



ROI Success Story:

**Siemens Enterprise Communications Drives Cost  
Efficiencies & Employee Productivity With OpenScape  
Unified Communications Solution**

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## Executive Summary

### Highlights

#### Goal:

- Reduce the cost of voice communications for the company's North American operations
- Scale the communications infrastructure more effectively to support new services and business growth
- Promote collaboration and increase productivity amongst end users

#### Solution:

- Implement OpenScape Unified Communications (UC) Server to 21 offices in the U.S. and Canada
- Integrate the existing, diverse network environment using OpenScape's SIP-based technology

#### Results

- Five year savings of up to US\$18.7 million and a 145% return on OpenScape investment
- Cost savings from lower long-distance and teleconferencing charges, infrastructure consolidation, and energy efficiency
- Centrally managed communications platform leading to lower administrative overhead costs and expanded use of teleworkers
- \$16.8 million in indirect savings from more efficient daily communications, easier expense management, and a leaner support operation

Siemens Enterprise Communications is a world leader in providing enterprise communications and data networking solutions for enterprises of all sizes. The company pioneered the concept of Open Communications, which allows organizations to unify information and user experiences across wireless, fixed, and enterprise networks—regardless of vendor—and creates a consistent voice and data environment. Based in Munich, Siemens Enterprise Communications has more than 15,000 highly-qualified employees in approximately 80 countries.

Siemens Enterprise Communications' award-winning unified communications (UC) solution—the OpenScape UC Server—has been adopted by companies of all sizes and in every industry. The software-based solution appeals to companies because it works in any telephony and IT environment, is extremely scalable, and offers certain cost advantages over traditional communication architectures.

In 2007, executives at Siemens Enterprise Communications posed a seemingly obvious question: Why not deploy OpenScape UC Server at its own offices and reap these same benefits? To gauge the likely costs and benefits, the company commissioned an internal business case analysis, which concluded that the project could possibly cut communications costs by up to 30%, potentially saving millions each year. Seizing the opportunity, Siemens Enterprise Communications developed a plan to deploy OpenScape UC Server at its North American operations, linking 21 offices and connecting more than 1,900 employees, including some 500 home-based teleworkers. Through a diligent approach, the company was able to complete the deployment in less than six months.

Several months after implementing OpenScape UC Server, company executives and managers began reporting substantial efficiency and productivity gains. To quantify the benefits, it asked independent advisory firm Mainstay Partners to conduct a financial assessment of the project. In its study, Mainstay documented significant benefits including sharply lower telephony and support costs, infrastructure consolidation savings, and a boost in workforce productivity.

According to the study, as depicted in Table 1, Siemens Enterprise Communications is projected to realize tangible business benefits totaling up to US\$18.7 million over five years, and additional indirect benefits of up to US\$16.8 million. Factoring in the project's cost of US\$5.7 million, the company's OpenScape investment is estimated to be on track to generate a return on investment (ROI) of 145%. Siemens Enterprise Communications could achieve payback on the investment in 24 months, according to the study.

Moreover, the implementation gave Siemens Enterprise Communications an in-depth understanding of what it takes to deploy OpenScape in large enterprises like its own—a base of knowledge that it's already putting to work at customer engagements around the world.

**Table 1. OpenScape Financial Summary (Five-Year Analysis)**

P&L Impact	US\$18.7 m
Productivity Impact	US\$16.8 m
Payback Period	24 months
ROI	145%
IRR	57%

