

Achieving Cost and Resource Savings with Unified Communications

How Unified Communications Provides Proactive Responses to the
Harsh Economic Environment and How Microsoft UC Solutions
Can Enable Those Responses for Your Enterprise

Marty Parker, Principal, UniComm Consulting, LLC
Don Van Doren, Principal, UniComm Consulting, LLC

March 2009



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Abstract

Enterprises are always seeking to cut costs and optimize resource utilization. Now, in this harsh economic climate, the need is more compelling than ever. This paper highlights **potential savings exceeding \$5,000,000 per year for each 1,000 employees** through the application of Microsoft Unified Communications to your business and IT operations.

Unified Communications (UC) is a new approach to communications methods and solutions that opens up significant new ways to achieve both immediate and sustained cost and resource savings. In the past, communication-based business activities have been highly manual and prone to delays and workarounds. Now, with UC, these communications steps can be streamlined and software-assisted to reduce costs while also improving results.

This paper identifies savings opportunities and actions for three broad categories of benefits:

- **Reducing out-of-pocket costs** for communications services such as telecom and cellular bills and hosted audio and video conferencing, and for related expenses such as travel and office facilities. Potential annual savings range from \$2.6M to over \$8 million per 1000 employees.
- **Consolidating communications infrastructure** to lower operating costs by replacing multiple diverse and dispersed legacy products with the integrated functions of the new UC solutions. Potential annual savings are in the range of \$0.9 million per 1000 employees.
- **Leveraging human capital** by supporting individual productivity; workgroups and collaboration; and enterprise governance. Potential annual savings range upwards from \$2 million per 1000 employees.

The savings actions suggested in this paper can have paybacks of less than a year – within a single annual budget cycle – and many have paybacks of less than 6 months when applied to the high-savings use cases. Each UC savings opportunity is defined in general, followed by recommended actions using the Microsoft UC Solution set – Office Communications Server 2007 R2 and Exchange Server 2007. Savings calculation guidelines are provided and supported by case study references.

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The Economic Climate in 2009 and Beyond

The deterioration in global economic conditions over the past year presents both unprecedented challenges and potential opportunities for today's IT and Line of Business managers. The turbulence unleashed by the collapse of the world's financial market system and the subsequent uncertainties and business impacts mean that many previous priorities must be put aside to meet urgent new situations.

The economic climate is also more challenging since, over the past decade, businesses have become much more global. In some cases this is a situation in which a company's own facilities are taking on a global footprint to take advantage of more cost-effective labor pools or manufacturing facilities. In other cases, companies are expanding their markets globally, supported by internet-enabled channels and growing international opportunities. Many companies have extended their supply chains and partnerships around the world.

These uncertainties and challenges can be paralyzing, but paralysis cannot be the response. Prudent managers will consider their options carefully and create an action plan appropriate to their organization's strengths, financial situation, and needs; the nature of the products and services it offers; and how the downturn is likely to affect both its customers and its competitors.

For Line of Business managers, these conditions usually require adjustments to business procedures, depending on the scope of the economic impacts. Certainly, savings actions will also be aggressively pursued, both to cut costs and to provide funding for the more substantial process adjustments. For IT Managers, the initial focus will likely be on rapid reductions in out-of-pocket payments for volume-based or headcount-related goods and services. In parallel, most IT Managers will seek structural changes in infrastructure, in operational support costs, and in the scope of services being supported in order to make long term, sustainable savings.

Throughout every organization, cutting costs and expenses to preserve cash will be a mandate. Economic pressures will lead to leaner staffing or headcount reductions. In many cases, project expenditures or capital commitments without a near-term payback or clear strategic value will be deferred or cancelled. This paper focuses on the opportunities to use UC solutions to respond to these cost cutting issues with paybacks within a single annual budget cycle.

What Unified Communications Is and Why It Matters

Unified Communications (UC) is a major area of opportunity in this economic situation, since it can facilitate both immediate cost reductions and long-term efficiencies in resource utilization.

At the basic level, UC is the convergence of multiple communications technologies into a single solution, enabling cost-cutting consolidation of previously separate systems and services into one efficient package for text, voice and video communications, accessible from essentially anywhere via PCs, smartphones, and similar devices. These technologies include e-mail, texting, instant messaging, and group chat, voice and video calls and conferences; directories, calendars and tasks; and various assemblies of these functions into job-specific applications such as mobility applications or collaborative workspaces.

At a more advanced level, these software-based UC capabilities can be integrated with users' and groups' business processes to reduce duplication, waste and rework in communications-intensive

activities, enabling successful management of the necessary hiring freezes or headcount reductions by improving process efficiency and reducing process labor content.

For immediate UC-driven cost reductions, communications is almost always a significant variable cost, increasing as business is more global in scope. Toll costs, cell phone charges, conferencing service fees, travel costs, and meeting expenses are all forms of communications expense that can be rapidly reduced with effective application of UC solutions. Also, it is often possible to achieve significant savings by consolidating multiple older communications systems into a single, integrated UC platform. Both of these savings categories are detailed in this paper.

For resource savings, improved communications via UC solutions can provide business process efficiencies, cutting both the time and labor spent on communications-based tasks and also eliminating the communications-based delays, duplications and rework in business processes. While these process changes may require several months or quarters to realize the benefits, they will usually produce much larger savings since they impact on how the business operates, not just on the infrastructure costs.

Details of these cost and resource saving opportunities are provided in following sections.

Microsoft Unified Communications Solutions

Microsoft UC solutions unify email, calendaring, instant messaging, voice mail, audio/video/web conferencing and voice over internet protocol (VoIP), and including interfaces to other business applications. This unification provides a single identity for an end user, which enables the user and their co-workers to streamline their communications across different communication modes. It also enables IT professionals to manage both messaging and telephony communication services efficiently and cost effectively in a single infrastructure. These capabilities are delivered by Microsoft via Office Communications Server 2007 R2 (OCS R2) and Exchange Server 2007, available both as on-site systems and as cloud-hosted services.

Microsoft UC solutions are presented to users via the very familiar user interface of Microsoft Office clients – Office Outlook and Office Communicator – in versions for the PC, Web browsers and smart phones. These UC solutions are supported by the UC industry’s most comprehensive community of technology partners, systems integrators and developers, to enable a very broad range of proven solutions. More information about the Microsoft UC solutions is available at www.microsoft.com/uc.

