



# Decisions..Decisions..

Determining the Best Communications  
Solution for Financial Services Companies

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making  
communications  
easy.



## Table of Contents

Overview	<b>1</b>
Communications Decision Criteria for Financial Services Firms	<b>2</b>
VoIP over Broadband	<b>3</b>
Build Your Own VoIP Solution	<b>4</b>
Hire a Vendor to Build a VoIP Solution	<b>5</b>
IP Centrex	<b>6</b>
Voice and Multimedia as a Service	<b>7</b>
Selecting an Outsourcing Partner	<b>10</b>
Summary	<b>11</b>

### Overview

In a financial services environment, your IT systems are the lifeblood of your enterprise. A financial services firm's success depends on how quickly its employees can gather market intelligence, communicate information and complete a transaction. Each of these components needs to take place in real time, with unyielding reliability. This dynamic and complex business environment is often further complicated by the need to communicate 24/7 on a global basis.

IT executives at financial services firms not only have the challenges that their contemporaries face in other vertical markets, but must also consider how to use IT systems to best implement and support:

- Corporate compliance regulations and standards
- Business continuity
- Access to reliable, secure, always-on infrastructure
- Maintaining competitive advantage using innovative technology
- Improved user productivity
- Maintaining focus on the firm's core competency
- Multiple locations
- Remote workers

This paper will address how CIOs can use telephony—specifically VoIP (Voice over IP) to address specific strategic concerns that are unique to the financial services industry. The paper will explore multiple ways to implement VoIP—building a custom network, hiring a vendor to build and implement a solution or leveraging outsourcing to meet VoIP communications needs. Each of the VoIP models will be explained in detail with benefits and drawbacks clearly identified. Increasingly, financial analyst firms are taking into account a company's ability to manage risk when assigning credit ratings and other financial indices to the company. Because of the importance of risk management and its impact on corporate ratings, this paper will also introduce the concept of inherent business continuity within the outsourced or hosted VoIP model. In many instances, the business continuity provided with a hosted VoIP solution fulfills the redundancy and business continuity requirements that are needed by financial services firms.

IT executives at financial services firms not only have the challenges that their contemporaries face in other vertical markets, but must also consider how to use IT systems to best implement and support:

- Corporate compliance regulations and standards
- Business continuity
- Access to reliable, secure, always-on infrastructure
- Maintaining competitive advantage using innovative technology
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## Communications Decision Criteria for Financial Services Firms

Although there will be variations within individual solutions, for purposes of discussion, major solution "scorecards" will use the following broad-based rating system:

-  Advantage
-  Neutral/Caution
-  Disadvantage

There are a wide variety of VoIP solution alternatives available and no single solution is the best choice for every environment. In addition, each business has unique attributes and abilities that should be matched to an appropriate telecom solution. Although every business is unique, key considerations for communications solution purchases typically include:

**Call Quality:** Ability to provide consistent service with a minimum of noise, distortion, dropped calls, etc.

**Business Continuity:** Can the solution provide uninterrupted service in the event of a disaster? Can users easily relocate with full communication capabilities? Is the system geographically redundant? Are system components redundant?

**Security:** A measure of the system's ability to provide secure communications and resist malicious activity.

**Ease of Use:** A measure of the effort required to deploy the system in the enterprise. Also, a measure of the user-friendliness and adaptability of the system.

**Product Capabilities:** Richness of product capabilities, including call management, collaboration, conferencing, messaging, mobility, remote access and other premium VoIP features.

**Cost Savings:** A measure of the relative affordability of the system.

**Technical Support:** A measure of vendor problem resolution and training capabilities.

**Vendor Maturity:** A measure of overall vendor capabilities, maturity and viability.

## VoIP over Broadband

VoIP over broadband applications include low- or no-cost peer-to-peer services, or voice applications embedded into instant messaging products.

Frequently these services are positioned as a replacement for a home telephone line or as an adjunct solution for point-to-point calling. Most commonly, these services provide single or dual line telephone features via software (a soft client) or a conventional telephone handset attached to a special network adapter.

Advantages of this solution include ready availability, low cost and relatively small commitment, making it an excellent choice for residential voice service or for home office use.