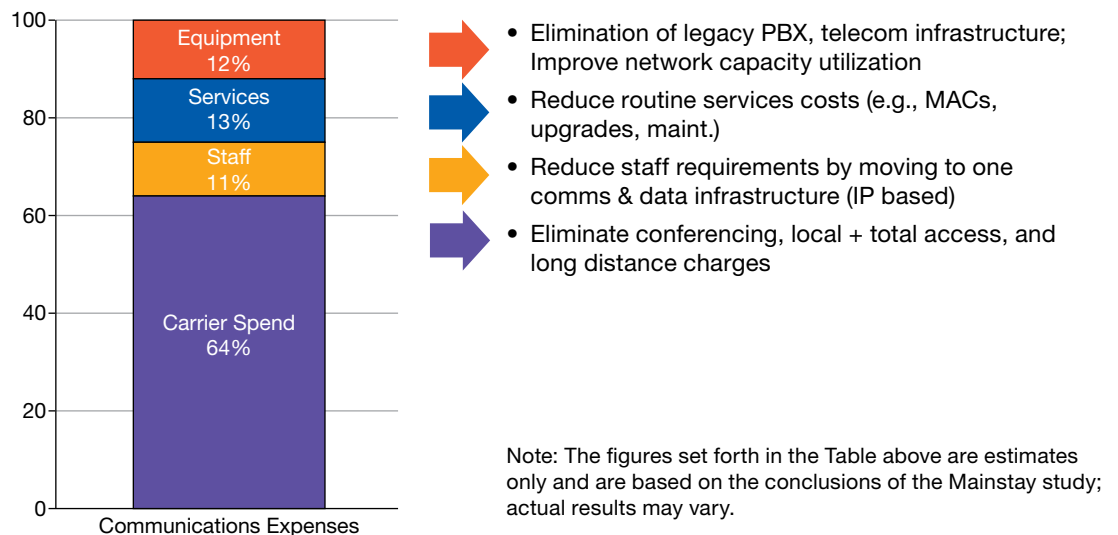
Note: The figures set forth in the Table above are estimates only and are based on the conclusions of the Mainstay study; actual results may vary.

## Project Background

In 2007, Siemens Enterprise Communications commissioned an internal team to investigate potential savings from replacing the company's legacy PBX voice infrastructure and services with OpenScape Unified Communications (UC) Server. Calculating the savings proved more difficult than expected because many communications charges, such as teleconferencing and PBX costs, were buried deep within the organization—hidden in the budgets of local business and facilities departments, and in the expense reports of teleworkers.

Ultimately, the team was surprised by the magnitude of its annual voice communications spend. But the team found that many of these costs could be trimmed or eliminated altogether by switching to a centralized, software-based OpenScape platform. Figure 1 shows the potential for reductions in PBX, service, staff and carrier costs at its North American offices.

**Figure 1. OpenScape UC Server Savings Opportunities**



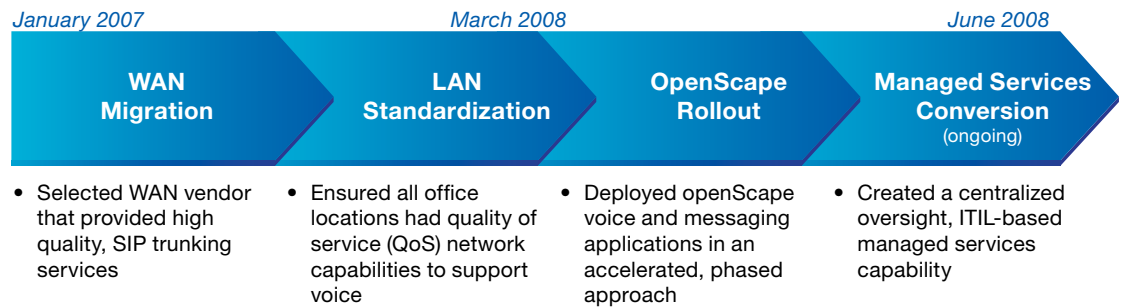
The company hopes to garner further savings by encouraging more people to work from home. Its population of teleworkers had been rising in recent years and Siemens Enterprise Communications hoped to boost the number to about 500 in 2008, enabling it to shut several of its smaller offices and eliminate costs such as rent, utilities, insurance, and security. Meanwhile, the remote-enabled OpenScape UC solution would provide seamless communications and collaboration capabilities for the new teleworkers, many of whom look forward to the convenience of working from home.

Another reason for switching to OpenScape was strategic: By installing its own solution, Siemens Enterprise Communications could learn a lot about implementing a unified communications solution at a large enterprise and pass these lessons on to benefit its customers. It could learn which phases of the project could be done in parallel and document best practices in an effort to facilitate a fast, more cost-effective implementation.

## Rapid, Four-Step Implementation

Convinced of the project's potential, Siemens Enterprise Communications' Chief Financial Officer Stefan Meuser approved the OpenScape investment and maintained an oversight role to ensure benefits were captured quickly. The implementation team planned for a rapid six-month implementation, aiming to capture the benefits of a companywide "network effect" as soon as possible. The project scope covered the conversion of more than 1,600 users spread over 19 U.S. offices and more than 500 U.S.-based teleworkers.