Now, let’s examine Unified Communications cost and resource savings opportunities along with the ways that Microsoft UC solutions can be applied to realize those savings for your enterprise.

Cost and Resource Saving Opportunities with UC Solutions

Based on the challenges described earlier, three major opportunity categories are highlighted in this paper:

- **Reduce out-of-pocket expenses:** Emphasis on immediate reductions in travel, conferencing service fees, toll charges, cellular bills, and facilities expenses.

- **Optimize communications infrastructure:** Recommendations on short-term and sustainable cost reductions and IT staffing economies by consolidating and decommissioning aging or redundant communications equipment and applications.
- **Leverage human capital:** Focus on ways to reduce communications-related labor content, whether to deal with immediate cutbacks or to manage through overtime reductions, hiring freezes and attrition.

Several opportunities exist in each category, described in the following sections.

Reduce Out-of-Pocket Expenses

The focus in this area is to gain immediate or near-term cost savings in four areas that usually have significant out-of-pocket variable expenses, including travel, conferencing services, toll charges, and facilities expenses. Savings in these areas can be relatively immediate, as well as sustainable over time. The UC deployments to realize these savings will also provide a platform for Leveraging Human Capital, as suggested in the third section. Here are the top four opportunity areas.

Opportunity: Reduce Travel Expenses

Savings Opportunities

Travel expenses, both locally and to remote cities, are one of the most visible expense categories, and are a major UC-driven savings opportunity.

You can achieve immediate reductions in current expenditures by limiting employee travel. UC enables this without disrupting business effectiveness. Audio, web and video conferencing are proven solutions for this purpose. The addition of recording options and the ability to post meeting content to a shared workspace enables team members who cannot attend the meetings to stay informed. Wherever possible, extending conferencing capabilities to supply chain partners and customers can produce even greater savings.

Applying Microsoft UC to Realize Savings

Microsoft conferencing solutions, using Live Meeting conferencing either in Office Communications Server 2007 R2 (OCS R2) or as a cloud-hosted solution, are excellent vehicles to achieve these savings. Live Meeting is one of the leading “unified” conferencing solutions that provide a complete set of voice, web and video conferencing capabilities with ‘Anywhere Access’ from PC clients, web browsers, mobile devices (with OCS R2), and meeting rooms. Live Meeting Voice participation is supported either through Voice over IP (VoIP) features from PCs or through the telephone networks from any phone or cell phone.

Conferences in meeting rooms benefit from the unique and highly functional Microsoft RoundTable¹, providing a view of all participants and highlighting the current speaker. The OCS R2 version of Live Meeting also provides integration to existing meeting room audio and video devices and to telepresence systems when needed for those formats. Live Meeting includes integral, easy-to-use support for meeting recording, which enables posting of the meeting activity either in an OCS R2 Group Chat session or in SharePoint. Supply chain

¹ <http://www.microsoft.com/UC/products/roundtable.aspx>

partners and customers can be invited into any meeting – voice, web or video – with secure access assured from the Live Meeting client or web browser. All of these features enable employees to perform their jobs and roles while eliminating travel time and expense.

Evaluating Savings Potential

The savings will be some portion of the current travel expense, as well as possible staff reductions by capturing and consolidating the travel time savings. Payback can occur within 6 months, with a deployment targeted at the active traveler user cases.

If actual departmental travel expense analysis is available from finance or management, that will be the best basis for evaluating the savings opportunities. ROI models show typical savings of \$913 per employee, based on this simple formula:

$$(30\% \text{ of all employees travel } \times 5 \text{ trips per year/travelling employee } \times \$1,522 \text{ per trip}^2) \times 40\% \text{ (or 2 trips per year) reduction.}$$

Savings Examples

[Crédit Agricole S.A.](#), one of Europe’s leading banking groups, is utilizing OCS R2 conferencing to bring specialized teams together without travel; to provide training and coaching to branch employees via recorded video conferencing; and to have “three-way banking” meetings between the client, their banking representative, and a relevant banking expert. Overall, travel expenses are being reduced by 10% to 20% in the first year, consistent with the savings potential suggested above.

Opportunity: Reduce Conferencing Services Charges

Savings Opportunities

Any enterprise that is using one or more usage-priced external services for your audio, video or web conferencing can rapidly cut those costs by moving to an in-house conferencing system or to a flat rate cloud-hosted service.

The biggest savings will likely be in the area of web conferencing (sharing desktops, presentations and applications) and video conferencing, since those services carry a premium cost per minute. Savings are also possible by bringing audio conferencing in-house; though per minute costs for audio conferencing are far lower than for video conferencing, usage is often much higher, producing a significant savings target. Of course, the savings will be sustained over time and will be even greater as conferencing use increases based on travel avoidance and new business methods.

Applying Microsoft UC to Realize Savings

Microsoft Live Meeting, either included in OCS R2 or as a cloud-hosted service, is a very effective solution for reducing or eliminating fees to external services. As described above in Reduce Travel Expenses, Live Meeting is a leading “unified” conferencing solution that provides a complete set of voice, web and video conferencing capabilities and includes unique features such as the RoundTable conference room voice and video module. These functionalities allow absorption and replacement of all the external services. Total Cost of

² Based on four domestic trips at \$1,110 and one international trip at \$3,171 according to the 2008 American Express Travel Forecast: <http://home3.americanexpress.com/corp/pc/2007/pdf/GBTF.pdf>

Ownership (TCO) is low either as an integral element of OCS R2 or a very economical (~\$5 per user per month) fixed rate-per-user cloud-hosted service. Please refer to the 2009 white paper, [“The Compelling Case for Conferencing”](#), for a broader review of this topic and the related savings and business value.

Evaluating Savings Potential

The payback period for in-house conferencing is usually very short – less than six months, and is certainly low with the Microsoft Live Meeting unified conferencing options. Since audio conferencing services usually cost about \$0.10 per minute and video conferencing costs range around \$0.35 per minute, usage charges for 100 users can easily run to over \$10,000 per month. Since ownership costs for on-premise OCS R2 Live Meeting conferencing is well below \$10 per user per month and in a similar range for Live Meeting cloud-hosted services, the resulting payback times are usually less than one calendar quarter, with continuing savings from that point onwards. Savings Estimation for 1000 users:

$$(\$100 \text{ usage charges per user per month} - \$10 \text{ per user per month Live Meeting OCS R2 costs}) \times 1000 \times 12 \text{ months} = \$1.08 \text{ million annual savings potential.}$$

Savings Examples

In addition to their travel savings described previously, [Crédit Agricole S.A.](#) eliminated over \$200,000 in annual conferencing fees by using their in-house OCS R2 system.

