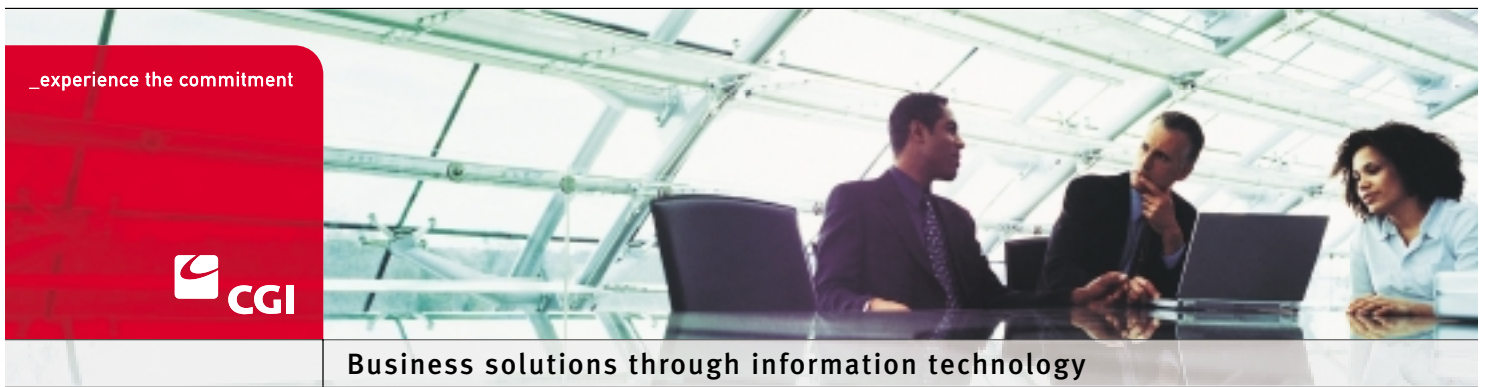


# The Road to Consolidated Billing for Voice and Data Services



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Business solutions through information technology

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## **The Road to Consolidated Billing for Voice and Data Services**

It's no secret that data services can positively affect revenue for wireless and wireline providers. Early adopters have proven that providers can no longer ignore or wait to add these options to their offerings. But to deliver these types of services, many providers are faced with having to update their entire infrastructure—a daunting and expensive undertaking.

This Q&A examines the data services trend and provides recommendations on how to remain competitive. While offering data services will obviously affect the entire operational support system, this paper delves specifically into billing systems. Providers that have optimized billing systems and processes will be able to improve revenue streams while providing positive customer experiences.

### **Where are wireless and wireline providers in offering data services?**

For wireless providers, significant revenue benefits from data service have already been realized. The technology infrastructure for voice and data capabilities is ready today. As available network capabilities and bandwidth increase and voice margins decline, brand-new data services will continue to be introduced.

The wireless trend is clear—providers' profitability will increasingly depend on their ability to roll out successful data-based products. These providers are limited only by their imagination.

In contrast, wireline providers have been slower to realize these benefits because the IP-based networks that provide a foundation for advanced data services are still in the adoption phase. A significant amount of resources would be required to invest in a new infrastructure.

At the same time, new and smaller wireline providers with no legacy infrastructure have undercut large operators by offering voice services at a fraction of the price. The U.S. Federal Communications Commission's hands-off approach to VoIP regulation has contributed to helping these new entrants. Adding to this competition are cable operators entering the market and new customer demands: businesses are asking to consolidate their fixed-wire voice and data networks.

### **Given these trends, what can providers do to remain competitive?**

Increasing competition shows that a focus on cost reduction can no longer be providers' all-encompassing strategy. With voice margins declining, it is an imperative that both types of providers look for new revenue streams—innovative data-based products.

This is especially challenging for large fixed-wire operators. They must figure out how to compete with new entrants and wireless providers. Reducing price alone won't do it. As wireless bandwidth increases with the introduction of new networks, new products and services must be introduced to give fixed-wire customers a reason to stay.

### **Focusing on the specifics of billing, what should providers look for in their billing systems to effectively offer data services?**

There are several factors driving “requirements” for a future billing system. Therefore, providers should look for the following characteristics.

#### **1. Speed and efficiency**

The speed and efficiency with which new products and services are introduced will be critical to success. They are essential to maintain a competitive edge in product innovation, and to respond quickly to competitive pressures. Past examples provide valuable lessons learned, such as the introduction of MCI's “Friends and Family” service in the early 1990s. MCI was far ahead of the pack, and it took much too long for competitors to react.