**Figure 2. OpenScape Project Timeline**



In phase one, as depicted in Figure 2, the team re-evaluated the company's wide area network (WAN) and put a contract out to bid. The network plays a pivotal role in an OpenScape deployment because it integrates with the public switched telephone network (PSTN), enabling the unified system to connect to traditional landline phone networks.

Next, the project team checked each office's local area network (LAN) to ensure it could support enterprise-grade voice communications. Although Siemens Enterprise Communications had installed a mix of LAN hardware from 3COM, Cisco, and Enterasys, the OpenScape UC Server SIP-based technology is designed to work with any IT infrastructure so the company could keep its existing LANs and only upgrade those offices that fell short of minimum bandwidth and service levels.

## Bottom Line Business Benefits

In its study of the OpenScape implementation, Mainstay interviewed more than a dozen key managers across Siemens Enterprise Communications' business, IT, and managed-services functions, and reviewed project documents ranging from work plans and financial models to management presentations. The study concluded that there were two major sources of savings that directly impacted the company's bottom line:

- Savings from More Cost-Effective End-User Voice Services and Support.** This included significant reductions in voice-service expenses, including long-distance and conference calls, as well as support-related savings resulting from OpenScape's efficient "move-add-change" (MAC) process. Savings in this category are estimated to total up to US\$16.1 million over five years, according to Mainstay.
- Savings from Voice-Data Infrastructure Consolidation.** This included cost savings—enabled by OpenScape—from consolidating and standardizing Siemens Enterprise Communications' communications infrastructure, including associated productivity savings. Savings in this category could contribute up to US\$2.6 million to the bottom line over five years, Mainstay estimated.

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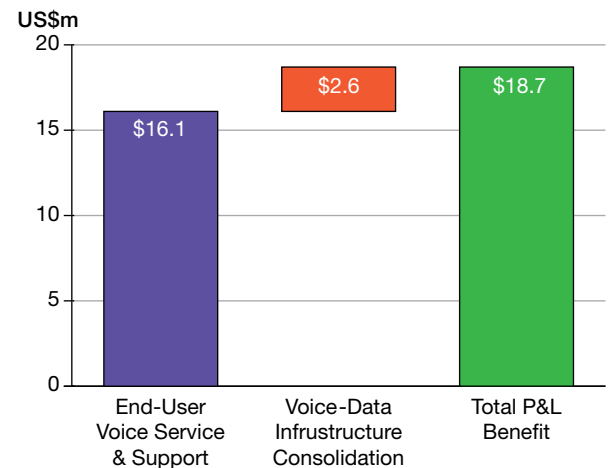
***"OpenScape has been estimated by Mainstay's study to have the potential to deliver up to US\$18.7 million in bottom-line telecommunications related savings over five years. In addition, the centralization of voice services through OpenScape has significantly improved our ability to control and monitor these costs in the future."***

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Stefan Meuser, CFO

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**Total P&L Impact (Five-Year Analysis)**



Note: The figures set forth in the Table above are estimates only and are based on the conclusions of the Mainstay study; actual results may vary.

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In all, OpenScape investment is estimated to yield up to US\$18.7 million in bottom-line savings over five years, according to Mainstay.

In addition, Mainstay concluded there were a host of potential productivity gains that could likely result in significant benefits over the same time period. These range from a reduction in the amount of time workers spend contacting colleagues, to faster expense reporting, to easier IT administration. Mainstay estimates these types of indirect productivity improvements could generate benefits totaling up to US\$16.8 million over five years.

The following sections describe the benefits in greater detail.

## More Cost-Effective End-User Services and Support

For large enterprises like Siemens Enterprise Communications, end-user voice expenses—primarily long-distance and conference-call charges—are typically spread across several different department budgets, making them difficult to track and control. With the centrally administered OpenScape solution, however, the finance organization can more tightly manage its telephony and related expenses. Table 2 shows the projected savings in end-user voice services and related support costs over the next five years.

**Table 2. OpenScape UC Server Investment: End-User Services and Support Savings**

Cost Category	Five-Year Savings
Office voice and data network charges	US\$7.5 million
Teleconferencing	US\$2.7 million
Facilities operations (reduction due to more teleworkers)	US\$2.5 million
Teleworker voice charges	US\$2.0 million
Move, Add, Change (MAC) management	US\$1.3 million
Phone costs (“soft”)	US\$0.1 million
<b>Total</b>	<b>US\$16.1 million</b>

Note: The figures set forth in the Table above are estimates only and are based on the conclusions of the Mainstay study; actual results may vary.