Disadvantages include factors such as inconsistent call quality, reliability and functionality. Because these approaches rely on "best effort" public Internet connections, call quality will be subject to transient and uncontrollable network congestion issues. For similar reasons, the systems generally offer poor reliability/recovery and security protections. Firms that require business continuity planning for their communication systems may find that this solution falls short of their expectations. Further, systems may have limited capabilities to communicate with phones on the traditional public switching telephone network (PSTN). Vendor maturity and technical support capabilities often fall short of enterprise expectations.

While these products typically offer basic voicemail or fax support, they generally lack the more expansive feature sets, scalability, business continuity options and system integration capabilities of credible enterprise-grade telecom solutions.

### **MOST SUITED FOR:**









Small Office / Home Office (SOHO) use.

### **SCORECARD:**

Call quality	
Product capabilities	
System reliability	
Security	
Ease of deployment	
Cost savings	
Technical support	
Vendor maturity	

## Build Your Own VoIP Solution

### SCORECARD:

Call quality	
Product capabilities	
System reliability	
Security	
Ease of deployment	
Cost savings	
Technical support	
Vendor maturity	

This do-it-yourself solution requires the enterprise to build the VoIP network, purchase the switch(es) and equipment, acquire and integrate the various software components and then manage everything in-house or hire outside vendors to manage it.

While it's a solution that offers maximum customization and control, it is also capital intensive, resource intensive and does not include inherent business continuity. To take advantage of all the features and benefits of a custom VoIP solution, the enterprise is essentially forced to become a phone company and will most likely have to juggle the management of multiple vendors and a custom integration. If business continuity is required, additional costs will also be incurred.

According to recent surveys, many enterprises have found that building and deploying a VoIP system is much more complex than they expected. As for financial services firms, the large numbers of legacy systems tend to make global enterprise networks "networks of networks"—that is, systems and networks that lack integration and are poorly linked. The result is often inefficiency, high cost, inadequate business continuity, and an inability to deliver new bandwidth-intensive applications. For financial services firms with legacy networks, entire corporate networks may need to be replaced in order to successfully implement an enterprise designed and managed VoIP solution.

### MOST SUITED FOR:

Businesses that require complex customization that cannot be supported by other VoIP applications; have large sums of capital to invest in the network and a large IT staff; are willing to manage multiple vendors; don't require a business continuity solution or are willing to pay extra dollars for it.

## Hire a Vendor to Build a VoIP Solution









While hiring a vendor to build a VoIP solution makes the deployment a little less frustrating for the enterprise, there are significant drawbacks. Since the infrastructure can be located at the vendor's premises, the enterprise will lose some of the control. It's still capital intensive, requiring companies to purchase everything up front and then pay the vendor to manage and maintain it. The management of multiple vendors may be required. Typically, the vendor who builds the VoIP network is not the same vendor who supports it.

This solution typically has poor LAN/WAN management and business continuity, and it can cost significant dollars to contract these additional components. At the end of the day, the enterprise may still not connect to a VoIP network designed and managed for highly secure IP communications. Many of these approaches utilize IP for internal communications, but then simply connect to the same old telephone network and compromise your geographic redundancy.

### **MOST SUITED FOR:**

Businesses that require complex customization that cannot be supported by other VoIP applications and have large sums of capital to invest in the network. (Note: Requires more capital than the "build your own VoIP network" approach, but can be implemented with a smaller IT staff. ) Firms must be prepared to manage multiple vendors and realize that LAN/WAN management is typically separate. Geographical redundancy is typically poor, unless the firm is willing to pay extra dollars for a business continuity solution. The firm must also be willing to pay for upgrades and maintenance for the life of the system.

### **SCORECARD:**

Call quality	
Product capabilities	
System reliability	
Security	
Ease of deployment	
Cost savings	
Technical support	
Vendor maturity	

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## IP Centrex

### SCORECARD:

Call quality	
Product capabilities	
System reliability	
Security	
Ease of deployment	
Cost savings	
Technical support	
Vendor maturity	

IP Centrex is a VoIP technology that is especially suited to many business requirements. IP Centrex is generally defined as an IP-based, provider-hosted network service on a shared platform.

IP Centrex puts high-quality unified communications functionality on the desktop and eliminates the need to purchase, install and maintain complex on-premise telecom equipment. IP Centrex's flexible "pay-as-you-go" subscription model easily adapts to changes in business locations, employee counts and other issues that often lead to premature obsolescence of on-premise PBXs and handsets.