In another example, [Syngenta](#), a global agriculture business, replaced its service-based virtual (web) conferencing solution with Microsoft web conferencing and reduced conferencing costs by 50%.

Opportunity: Reduce Telephone Tolls and Cell Phone Charges

Savings Opportunities

There may be significant opportunities to reduce toll or calling card charges billed by long-distance and cellular carriers. Although long-distance rates have dropped significantly within the United States, international toll costs are still significant, typically ranging from \$0.19 per minute to the UK to \$0.34 per minute to China and much of Asia³.

Similarly, cellular bills often range around \$100 per active field user per month, and can be much larger for calls from international mobile users, especially to employees, clients or partners in other countries. Use of a secure Voice over Internet Protocol (VoIP) solution (such as OCS R2) can cut the telephone toll costs paid to external providers by routing those calls over the corporate data network or the Internet, thereby bypassing the toll-based networks. Another proven method for reducing telephone toll and cellular charges is to use presence indication to avoid wasted calls altogether, especially from mobile devices, and to shift many communications to Instant Messaging (IM), replacing many short phone calls.

For cellular calls in countries where the “caller pays” for the calls, a UC solution can provide the mobile user with the ability to have the enterprise UC system call out to the user and then connect to the intended party, thus avoiding the cellular network charges.

³ AT&T Calling Card Rates, first quarter, 2009. www.att.com.

Applying Microsoft UC to Realize Savings

OCS R2 provides a secure VoIP communications suite that can dramatically reduce out-of-pocket telephone toll and cellular charges. Three major methods are used to achieve these savings:

- 1) OCS R2 provides very easy “click-to-communicate” between users via their PC, a web browser, or an IP voice device from a Microsoft partner. OCS R2 stands out for the range of devices supported and for the ability to include any customer or business partner in secure calls, thus maximizing the areas of toll cost reductions.
- 2) Cellular users with the Communicator Mobile client can use their Windows Mobile, BlackBerry, or Nokia smartphones to check status with presence before making a call and can use Instant Messaging (IM) instead of a call in some cases.
- 3) Users can have the in-house OCS R2 server call out to their cell phone to avoid tolls or to bypass cell charges in the ‘caller pays’ countries. For example, tolls are avoided when an international traveler logs-in to OCS R2 from a distant country, uses the Internet for VoIP connections back to the home office, and then speaks to office colleagues at no charge or makes local calls from the OCS R2 server. Cell charges are avoided by mobile users who click to call another party; OCS R2 will first call out to their cell phone and then connect to the intended party at corporate telephony rates.

Also, through the shift to VoIP there will likely be an opportunity to reduce the number of telecom carrier trunk terminations into your locations and/or to renegotiate your cellular billing plans, even putting the contracts out for re-bid. The bottom line can be significant savings in tolls and cellular charges.

Evaluating Savings Potential

Evaluate the toll and cellular usage-based bills being paid by your enterprise; or sample the expense reimbursements and calling card bills if your employees pay those bills directly, depending on your policies. Some rapid spreadsheet analyses will often pin-point the high usage cases for which you can plan a rapid conversion to UC-based calling.

A “rule of thumb” savings estimation is:

$$(Average\ tolls\ (\$50/mo.) \times 70\% \text{ reduction}) + (average\ cellular\ usage\ (\$90/mo.) \times 30\% \text{ reduction in USA}) \times 12\ months \times 1000\ users = \$744,000\ \text{annual savings potential.}$$

The extent of the savings will vary based on the user roles and the extent of international calling. Paybacks of less than 6 months are possible by targeting the high-toll/bill users.

Savings Examples

[Global Crossing](#) converted to OCS R2 for both office staff and mobile personnel and is now saving more than \$1 million annually for costs of telephony and employee travel combined, including the reduction in cellular bills using OCS R2 as outlined above, with a payback of 7 months. Since the OCS R2 software runs on existing PCs and Mobile Devices, the transition was easy for users to embrace.

Opportunity: Reduce Facilities Costs

Savings Opportunities

Facilities costs, including both lease payments and operational costs such as light, heat, power, security and other costs, are an important target for cost reductions.

Many companies are using UC solutions to enable staff to work remotely, at least part of the time, with shared “hot desks” available when the employee must come to the office. As enterprises become more spread out and employees have longer commutes, studies show that employee satisfaction and productivity both rise when effective remote working capabilities are put in place. Once these programs are launched, savings can begin by consolidating the remaining on-site staff and shutting off the lights, power and heat to entire sections, floors or buildings. If the outlook for space saving is longer term, it may be possible to sub-let the space, terminate leases or sell company-owned facilities.

Applying Microsoft UC to Realize Savings

Microsoft UC solutions provide excellent support for flexible work arrangements. Exchange 2007 and OCS R2 deliver a complete, best-in-class capability across all the communication methods (a.k.a. communication “workloads”) and across a seamless set of tools. Thus, employees have ‘anywhere access’ and are able to work effectively from any location. Presence capabilities in OCS R2 make each worker equally visible to the others in their team or group as if they were in the same building. Also, since the remote users are working with the same Microsoft Office software applications and with the same directory structure as when on-site in the building, remote work can progress seamlessly and with productivity and security equivalent to all staff members working in the same building.

Evaluating Savings Potential

Of course, the savings vary by industry and by geography, both for the environmental costs (lights, heating, cooling) and for the net cost per square foot. For office workspace which is most eligible for cost savings, usage ranges⁴ from 150ft² to 300ft² per employee, averaging 220ft². With large city⁵ costs around \$27/ft² per year, annual savings could range from several hundred dollars per employee for simply turning the space “dark” and saving energy, to as much as \$6,000 per employee per year for lease terminations or lease/building avoidance in a metropolitan area. Payback in 3-6 months is typical for lease termination/avoidance.