***“Our sales teams have benefited greatly from OpenScape’s ability to foster collaboration and communication. With sales teams constantly on the road, OpenScape’s presence capabilities allow my team to find an expert immediately without sending multiple text messages or voice mails to track them down. The bottom line is that we can now respond to customers more effectively and provide greater levels of service.”***

*Rick Puskar, VP of Sales*

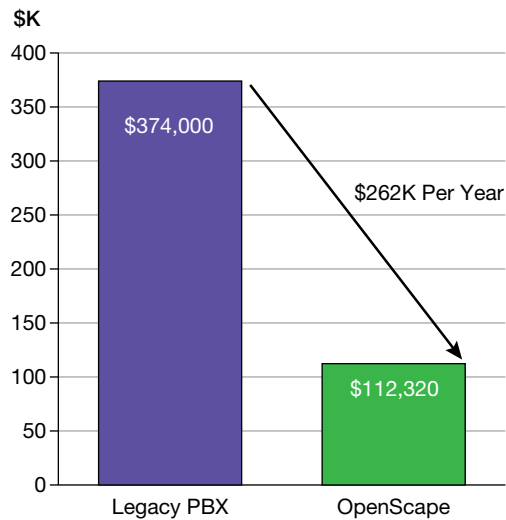
In total, the OpenScape Unified Communications platform has been estimated by Mainstay to have the potential to generate up to US\$16.1 million in P&L expense reductions over five years, of which approximately US\$7.5 million could come from lower local and long-distance phone charges due to the reduced reliance on Telco providers to carry those calls. (Siemens Enterprise Communications’ rapid deployment enabled it to capture the full annual impact of this category of savings in the very first year.) For the same reason, Siemens Enterprise Communications has the potential to cut teleconferencing fees by an estimated amount of up to US\$2.7 million over five years. Moreover, OpenScape users benefit from the voice system’s close integration with instant messaging, web conferencing, email, and video services.

Siemens Enterprise Communications is also estimated to have the potential to realize additional savings, totaling an estimated amount of up to US\$2.5 million over five years, by basing more workers at their home offices. OpenScape enabled the move in part because its collaboration features—such as the ability to see a coworker’s “presence” on the network from any device—made it possible for new types of employees to switch to teleworking. Employees formerly assigned to call centers, for example, can work from home effectively. Setting up a home office with OpenScape is simple, requires less support, and offers office-like conveniences like four-digit extensions for dialing coworkers. And since employees can work from home anywhere in the country, Siemens Enterprise Communications can now draw from a larger talent pool.

The study estimated substantial savings from a major cut in the administrative costs of moving, adding or changing (MAC) voice services. The average employee moves about two times a

year, costing the company on average about US\$100 per move. According to the study, Siemens Enterprise Communications could cut MAC costs by up to 70% with the centrally managed OpenScape environment, saving up to US\$1.2 million over five years. Figure 3 shows the company's estimated annual MAC savings.

**Figure 3. Estimated Move/Add/Change (MAC) Savings**



Note: The figures set forth in the Table to the left are estimates only and are based on the conclusions of the Mainstay study; actual results may vary.

## Consolidated Architecture Yields Additional Savings

OpenScape presented Siemens Enterprise Communications with a tremendous opportunity for integrating and consolidating the company's fragmented voice and data network, which included an aging, energy-intensive PBX infrastructure, a myriad of voice-messaging systems, and high overhead costs. Over five years, Siemens Enterprise Communications move to OpenScape could save up to US\$2.6 million in infrastructure-related costs, Mainstay estimated, as summarized in Table 3.

**Table 3. OpenScape UC Server Investment: Infrastructure Consolidation Savings**

<b>Cost Category</b>	<b>Five-Year Savings</b>
Avoided PBX upgrade and related facilities costs	US\$309,000
Lower IT costs related to software upgrades and patches	US\$40,000
Energy costs	US\$165,000
System expansion costs	US\$2,088,000
<b>Total</b>	<b>US\$16.1 million</b>

Note: The figures set forth in the Table above are estimates only and are based on the conclusions of the Mainstay study; actual results may vary.

