

# IDC ExpertROI® SOLUTION BRIEF

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## Assessing the Business Value of Unified Communications

*Sponsored by: HP*

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### Overview

Unified communications (UC) combines advanced IP telephony calling and management; unified messaging (email, fax, and voice messaging combined); Web conferencing, audio conferencing, and videoconferencing; mobility; instant messaging (IM); and pervasive presence management and awareness — all accessible through common user interfaces on desktop and mobile devices using voice or tactile controls. Unified communications and collaboration (UC&C) is a term that emphasizes the increasingly important role that collaboration applications and services are playing in support of the needs of UC customers. Collaborative applications software and services provide the user interfaces, repositories, and computer logic required for individuals and groups of users to interact, coordinate tasks, and share information in real-time and non-real-time models. Increasingly, we are seeing interest among enterprise customers in integrating unified communications and collaboration technologies with business processes or applications. This functionality is sometimes referred to as communications-enabled business processes (CEBP).

### The Importance of Services

Projects to deploy and integrate UC&C solutions and applications can be complex for many organizations. Choosing the right vendor, or vendors, is a key step in the ultimate success (or failure) of these projects. UC requires a rich partner practice in networking, voice, and, increasingly, video, mobility, and social media. Customers are demanding these professional services capabilities as well as expertise in the integration of UC with workflow and vertical applications, prompting the following recent IDC top 10 prediction for UC:

- ☒ In 2012, UC&C professional services expertise will become an even more important differentiator.

UC is a truly transformative technology, but today, it requires a significant services component to assist organizations in leveraging this new way of working. Long-term competitive advantage requires a radical rethinking of the existing communications model, a deeper focus on innovative approaches, and, most critically, a closer alignment of communications strategy with users and business performance.

To emphasize the importance of services, we note that in 2011, UC&C professional services accounted for a significant portion (16.5%) of IDC's total worldwide UC&C revenue forecast of \$22.8 billion.

### **Network Considerations for UC**

IDC forecasts the worldwide enterprise network equipment market will reach \$42.6 billion in revenue in 2012. We expect UC components such as IP telephony, video, and mobility to be main drivers for network upgrades and expansions. IP telephony, in particular, is expected to garner about 19% of the total enterprise network equipment market revenue for 2012, the second largest component in our forecast behind Ethernet switches (50%).

Most legacy networks are not equipped to support higher-level UC and CEBP deployments, especially when real-time applications such as voice and video are added to the mix. The network infrastructure is a critical component for UC success that tends to be overlooked by many customers during the process of selecting and deploying the right UC solutions. At a basic level, when replacing a legacy TDM PBX with a new IP telephony solution, for example, a full assessment of the customer network to handle voice, video, etc., is typically an initial part of the deployment process mandated by the vendor or partner. This assessment can identify components in the existing network that may need to be upgraded or replaced to accommodate real-time communications — data switches, routers, gateways, and other related components — and is considered a critical step in any deployment process. In addition, a network upgrade assessment should be the time for companies to rethink their data and communications strategies and comprehend new uses of technology, not just do a "like product" for "like product" refresh.

As a result, a properly assessed and upgraded network infrastructure for UC can meet short-term customer requirements and provide additional benefits for meeting a customer's longer-range networking strategy for UC&C, including the following:

- ☒ A scalable network infrastructure to accommodate long-term growth
- ☒ Provisioning a communications architecture based on standards, such as SIP, for supporting things like multivendor interoperability and future UC solutions and applications
- ☒ Increased LAN/WAN capacity for multimedia communications such as voice, video, and collaboration
- ☒ A low-latency, high-performance network that supports end-to-end quality of service (QoS) to ensure a superior user experience
- ☒ Fast network convergence and failover capability to eliminate jitter, frozen frame, and dropped voice conversations and video sessions (i.e., survivability)
- ☒ Enhanced management and administration capabilities, especially for UC

### **Selecting the Approach to UC**

As UC continues to experience greater adoption in the market, companies evaluating solutions in this area must consider whether to pursue a "single vendor" or "best in class" approach to deploying the new technologies. In reality, because UC typically involves the integration of several different communications and/or collaboration applications, many organizations opt for a dual-vendor or multivendor approach. The logic behind this approach is that no one UC vendor can provide all of the optimal solutions, applications, services, etc., across its portfolio (although many would like you to think so).