Savings Examples

[Rabobank](#) reduced required office space by 40% from 26m² (280 ft²) per employee to just 15m² (161 ft²), a reduction of approximately 100ft² per employee, and realized more than 10% savings in operational costs in their headquarters building.

[Renault](#) is using OCS to enable flexible working methods with shared “hot desks” when employees come to the office; by reducing total desks by 8.3% (2,000 desks), Renault expects to save potentially up to €20M (U.S.\$27.7M) a year through flexible working solutions.

⁴ Rule of Thumb Calculator at <http://www.officefinder.com/officespacecalc.html>

⁵ Chicago Office Rate Forecast: <http://www.scribd.com/doc/4621481/Chicago-Office-8-8-08>

Optimize Communications Infrastructure

The focus in this area is to gain immediate or near-term cost savings. Consolidation, with resulting reductions in management and administration workloads and maintenance contract fees, is possible across all communication workloads – messaging, voice systems, servers and sites, and application packages. In some cases, licensing costs can be reduced by converting to a comprehensive or bundled licensing package.

Opportunity: Consolidate Communication Systems

Savings Opportunities

Consolidation of communications systems such as telephony, voice mail, instant messaging and audio/video/web conferencing is a huge savings opportunity. In the past, there were essentially one or more PBX or Key systems per location, often accompanied by a set of related systems such as voice mail, interactive voice response (IVR), call centers, call accounting and administration consoles. Now with Unified Communications, consolidation of systems to a single or a few locations and systems is very practical, with support of other sites via secure Internet Protocol connections on the enterprise wide area network (WAN) or the Internet.

This savings initiative is often very timely, since many PBX and voice mail systems installed in the late 1990's are nearing the end of manufacturer's support and decisions must be made in any case. Applying the consolidation model to those decisions will usually yield major savings. The approach is to establish or expand a central platform to which sites can be consolidated and then to progressively consolidate eligible sites to the central platform. Even if some specialized items, such as IVR or a complex call center are not ready for consolidation at this point, all the other systems can be converged and savings will still accrue.

Applying Microsoft UC to Realize Savings

OCS R2 is a highly functional platform for voice communication system consolidation. If voice mail systems are also being consolidated, then Unified Messaging in Exchange 2007 can serve that need in most enterprises. Please refer to the 2009 white paper, "[The Compelling Case for Unified Messaging](#)", for a broader review of the unified messaging topic and the related savings and business value. All of the required communications for most workgroups and sites can be served by these two communication platforms. Since OCS R2 and Exchange 2007 are each integral software environments, each with a single administrative interface, a significant administrative savings is possible. OCS R2 and Exchange 2007 are notable for their flexibility in supporting groups, sites and remote workers, and can enable a more rapid and significantly less costly consolidation.

Evaluating Savings Potential

For communications infrastructure consolidations or replacements, cost avoidance is the biggest opportunity, since PBX and voice mail replacements can easily range from \$600 per user to over \$2,000 per user, depending on the specific vendors and related services prices. Since comparable OCS R2 costs are approximately half of these price ranges⁶, the migration of 1000 users to UC with OCS R2 could yield \$300,000 to as much as \$1,700,000 in capital cost avoidance over time.

⁶ http://www.unicommconsulting.com/library/DeMystify_VoIP_and_UC_Price_Trends_mp_Sep07.pdf

In addition to capital cost avoidance, which provides immediate payback, savings can be found by eliminating on-going maintenance contract costs for legacy PBX and voice mail systems, in the range of \$100 per PBX station/voice mailbox user per year, plus the operational management of the systems, ranging from \$25,000 to \$75,000 per system per year. This is most easily accomplished if you have multiple PBXs and/or Key Systems in your enterprise, since you can progressively decommission those systems, starting in the workgroups or locations where OCS R2 and Exchange 2007 provide the most significant impact.

Savings Examples

[Lifetime Products](#) saved \$16 per employee per year, a payback of 9 months, by consolidating voice mail systems to Unified Messaging in Exchange 2007, plus \$600,000 per annum by eliminating most fax machines, using UM in Exchange for fax management.

[Lionbridge](#), a leading provider of language, content and technology outsourcing services with 4,600 employees in 26 countries, expect to save almost \$1.4 million in capital investments with a payback of 7 months by replacing 40 PBX systems.

Opportunity: Consolidate Messaging Systems and Infrastructure

Savings Opportunities

The combination of integrated software to support enterprise messaging and the advancement of computing power (64-bit processors) and storage options creates a major savings opportunity for most businesses. The major elements of existing messaging infrastructure that can be consolidated to produce the savings economies are:

- Use of 64-bit and virtual servers where appropriate to consolidate location or divisional servers while preserving separate domains or identities if necessary. This capability allows centralized consolidation, eliminating the cost of equipment and support at remote sites.
- Elimination or avoidance of SAN/NAS Configurations wherever there is a proliferation of expensive local or redundant message storage or archival systems.
- Consolidation of messaging-based applications. Often a number of standalone, local systems exist for compliance, archiving, SPAM and Virus controls, messaging-based workflow applications, shared folder support or even voice messaging. In many cases, these locally distributed applications can be consolidated for significant savings in operational and maintenance costs.

As with communications infrastructure, the methodology for savings is to establish or expand a centralized messaging platform while decommissioning the existing remote or diverse messaging systems and related infrastructure.

Applying Microsoft UC to Realize Savings

Exchange 2007 is a powerful, industry-leading solution for consolidating messaging, storage and access systems to save costs. The savings begin with reductions in the number of messaging servers, usually through consolidation onto 64-bit systems, often cutting the number of servers by half. In addition, since Exchange 2007 supports Direct Attached Storage (DAS), costs can be avoided for additional Network Attached Storage (NAS) or Storage Area Network (SAN) systems. Also, Exchange 2007 includes automated archiving and backup solutions, SPAM filters, and Virus protections, allowing the decommissioning of existing stand-alone systems operated for those purposes.

Evaluating Savings Potential

The savings potential is seen in two categories, with paybacks of less than 6 months when new purchases are avoided or when maintenance/service contracts are terminated.