A large portion of these savings—amounting to an estimated US\$309,000 over five years—will come from the retirement of its old PBX infrastructure and the consolidation of its messaging systems on the unified OpenScape platform. Related savings will come from a reduction in the heating and air conditioning costs needed to run the legacy PBX equipment.

OpenScape's compact, centrally managed server environment has simplified the way Siemens Enterprise Communications manages software upgrades and patches, doing away with piecemeal, locally managed upgrade projects, thereby saving up to US\$40,000 over five years, the study estimated. Central management of the voice network is also boosting the quality and sophistication of voice applications, managers reported. For example, various issues that used to require a site visit by a technician or facilities manager can now be handled remotely by the data-center staff.

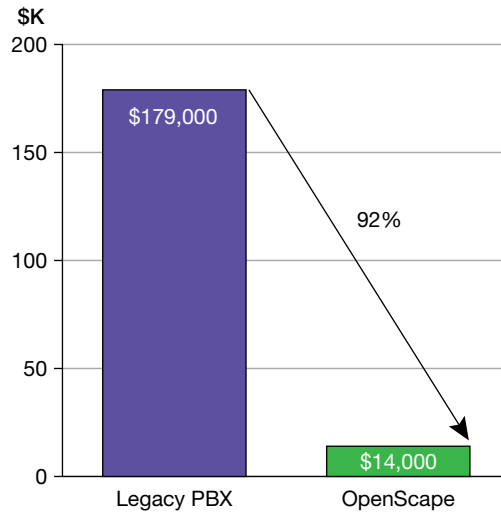
Moreover, Siemens Enterprise Communications anticipates that it will take less than half as much time to move an office—from 60-90 days to 30 days—since technicians will no longer have to move the office's PBX system and order new hardware to get the new site up and running. It also hopes to cut energy consumption significantly as it switches from power-hungry PBX equipment to the OpenScape software-driven platform. The migration is expected to save up to US\$165,000 in lower energy bills over five years, according to the study, as shown in Figure 4.

Finally, Siemens Enterprise Communications could realize an additional savings of up to US\$2.1million over five years by connecting new offices and workers to the OpenScape platform, including the company's Canadian workforce and employees at a recently acquired company, according to Mainstay.

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**Figure 4. Estimated Energy Savings**

**Voice Hardware Five-Year Energy Cost Savings**



Note: The figures set forth in the Table to the left are estimates only and are based on the conclusions of the Mainstay study; actual results may vary.

## Productivity Boost

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***“We run a very lean IT organization leveraging ITIL best practices. With OpenScape’s ITIL-based managed services approach, we have developed a proactive relationship with our OpenScape managed services partner. By sharing common business processes, we’ve reduced overhead and delivered best-in-class results for our customers.”***

*Jack Fredricks,  
VP of Information Technology*

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Beyond the direct financial impacts discussed above, OpenScape may generate indirect productivity benefits that are harder to quantify but potentially equal in value to the company. Indeed, these productivity enhancements are expected to generate savings totaling up to US\$16.8 million over five years, according to Mainstay.

Noteworthy among these soft benefits: Due to OpenScape’s sophisticated “presence” capability, workers should enjoy more efficient communications and spend less time tracking down colleagues with redundant calls, emails, and text messages. Now, any user on the network can tell at a glance whether someone is available and their preferred device at that moment.

Mainstay estimates that if 40% of Siemens Enterprise Communications’ workforce cuts the amount of time it spends doing email and other communications by just 20 minutes a day, the company could benefit by up to about US\$13 million over five years in productivity gains. Also, since the new system can centrally track communications costs, home-based workers will no longer need to submit expense reports for these charges, a move that could save up to approximately US\$1.2 million in labor over five years while boosting employee satisfaction, according to the Mainstay study.

The company could also reap savings by slimming down its communications hardware at local offices—a key advantage that OpenScape’s software-based architecture offers over traditional PBX or even newer VoIP technology. The system’s total cost of ownership should decline over five years as the company reduces its dependency on local IT and voice technicians. According to Mainstay, the move could avoid an estimated amount of up to US\$510,000 per year, or US\$2.55 million over five years, from its Managed Services group as it phases out its local PBX infrastructure. While these savings will not be reflected on Siemens Enterprise Communications’ P&L, it does free up its Managed Services resources to provide higher value services such as network monitoring and security, while maintaining a more consolidated IT infrastructure.

