fastest growing communications channel over the past several years, reaching 3 million new customers each month (Yankee Group). Instant messaging services allow users to see the presence status of their friends and send instantly delivered messages or initiate chat sessions.

In January 2001, the total number of registered instant messaging users of the four largest instant messaging networks – AOL Instant Messenger, ICQ, MSN Messenger and Yahoo Messenger – was greater than 180 million. Unlike email or SMS, however, users are not able to send messages between these different IM networks.

Instant messaging is currently making its way towards the wireless world as well. Major instant messaging providers are negotiating with wireless carriers to add SMS functionality to their systems, and a number of system suppliers are offering wireless carriers the technology needed to build their own instant messaging services. By 2004, Gartner Group estimates 60 per cent of real-time communication between users via any means, including voice, text or call-and-response, will be driven through IM technology. Durlacher and Eqvitec project that revenue from wireless instant messaging in Europe will grow from 1 million euros to 760 million euros between 2001 and 2005.

### **The market**

The main target market for wireless instant messaging is consumers, particularly teenagers, who demand high levels of communication and are avid users of traditional instant messaging services. Creating buddy lists, knowing each friend's presence status and even location adds compelling features to daily communication.

Business use of instant messaging is also on the rise. According to IDC, the number of corporate instant messaging users worldwide will increase at a compound annual growth rate of 140 per cent, from 5.5 million users in 2000 to more than 180 million users in 2004. According to Forrester Research, nearly half of U.S. Fortune 1000 companies will use instant messaging by the end of 2001. North America is expected to be the main market for corporate instant messaging usage.

## ***THE BUSINESS CASE FOR CARRIER BRANDED INSTANT MESSAGING***

### **The Existing Scenario**

Currently, PC-based instant messaging services are offered free of charge by providers such as AOL (ICQ, AOL Instant Messenger), Yahoo (Yahoo Messenger) and Microsoft (MSN Messenger), typically in support of other service offerings. These IM services have begun to bridge their offerings towards wireless users by offering PC-to-SMS and SMS -to-PC connectivity and by introducing WAP clients.

PC-to-SMS messaging is typically problematic due to complicated billing mechanisms for end-users. Similarly, SMS-to-PC messaging is also very difficult for end-users because only a limited number of operators allow external IM services to connect to their SMSC. Furthermore, to use the service users must change their phones' SMSC settings every time they wish to send a message to the IM service.

In this scenario, the operator's role is merely to provide wireless connectivity for existing IM providers. The operator's role is limited to serving as a mere pipe for AOL, Yahoo and Microsoft. Furthermore, operators lose customer retention benefits and fail to capitalize on their direct link to the subscriber.

### **The Carrier Branded Scenario**

In the carrier branded business model, the mobile network operator that controls its own wireless network acts as a service provider for end-users. In this scenario, operators maintain control over wireless subscribers and their message traffic. As a result, operators have the ability to:

- (i) Control the subscriber's service experience (e.g. customized user interfaces, quality of service)
- (ii) Develop complementary IM-related services (e.g. dating services, special interest groups)
- (iii) Offer creative pricing plans (e.g. promotions, flat rates, off peak rates, bulk rates)

From the mobile network operator's point of view, a carrier branded instant messaging system brings direct and indirect benefits. Direct benefits include increased average revenue per user (ARPU) through increased message traffic and usage fees. Indirect benefits include greater customer loyalty and reduced churn, greater brand value and a more solid competitive positioning. Taken together, it is clear that a carrier branded instant messaging service is a strategic service for any operator's mobile Internet offering.

In the next section we'll review different methods to launch a carrier branded instant messaging service.

## ***LAUNCHING A CARRIER BRANDED INSTANT MESSAGING SERVICE***

There are several methods to deploy a carrier branded instant messaging service.

|                        |  |
|------------------------|--|
| <p><b>Method 1</b></p> | <p>Operators can acquire the technology for wireless instant messaging from dedicated platform providers. Depending on the operator's business requirements, the platform can either be hosted or licensed. While hosted solutions offer a quick, low-risk solution, many operators wish to retain control of customer information to allow for targeted marketing efforts, or to facilitate the development of complementary services. Some operators elect to begin with the launch of a hosted service which enables a rapid time-to-market, and as technical resources become available or as the service increases in popularity, to bring the platform "in-house".</p> |
| <p><b>Method 2</b></p> | <p>In some market areas, operators prefer to work with a wireless application service provider. The mobile operator's role in this model is to market the service to its subscribers, while the wireless ASP handles the technical functionalities of the service including hosting, billing and other support services. The wireless ASP model gives the mobile operator a low-risk solution to try out new service concepts, while still owning the customer information and brand identity of the service.</p>  |

## ***COMPLEMENTARY SERVICES***

In this section we'll outline several complementary services that play an important role for operators launching instant messaging services.

