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Strategic Networks Group

Insight to Move Forward

Collaboration: A Key Enabler of Economic Recovery

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Summary

Sixty-one percent of CFOs at large U.S. manufacturers expect their companies' revenues will rise in 2010, and 46% forecast a growth in profits.[i] However, 62% also don't expect to increase the size of their labor force this year.[ii] To achieve such aggressive financial goals without increasing the workforce requires that companies think differently — they can't do business as usual. According to the Corporate Executive Board, poor decisions made during an economic downturn can significantly impede a return to growth in an upturn. [iii] High on medium and large companies' objectives to boost business performance are improvements in collaboration, which is viewed as an effective way to make and enact better business decisions (see Figure 1). Collaboration is becoming widely recognized as a key enabler of *better* business decisions that both drive *and sustain* economic recovery.[iv]

Actions to Foster Collaboration

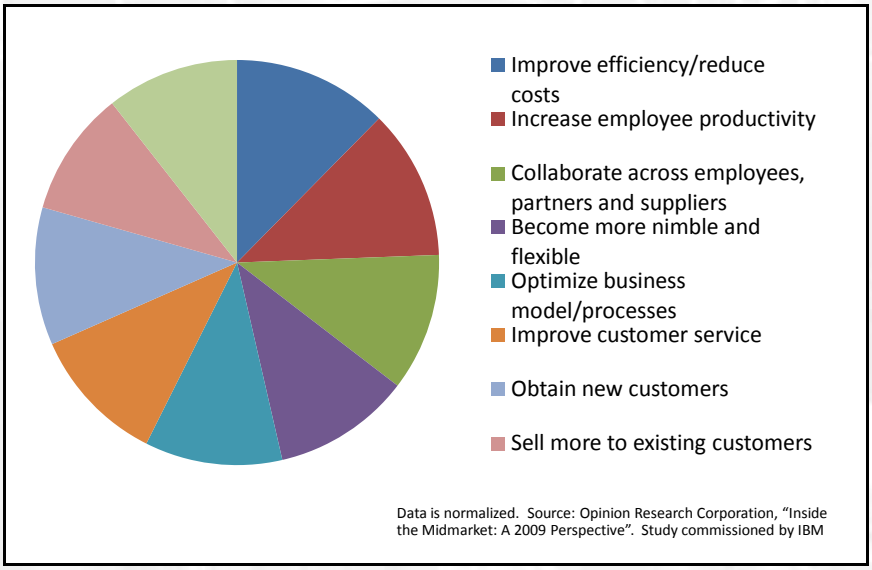
Fostering intra-organizational collaboration requires that companies:

1. **Understand the business**: Identify the firm's greatest drivers of revenue and profitability, and the jobs and business processes that revenue and profitability most depend upon.
   a. Understand the business functions that benefit most from collaboration. Sales, product management, business development, R&D, and customer service are roles that demand collaboration. These types of functions typically derive greater ROI from collaborative technologies than do functions like human resources, investor or public relations.[v]
   b. Thoroughly assess how people in key business functions work, and the types of changes that can improve important KPIs like productivity, flexibility, costs and customer responsiveness/flexibility. People who perform the functions listed above often have jobs that require a high degree of interpersonal and organizational communications and collaboration. These people may all be company employees, or they may also include people outside the company such as suppliers, contractors, customers, distributors, etc.
2. **Change key business processes**: Implement changes in underlying processes that improve business-critical functions. Organizational and cultural inertia are very real. But especially during tough economic times, people are often more open to considering and implementing changes they had previously resisted. For example, many travelers who had customarily flown business-class now fly coach, and a growing number of companies have slashed their

travel budgets but still "do the meeting" by using the latest videoconferencing technology. In many cases, businesses view these as permanent, not temporary, changes in individual and organizational behavior.[vi]

3. **Acquire the necessary tools**: These tools optimize key (revised) business processes. Don't buy everything, because often just a few well-selected tools can provide the majority of the benefit. However, new business processes and IT tools aren't always intuitive to use, so don't skimp on employee training. [vii] And since old habits die hard, remember to consistently reinforce new behavior (use of new/revised business processes and related tools).

