

Capturing CEBP Value

How Unified Communications software delivers
Communications Enabled Business Processes (CEBP)
to reduce costs and improve results for your enterprise.

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Executive Summary

Unified Communications (UC) capabilities deliver many benefits to business operations. Improvements in individual Information Worker productivity have been widely documented. More importantly, both private enterprises and public sector organizations are finding significantly greater benefits by integrating these new UC functions directly into their business process and business applications software. Such integrations are known as Communications Enabled Business Processes (CEBP).

This paper defines seven solution scenarios where enterprises are investing in CEBP and outlines an approach by which an enterprise can assess how to apply UC in these seven CEBP scenarios. Typical benefits are defined and reference case studies are cited for each scenario.

Assessment and resultant action planning is recommended at this time to assure your enterprise remains in the forefront in the use of communications technologies as a cornerstone for your enterprise's competitiveness and effectiveness in your mission.



Contents

A New Era in Business Communications.....	3
Drivers for CEBP Investments	4
Optimize Resource Utilization	4
Accelerate Transaction Completion.....	5
Increase Notification Precision	6
Improve Contact Success	7
Automate Communication Processes.....	8
Speed Information Delivery	9
Enhance Collaboration Effectiveness.....	10
Considerations for CEBP Implementation	12
Summary and Recommendations.....	14

A New Era in Business Communications

New, software-based communications tools are transforming how enterprises, in both the private and public sectors, operate more effectively. Thousands of enterprises are now applying the new capabilities of software-based communications to cut costs and to improve their organizational results: they connect their employees, customers and suppliers in new ways and streamline their business workflows by eliminating the waste, rework and delays.

For the past century and even in the last decade, communications systems have been delivered as closed, proprietary silos of technology for each type of communications – telephony, fax, voice mail, e-mail, instant messaging, conferencing, etc. But now, new communications systems and solutions are being delivered as flexible software-based platforms with open and extensible APIs and software development tools that enable you to incorporate multiple communications modalities in your enterprise operations.

The flexibility and efficiency of software-based communications functionality and the ability of software to manage the streams of digital media – voice, text, images and video – combine to enable solutions that were either not possible or not affordable in the recent past.

Based on these new capabilities, enterprises can now re-examine their operations, business processes, and workflows to find those places where the old methods of communications or the lack of communications are causing barriers or bottlenecks. We call these barriers or bottlenecks communication ‘hot spots’. Software solutions incorporating communications can be applied to remove or mitigate those hot spots, creating major savings in expense, time and labor, or improving business results by enhancing customer service, growing revenues, or increasing profits.

Enterprises can achieve basic savings by making new tools available to their employees including presence, instant messaging, and click-to-communicate from directories, documents, and applications. These new tools increase individual user productivity. In some cases, these tools will also enhance the effectiveness of the business processes in which the individuals participate.

However, much greater benefits are available by integrating the new communications tools into specific enterprise operations and business processes. This is known as “Communications-Enabled Business Processes” or CEBP¹. The communication ‘hot spots’ in enterprise operations can be analyzed to determine which can most effectively be mitigated with new UC tools. The analysis can then be converted into a series of action plans to produce an investment and benefits roadmap.

Many enterprises of all sizes have already found those ‘hot spots’ and are already on their Unified Communications and CEBP roadmaps, as described in the following sections of this paper.

¹ The term “CEBP” was coined by Gartner in 2003 and is now widely used and understood. At Gartner Symposium 2010, Bob Hafner, Managing VP, Gartner Research enterprise communications application team, presented a [CEBP review](#), summarized as: “Integrating communications and collaboration with business processes offers opportunities for hard and soft benefits, savings and business improvements. The methods for modeling and developing these applications have matured along with unified-communications solutions.”

In the past, these CEBP steps were difficult and costly, because of the silos of proprietary communications systems. Now, with Unified Communications solutions, communications can be much more easily integrated with application software, even to the point that clicking to communicate within an application is increasingly as easy as pressing CTL-P to print.