Although not specific to UC, there is some compelling thought in the market that customers can actually save money on capital, maintenance, and operational costs by implementing a dual-vendor approach to provisioning enterprise network components. However, IDC cautions clients that once the networking deployment approach moves beyond two vendors (i.e., a multivendor approach), the complexity tends to increase.

During the assessment and evaluation of which approach to take, customers must clearly identify which technologies, features, and applications are most appropriate for their organization and, more importantly, which source(s) they should turn to for deployment and expertise. IDC research clearly shows that there is no "one size fits all" solution for UC adoption, which enables customers to choose from an assortment of vendors and features to meet their UC needs. However, many customers are still grappling with the UC concept within the context of their own businesses, and many have already experienced the challenges of UC projects.

Layered on top of the complexity of determining which vendor(s) to work with for UC solution deployments is the critical consideration of expense. How much will the UC solution cost us for networking equipment and support services? Will our company derive tangible benefit in the areas of increased productivity — both for IT staff and our end users — with this solution, or will we have an initial trough in those areas if it takes a lot of resources to ramp up to a new solution?

### **Business Benefits of UC Solution**

IDC considers the following some of the major operational and productivity benefits that companies can realize from the successful deployment of a UC&C solution:

- ☒ Brings together a range of UC features and functions — IP voice, IM, presence, Web conferencing and videoconferencing, mobility, integration with calendars and contacts, email, access to business and media, and other applications — making them easier to control and manage
- ☒ Bridges disparate geographic regions and workers, including mobile workers
- ☒ Enables effective, agile production from any user or device, from virtually any location
- ☒ Facilitates employee "bonding" via more open, formal data sharing and collaboration
- ☒ Brings people out of their "silos" — their work is not an entity unto themselves; they need to collaborate and share in order to vet and refine their work
- ☒ Allows individuals and workgroups to absorb/interpret the same information at the same time, greatly enhancing overall comprehension levels
- ☒ Reduces finger pointing — everyone is on the same page regarding important collaboration projects and decisions
- ☒ Allows companies to tap into new sources of data and information for enterprise purposes — such as social media
- ☒ Supports intuitive worker interactions via multiple media streams
- ☒ Reduces cost of communications services
- ☒ Reduces spending on power, datacenter space, and hardware
- ☒ Improves technical performance (system availability, reliability)
- ☒ Enables enhanced monitoring of the company's communications infrastructure

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## The HP UC&C Portfolio

Working in conjunction with UC platform partners such as Microsoft, Avaya, and Polycom, HP provides unified communications, collaboration, and messaging services and consulting specific to the UC market. HP's multiyear strategic global initiative with Microsoft, for example, covers product development and integration activities around Microsoft Office SharePoint Server, Microsoft Exchange Server, and Microsoft OCS/Lync with HP networking products, HP TouchSmart Business PC and select smartphones, new HP IP phones for Lync, and HP Business Technology Optimization (BTO) software for Microsoft OCS — all toward the goal of delivering an end-to-end UC solution.

Today, HP can deliver a complete Microsoft Lync solution from endpoint devices (e.g., PCs or IP phones) to the datacenter while also providing a survivable Lync solution for the branch, if access to the WAN is lost. This solution employs the advantages of the HP Converged Infrastructure (CI) with Microsoft Lync. In addition, HP provides a range of enterprise infrastructure, network, storage, server and virtualization, and critical facilities services.

The HP Enterprise Communications Architecture (HPECA) is a framework that HP uses — based on open standards and design and key access and integration points — to promote the preservation of customers' existing equipment investment and multivendor integrations. Among other benefits, the HPECA framework clarifies the existing UC components no matter who the vendor is and promotes the best decision-making process for a multivendor system.