- 1) First, reduction of the number of servers to be maintained and supported can be usually reduced by 50%. At an annual cost of ownership per server of \$15,000 to \$25,000, a consolidation from 100 to 50 servers would reduce costs by an average of \$1 million per annum.
- 2) Second, the consolidation or avoidance of expansion of ancillary SAN/NAS systems for storage and archiving can yield cost avoidances of tens to hundreds of thousands of dollars, depending on the amount of storage needed to support enterprise message retention policies.

Savings Examples

[Telecom Italia](#), a telecommunications leader in Italy, reduced dedicated e-mail servers by more than 40%, from 130 to 70 servers.

[Emory University](#), in Georgia, US, reduced storage costs by 50% and doubled the number of users per server. The white paper describes comprehensive benefits that Emory University had achieved by upgrading to Exchange Server 2007.

Opportunity: Consolidate UC Application Software Packages

Savings Opportunities

UC solutions can consolidate some or all of the typically diverse set of communications applications packages and supporting hardware. Most often, this is in addition to the savings directly available from consolidation of communication or messaging infrastructure (above). Examples include call accounting and/or reporting systems, call recording systems, interactive voice response (IVR) and voice portal applications, speech attendant and directory access applications, notification systems, pager applications, remote access to voice and/or messaging systems, message archiving systems, business continuity and backup systems, and more. If these functions can be provided as integrated elements of a UC solution, the costs of ownership, especially the separate management of the diverse systems, can be eliminated, including administration and maintenance time, license fees, service contract fees, vendor management expenses, lease or depreciation charges, and energy costs.

An inventory of application software as well as related servers and appliances, such as those suggested above, is the basis for identifying those elements that can be replaced by a UC solution. A concurrent assessment of the staff assignments and recurring expenses, such as maintenance contracts, will enable tabulation of the total savings available through replacement with UC software applications.

Applying Microsoft UC to Realize Savings

The Microsoft UC solutions, Exchange 2007 and OCS 2007 R2, include the most extensive consolidated set of communication application elements that were sold and deployed separately in the past. Essentially all of the separate functions listed in “Savings Opportunities” above are now available as part of the Microsoft UC solutions and can be

obtained via a consolidated Enterprise CAL Suite license. Table 1 in [Appendix A](#) shows a range of standalone and legacy UC-related software packages that are candidates for consolidation onto the Exchange 2007 and OCS 2007 R2 solutions. Table 2 in Appendix A shows additional operational and infrastructure software functions that can be consolidated based on the single Enterprise CAL Suite license (more on the Enterprise CAL suite below).

Evaluating Savings Potential

The savings potential estimate is straightforward, consisting of performing an inventory of standalone and third party software that can be consolidated into the Microsoft UC solutions. An application-by-application evaluation of replacement options for the applications currently used to perform the functions listed in Appendix A will identify the opportunities for application consolidation and resulting savings.

As a rule of thumb, a large enterprise will have ten (10) such applications, representing an investment of \$500,000 and requiring at least one full-time staff position to support those. Payback is usually immediate when the purchase, upgrade or replacement of the existing diverse applications can be avoided. Thus, the staff savings from consolidation can be \$75,000 per year and licensing avoidance will approximate \$100,000 per year over 5 years.

Savings Examples

[Franklin Covey](#), a time-management company in the US, reduced the cost of remote connectivity as separate server expenses by about 40% by upgrading to Exchange Server 2007 and Outlook Web Access.

Opportunity: Optimize Software Licensing

Savings Opportunities

In addition to the application software consolidation described above, enterprises can achieve major savings by focusing on the best packaging or bundling options available from their primary software provider(s). This option is available from a number of UC providers and is especially an opportunity for enterprises using Microsoft UC and Office solutions.

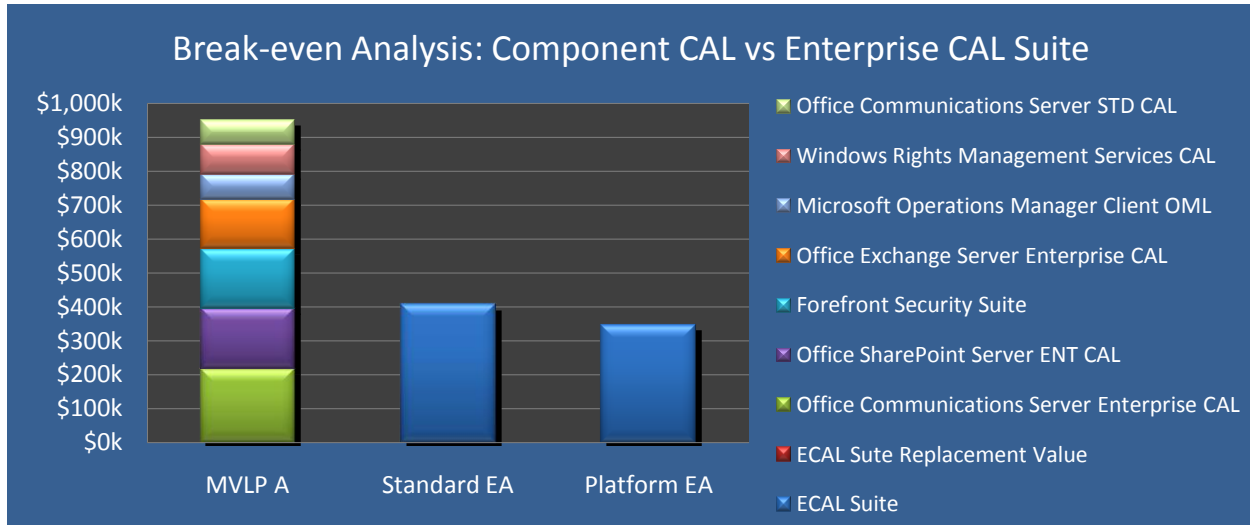
The savings from converting to consolidated or bundled software pricing can be significant and accomplished in a few months' time, since the task is simply to negotiate and update the purchase orders and licensing agreements – no technology deployments or changes to user applications is needed to achieve these savings. Cost avoidance is also possible, since new business requirements can often be served by UC or related applications that are included in the bundled licenses. It is important to look broadly at this question, so as to include all the departments – IT, Telecom, Facilities, Administration, and Lines of Business – that are using the software packages. Also, dialog with Purchasing/Procurement departments is crucial, both to educate them on the licensing opportunities and to get the latest information on existing contracts.