Drivers for CEBP Investments

Enterprises make investments in business improvements based on compelling evidence of important achievable benefits. Two most obvious benefits are cost savings and improved business results. The first step for most enterprises is determining where to look for the business improvements that will produce those benefits.

We have identified seven solution scenarios where applications using Unified Communications and CEBP reflect actual benefits being achieved today. The scenarios are an excellent starting point to define the roadmaps we recommend that enterprises develop. This identification of these scenarios originally comprised five categories of UC applications in 2007². Continued investments, hundreds of new cases studies, and innovations by suppliers, application developers, and customers have expanded the range of UC and CEBP application opportunities.

Today we define the following key solution scenarios that can be achieved through CEBP:

- Optimize Resource Utilization
- Accelerate Transaction Completion
- Increase Notification Precision
- Improve Contact Success
- Automate Communication Processes
- Speed Information Delivery
- Enhance Collaboration Effectiveness

The following sections describe each of these and provide evidence of achievable benefits.

Optimize Resource Utilization

Efficiently engage the best resource for the purpose. Resources are key to an enterprise. This is especially true for the human resources – the talented, trained and certified people who produce and deliver the enterprise’s products or services. Too frequently, these resources can be underutilized or wasted due to communications inefficiencies. The new UC tool known as ‘enhanced presence’ is a great way to immediately see who is available to perform a task, answer a question, assist in a project, or approve a request. In some applications, software analysis of presence properties such as location proximity or skills applicability can be used to make the best connection immediately. Compared to the old method of making multiple uninformed calls that land in voice mail and sending multiple e-mails requesting a response, even basic availability-only based presence is reported to save 5%, 10% or more

² See “[Top UC Applications Are Now Apparent](#)”, M. Parker, BCR Magazine, 2007.

in daily workloads, while also accelerating business results. Advanced tools such as the resource finder functions of the Microsoft Lync client or CEBP applications such as the case studies below can improve resource utilization even more dramatically, with results ranging as high as a 70% reduction in labor content in some business processes. In the advanced applications, enterprises are applying CEBP tools for even better resource management. When a resource is needed with specific skills, certifications, roles, knowledge, or other attributes, software can assist in the process to automatically locate the best resource to meet the immediate need. CEBP applications in this category are driving investments across industry categories, ranging from government and healthcare to manufacturing and professional services.

- Benefits from Resource Utilization applications include: reduced labor content in the business process; better utilization of trained resources which reduces staffing costs; and faster services or task completion which often increases revenues and margins. [Global Crossing](#) applied CEBP methods to find automatically the best on-shift, skilled, and available engineer to resolve customer issues at their help desk. They are now able to complete the problem resolution via Instant Messaging 70% of the time and the number of phone calls per trouble ticket dropped from 5 calls to 0.3 calls (a phone call was only needed for 30% of the tickets). The effect was a significant reduction in labor cost per ticket and an 80% improvement in customer response times.
- [Fortek](#) developed an emergency response system that, when an incident is reported, can automatically detect which responders are in the neighborhood of the incident and are available. The available responders are all placed in a Lync conference which enables the responders to coordinate the incident response. Average response times have been reduced from 7 minutes to less than 2 minutes.

Accelerate Transaction Completion

Most enterprises have major business processes that focus on completing a transaction. Examples include producing and shipping a product in manufacturing, receiving and delivering a product in transportation, issuing an insurance policy in financial services, approving a building plan in local government, or completing a program of treatment in healthcare. In every case, the customer is served and the enterprise earns revenue or fulfills its mission by completing the transaction. However, many transactions, including all of those mentioned here, can incur delay, rework, or errors based on the impediments of historical communications methods such as missed calls, incomplete or inaccurate messages, or unavailable information.

Now, with CEBP, enterprises are able to build communications directly into the workflows related to those transactions. When communication is required, it can be initiated directly from within the business software applications that support the processes, eliminating errors, wasted time, and most delays. Further, since CEBP is based on the full range of Unified Communications tools, the communication can be in the format most appropriate to the situation -- a text or IM message to a cell phone, a video session to inspect a defective part, or a voice consultation amongst hospital caregivers.