Key benefits of IP Centrex services include flexible pay-as-you-go subscription options, minimized capital expenses and reduced maintenance headaches.

However, it's important to find a Centrex vendor that supports flexible and innovative applications. Further, since reliability and security are network-dependent, it is important to have a single, qualified vendor managing both the IP Centrex service and local network architecture.

Along the same lines, it is important to select a Centrex vendor with appropriate maturity, technical experience and geographic coverage. Some of the drawbacks to look for when selecting an IP Centrex provider include: limited service set, narrow geographic span, unmanaged LAN/WAN, lack of end-to-end solution and absence of a national network for business continuity protection.

### **MOST SUITED FOR:**

Businesses that have limited needs for advanced VoIP applications and are prepared to settle for an unmanaged LAN / WAN solution, limited flexibility, functionality and geographic redundancy. Firms that select IP Centrex typically lack internal technical expertise and have limited capital resources.

## Voice and Multimedia as a Service

Voice and Multimedia as a Service (VMS) is a VoIP technology that is especially suited to the requirements of financial services firms. VMS can be defined as an IP-based, provider-hosted network service on a shared platform. It has the basic features of legacy Centrex, along with significant additional features and functionality derived from or made practical by IP technology, such as presence, collaboration, video conferencing and video calling.









Overall, VMS is well suited for:

- Multi-site businesses and distributed organizations.
- Businesses with mobile and remote teleworkers.
- Businesses with limited internal technical expertise or businesses that plan to focus IT resources towards business-centric activities.
- Businesses who don't want to be in the phone business.
- Businesses that need to minimize capital expense and retain flexibility.
- Businesses that plan to redirect telephony capital expense to capital expenditures that impact the core business.
- Businesses concerned about disaster recovery, business continuity and Internet security issues.
- Businesses concerned with relocation issues or opening new branch offices.

VMS puts high-quality unified communications functionality on the desktop and eliminates the need to purchase, install and maintain complex on-premise telecom equipment. VMS's flexible "pay-as-you-go" subscription model easily adapts to changes in business locations, employee counts and other issues that often lead to premature obsolescence of on-premise PBXs or legacy Centrex service models.

In many ways, unified communications via VMS is the desktop equivalent of mobile telephony. For example, because mobile carriers deliver high-quality functionality—voice, data, messaging and video—to the handset, no one even thinks of putting a PBX into their jacket or car trunk. The brains and functionality are all in the network. VMS works the same way. The brains and functionality are all in the network, and it works great.

### SCORECARD:

Call quality	
Product capabilities	
System reliability	
Security	
Ease of deployment	
Cost savings	
Technical support	
Vendor maturity	

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*Continued from Page 7*

VMS also makes it easy to consolidate far-flung business locations into a cohesive enterprise telecom system. It typically features all of the traditional functions enterprises expect such as 4-digit dialing, call transfer and voice conferencing, with the added features of advanced collaboration, unified messaging and other key capabilities, making it ideal for multi-site or distributed enterprises, mobile employees and teleworkers. Unified messaging and mobility are key for financial service firms that never want to miss a customer call.

VMS can also deliver reliability and security advantages that translate to less downtime, more flexibility and fewer headaches for enterprises. For example, in the event of a local or regional disaster (fire, hurricane, etc.), the remote VMS can provide better recovery and/or business relocation capabilities as compared to on-premise equipment. Further, VMS puts the burden of Internet security maintenance onto the vendor. Although this does not eliminate security threats in general, the VMS vendor's technical expertise can keep security problems out of the enterprise and mitigate threats that might otherwise disrupt on-premise IP-PBX equipment.

VMS also offers advantages such as simplified staffing requirements, predictable expense structures, reduced telecom fees and lower total cost of ownership. It is known to be an efficient, secure, reliable, easy-to-use solution.

The upside of this solution is profound: It has the potential to provide huge telecommunications savings, increased bandwidth for movement of larger pieces of data, more flexibility for mobile workforces, more security for disaster-recovery and business-continuity backup systems, more CRM capabilities, and more options for in-house training with video and other applications.

