

A **ViaCLIX** White Paper



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Channels Change Everything Channel Based Internet Network For A Mobile World

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Introduction

ViaCLIX's Channel Based Internet Network for cellular phones is powerful technology that will help service providers dramatically increase their profits while providing consumers with an abundance of great features. ViaCLIX's technology simplifies user functionality on mobile devices and gives cellular companies endless opportunities to add new features that have enormous profit potential, including a variety of ways to integrate targeted advertising.

The growth of the Mobile handset industry in the last five years has been unprecedented. Sales of mobile devices and subscription rates continue to break new records. Production of mobile devices is expected to top \$160 billion in 2011. Production of handsets is projected to grow at a rate of 12 percent in 2008. This will account for approximately 1.3 billion units being sold worldwide this year.

Subscription rates for mobile services are also on the rise. Worldwide, it is predicted that mobile subscriptions will grow from 3.9 billion in 2008 to 5.6 billion within the five years. Last year less than 15 percent of all mobile phones sold were 3G devices. However, it is estimated that by 2011 3G networks will service about 29% of all subscribers or approximately 403 million units globally. It is also believed that by 2013, 3G networks will account for almost half of all mobile subscriptions.

Increased competition has forced mobile network operators to lower margins on voice and text messaging services while

continually seeking additional ways in which to expand non-voice mobile services. In the last few years, many value-added non-voice services have become available, from email and music to mobile TV and gaming. Worldwide, these non-voice services accounted for 18.9 percent of total mobile services revenues in 2007. Non-voice revenues are expected to increase to nearly one-quarter of total mobile subscription revenues by the end of 2012, exceeding \$250 billion annually.

ViaCLIX, a leader in Internet content delivery systems, has designed, developed, and patented Channel Based Internet Network technology to help mobile network operators provide their customers with easier to use handsets that have greater functionality and more useful consumer friendly features. The ability for these operators to add further non-voice features to their mobile handsets is absolutely critical for them to remain competitive within the industry.

Overcoming Size With Versatility

Cellular phone companies (both manufacturers and service providers) are constantly moving up and down in the sales ranks depending on what new and unique phone is introduced in the market. In the last couple of years, mobile devices have remained fundamentally the same. They offer similar features with slight variations such as how many megabytes a camera has or weather or not a phone is GSM or G3. Essentially, most mobile phones on the market offer almost indistinguishable features. Because of this, it's no wonder that companies like Apple are able to

sell over a million iPhones the first three days on the market.

From a consumer standpoint, mobile technology presents users with a whole set of challenges based strictly on size constraints. Often times it is difficult to navigate the phone's menu structure that would allow consumers to take better advantage of useful applications. With many phones, for example, a series of steps is needed to simply implement one single action, like accessing an Internet page or checking email. This current, and somewhat clumsy, technology is acting as a barrier that is keeping many consumers away from taking advantage of a wide variety of value-added programs and services that could otherwise be generating substantial revenues for cellular companies.

Additionally, cellular networks, like any other data network, require strict management to monetize their services. Because of this, and because of the untapped potential of mobile devices, it is necessary to start structuring standardized channels that perform predictably in a rules base system.

Previous Options

Prior to Apples' iPhone the only services available on a cell phone, other than voice and text messaging, were picture and some limited video messaging as well as very limited Internet browsing and data feeds.

The ViaCLIX Solution

In January 2001 ViaCLIX was awarded a patent for their Channel Based Internet Network (CBIN), which uses alpha, alphanumeric, or glyphs

(labels, symbols, and / or pictures) to connect the client to a specific channel within a channel network in a rules based system. The patent covers data management issues over IP lines, cellular networks, satellite feeds, and terrestrial cable. CBIN technology organizes data and communications into individual “channels” that have a wide variety of uses essential for cellular companies wishing to expand their services.

Channels are easy as one, two, three. Most people have the capacity to remember a series of at least 5 to 9 digit numbers and almost everyone can remember the channel number of where his or her favorite television or movie channel is located.

Channel numbers are easy to remember. But, channel numbers and channel assignments are really only a small part of the power of ViaCLIX’s CBIN. There are many new and exciting opportunities that present themselves for use in mobile devices by using this technology.

Benefit 1 – Assignable Channels

ViaCLIX’s CBIN allows content providers to assign channel numbers and positions to any web site or content source. Using a hierarchical menu system, mobile companies will be able to organize the web into various popular categories like shopping, sports, and social networking. This serves two significant purposes. It makes it easy for their subscribers to use and provides an important way to for a cellular provider to monetize the placement of a web page.

Using the above example, a service provider sells or leases valuable channel space to websites wishing to participate in a particular directory listing. The cellular company then may list several dozen websites under the general category of “shopping”. Companies like Amazon or Ebay would more than likely be inclined to pay the cellular company a fee to be listed first or to be assigned a channel like “shopping channel 1” (see figure 1). The results are predictable; web companies would be happy to pay for a high menu placement (or a low channel number) and customers would be happy to have an easy and quick way to access their favorite site.



Figure 1
With ViaCLIX's patented CBIN, mobile operators will have the ability to assign web channels to participating websites.