Often Transaction Completion is combined with Notification Precision (see below) for further acceleration.

Benefits from Transaction Completion CEBP applications include: reduction in labor cost per transaction; faster time to billing; likely improvement in customer satisfaction; an increase in capacity which usually grows revenues and margins; and an increase in asset utilization which reduces capital costs and balance sheet loads for the enterprise.

- [Wonderware](#) is a leading producer of manufacturing plant automation software. Wonderware has embedded communications functions directly into the plant operator interface, using Microsoft Office Communications Server (the precursor to Microsoft Lync 2010). This enables the operations center to connect directly to an appropriately skilled and available plant technician to minimize downtime and maximize plant throughput.
- [Infonavit](#) is a government mortgage company with offices throughout Mexico. Their mortgage processing teams are using presence and IM to find immediately available team members to address questions, eliminating delays and moving the application to the next step in the mortgage application process. This enables a capacity increase of 30,000 mortgage completions annually by Infonavit's 4,000 employees.

Increase Notification Precision

In many cases, enterprise actions and processes are triggered by some exceptional or external event. This might be some element of a manufacturing production line failing or falling below specified thresholds; or it may be a complaint from a customer or citizen; or perhaps it is a high risk situation such as a hazardous material spill from a cargo vehicle. Whatever the cause, there are almost always a set of rules that guide the proper response to the situation and a specific set of personnel who need to be notified and engaged. Since the rules can often be complex and since the personnel to be notified will vary based on shift assignments, time of day, and the skills required for the nature of the triggering event, this can be a very complex and error-prone situation with most existing communications tools.

Now, with CEBP, software can intercept the triggering event or alert and can initiate, guide and track the communications from start to finish. The right personnel, both inside and outside the enterprise, can be notified via the most appropriate communications method and the responses to the notification can be tracked and logged to achieve effective outcomes, with records to assure compliance to standards or regulations.

Benefits from Notification Precision applications include: reduced errors and rework rates since the right person is notified promptly; improvements in customer service levels or SLA performance; improvements in safety and quality for the enterprise, and lowering risk profiles and insurance costs.

- [AtHoc](#) produces software tools to manage notifications of all types, including event alerts from software programs, alarms from security and monitoring systems, or emergency notifications to groups and communities, such as school campuses. AtHoc integrated Microsoft Office

Communications Server (now Microsoft Lync) communications functions into their software to enable notifications through multiple communications channels. AtHoc avoided the cost and time of creating this software on their own to provide a more cost-effective notification product to their customers.

- [Convergent Solutions](#) developed a crew dispatch system for responding to utility system or network outages. Through rapid, software-assisted notification, the utility provider can more quickly notify and assemble the right crew for the task based on location, skills, availability and labor rules. This CEBP solution uses Microsoft Lync and Exchange for any combination of notifications via an outbound phone calls, instant messaging (IM) or short text message (SMS), and gathers the confirmations and declines using Interactive Voice Response (for calls) or query response bots (for IM and SMS).

Improve Contact Success

Interactions outside the enterprise boundaries engage customers, suppliers, business partners, constituents, and many others. These relationships involve many communications events since the customers and partners seek to make contact with the most appropriate enterprise personnel. Conversely, the enterprise seeks to have effective contact with the customers and suppliers. While some customer and supplier interactions flow through a contact center where contact success is measured and managed to specific service levels, many of the most important contacts to and from the enterprise are not measured or managed. Legacy communication tools are very inefficient and ineffective for these contacts. By some studies, 70% of phone calls end in voice mail, leading either to a callback at some later point; more often, the contacting party wastes their time in attempts to use other numbers (call a cell phone, call another person) or media (send e-mail, send text message, etc.). Due to this low success rate on phone calls, most customers and partners have shifted to e-mail, but that method has implicit delays and inefficiencies. Another approach is to use the “follow me” feature to ring multiple devices (desk, cell, home office) in an attempt to reach the intended person. But none of those options is optimal. Clearly, these approaches impede effective communications.