Microsoft UC Savings Applications

Microsoft offers the Enterprise CAL Suite⁷ (or E-CAL Suite) that provides a full range of Office functionality and a complete package of UC solutions for potential savings of up to 50%.

⁷ <http://www.microsoft.com/calsuites/>

Specifically for UC, the E-CAL suite includes both the Standard and Enterprise CALs for Exchange 2007 (the Enterprise CAL includes both Unified Messaging and the Anti-SPAM and Anti-Virus packages) and both the Standard and Enterprise CALs for OCS 2007 R2 (where Standard CAL includes the full suite of peer-to-peer communications and the Enterprise CAL adds the powerful conferencing, group chat, and enterprise VoIP solutions). The E-CAL Suite also includes the essential collaboration platform, Microsoft Office SharePoint Server, which integrates with both Exchange/Outlook and OCS/Communicator environments. The table below illustrates the savings for a 5,000 employee firm that converts from Microsoft Volume License Pricing (MVL) to the E-CAL Suite (Standard or Platform Enterprise Agreement).



Evaluating Savings Potential

Microsoft licensing information shows a potential savings of up to 50% on licensing prices for the Enterprise CAL Suite, providing an immediate payback using financing options. In the example above, a cost of \$190 per user was reduced to \$69 per user in the Platform EA case. More information on E-CAL Suite is available at <http://www.microsoft.com/calsuites/>.

Savings Examples

[Del Monte Foods](#) reports that by converting their “Next Generation Desktop” software licensing from individual licenses to the Enterprise CAL Suite. They reduced their technology spend by 16%, directly saved \$492,000 over three years, and gained additional valuable applications that were included in the Enterprise CAL Suite. The total of both savings and cost avoidance is valued at \$1.5 million.

Leverage Human Capital

The focus in this area is to deliver real productivity gains in the lines of business that will enable them to maintain or improve brand value and customer services even as the economy demands headcount reductions or constraints on hiring and backfilling of open positions. This occurs in two tiers: 1) general staff efficiency and 2) streamlined workgroup processes and collaboration projects. Also, UC solutions can reduce the staff required for enterprise governance and regulatory compliance in communications-related areas.

Opportunity: Improve Staff Efficiency

Savings Opportunities

Improving staff efficiency can be both sizable and, in the face of headcount cuts, essential. The opportunity is to use UC solutions to eliminate the communications-related barriers in everyday working environments. Major savings opportunities include presence and IM tools to find the right resources immediately and to avoid phone calls and messages to persons who are not available. Other savings come from simplified communications tasks, such as click-to-communicate from a document, e-mail or contact name. “Anywhere access” keeps users productive when mobile, saving time and travel. All of these lead to reductions of staff levels for the same workload which translates into savings at departmental, functional, and, ultimately, enterprise expense levels.

Estimates of individual employee productivity improvements range from 10 to 60 minutes or more per person per day, a savings of 2% to 12% of staff time, as described in the case study examples below. To achieve the savings, the recommended approach in both IT/Telecom and Line of Business departments is to respond to situation-driven hiring freezes, overtime cuts, or layoffs with new UC tools (and training) for the remaining staff. Rapid deployment of these new UC tools is especially important if the cutbacks are in customer-facing roles such as sales, services, or customer care/accounts receivable.

Microsoft UC Savings Applications

Microsoft UC, especially OCS R2, is one of the best solutions to realize actual hard-dollar, staff reducing savings through communications productivity:

- First, both OCS R2 and Exchange 2007 are fully integrated suites, enabling the optimal communications productivity for the employees.
- Second, the Microsoft UC solutions offer “Anywhere Access”, via PC clients, browsers and mobile devices, to achieve these productivity gains most widely.
- Third, the Microsoft UC solutions are natively integrated with Office and SharePoint tools to enable even further efficiencies.

Training and adoption are simple and rapid since the new UC tools are consistent with other, already familiar Microsoft Office tools.

Evaluating Savings Potential

Savings from implementing the basic productivity tools range from 5% to 10% in annual staff expense reductions. You can easily divide the employees into three groups:

- 1) *Those that are highly mobile, for which the savings are in reduced contact time for support and in avoidance of missed customer calls and call-backs;*
- 2) *Those that are office-based with high communications content in their day (which can be seen in usage reports), for which savings are in the automation of those communications and efficiencies due to better tools; and*

- 3) *All others, such as production or logistics staff, where the savings usually come from better information delivery (via wireless devices and portals) and major reduction in delays for assistance, approvals or exceptions.*

It is often useful to run fast pilot tests with each target group to find the “sweet spots” for productivity improvements. The payback is usually less than 6 months when these “sweet spot” implementations enable hiring avoidance or even staff reductions or reassignments.

Savings Examples

[Global Crossing](#) was able to improve customer responsiveness and reduce labor costs by 75% while business volume grew 70% over a three year period by converting to UC presence and instant messaging integrated to their business processes.

Microsoft IT, in measuring their broad deployment of OCS R2, identified productivity gains of 28 minutes per day (5.8%) as reported by the Microsoft UC users.

Opportunity: Streamline Workgroup and Collaboration Projects

Savings Opportunities

While improvements to individual productivity are important, benefits are even more significant, and often more readily measurable, when the UC tools are applied within a team – a workgroup, department, project team, or similar group of individuals working jointly and collaboratively to accomplish a particular goal or to produce a project outcome. There are many examples of workgroups using UC capabilities to quickly accomplish tasks that otherwise would languish waiting for an e-mail response, or a voice message to be accessed, or for a specific person to return to the office.

The two main tools for streamlining this work are (1) conferencing linked with collaboration tools, and (2) presence awareness with click to communicate with single number/identity access, both enabled with ‘anywhere access’. The benefits show up as shorter projects that consume fewer resources, shorter sales cycle times that either produce more revenue or reduce the sales headcount, and improved customer support with fewer resources.

Applying Microsoft UC to Realize Savings

The OCS 2007 R2 solution, in combination with Exchange Server 2007 and SharePoint Server, provides a full-featured solution set for this savings category. OCS R2 supports workgroup productivity exceptionally well with both (1) a complete set of communication tools, as described previously, and (2) the complete and effective integration of those tools into the workgroup’s business tools such as Office applications, SharePoint workspaces and portals, and business applications (using the OCS development tools and APIs).

