Disruptive VoIP Services: What Carriers Need to Know

EXECUTIVE SUMMARY

Voice over IP (VoIP) is the most potentially disruptive telephony technology since the birth of the industry, changing every aspect of making and delivering phone calls. Many traditional telecom carriers today transport all of their long-distance voice traffic over IP connections. Some companies deliver phone calls over the Internet for free. Others offer residential or business voice services that function like traditional phone services, but just happen to travel over the Internet. An increasing number of hosted VoIP services are making premises-based phone systems unnecessary for smaller businesses. IP phone systems have become the norm in enterprises.

Such developments have already made VoIP a mainstream communication technology. But while there have been some truly radical advances, VoIP services – in what we may consider the first phase of VoIP innovation – have largely emulated traditional phone service. As a result, VoIP’s disruption of the traditional telecom services business has to date been far less dramatic than many expected.

That first phase has ended, and a more dynamic second phase is now underway. The last few years have seen the development of new kinds of VoIP services with great potential to disrupt the telecom market. In this phase, innovators are attempting more deliberately to undermine the technical and commercial models of traditional telephony.

The changes wrought by VoIP technology will transform the dynamics of the market in ways that provide a significant opportunity to lessen the commercial dominance of incumbent telcos. These changes include:

- **Decentralization** or **virtualization** of application delivery. Because applications and services can serve users from anywhere, there is no need to have nationwide or global infrastructure to be a nationwide or global provider. This drastically lowers the cost of entry into the telecom services market.

- **Democratization** of application development and delivery. The fact that developers and providers no longer have to buy, or gain access to, switching platforms costing millions of dollars opens the telephony business to a far broader range of potential providers.

- **Hybridization** and **integration** of applications and services, allowing developers to make voice one part of larger and more complex services, rather than a standalone service.

- **Enrichment** of applications and services. Because IP connections can deliver various types of data along with the basic voice packets, providers can offer rich services that incorporate everything from universal presence detection to HD voice to integrated video.
However, the extent to which innovative new VoIP services will actually disrupt the telephony market remains far from certain. Incumbent providers still have substantial means to resist such disruption – in part by turning technological innovations to their own advantage.

**Disruptive VoIP Services: What Carriers Need to Know** first clarifies how the concept of disruption applies to the impact of VoIP innovation on the telecom services market. It catalogs the advances that VoIP brings to traditional telephony models, practices, and concepts, then categorizes the innovative VoIP services with the most disruptive potential. It also identifies the economic and commercial forces that will influence the impact of VoIP innovation and projects a number of specific results that this combination of factors will produce.

The report also provides concise profiles of 50 innovative VoIP services and companies that are likely to significantly contribute to the market disruption. For a full list of VoIP providers analyzed in this report, [click here](#).

The radical changes that VoIP technology brings will force any providers that want to keep up with the pace of innovation to rethink some of the most basic concepts of telephony, as shown in the excerpt below.

### Excerpt 1: Telephony Concepts Redefined by VoIP Innovation

<table>
<thead>
<tr>
<th>CONCEPT</th>
<th>FORMER DEFINITION</th>
<th>NEW DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>What a phone is</td>
<td>A single physical device, tethered to a single physical line</td>
<td>Software running on any device; alternatively, a general-purpose computer serving as a handset</td>
</tr>
<tr>
<td>What a phone call is</td>
<td>Discrete point-to-point connection between specified devices</td>
<td>Multi-point connections among any devices connected to the network</td>
</tr>
<tr>
<td>What a phone network is</td>
<td>Linear infrastructure that creates defined paths for two-way communication</td>
<td>Mesh network creating programmable multi-path connections</td>
</tr>
<tr>
<td>When and how voice conversations can occur</td>
<td>Calls have specific beginnings and ends</td>
<td>Voice connections can appear and disappear as needed, depending on context</td>
</tr>
<tr>
<td>How voice connections are initiated or handled</td>
<td>Dialing or pressing keys</td>
<td>Multiple methods, particularly clicking or dragging and dropping</td>
</tr>
<tr>
<td>How call notification is delivered</td>
<td>Ring, wait, answer</td>
<td>Visual notification such as screen pops, or other methods including text messages and tweets</td>
</tr>
</tbody>
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*Source: Heavy Reading*

**Report Scope & Structure**

*Disruptive VoIP Services: What Carriers Need to Know* is structured as follows:

**Section I** is an introduction to the report, with complete report key findings.

**Section II** defines the process by which VoIP innovation disrupts the telecom services market, and describes the various technical, commercial, and theoretical factors that underlie this ability to disrupt.

**Section III** presents 17 types of potentially disruptive VoIP services, describes the sometimes conflicting impact the different types will have on traditional providers and the market in general, and provides examples of each type.
Section IV identifies several broader economic forces that will alter the impact of VoIP innovation on the market, analyzes the changes and trends that this combination of economic and innovative forces will ultimately produce, and predicts the strategies that VoIP innovators and established providers will use to respond to these changes.

Section V provides concise descriptions of 50 companies and services with early-stage or advanced potential to significantly disrupt the telecom services market.

The report is essential reading for a wide range of industry participants, including the following:

- **Telecom service providers**: How will new developments in VoIP technologies and services affect your services, pricing, and ability to compete? Which types of emerging VoIP services have the greatest potential to disrupt your business over the next three to five years? What strategies can your company employ to mitigate or otherwise alter the disruptive effect of VoIP innovation – or turn it to your advantage?

- **Telecom equipment manufacturers**: How do the changes in the telecom services business brought on by VoIP technology change requirements for your core products? Does your technology strategy account for the development and arrival of disruptive services? Is your current product portfolio in line with the projected needs of service providers?

- **Investors**: Which companies are best positioned to benefit from the disruptive potential of VoIP technology? What impact will broader economic forces have on the rapidly evolving telecom services market? Which innovative startups are likely to be acquired by larger players, and which are poised to succeed on their own?

Disruptive VoIP Services: What Carriers Need to Know is published in PDF format.