Basic Unified Communications can be helpful for improving contact success. If an enterprise can connect their presence and instant messaging system to the customers’ and suppliers’ presence and IM systems (called “federation”), it may be possible for the contacting party to see who is available and the best way to communicate before attempting a connection.

Further, with CEBP, customers and suppliers can engage software to help in one of several ways. One approach is to offer callers alternatives if the called employee is not available. Software can check presence to determine whether others on the employee’s team are available, and offer that choice. Another, increasingly popular solution is the “communications-enabled portal” through which an authenticated partner or customer can either indicate the type of contact they need (sales, service, accounting, etc.) or can see the presence availability of the staff, or their delegates, with whom they typically interact. This enables an immediate and informed communication, in the medium of their preference, whether instant messaging chat, voice or video calling, and/or information sharing. CEBP is

also being used to create contact success solutions that are displacing higher cost call center and contact center solutions, especially when the range of traditional call/contact center features is not required.

Benefits from Contact Success CEBP applications include: improved customer relationships and loyalty, usually increasing revenues and margins; more efficient interfaces with partners and suppliers, usually lowering costs and minimizing errors, rework and delays; and lower labor costs (i.e. lower expense to revenue ratios) for account management (sales and service) and supplier management (logistics).

- [Horizon21](#), a Switzerland-based financial services company, has reduced the number of unanswered calls both within their organization and with their customers by using the presence and instant messaging features of Microsoft Office Communications Server (OCS). Horizon21 is federating their OCS system with their financial services partners so that employees of both companies can see the other parties across enterprise boundaries. The effect is a dramatic improvement in efficiency, eliminating delays and lowering costs.
- [Emerson Ecologics](#) uses hosted contact center software based on Microsoft Office Communications Server. It offers an automated call distributor (ACD) that is able to handle queries via the telephone as well as via (web) chat. The ACD uses enhanced presence to identify the best available agent for the inquiry to provide optimal customer service.

Automate Communication Processes

Some communication events are highly repetitive or are part of a very specific workflow. In those cases, the communications can be automated. Many examples exist today such as workflows based on e-mail, commonly used for such tasks as expense report approvals or future delivery of business announcements or reminders. Self-service web sites and interactive voice response are other examples of this, for purposes such as telephone banking or online shopping. Similarly, RSS feeds are used to automatically assemble information to meet the user's needs.

Now, with CEBP, more complex communication tasks can be automated. Emerging basic examples include automatic joining of parties to an audio or web-sharing conference. More advanced applications integrate communication tools into business processes to complete transactions (rather than manually sending confirming messages or documents), to enable electronic signatures (rather than faxing documents), to incorporate communication recordings and electronic transcripts into project files (rather than manual note-taking or transcription), or to link two or more parties together at the earliest opportunity (rather than manual brokering of meeting times).

Increasingly, the tasks performed daily in many business environments will be enhanced by embedding communications capabilities directly into software applications associated with those tasks. When issues arise, additional information or assistance is usually accessed directly from within the business application. Presence-enabled and context-aware communications can be launched either by the employee engaged in the activity, or even automatically by the UC software within the application. Of course, Call Centers and Contact centers have been used to automate communications for the past two

decades through call routing, automated agent desktops, and interactive voice response; now CEBP solutions are also delivering that communication automation.

Benefits from Communication Automation applications include: significant reductions in labor costs where self-service eliminates the need for staff to relay information orally or by e-mail; reduction in delays from workers having to identify and locate individuals to provide information or decisions; reduction in labor costs for basic tasks such as faxing order confirmations; improved customer responsiveness and service which usually increases revenues and margins; and reductions in the cost of waste, rework and delays caused by late or overlooked communications tasks.