ViaCLIX's CBIN allows users to not only have quick and easy access to a web page, it also lets users surf the Internet on their mobile devices with the simplicity of a two button system...channel up and channel down; just like channel surfing on television.

Benefit 2 - Unlimited Channels

ViaCLIX's CBIN provides mobile network operators limitless "channels" of opportunity. Channels can be assigned to alpha, alphanumeric, or glyphs. This means that there are an infinite number of channels that can be assigned to an endless array of possible applications. The network is literally divided into separate channels that are easy to manage and respond exceptionally well to a rules based system to assure maximum security, seamless access, and clear monetization of services.

Any Widget or application residing on the server can be assigned a channel. For example, a web-based mapping service, such as Google Maps could easily be assigned to a channel with the Google Maps logo as its glyph, thereby allowing the glyph to access the channel. One touch on the glyph and Google Maps is accessed for the user. Likewise, any other application can be assigned a channel based on a number or combination of numbers.

Benefit 3 - New Advertising Paradigms

ViaCLIX's Channel Based Internet Network for mobile devices presents some exceptional new opportunities for carriers to monetize services that

customers expect to receive as part of their subscription package, namely Directory Assistance. Now with CBIN, mobile network operators can provide their customers with an additional service that is not only useful to the customer, but is also a valuable feature and profit center for the provider. The feature is called *InfoChoice*.

With *InfoChoice*, when a caller calls Directory Assistance and requests a phone number for a business, or anything else for that matter, the network can automatically send the caller a text with the requested information contained within an advertising graphic relevant to the caller's request (see figure 2 below).



Figure 2

ViaCLIX's Channel Based Internet Network for mobile devices allows for *InfoChoice*, "branded" text messaging.

The returned information and ad message can be specific to the caller's location or requested location. For example, when a caller connects to the mobile provider's Information center, they are asked "city and state please". Automatically, the system is programmed to access information within that area or region. Now, let's say a caller requests the telephone number for Home Depot in San Jose, California. Several things can happen, depending upon the preferences set by the operator.

Once a caller makes a request for information about a business using Directory Assistance, not only is the number given by voice, a text message is simultaneously sent to the caller with the requested information. Now, with the help of ViaCLIX's CBIN, that text message can be contained within a graphic layout that features advertising for either that business or similar business.

In the example above where a caller asks for the telephone number of Home Depot in San Jose, the resulting text message can be contained within a channel "button" that can give them instant access to Home Depot, Lowes, or the Walmart in that same area of the city.

Advertising messages operate in a similar fashion to keyword searches on a search engine. If a company pays for specific keywords, the server automatically delivers the appropriate advertisement to the handset when a telephone number is requested.



Figure 3

Channels, in the form of buttons, icons, or glyphs make for easy one-touch navigation on small devices.

What makes this type of text messaging even more unique is that the pod that contains the text message is actually a channel or several channels that can be selected to perform one or more of the following actions (see figure 3 above):

- One Touch Direct Connect Dialing or Speed Dialing
- One Touch Access To The Company's Web Page
- One Touch Access for maps and driving directions.

- Displayable coupons for discounts at participating business.

Each one of these actions represents an individual channel within the Channel Based Internet Network for mobile applications.

Additionally, text messages received from the Information Operator could also contain discount coupons or other incentives to help motivate a potential customer to perform some action: presumably to make a purchase (see figure 4).



Figure 4
Channels allow valuable coupons to be sent directly to any mobile device.

Text messages are location driven based upon a couple of simple factors. First of all, most mobile phones contain Global Positioning Satellite (GPS) technology that can place the handset within a traceable area. Secondly, the caller verbally identifies the geographical area in which he or she is interested.

Summary

High consumer expectations and a growing demand for more services to be made available for mobile devices coupled with the need for cellular companies to grow their revenues through new non-voice services requires a significant change in mobile technology. ViaCLIX's CBIN provides that change by opening up new channels of communications within existing networks.

Revenues for mobile network operators for non-voice services is expected to exceed \$250 billion annually and should account for almost a quarter of subscription revenues by the end of 2012. Now the question is, how will these new services be delivered?

With size being an issue for mobile devices, it is essential for cellular companies to offer services to their customers that are easy to access and easy to use. Otherwise, subscribers will seldom, if ever, use these new services. ViaCLIX's unique channel network provides a new infrastructure that is designed to fit within existing mobile networks.

ViaCLIX's CBIN uses alpha, alphanumeric, or glyphs (labels, symbols, and / or pictures) to connect client systems to specific channels within a channel network that can contain an unlimited amount of channels. Each channel is assignable and can be purposed in a variety of ways. Mobile operators can assign channels to websites or can assign a channel to directly dial a phone number.

Channel numbers are easy to remember, so subscribers can easily access their

favorite website with the touch of a button. Additionally, ViaCLIX's CBIN gives mobile operators the ability to increase their revenues through new targeted advertising methods, like *InfoChoice*, which provides branded text message responses from Directory Assistance, mapping services, driving directions and coupon distribution.

These types of programs and services are only the tip of the iceberg of what can be achieved with the use of ViaCLIX's patented Channel Based Internet Network. Channels provide an ideal way to expand any mobile or Internet network to provide a variety of value-added services.

For further information visit www.viaclix.com.

About The Author

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