Figure 1: Critical Business Challenges



The Technology to Support Collaboration: Unified Communications

In the world of information technology (IT), unified communications (UC) technologies are the IT tools that provide many of the key benefits of collaboration (see Figure 2). UC technologies provide a common interface to a flexible and feature-rich platform that integrates non real-time data and text-based applications with a variety of existing and emerging real-time applications, such as audio/video/Web conferencing, location-based services, fixed/mobile convergence, multimedia collaboration, and applications that use presence engines, like click-to-call/click-to-chat (see Table 1). Thirty two percent of medium and large businesses in the U.S. use UC, and an additional 31% plan to adopt these technologies within three years. Among the most popular of UC tools are those that promote collaboration — unified messaging (UM), instant messaging (IM), and presence, followed closely by high-definition videoconferencing.[viii]

Figure 2: Chief UC Business Benefits

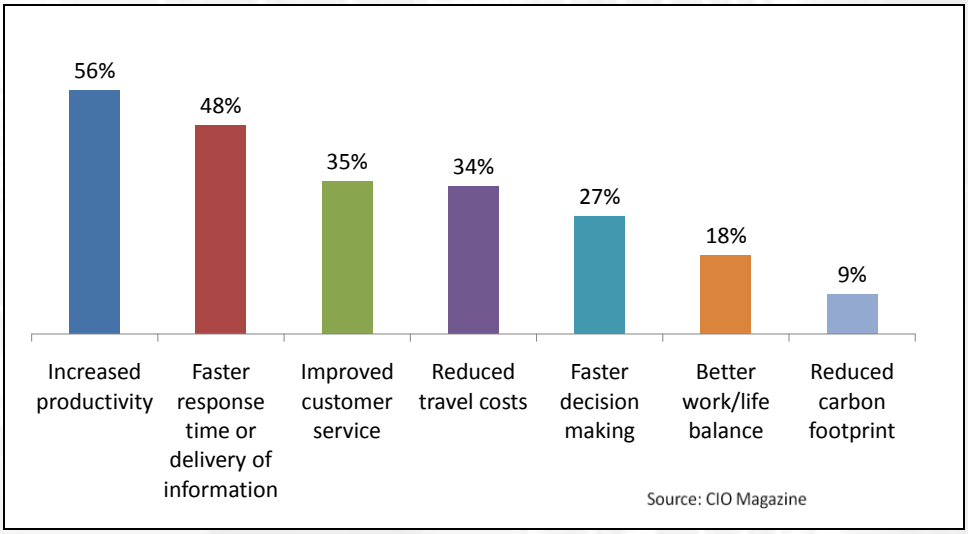


Table 1: Examples of UC Applications

Category	Description
IP-Based Collaboration and Conferencing	Point-point and multipoint HD videoconferencing (desktop, room/telepresence), Web/data conferencing or white boarding augmented by audio
Find Me/Follow Me	Enabled by presence engines, often included in fixed mobile services like consecutive ring or single number service
Unified Messaging	Unified inbox/outbox (single message box that handles email, IM, fax, landline and mobile phone messages) often augmented by text-to-speech and speech-to-text capabilities
Contact Center	Presence is used to optimize call/session handling; other common UC applications used in contact center applications include click-to-chat, click-to-call and speech recognition

Unified Communications Pre-Requisites

To deploy UC, organizations must first deploy a single network infrastructure that supports both voice and data applications on a flexible and scalable basis. Typically known as a converged network infrastructure, at a high level this requires that a business upgrade or acquire:

1. **Upgraded LANs**: Local area networks (LANs) enabled with quality of service (QoS) functionality support both real time and non-real time applications simultaneously, and typically meet or exceed the requirements to support UC.[ix]
2. **Premises equipment**: Implementation of VOIP gateways, IP PBXs or hosted IP telephony services that use QoS-enabled LANs to bring the benefits of UC to the desktop; many medium and large U.S. businesses have already begun the necessary migration.[x]