- [Care1st Health Plan](#) is a Monterey Park, California provider of health care services to approximately 200,000 low-income and disabled plan members. State regulations require that the members have health screening with primary care physicians and that the physicians complete an Initial Health Assessment (IHA) for each visit. Working with Microsoft partner 4PatientCare, Care1st has automated both the appointment making process, using the Speech Server in Office Communications Server both for calling the members to schedule appointments and to automate the IHA form completion by the physicians. Regulatory compliance was achieved without increasing the staff or budget while physician reporting time was reduced.
- [Extend Health](#) deployed an interactive voice response application combined with an automatic call distributor based on the Microsoft Unified Communications platform. The software is able to route the calls to the right agent based on customer input combined with historic customer information. Agents are presented with the customer information before the call starts. Using the built-in firewall traversal capability of Microsoft Office Communicator, agents can take the call from wherever they have internet connectivity.

Speed Information Delivery

Many communications events are simply a request for information. Many enterprises acknowledge that a large portion of their employees' cell phone calls or mobile e-mail messages are made to office staff to get information from the corporate systems. Further, when management or staff are mobile, they often find they must suspend a communication session until they can "get online" or "return to the office" to have the information needed to proceed with the business action. Most communication systems now have a software client to run on many brands of mobile wireless devices, but those clients are usually limited to the communications functions being offered or promoted by the communication system producer.

Now, with CEBP, it is possible to create user interfaces that combine communications tools with information access in a way that meets the business needs of the user. For example, access to inventory and logistics information while communicating with a repair customer may help a field engineer meet service level agreements (SLAs). Some enterprises are creating 'query-response' bots (software *robots*) to allow instant messaging queries for information as suggested here. Similarly, access to machine diagnostic information, or patient data, or relevant images while in a voice- and/or video-based problem

solving communication may shorten the time-to-resolution while producing a higher quality result. Of course, it may also be possible to collect, share, and capture information during such sessions to automate the information updates or documentation requirements. The key to this CEBP solution is to combine information and communication in ways that match the task at hand and that reinforce best practices for that business process.

Benefits for Information Access applications include: reductions in labor costs to manually or orally provide information to mobile personnel; reductions in the costs of errors or rework caused by communications that are misinformed or uninformed; faster task completion or improved customer services that usually results in increased revenues and margins; and better asset utilization by knowing the availability and location of needed supplies or equipment.

- [Herrenknecht](#) is a Germany-based company that is the leading global producer of complex tunneling equipment. Herrenknecht integrated Microsoft Lync 2010 with their inventory system so that field personnel can send Instant Messages to a software “bot” to access inventory data and locate nearby parts. Also, the inventory system can deliver information and alerts to the field staff, avoiding wasted time and travel and allowing faster issue resolution.
- [MetalForming](#) is a leading supplier of architectural sheet-metal machinery. In order to improve its support operations, it built Lync communications capabilities into each machine, allowing customers to directly communicate with MetalForming support personnel, using voice and video over IP, as well as application sharing. For MetalForming it reduced travel costs of their support staff, while for customers it offered much-enhanced support and training experiences.

Enhance Collaboration Effectiveness

For Information Worker roles that depend on collaboration, i.e. the iterative sharing of information and ideas to create content, products or services to meet new or situation-specific needs, the communications steps in the collaborative process are very important. Certainly, progress is being made today with more readily accessible voice, web, or video conferencing, along with associated document sharing. Yet, communication hot spots still exist such as the challenge of scheduling meetings or of getting complete attendance at those meetings. Or, the challenge of using single-dimension communication tools such as telephony or e-mail to share information or to discuss issues.

Basic Unified Communications is helpful in solving these problems by enabling easy, presence-supported setup of conferences without the delays of current methods of conference initiation. In addition, communications tools can be linked into collaborative workspace products such as SharePoint or even into all the basic business information worker tools such as Microsoft Office and Outlook. The new UC solutions such as Microsoft Lync can seamlessly involve parties outside the enterprise in secure team collaboration activities to assist in such functions as product focus groups or as interaction with outside contractors (advertising, architects, attorneys, etc.).