## 2. Flexibility

Given this requirement, flexibility is paramount-providers must be able to react to the unpredictable. Their future billing system choice cannot be based on current requirements, as these are bound to change quickly. Challenge each billing system supplier to articulate its other features. The ability to bill on call duration, data, and content is mandatory today-the question is “What can the supplier provide beyond this?”

## 3. Modularity

Providers must also look for modularity. A monolithic end-to-end offering takes too long to implement and-should a provider need to-replace. Even if a provider buys everything from one supplier, that provider must find out how modular the solution is and how easily part of it could be replaced. Modularity can speed up deployment and allow providers to quickly put into production the part of the new system that addresses the biggest pain point.

## 4. Compatibility

Providers should also find prepaid/postpaid compatibility. In Europe most of the wireless traffic is prepaid-a trend that is increasing in the United States. The barrier between prepaid and postpaid systems is coming down. In future-generation networks prepaid/postpaid “hybrids” may be more common. A billing system should be able to handle both.

“Billing for data” means being able to bill for any “event” type. Such events can be based upon a variety of measurable quantities-such as “bullets” or “lives” in online gaming-or a combination of different rating parameters. For example, data downloads could be based on the combination of bytes and type of events-ring tones, music, games.

Data-based billing needs to incorporate quality and class of service, and potentially, location-based services, and support today’s voice-based products.

### **Traditionally, wireline providers have operated with a large number of disparate billing systems. Given the fiscal constraints these providers have to operate under, what sort of strategies should providers with a large number of systems employ?**

The days of introducing yet another billing system for a new product are gone. The name of the game is billing system consolidation. The challenge, however, is to secure funding for such consolidation while introducing new data-based products without a huge investment. To address this, adopt an approach that helps consolidate over time.

There are several approaches that can be taken. For example, a provider could use a “rebill” that imports data from legacy systems; in time, as the existing systems retire, the rebiller can gradually become the billing system of the future. Or an “adjunct rater” can be used to supplement some of the existing billing system capabilities, while simultaneously working toward consolidation.

For providers with a large number of systems, a key strategy can be gradual migration. A gradual upgrade is easier to justify and decreases risk as opposed to a big-bang implementation.

### **What else should providers look for in readying their billing systems for data services?**

Data-based billing should enhance customer experience and support the easy definition of business rules. In situations where the actual quality of service is lower than the provisioned one, business rules should determine how the customer can be compensated prior to getting the bill and calling customer service. Naturally, convergent bundles are important, as is offering attractive cross-product discounts. It is important to remember that nothing is out of bounds. Providers must expect the unexpected and be prepared for it-they must start asking the right questions.

**Is there still time for providers to wait and see what other trends develop?**

When IBM introduced its first PC in the 1980s, it had a 4.77MHz Intel 8088 processor and 16Kb of RAM. In today's prices, it would cost around \$4,000. A hit at the time, it would only be bought today by a collector. This example demonstrates that no provider has the option of hoping customers will buy today's offerings in 10 years time. The absence of action today will make it much harder to compete tomorrow. Displaying the innovation, creativity, and market understanding to introduce data-based products will differentiate the leaders from the rest of the pack and increase their customer base. A state-of-the-art billing system that handles voice and data services is a key element of being able to offer that vision to customers.

**CGI BILLING SOLUTIONS**

CGI specializes in delivering high-volume, high-performance billing solutions to communications providers of all sizes around the globe. Through management consulting, outsourcing services, systems integration expertise, and technology solutions, we help reduce costs while maintaining superior customer service. CGI also delivers the market-leading billing application suite for communications providers-CGI-AMS Tapestry®-to facilitate the entire billing cycle.

Together, our products and consulting services meet communications providers' needs to build a more cost efficient business, minimize risks, and provide a consistent customer experience across channels and functions. CGI has long had a specialization in this area.

**About CGI**

Founded 1976, CGI has worked with clients in a wide range of industries to help them leverage the strengths of information technology (IT) to optimize their business performance and produce value-driven results. We also offer a comprehensive array of business process outsourcing (BPO) services, enabling us to help manage and improve our clients' day-to-day business processes while freeing them up to focus more on strategic decision making. Our consulting, systems integration and outsourcing services provide a total solution package designed to meet our clients' complete business and technology needs. We approach every engagement with one objective in mind-to help our client win and grow. CGI provides services to clients worldwide from offices in Canada, the United States, Europe, as well as centers of excellence in India and Canada.

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