With VMS, there is a single vendor for the entire solution. There's no capital outlay; telecom is treated as a standard P & L expense, freeing capital for other projects that are more central to the organization's core business. The solution also contains inherent business continuity at the component and network level. Nationwide distribution provides additional geographic redundancy.

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On the downside, the enterprise does not own the equipment and no capital investment is seen on the balance sheet. The enterprise does not manage and is not “in control” of the solution.

### **MOST SUITED FOR:**

Firms that require advanced, customizable VoIP applications to support remote locations and teleworkers or to improve business processes with real-time presence information, video conferencing and calling, secure chat and unified messaging. Ideal for firms that don't want to be in the phone business and wish to avoid managing the solution in-house; have limited IT staff and limited capital or are seeking to avoid capital expense; and firms that require a robust business continuity solution.

## **Business Continuity – Is Your Firm Ready?**

Any unplanned event—from a simple power outage to a natural disaster or terrorism—can negatively affect any company, but financial services firms are especially vulnerable. IT systems that enable core business operations can collapse under the weight of a severe disruption and employee displacement. Increasingly, business continuity centers on information availability and operating an always-on network, a challenge that transcends traditional disaster management contingencies.

When surveyed, most IT executives report that their business has encountered at least one disruptive event—such as a significant power failure, hurricane, flood, terrorist event, tornado or earthquake. The question is not “if” an enterprise will need to use their business continuity procedures, but “when” your planning and preparations will be required and fully tested during an emergency situation.

Of all the benefits attributed to Voice and Multimedia as a Service (VMS), perhaps the inherent business continuity protection is the most

valuable to an enterprise. National VoIP-specific networks generally locate all VoIP transport components in geographically diverse data centers to provide for redundancy and high availability. All data circuits can route to different locations so that if any building is damaged or destroyed, data integrity and connectivity isn't compromised. And, if employees lose their ability to communicate in one location, the communications service is simply transferred to a secondary location, or distributed among employees as they work from home.

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## Selecting an Outsourcing Partner

Outsourcing strategic projects can help you gain larger-scale, enterprise-wide value quickly and efficiently. When considering outsourcing in support of strategic business objectives, IT executives are encouraged to consider the following:

*What is the ROI of the build vs. outsource decision?*

*What is the relative total cost of ownership in outsourcing VoIP vs. managing internally?*

Best practices show that managed VoIP providers should offer:

- Purpose-built VoIP network and applications
- Enterprise-wide solutions
- National coverage with geographic redundancy
- Proven implementation capabilities
- Guaranteed service levels
- Strong financial and corporate stability
- Considerable experience with “voice as a service” approach to telecom
- Real-time, around the clock network monitoring
- Self-correcting network with high-level of security
- SIP open standards

## Summary

The wide array of advanced VoIP communication services support compelling and innovative business applications that far exceed the capabilities of legacy telecom equipment.

When business needs and capabilities align with the right technologies and partners, the answer to urgent VoIP purchase questions -- Is the quality good enough? Is it safe? Will it work? -- is a resounding and enthusiastic "Yes".

While there is no "one-size-fits-all" solution for enterprise-class VoIP telecommunications, hosted alternatives such as Voice and Multimedia as a Service (VMS) allow financial services firms to acquire innovative, feature-rich telecommunications with inherent business continuity capabilities while minimizing the deployment and maintenance headaches of traditional on-premise systems. When considering hosted VMS services, businesses should look for stable, experienced vendors with the ability to reliably deliver enterprise-wide connectivity and functionality. With the right partner, financial services firms can leverage their new VMS capabilities to improve collaboration, work more efficiently, enhance flexibility, control costs and build competitive advantages.

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Boasting a 20-year legacy and more than 6,500 customers coast-to-coast, Cypress is one of the nation's largest providers of end-to-end managed communication solutions for mid-sized businesses. Cypress provides advanced IP phones and voice over IP services with cutting-edge multimedia desktop applications like Microsoft Outlook integration; unified messaging; video calling; and audio, video and Web conferencing. As a Deloitte Fast 50 and Fast 500 award recipient, Cypress is also recognized as one of the fastest growing telecommunication companies in North America. Cypress is headquartered in Atlanta, GA. The company's Web address is [www.cypresscom.net](http://www.cypresscom.net).

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