Further, with CEBP, the collaborative processes can be supported by software tools that manage the movement and sharing of information, track team involvement in review cycles, and provide action or escalation messages to only the appropriate team members.

Additionally, other CEBP solutions can make collaboration more effective by recording and automatically sharing appropriate meetings, conversations, or message strings, or by automatically linking events in the collaboration workspaces with relevant enterprise data, news, or web references that add perspective to the project.

Benefits from Collaboration Effectiveness include: significant reduction in labor costs per project based on faster and more efficient team operations; increases in revenue and margins when products or projects are brought to market or to production more quickly; reductions in asset requirements when capital intensive projects are completed more quickly; often increased revenues and margins when higher quality collaboration outcomes improve competitive differentiation or lower risk profiles for the enterprise.

- [Schlumberger](#) is a global oil field services and exploration company. Schlumberger integrated Microsoft Office Communications Server 2007 R2 with their Petrel oil field exploration and analysis software package to enable immediate collaboration with experts who could assist in evaluation of an exploration site. This immediate collaboration allowed completion of an exploration site analysis in 20% - 25% less time, conserving resources and assets, improving equipment utilization, and reducing the time to make critical decisions.
- [ProtoSphere](#) by ProtonMedia drives real-time communications and collaboration across the enterprise through a highly engaging 3-dimensional virtual environment. Organizations can bring their people and content together in visually appealing 3-D virtual spaces. In these spaces, they can talk, send instant messages, view and interact with presentation and media content, record notes, and access the web—all at the same time, from anywhere. Surveys of enterprise deployments of ProtoSphere for training applications have shown that learning retention is up to 50 percent higher than with training in other formats.

These seven CEBP solution scenarios, or categories, summarize industry experience to date in deploying CEBP UC applications. These scenarios can be used as a reference structure for review of the communications systems in an enterprise and for review of the opportunities to optimize business processes by removing communications barriers and bottlenecks. The scenarios can either be used as a checklist of potential solutions after identifying communications barriers, or can be used as templates to search for places in a business process where one of these scenarios exists and offers the opportunity for CEBP enhancement.

Considerations for CEBP Implementation

Successful CEBP projects require attention to key factors. Since changes are being made to business processes, it is important to have sponsorship from the specific process owners; this sponsorship will foster collaboration with and acceptance of the CEBP project. Also, the sponsorship will provide the change leadership necessary for proper introduction, training and adoption of the revised communication methods to produce the expected business process optimizations.

In parallel, the technical team will need to create the new CEBP application modules that deliver the improved communications functions to the business processes. As suggested for each of the seven CEBP drivers presented in this paper, the improvement can often be achieved through implementation and appropriate configuration of standard UC products.

In more advanced cases, the CEBP applications may require customization such as:

- Design and programming of specific business process rules, often with reference to dynamic data bases or information systems.
- Design and deployment of specific user experiences, such as click-to-chat or click-for-video functions presented in a web portal or embedded in a packaged application user interface.
- Formatting and delivery of the CEBP functionality to specific devices, especially mobile smart phones.
- Interaction between the CEBP application and other communication system components, such as for placing calls to persons on the corporate voice network or the public telephone network.
- Federation with other UC systems, such as to exchange presence status and enable click-to-communicate functions between the enterprise and specific partners or clients.

Almost no CEBP applications to date require all of those functions, so it is often possible to get started with CEBP with just one or two of the functional categories listed above. However, if it is possible to look ahead and anticipate CEBP functional requirements over a 3- to 5-year period, it will assist in the definition of CEBP platform requirements, in architectural decisions, and in vendor dialogs.

The CEBP platform requirements for your enterprise usually will define a set of key characteristics. These characteristics usually become a standard element in the Enterprise Architecture to provide the most efficient and non-duplicative use of technology, the most effective use of trained technical talent, and the definition of the communications fabric for adaptation of existing applications or design and procurement of new applications.