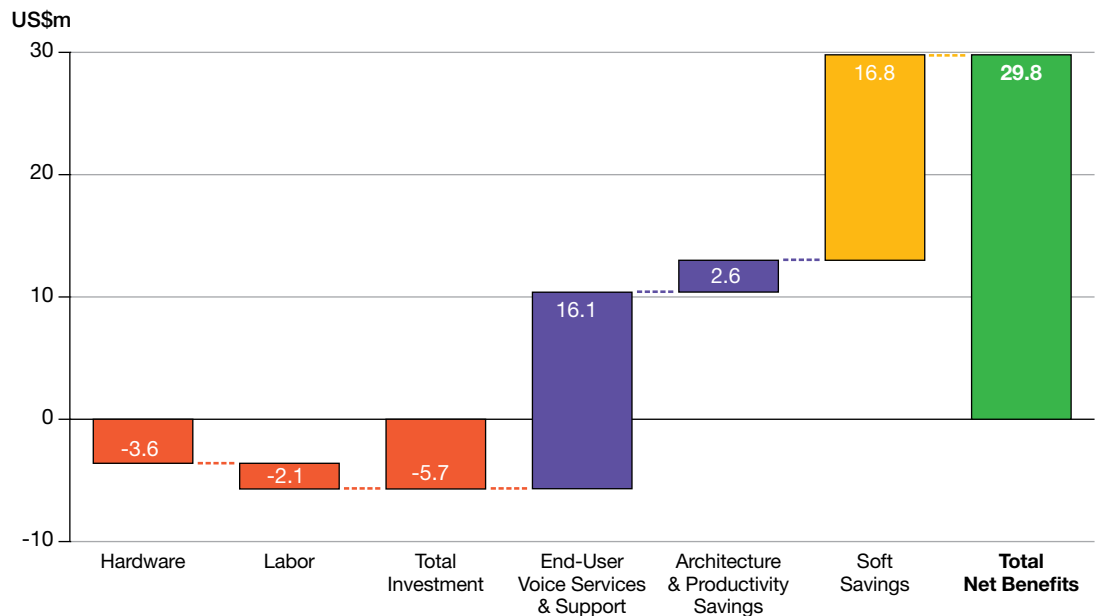
## Summary of Benefits

Figure 5 summarizes the estimated total net benefits from Siemens Enterprise Communications’ OpenScape investment over five years, factoring in the time value of money. The estimated benefits include direct bottom-line savings of up to US\$18.7 million and an additional amount of up to US\$16.8 million in workforce productivity benefits (“soft savings”). Subtracting investment costs, Mainstay is projecting that Siemens Enterprise Communications could gain total net benefits of up to US\$29.8 million over five years.

Considering the direct bottom-line savings alone, Siemens Enterprise Communications’ OpenScape investment is estimated to yield a 145% return on investment and a 57% internal rate of return, as shown in Table 4. The study also concluded that Siemens Enterprise Communications could recoup its initial investment in 24 months. Siemens Enterprise Communications’ year-by-year investment costs and estimated benefits are summarized in Table 5.

**Figure 5: Total Net Benefits**

**Five-Year Net Present Value Analysis (\$000)**



Note: The figures set forth in the Table above are estimates only and are based on the conclusions of the Mainstay study; actual results may vary.

**Table 4: ROI Summary**

<b>Return on Investment Summary (Using 10.5% WACC)</b>	
Internal Rate of Return (over 5 years)	57%
Return on Investment (over 5 years)	145%
Initial First Year Investment	US\$5,530,000
Total Bottom-Line Benefits (over 5 years)	US\$18,701,863
Payback Period	24 months

Note: the figures set forth in the Table above are estimates only and are based on the conclusions of the Mainstay study; actual results may vary.