3. **Business-class IP-based WANs**: Employment of multi-functional packet-based services like MPLS and Ethernet services is necessary to support intra-company UC connectivity; businesses migration is well underway, with some carriers de-commissioning legacy WANs.[xi]
4. **SIP trunks**: SIP trunk services provide session, call control and management functions that UC applications need to be used across company locations, or between multiple companies.[xii] They interface between carriers' nodes and SIP-enabled customer premises equipment, such as a SIP gateway or IP PBX, and connect customer sites with service providers' hosted VOIP/IP centrex services and cloud/software as a service (SaaS) applications like hosted IP IVRs and IP ACDs.[xiii] By bridging IP-enabled LANs and IP-based carrier services, SIP trunks provide the necessary all-IP foundation necessary for UC collaboration across diverse locations, and are the fastest growing type of access service today.[xiv] [xv]

Important Unified Communications Selection Considerations

Once companies have identified key business objectives, they can consider UC technology choice, supplier selection and implementation issues. First-order business-driven UC selection activities include:

- **Identify high-business value functions**: Although UC tools can enhance collaboration and increase productivity across a wide range of job functions, only certain types of jobs drive most companies' economic engines. Companies that want to gain the greatest benefit for the least cost will focus accordingly. UC benefits cited by key job functions like sales and R&D include improved responsiveness to customers, increased sales, and decreased cycle time/cost to develop and introduce products to market (see Table 2).
- **Match work with tools**: There are a host of UC tools, and the list keeps on growing. However, tools that are most frequently cited as driving improvements in important business KPIs include presence, IM and audio/video/Web conferencing.[xvi] Typically the first two tools are not used in a stand-alone fashion, but are used as precursors to collaboration and conferencing (on an ad-hoc basis to engage a colleague in a dialog with one or more employees). Some also use IM to augment multi-party conference calls (e.g., as a form of select, back chat inside a larger collaborative activity). North American enterprises recognize the business value of UC collaboration — their use of audio/Web/video IP conferencing tools will more than double between 2008 and 2014[xvii]
- **Stage tool deployment**: Many organizations are taking a staggered approach to deploying UC tools — deploying some or all of the above features to key employees in Phase 1, and in later phases, introduce additional functions, such as embedding UC functionality into pre-existing applications (known as communications-enabled business processes — CEPB). Understanding how UC can improve business processes clearly impacts the order of deployment. For instance, a legal firm will likely deploy IP conferencing, data sharing and editing applications in Phase 1. The same is true of types of employees — a company will provide presence, IM, click-to-chat and select conferencing applications to contact center agents.
- **Understand UC's ROI and deployment models**: As described, companies that intelligently deploy the right UC tools to the right personnel can quickly reap economic benefits. For instance, after a manufacturer made it easier for customers to quickly locate and communicate with its distributed sales force, its revenues rose by 20%. A software development firm deployed collaboration tools to select departments and decreased its RFP response cycle time by 73%.

One company that used UC to change key business processes used a virtual contact center model and avoided building a new brick-and-mortar contact center, saving millions. [xviii]

- **Buy or Lease**: A growing range of UC acquisition alternatives provides all sizes of customers with greater flexibility and faster profitability:
    - **Traditional infrastructure approach**: Large companies have both the capital and the IT design and management expertise to underwrite the significant up-front costs that buying UC typically entails.[xix] Many technology professionals employed by large and medium-sized companies have historically preferred to purchase and manage IT in-house, and they look at UC as just another IT infrastructure upgrade. Their implicit assumption is that the company attains the greatest economic return from this approach because all employees can make use of the technology.
    - **New UC acquisition and ownership models**: As discussed, targeted deployment of UC to select groups of employees can yield the most rapid payback and greatest ROI.[xx] Clearly, selective acquisition and deployment of UC tools requires a flexible purchase model. This is especially important for organizations with limited capital budgets or who are concerned about attracting and retaining UC expertise. Rather than buy UC hardware and software for all employees at all locations now, companies can essentially lease UC applications and services for the targeted subset — and even deploy it to them incrementally by region. Such enhancements are often marketed by UC providers as managed, hosted or cloud/SaaS-based UC services, and are becoming available from a growing range of suppliers.[xxi] Businesses typically pay a per-seat monthly recurring charge for each employee who uses these tools.[xxii] Such acquisition models often are very suitable to mid-sized companies, because they allow for controlled, incremental deployment *and support* of technology as it makes sense for the business. Support costs can add up — over a software product's useful life, they can cost up to four times the price of initial purchase.[xxiii] Ultimately, should the business elect to deploy UC tools to a large percentage of employees, it can employ the same model (lease) or acquire the software and hardware outright.[xxiv]