Note that the resource savings and optimizations are highly dependent on an integrated solution set. While there are a number of individual solution elements in the market, provided as standalone applications by various vendors, the Microsoft integration has our endorsement for delivering the integrated functionality needed for increasing workgroup productivity.

Evaluating Savings Potential

The savings occur by speeding project or task completion through elimination of delays in communications and meetings and through avoidance of rework or coordination on work product versions. The best way to evaluate this is to estimate the number of concurrent projects, sales proposals, or similar tasks in your enterprise, grouped by major and minor projects if appropriate, and then estimate the reduction in scope for those projects through improved communication. Since payback is linked to project completion, payback of less than 6 months is possible by focusing initially on the shorter projects in the enterprise.

Typical savings are around 25% of the project time and scope. Savings Estimation per 100 project related staff positions:

$$(100 \times 25\% \text{ reduction in project completion time} \times \$70,000 \text{ average annual compensation and overhead per headcount}) = \$1,750,000 \text{ annual staff reduction savings potential.}$$

In addition to the savings, projects are completed and the benefits are realized more quickly.

Savings Examples

[Astra Zeneca](#), a major pharmaceutical firm, reports acceleration of six months or more in time-to-market for new products, resulting in reduced project costs and, much more significantly, the potential of billions of dollars in additional revenues.

[Infonavit](#), the National Workers' Housing Fund Institute with 4,000 employees in 80 offices throughout Mexico, found that Microsoft OCS 2007 enabled their employees to process loans more efficiently based on streamlined communications and collaboration. This increased the loan processing capacity of the Infonavit staff by 6%, or 30,000 additional loans per year.

[Care1st Health Plan](#), a healthcare network serving over 200,000 low-income and disabled members, tripled their compliance with regulatory requirements for Initial Healthcare Assessments of new members while freeing up workgroup time by creating a speech-enabled outbound-calling application to make and confirm patient appointments.

Opportunity: Simplify Governance and Compliance

Savings Opportunities

Whether by law, regulation, or corporate policy, many companies must spend significant time and resources to assure proper governance and compliance alignment to specified guidelines.

In the past, governance and compliance in communications solutions was accomplished with manual process overlays onto existing systems or with separate, add-on software modules to the business applications software. The savings opportunities come from embedding the governance and compliance functions into the core UC solutions, so as to avoid the manual overlays or workaround procedures and to eliminate the separate modules.

Applying Microsoft UC to Realize Savings

Both Exchange 2007 and OCS R2 are currently unique and differentiated among enterprise communications solutions for completeness and integration of functionality to enable automatic compliance support and enforcement. To meet regulations requiring documentary

evidence, both OCS R2 and Exchange 2007 provide logging, recording, archiving and retrieval of the required information. For regulations requiring security and privacy, both products provide for encryption of information and communication transmission, to the maximum extent possible (e.g. voice calls on the PSTN or cellular network are not encrypted when outside the enterprise firewall). In addition, Exchange 2007 provides Rights Management settings that can restrict information access by unauthorized parties; OCS R2 provides access controls to communication sessions that prevent unauthorized access and that record the active participants at any point in time.

The result is improved governance and compliance at a lower operational cost. The direct savings, of course, are in reduced staff time and elimination of third party applications and systems previously required. The improved outcomes are in the quality, certainty and ease of compliance, possibly avoiding thousands or even millions of dollars in remedial expenses.

Evaluating Savings Potential

The value of governance and compliance improvements will vary according to your enterprise's industry and historical situation. We suggest an inventory of the staff time and the individual applications and servers used to serve these needs. While the information research and reporting work will continue; the staff or manual information extracting and for the management of multiple applications or servers will be eliminated. Since each case is unique, no "estimation" is provided.

Savings Examples

[Webcor Builders](#), a 1,200 employee building contractor in California, US, saved \$70,000 in IT staff time and \$40,000 in attorney staff time by using the advanced archiving features of Exchange Server 2007 to assure effective message retention and regulatory compliance. Webcor combined this with Symantec Enterprise Vault to enable rapid search and E-discovery processes in response to litigation events.

Summary

This white paper has reviewed specific cost savings opportunities within three broad savings categories: reducing out of pocket expenses, consolidating communications infrastructure, and leveraging human capital. The savings potential estimates are summarized in this table:

Savings Category	Microsoft UC Focus	Savings Potential (Est.)
<i>Reduce Out of Pocket Expenses</i>		
Travel Expenses	Unified Conferencing	\$ 913 per employee per year
Reduce Conferencing Service Costs	Unified Conferencing	\$1,000 per user per year
Telephone and Cell Phone Bills	UC Desktop & Mobile Devices	\$ 744 per employee per year
Reduce Facilities Costs	Flex-Work, Anywhere Access	\$6,000 per employee per year
<i>Optimize Comm. Infrastructure</i>		
Consolidate Communication Systems	UC & System Consolidation	\$ 400 per employee per year
Consolidate Messaging/Fax Systems	Exchange 2007 Capabilities	\$ 300 per employee per year
Consolidate Application Packages	Consolidated UC Solution	\$ 100 per employee per year
Optimize Software Licensing	Enterprise CAL Suite Pricing	\$ 120 per employee per year

Savings Category	Microsoft UC Focus	Savings Potential (Est.)
Leverage Human Capital		
Improve Staff Efficiency	UC-based Productivity Gains	\$ 2,000 per employee per year
Streamline Workgroup Projects	UC based Collaboration Tools	\$17,500 per project HC/year
Simplify Governance & Compliance	UC Enhancements and Tools	\$ 92 per employee per year

Every major category offers compelling savings opportunities. Your action decisions will vary according to your business needs and timing. In almost all cases, significant savings are available within just a few months' time by reducing travel, conferencing services costs, and telephone and cell bills. Similarly, optimizing software licensing can begin saving money within months. Infrastructure optimization will usually have a longer time to benefit, perhaps one or two quarters, since physical changes and software reconfigurations must occur, but the savings and benefits are significant and lasting. Leveraging human capital offers some of the larger potential savings or cost avoidances and may be crucial in the face of headcount cuts, yet will require changes to business methods and processes to realize the full savings potential.