**Table 5: Financial Summary Model**

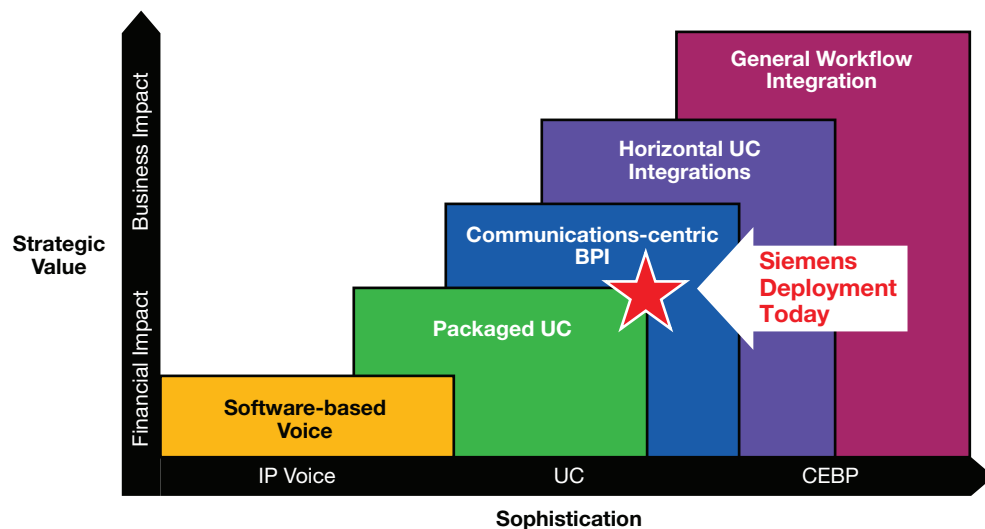
	<b>Initial Investment 2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
Total Hardware Costs	\$3,510,000	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000
Total Labor Costs	\$2,020,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
<b>Total Investment</b>	<b>\$5,530,000</b>	<b>\$30,000</b>	<b>\$30,000</b>	<b>\$30,000</b>	<b>\$30,000</b>	<b>\$30,000</b>
Total End User Savings	\$0	\$3,157,080	\$3,181,080	\$3,215,205	\$3,250,330	\$3,311,830
Total Voice/IT Architecture Savings	\$0	\$102,387	\$102,387	\$102,387	\$102,387	\$102,387
Worker Productivity & Other Benefits	\$0	\$1,100	\$1,100	\$688,618	\$695,643	\$707,943
<b>Total Benefits</b>	<b>\$ -</b>	<b>\$3,260,567</b>	<b>\$3,284,567</b>	<b>\$3,986,210</b>	<b>\$4,048,360</b>	<b>\$4,122,160</b>

Note: The figures set forth in the Table above are estimates only and are based on the conclusions of the Mainstay study; actual results may vary.

## Future Opportunities

Though it has achieved significant benefits already, executives say the company is still in the early stages of developing its OpenScape solution. Now the company is preparing to extend the unified platform, first by integrating communications-centric business processes such as its call center operations, enabling real-time collaboration with customers as shown in Figure 6.

**Figure 6. UC Maturity Model**



The company is also looking at integrating business applications into the OpenScape environment, for example, by adding new communication power to its existing customer-relationship management solution and enhancing its outbound marketing and customer service programs. Siemens Enterprise Communications also plans to further leverage the integration of OpenScape with collaboration tools that could include Microsoft's Office Communication suite to develop a "rich workroom" where document collaboration, voice, and video can be streamed to a worker's desktop.

Ultimately, the company wants to exploit OpenScape's potential for building communications enabled business processes (CEBP), embedding rich communications and collaboration capabilities into the company's daily workflows. For example, by integrating OpenScape into its service-management process, the company's product-support engineers could solve trouble tickets faster by collaborating in real time with the customer's IT managers and Siemens' field technicians. Siemens Enterprise Communications also hopes to use OpenScape to automate and enhance its ITIL-based service packages, allowing users to share electronic documents in real time and hold virtual conferences featuring video and desktop sharing capabilities.

Down the road, executives say that OpenScape will continue to revolutionize the way Siemens Enterprise Communications works with its customers, vendors, employees, and investors, helping to speed and improve the way it collaborates with people anywhere in the world while working to continuously reduce service costs.

## **About This Case Study**

Research and analysis for this study was conducted by Mainstay Partners, a leading independent advisory firm specializing in assessing the business value of technology solutions. Mainstay works with leading information technology providers including Oracle, SAP, Microsoft, Dell, HP, BearingPoint, EMC, Network Appliance, EDS and Satmetrix. This case study was based on interviews with Siemens Enterprise Communications' business and IT management, review of project planning documents, and searches of industry literature.

Information contained in the publication has been obtained from sources considered reliable, but is not warranted by Mainstay Partners LLC or Siemens Enterprise Communications Group.