Table 2: Select UC Benefits Cited by Key Business Functions

Department	Respondents Who Cited	Metric
R&D	44%	Shorter product development cycle
R&D	42%	Product better suited to market requirements
R&D	44%	Higher product quality
Sales	45%	Improve sales success rate
Sales	41%	Reduce cost of sales
Sales	42%	Reduces sales cycle time

Source: Frost and Sullivan, "Meetings Around the World II" survey, October 2009

Conclusion

Improving collaboration among and between key business functions is one of a handful of changes necessary for businesses to survive, quickly recover from and flourish after a recession. Unified communications (UC) technologies provide the IT infrastructure tools needed for effective organizational collaboration. Historically, most UC suppliers and early adopters deployed a wide range of UC tools indiscriminately — to all employees. Such a practice is both costly and time-consuming, and for too many, provided a mediocre ROI at best. But that is no longer the case. Recent enhancements by UC suppliers now make it possible to selectively and cost effectively provide the precise subset of tools with the highest impact to high-value employees first. This dramatically improves deployment timeframes and ROI. Such enhancements are often marketed by UC suppliers as managed, hosted or cloud/SaaS-based UC services. Since UC technology is relatively new and is constantly changing, a services-based approach also allows customers to rely on full-time experts to design, implement, maintain and upgrade this technology, and add new features or users as business needs require.

About Strategic Networks Group

www.strategicnw.com

Since businesses are becoming increasingly reliant on telecommunications and IT services, Strategic Networks Group works closely with business customers to optimize landline and wireless telecom lifecycle activities, including architecture, sourcing, negotiations, and performance management. By providing telecom and IT service providers with unique insights gained from working with business customers on a daily basis for over 15 years, we help them maximize the effectiveness of the product, pricing, marketing and sales strategies targeted to business customers.

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Lisa Pierce is the founder of Strategic Networks Group. She is an expert on emerging business- class network services, including UC/VOIP, MPLS, Ethernet, and 4G. A frequent speaker and media commentator, she has authored and published more than 800 reports. Her professional background includes eleven years as Vice President of Telecommunications Research at Forrester Research, four years in telecommunications protocol consulting and training at a boutique consultancy, and nine years at AT&T in new business services product development, management, research and forecasting.

Notes, Links and Bibliography

[i] Since upturns and downturns in the manufacturing sector often precede those in others, many economists look at the manufacturing sector as a bellwether of overall U.S. economic health. In March 2010, the domestic unemployment rate in the sector was 12.6%. See http://www.bls.gov/iag/tgs/iag31-33.htm .

[ii] Source: Bank of America/Merrill Lynch, "2010 CFO Outlook" survey.

[iii] Over 80% of the key factors that stall a return to growth are caused by "… preventable errors of judgment…" made during difficult economic times. For instance, companies often put great leaders in the wrong jobs (talent misalignment), resulting in their subsequent disengagement and flight. Source: The Corporate Executive Board, "Executive Guidance for 2010: Confronting Six Enemies of Post-recession Performance".

[iv] This was one conclusion reached in the above-cited Corporate Executive Board report. In addition to the study cited in Figure 1, this same conclusion was also reached in a February 24, 2010 Business Week article by Tim Ferguson, "Top Tech Priorities for CFOs in 2010".

[v] Source: Frost and Sullivan, "Meetings Around the World II; Charting the Course of Advanced Collaboration"

[vi] Source: The Wall Street Journal, February 18, 2010, "More Lucrative Business Travelers Now Teleconference, Fly Coach", by Mike Estrel.

[vii] Depending on the employee's 'starting point' and the nature of the tool, online training should be supplemented with classroom-based or small-group training. It's even possible that 1:1 tutoring may be required. There's no point in paying for tools that won't be appropriately used, so don't skip on training, and include a *realistic* cost when estimating ROI.

[viii] Source: CIO Magazine, "Unified Communications Survey", September 2009. Forty seven percent of those surveyed are interested in Unified messaging, 46% in desktop videoconferencing, 37% in room-based videoconferencing and 45% in telepresence.