Specific HP UC services include the following:

- ☒ UC Business Value Analysis Services (i.e., Communications Enabled Solutions, Virtual Workplace, and Voice Transformation)
- ☒ HP Education Services
- ☒ HP Branded Support Services

HP Converged Infrastructure is aimed at IT organizations in large and midsize enterprises and service providers that want to shift their resources from 70% focused on operations to 70% focused on innovation. HP CI is a blueprint for the datacenter of the future. It can accelerate the provisioning of IT services and applications (by up to a 4x factor) by integrating HP servers, storage, networking, security, power, cooling, and facilities into shared pools of interoperable resources — all managed through a common management platform and delivered via HP services. Benefits realized from moving toward infrastructure convergence include accelerating return on investment (ROI) by:

- ☒ Doubling utilization through virtualization and creation of virtual resource pools (via HP servers, storage, and networking solutions)
- ☒ Leveraging existing investments through HP's heterogeneous management capabilities — incorporating existing assets in a converged infrastructure (in lieu of a rip-and-replace strategy)
- ☒ Reducing energy costs using HP's SmartGrid technology (and tripling datacenter capacity)

The HP FlexNetwork Architecture (FlexNet), considered a complementary component to HP CI, comprises four functional building blocks that are interrelated: FlexFabric, FlexCampus, FlexBranch, and FlexManagement. These building blocks allow customers to segment their networks and align them with their business needs, even as those needs change. FlexNetwork gives organizations a consistent approach to securing all segments of the network — datacenter,

campus, and branch. It is designed to allow IT to manage these different network segments through a single pane-of-glass management application, the HP Intelligent Management Center (IMC). FlexNetwork is based on open standards, giving enterprises the freedom to choose the best-in-class solution(s) for their businesses. It enables enterprises to securely deploy and centrally orchestrate video, cloud, and mobile-optimized architectures that scale from the datacenter to the network edge. FlexNet's two-tier architecture provides lower latency, higher performance, and fast failover protection. It supports core switching from 10GbE to 40GbE and is 100GbE ready.

HP has positioned FlexNetwork as the architecture for supporting rich media communications — including videoconferencing and telepresence — which is rapidly becoming an integral part of business applications for many organizations these days. One of IDC's top 10 enterprise networking predictions for 2012 states that video will be the main driver for network upgrades, as the growing number of video deployments is placing a significant burden on enterprise networks. Enterprises deploying video applications must implement flatter, simpler datacenter networks to support the bandwidth-intensive, delay-sensitive rich media traffic associated with video applications. Among other benefits, FlexNetwork can help enterprises securely deploy and centrally orchestrate video-optimized solutions.

### **Considerations for a Best-in-Class Approach to UC&C**

A best-in-class approach can involve solutions from several vendors, such as Microsoft (for IM, presence, and collaboration), Avaya (for IP telephony), and Polycom (for videoconferencing), coming together to interoperate within the UC solution.

This approach enables a combination of the best solutions available on the market to be used as part of the solution, giving a customer the advantage of choice. Depending upon compatibility, interoperability, and level of integration, this strategy enables a customer to pick and choose the best solutions from the best vendors. But a high level of integration expertise must also exist either within the customer's IT organization (less likely today) or through systems integrators (SIs) such as HP and channel partners with formal UC practices in place to ensure that all the chosen products and solutions can interoperate well as one.

Lower-cost endpoint devices from a third-party vendor can be selected for deployment with the UC solution. End-user devices can account for a significant portion of the total UC solution investment, typically ranging from 25% to 35% of the total cost of the new solution in many cases. So any price efficiencies that can be realized in this regard can be significant for the customer from a hardware cost-savings perspective.

Conversely, third-party end-user devices typically do not support the full set of features and functions that the single-vendor solution devices support. Also with the best-in-class approach, key functionality such as security features and unified management capabilities across the portfolio may be limited as well.

Choosing a standards-compliant UC platform, such as a SIP-based solution, can facilitate an overall easier integration process for everyone involved in a best-in-class scenario. Open standards such as SIP enable better interoperability between different elements and help create a more flexible and complete solution. Plug-and-play provisioning for SIP phones, for example, can help simplify the installation, especially in cases where third-party phones are selected in a best-in-class approach. SIP will also prepare the customer for future product road map offerings and integrations.