- **Location based services:** Knowing the physical location of a subscriber offers the potential to significantly enhance communication between end-users of an instant messaging service. As many LBS platforms rely on data residing on the mobile network, operators hold a valuable position in the overall IM service framework.
- **Chat forums:** As the adoption of an instant messaging service increases, operators may enhance the service by allowing subscribers with similar interests to join a virtual community of other like minded users. Users participating in these communities may exchange live messages with, or post static messages for, a wider group of users.
- **m-Commerce:** Instant messaging capabilities can help businesses, whether online or offline, to communicate with end users in real-time in order to facilitate the sales process, provide customer support, and in general, increase customer satisfaction.
- **Advertising:** An instant messaging service offers carriers the ability to deliver highly targeted and valuable information to the subscriber. Such campaigns are typically launched on a permission-basis in order to avoid offending the subscriber.
- **Machine-to-machine applications:** A proprietary instant messaging service may be used as an underlying communications platform for supporting remote monitoring and maintenance of commercial and industrial equipment.

## **VIRTUALTHERE'S EXPRESSO**

The Espresso platform offers numerous advantages for network operators seeking to deploy a carrier branded instant messaging service. Among the advantages are:

### ***Immediate service deployment***

- Espresso is available for immediate deployment as both a hosted solution and installed at the operator's premises. Services deployed today can immediately generate revenue.

### ***Infrastructure investment protection***

- Investments in existing network and service infrastructure are protected. Espresso leverages existing wireless networks, WAP gateways, SMSCs, billing systems, user databases and other CRM applications.

### ***Infrastructure independent applications***

- Whether an operator is planning an upgrade to 2.5G or 3G, Espresso adapts to the underlying network technology. As increased bandwidth becomes available, enhanced messaging services, such as multimedia messaging, become possible.

### ***Dynamic support for concurrent delivery channels***

- Espresso can dynamically adapt its end-user experience for subscribers accessing messaging services through packet-based or circuit-switched bearers while adjusting itself for actual network conditions.

### ***Support for multiple deployment platforms***

- A variety of hardware, application server and database platforms are fully supported through Espresso's portable code base and gateway technology.

### ***High performance***

- Espresso's architecture combines intelligent design with the application of best-of-breed components. The Espresso platform was designed from the ground up as an enterprise-grade messaging system.

### ***Massive scalability***

- Support is available for multiple server process distribution as well as load balancing. Espresso's architecture facilitates dynamic scaling from tens-of-thousands of users to millions of users.

### ***Proven reliability***

- Espresso's intelligent architecture provides support for various levels of multi-way redundancy guaranteeing that messaging integrity is maintained even in the event of component failures.

### ***Open APIs***

- Espresso's open API provides an easy to use interface for accessing the sophisticated functions of the core Messaging System. Because Espresso is written in 100% pure Java, the platform may be seamlessly integrated with external applications.

### ***Future friendly***

- Whatever your business or technology needs are today or tomorrow, Espresso can evolve to suit your requirements.

## **CONCLUSION**

Defining, creating and deploying carrier branded value-added services requires careful consideration. Depending on specific business and service requirements, certain offerings may be more or less suited for particular operators.

Instant messaging services offer a compelling value proposition for end users and operators alike. By offering a carrier branded service, wireless network operators may:

- Differentiate themselves from competitors by offering a unique value added service, thus attracting new customers and keeping existing ones loyal
- Integrate service offerings between mobile devices and other popular terminals (e.g. PC, PDA, interactive TV)
- Extend the network operator's brand into the area of compelling value added services
- Control the precise nature (including look and feel, feature set and availability) of the service
- Increase network traffic by facilitating communication between subscribers
- Create new revenue opportunities
- Integrate with complementary value added services (e.g. gaming, financial information, localized content, location based services, machine-to-machine)
- Integrate the service with other carrier backend systems (e.g. billing, CRM)
- Automatically provision subscribers
- Offer creative pricing plans tied to other value-added services or on a completely standalone basis

By leveraging existing network elements and working with experienced IM platform providers, operators can quickly and simply launch a carrier branded instant messaging service. As more advanced networks are deployed, the IM platform can evolve to support a wider range of multimedia features.

In conclusion, a carrier branded instant messaging service is the perfect value added service that combines subscribers' appetites for effective methods of communication with the business requirements of operators. VirtualThere's Espresso is an easy to deploy platform that leverages existing investments in network and service infrastructure while enabling all of the benefits of a carrier branded instant messaging service.

## **CONTACT INFORMATION**

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## VirtualThere Inc.

### ***CORPORATE OVERVIEW***

VirtualThere designs, develops and deploys a comprehensive family of value-added mobile applications, collectively called the Espresso products. VirtualThere's Espresso products enable wireless network carriers and service providers to offer messaging services to their mobile customers. Solutions range from the core Espresso instant messaging platform on which carriers and service providers can develop unique customer-focused applications, to an immediately deployable service comprised of the core platform plus pre-packaged Espresso-ready applications, for the fastest time to market of compelling mobile messaging services.

VirtualThere's Technology Lab is focused on developing SMS applications, location based services, and advanced GPRS and third-generation (3G) wireless applications for mobile network operators.

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