Typical characteristics applicable to CEBP platform planning include (next page):

■ Open and Interoperable Architecture

The architecture should be flexible and easy-to-use both for CEBP development and for integration and interoperability with other systems. For development, the platform should have well-documented Application Programming Interfaces (APIs) and supporting software development toolkits (SDKs); it will be preferable if these tools are consistent with development environments already used and understood in the enterprise's IT team or by the enterprise's proven systems integrators (SIs). For integration and interoperability, the platform should offer the ability to interact programmatically to and from third party software and systems; this should include service-oriented architectures (SOA) using standards-based methods and protocols, so that information, communications control, and media streams can be easily exchanged or integrated. The platform should also support development for the set of devices and form factors currently used and anticipated by the enterprise, such as the appropriate set of operating systems, servers, desktop computing and/or communication devices, and mobile computing and/or communication devices.

■ Modular and Integrated

The software should be modular to allow incorporation in the CEBP application, separately or jointly, the necessary selections of UC functions, such as presence, instant messaging, voice communication, video communication, sharing and/or editing of information (images, applications, desktops), and other unified communications tools. Administration functions should also be modular for inclusion in the CEBP application, or in the enterprise IT monitoring and management system, or in a standalone interface, as appropriate; also, administration functions should be consistent across modalities to avoid unique CEBP controls for each function.

■ Supportable

The platform and third party application development should be officially supported by the vendor. The vendor should support both developer and customer calls for support of the published platform functions as part of maintenance agreements and on a per-call basis otherwise. The vendor should also provide both partners and customers with the option of a vendor professional services organization that is trained and skilled in custom development to supplement the developer or customer projects. SDKs and other tools should also be supported by a peer-to-peer community for assistance and shared knowledge, sharing of appropriate and thorough training material, and code examples for selected CEBP functions or applications.

■ Ecosystem Supported

The vendor should have a broad ecosystem of partners that offer software, customization services, and/or devices for the CEBP platform. Preferably, this ecosystem would include sharing of success stories and an application marketplace to help both developers and enterprise customers see what others are doing and build on prior successes, reducing the time and cost to successful CEBP application deployment. The availability of a broad and accessible ecosystem enables enterprises to find the best price/performance delivery for their CEBP applications.

- **Low Barrier to Enterprise Implementation**

It is helpful if there is a low start-up or prototype cost for both developers and enterprise customers. This may be supported by such services as downloadable evaluation versions of the platform, to assist in prototypes and trials; sample code for easy application mockups; templates for prototype application environments; or innovation program support via talented resources or financial incentives.

Summary and Recommendations

Unified Communications capabilities clearly provide important opportunities to improve business performance. Communications Enabled Business Processes (CEBP) is an important and growing type of UC application. CEBP applications often provide much higher return because they actually improve an enterprise's business methods (processes) in measurable and repeatable ways. These improvements are already in use by hundreds of enterprises who are reaping the benefits of lower expenses, lower labor content in their processes, and higher profits based on faster business throughput and, often, better customer service that produces a growth in revenues and market share.

The seven solution scenarios for CEBP are visible, based on documented results. Your enterprise can find the CEBP opportunities by scanning your operations for the communication-intensive processes or process steps. If those process steps are 'hot spots' with symptoms such as delays, errors, or duplicative work, then test the hot spots against the solution scenarios to identify potential for UC applications for process optimization. Then look at the bottom line impact from UC improvements. Use this information to organize these opportunities into a logical sequence of investments that quickly begins to capture the returns. In most cases, such a roadmap will also be based on logical technology evolution where the learning from easier, early application projects will empower the organization for success in the subsequent, perhaps more difficult, projects.

We encourage you to begin now to assess your enterprise's needs and opportunities for CEBP. Examples of innovation are already appearing in essentially every industry sector, so it has become an imperative to assess your opportunities for UC and CEBP so as to remain competitive in your market and responsive to your customers and stakeholders.