To assist in planning for and realizing the savings, Microsoft has developed a business value calculator to assess the savings and value of Unified Communications; Microsoft account representatives and partners can make this calculator available to estimate the value specifically for your enterprise. The following table combines the output of two typical analyses from that calculator, for both large (5,000 user) and mid-range (500 user) enterprises. The data show the first year potential benefits and savings for each case; while the savings potential increases in subsequent years, the table shows only the first year potential savings to highlight the ability to achieve rapid, in-year payback. The calculated per-employee savings potential varies, of course, from the case-study based savings estimates in the prior table.

Year 1 Potential Annual Benefits

	Large Enterprise 5000 Users	Mid-Range Enterprise 500 Users
Improving Business Outcomes	Year 1 Benefits	Year 1 Benefits
Increase End-User Productivity	US\$ 545,942	US\$ 94,182
Decreasing Costs	Year 1	Year 1
Reduce Travel Cost for Meetings and Training	US\$ 2,475,000	US\$ 247,500
Cut Audio/Video/Web Conferencing Costs	US\$ 1,765,680	US\$ 154,428
Cut Telephony Costs	US\$ 420,000	US\$ 122,000
Lower Real-Estate and Facility Costs	US\$ 230,000	US\$ 30,000
Reduce Cost for Voicemail	US\$ 150,000	US\$ 30,000
Reduce Messaging Costs	US\$ 660,089	US\$ 57,263
Year 1 Total Potential Annual Benefits	US\$ 6,246,711	US\$ 735,373
Benefits Per User	US\$ 1,249	US\$ 1,471

As described in this paper and as illustrated in the summary tables, UC capabilities directly contribute to cost-reduction efforts. At the same time UC solutions can help offset the challenges caused by hiring freezes or headcount reductions. Concurrently, UC builds business value by

breaking communications bottlenecks; by speeding transactions; and by making departments, teams, and even individuals more productive, effective, and efficient. Even more business value is available through OCS R2 and Exchange 2007 communications integrated to optimize business processes in the enterprise.

The costs to realize these benefits will vary by enterprise situation, but in almost all cases, especially in large enterprises, a selective, phased implementation will yield significant net benefits.

In addition to the cost savings efforts, strong companies will take advantage of this downturn to restructure and reposition themselves to emerge in a much better position during the recovery cycle with increased market share, stronger relationships with its customers, and greater business value overall.

We have noted many ways that the Microsoft UC solutions enable these immediate and sustainable UC savings and benefits. In addition to the values noted in support of cost savings, Microsoft UC solutions also provide an infrastructure designed to provide valuable business solutions today, with a platform for future growth and development.

We urge you to consider these UC Savings options intensively. Immediate and short term savings are available with sustainable long-term benefits and competitive advantages. The necessities of these challenging times are also opportunities to understand and adopt the powerful new capabilities of UC solutions. Resources are available to help you in this process and we wish you every success.

Appendix A: Standalone Application Consolidations

Table 1: The following table shows a typical list of third party and standalone software application packages that can be consolidated into the OCS R2 and Exchange 2007 Suite. Contact your Microsoft Partner or Account Team for a review of your enterprise's applications and an estimate of the savings potential from a consolidation into the Microsoft UC solutions.

<i>Consolidate These UC-Related Applications</i>	<i>To These Microsoft UC Products</i>
Web Conferencing service or servers	Office Communications Server 2007 R2
Multi-Party Audio or Video Conferencing services or systems	
Legacy PBXs/Key systems and early VOIP systems	
3 rd Party or Public Instant Messaging & Presence	
Group Chat or Persistent Chat systems	
Call Recording systems	
Call Accounting systems	
IVR and Speech Attendant systems	
Departmental ACD systems	
Voice Messaging Systems	
eMail Protection Applications or Appliances, e.g. Virus Protection or Anti-SPAM applications	
• E-mail Security	
• Journaling and archiving	
• Mobile e-mail delivery	
• Voice mail and Unified Messaging systems	
• Antivirus and anti-spam software	
• VPN software to access e-mail messages and file shares	
eMail Anti-spam & Antivirus Protection	
Hosted eMail Filtering	
eMail Archiving	
Document Protection, Audit, Retention	
Collaboration Antivirus	
Client Malware Protection	
Desktop Monitoring & Audit	

Table 2: The following table shows additional enterprise applications that are included in the Enterprise CAL Suite, adding additional savings potential to enhance and extend your UC investments.

<i>Consolidate These Other Business and Infrastructure Applications</i>	<i>To These Microsoft Enterprise CAL Suite Products</i>
E-mail Protection	ForeFront for Exchange
E-mail Anti-spam & Antivirus Protection	
Hosted E-mail Filtering	
Business Data Search	Office SharePoint Server
E-Discovery	
Browser-based KPIs, Dashboards, Excel Services	
Business Data Connections	
Browser-based Reporting	
Browser-based Forms	
Central Forms Data Collection	
Forms Workflow	
Document Protection, Audit, Retention	Windows Rights Management
Collaboration Antivirus	ForeFront for SharePoint
Client Malware Protection	ForeFront for Client
Desktop Monitoring & Audit	Microsoft Systems Center

Appendix B: About the Authors

Marty Parker, Principal, UniComm Consulting, LLC



Marty Parker has been a leader in Unified Communications since the late 90's, as he saw the convergence of real-time and non-real-time communications with business applications to drive new, compelling use cases. With a background in vertical market sales, marketing, finance and strategic planning with IBM, Marty has consistently focused on the business and financial benefits of new technologies. With Lucent and Avaya, Marty held leadership roles in the definition and creation of UC products and solutions, sponsoring the blend of voice, web and video conferencing as core elements of effective UC packages. Since 2005, Marty has been an independent consultant specializing in UC.

Mr. Parker holds a BS in Business Administration from the Haas Business School of the University of California, Berkeley.

Don Van Doren, Principal, UniComm Consulting, LLC



Don Van Doren comes to Unified Communications with 25 years of experience as the founder and president of Vanguard Communications, a leading independent consulting firm in call center, contact center, and interactive voice response technologies and solutions. Don sees Unified Communications as an area that will build on the learning and experience of the contact center industry. His focus in Unified Communications is to help enterprises improve their business processes, enrich both customer and employee satisfaction, and, concurrently realize hard-dollar savings and high ROI, by managing and informing the communications events with business process information.

Mr. Van Doren holds a Masters in Business Administration from the University of Michigan.