The best-in-class approach enables customers to leverage any critical business technology or infrastructure investment they have moving forward, alleviating the need to rip and replace it for a new solution. Instead, they can opt to integrate their existing equipment with the new UC solution until the equipment has been amortized over its useful life, or even beyond.

Best-in-class vendors typically are more focused on what they do best and tend to support richer, more open interoperability of their key technology products and applications to more easily integrate with other vendor products. However, a best-in-class choice can involve more than one integration partner and may introduce more time, cost, and complexity into the UC deployment process.

Customers who use a best-in-class approach are not locked into a future decision with any single vendor; thus, they have more long-term control over their UC technology direction. Customers can decide what UC technology they actually need, save money by avoiding what they don't need, and focus on the best-in-class approach for solving each technology issue they face versus trying to address their issues with a single-vendor approach (and possibly overpaying).

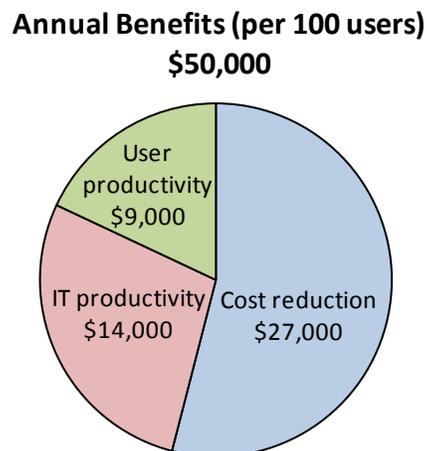
A standards-based approach — most importantly, one that is tested, validated, and certified, such as the HP UC approach — can mitigate the risk for customers and reduce time to service deployment.

### IDC's Methodology for Quantifying the Business Benefits of IT Solutions

IDC looks at both quantifiable and qualitative benefits of technology. The quantifiable benefit is a function of translating improvements in key metrics, such as reducing downtime, into financial savings. To help "normalize" and communicate the benefits of software solutions to clients in a "scalable" way, IDC quantifies total benefit value in terms of *dollar savings per 100 end users*. Thus, the total business value is expressed in a way that organizations of varying size can extrapolate as they deem appropriate. This value is a measurement that quantifies specific key metrics presented in the following narrative.

Over the past couple of years, IDC interviewed several companies that have deployed unified communications solutions. The data presented in this document reflects their aggregate experience. To illustrate the impact, we are using an enterprise with 1,200 employees. Such a company could achieve annual benefits of \$50,000 per 100 end users. IDC groups quantifiable benefits into three major groups, as shown in Figure 1.

Figure 1.



Source: IDC, 2012

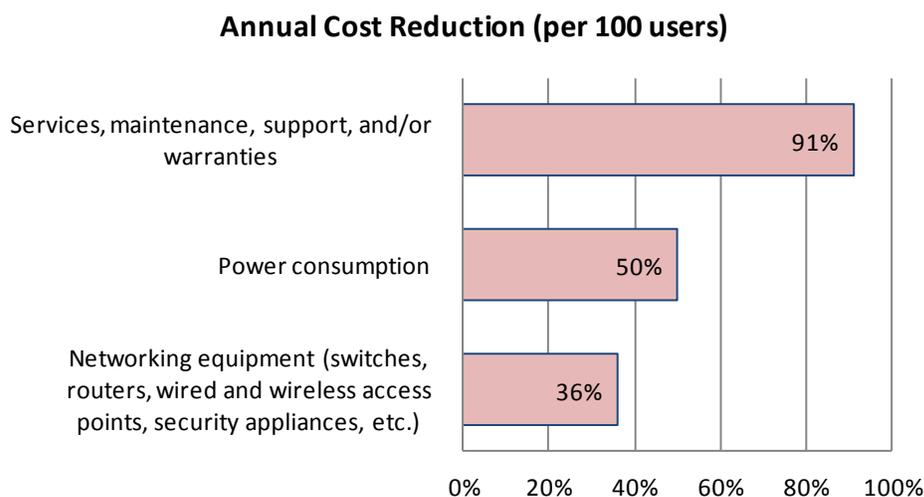
### Cost Reduction

The most significant impact on companies that use a unified communications solution is typically the reduction in infrastructure costs, accounting for 50–60% of the total value delivered. This is due to a combination of factors, including:

- ☒ **Consolidation of switches.** The driver for UC is simplifying the network by reducing the number and variety of switching technologies (i.e., PBXs). Organizations on average can cut their switches in half and, depending on the variety of technologies integrated, up to 80%.
- ☒ **Purchasing and rollout efficiencies.** Standardized equipment creates efficiencies in purchasing, planning, rollout, and asset management.
- ☒ **Facilities savings from reduced physical footprint.** Consolidating switches reduces physical footprint.
- ☒ **Power and cooling cost savings.** By consolidating switches and reducing the number of facilities, organizations are able to realize power and cooling cost savings.
- ☒ **Standardized components reduce size of spares pool.** Standardizing devices throughout the network — at the core, distribution, and access layers — reduces the variety of components in the spares pool, lowering the cost of inventory.

The top three areas of infrastructure cost savings, which come from fewer switch purchases, were networking equipment purchases; services, maintenance, and support; and power consumption (see Figure 2). In our 1,200-employee scenario, these factors combined would save approximately \$27,000 annually per 100 users.

**Figure 2.**



Source: IDC, 2012

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### ***IT Staff Productivity***

Centralizing and automating network management operations enables the IT staff to spend less time on manual and reactive management activities (keeping the lights on) and more time on implementing business initiatives. Key areas of savings include:

- ☒ **Lower maintenance and support costs.** Standardized components support standardized processes.
- ☒ **Streamlined ongoing network management.** Integrated management software streamlines ongoing network management, including the ability to quickly set up and manage user IDs and to publish user access rights to the wireless network through Active Directory.
- ☒ **Leveraging modularity optimizes operations.** Having switches based on common software and hardware modules in all layers of the network optimizes operations and eliminates the need for expertise on multiple different switch technologies. The reduction in complexity supports the ability to implement changes faster and with more flexibility.

### ***End-User Productivity***

Respondents described a dramatic decrease in network downtime after implementing HP networking, resulting in an increase in user productivity. Companies that rely on the network for business-critical or revenue-generating operations also cited reduced risk of failure as a key benefit. Organizations we interviewed were able to reduce downtime by 90% on average, saving each user across the entire organization approximately eight hours per year of 100% productive time.

The net result of deploying an HP networking solution was found to be the ability to optimize the networking environment. Companies were able to reduce their total costs for networking by 66% and at the same time improve the quality of networking services.

### ***Business Benefit***

Creating a more reliable network positively impacts business operations with revenue implications as well. Because not all organizations experience a direct revenue impact from UC solutions, we did not quantify this benefit. However, UC impacts revenue in two primary ways:

- ☒ Reduced revenue loss as a result of less downtime is potentially saving companies millions of dollars.
- ☒ Increased revenue from better operations results in faster time to market, ability to charge a premium for quality, less customer churn, and better-managed inventory and delivery.

### ***Business Value Results for Technology Solutions***

The bottom-line analysis that all companies should perform when considering changing or upgrading their network infrastructure is whether the cost-saving benefits of the upgraded infrastructure will outweigh the costs associated with implementing the new infrastructure, including migration costs and temporary performance degradations. In our case study, the 1,200-employee company would have realized returns of over 300% and a payback period of six months after full deployment (see Table 1).

**Table 1.**

Three-Year ROI Analysis per 100 Users	
Benefits	\$115,000
Investment	\$26,000
Net present value	\$90,000
ROI = NPV/investment	355%
Payback	6 months
Discount rate	12%

Source: IDC, 2012

### IDC ROI Methodology

IDC performs a three-step process to calculate the ROI and payback period:

1. Measure the benefits from reduced costs, increased availability, and improved IT productivity.
2. Ascertain the total investment in the solution (hardware, software, FTE requirements for deployment and annual maintenance, customization, training, and consulting).
3. Project the investment and benefit over three years and calculate the ROI and payback for unified communications solutions.

To account for the time value of money, IDC bases the ROI and payback period calculations on a 12% discounted cash flow.

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