[ix] The 802.11n wireless LAN standard, which operates at the 5 GHz band, supports up to 600 Mbps.

[x] Source: 2009 TIA Telecommunications Market Review and Forecast

[xi] One aggressive example of a forced migration to IP-based services was initiated by Sprint. More recently, AT&T approached regulators to inquire what would be necessary from their perspective to retire the TDM-based PSTN. The 2009 edition of the TIA Market Review and Forecast shows a 50% growth in adoption of enterprise-class MPLS, Ethernet and IP VPN services between 2007 and 2010.

[xii] The types of access lines and trunks usually replaced by SIP trunks include individual analog/POTS lines, ISDN BRIs, T1 and T3 connections, and ISDN PRIs.

[xiii] Many customers want to use a T1-enabled SIP trunk for both UC (real time) and data (non real time) applications. To allow both types of traffic to reside on the same access line/trunk on a flexible basis, carriers deploy Ethernet-based Virtual Private Line services (EVPL) at layer 2.

[xiv] As alluded to earlier, companies often want to deploy UC applications across both converged voice-data and fixed-mobile infrastructures. SIP trunks are often an essential component in enabling the use of UC applications in concert with cellular services.

[xv] According to an October 27, 2009 press release, a study by Infonetics places adoption of SIP trunks at 39% of North American enterprises, and estimates they will become the second most commonly deployed type of trunk within a year. In our opinion, the press release over-estimates the rate at which migration of the entire installed base of in band T1s and PRIs will occur. Companies typically deploy new trunking technologies at one or two locations at first, and at a later date to other locations as appropriate (for example, as these are upgraded to IPT, VOIP gateways or Hosted UC services).

[xvi] Source: UCStrategies.com, "UC End User Productivity Study", May 2008. Download the study at http://www.ucstrategies.com/UC_and_End_User_Productivity_Study.aspx

[xvii] According to an October 28, 2009 press release/executive summary issued by Wainhouse Research, although the global UC products market declined by 5% between 2007 and 2009 (to $14.8 B), it will grow by 10% between 2010 and 2013 (to $16.4 B). Products with the greatest projected growth rates are highly collaborative in nature and include web conferencing and IM/presence servers, team workspaces and videoconferencing equipment. Projected growth rates of these products range from a low of 24% to a high of over 100%. A summary of related research, the October 2009 report, "Rich Media Conferencing Volume 2: Enterprise Videoconferencing" is also on the same website.

[xviii] See the February 23, 2010 Tech Target article on Short Term UC ROI at its website http://searchvoip.techtarget.com.au/articles/38941-Is-proving-short-term-unified-communications-ROI-really-necessary-

[xix] Numerous positive UC business cases exist for large enterprises and multinationals — but they can require significant investments. For 2,000 employees, the Cisco and Microsoft 3 year TCO each approach $450,000. See the presentation from VoiceCon Spring 2009 at http://www.ucstrategies.com/uploadedFiles/UC_Views/Webinars/PM2-Parker.pdf?n=8586

[xx] An economic analysis performed by the Yankee Group shows that a company of 300 employees would a $230,000 investment in UC, while a company of 10,000 employees would need an investment of over $8 million. See http://www.cisco.com/en/US/prod/collateral/voicesw/ps6882/ps9156/CiscoTCOConsultingReport.pdf

[xxi] There are a wide range of UC services suppliers – from large telecom carriers to UC specialists and even vendors who offer managed UC services. The genre is relatively new but growing; for instance, IBM is evaluating how it can best support Lotus Sametime as a service.

[xxii] The most favorable per-seat prices usually require a guaranteed number of seats and a guaranteed contract term length (e.g., 2-3 years).

[xxiii] See the SaaS ROI calculator at http://www.saasroi.co.uk/static/saasroi/

[xxiv] An organization that undertakes a companywide UC upgrade also must consider how the infrastructure and applications will be supported going forward — (1) maintained to assure important performance parameters like availability, (2) perform moves/adds/changes, (3) undertake system upgrades and (4) deploy new functionality. Any/all of these functions may be performed in-house or outsourced to a third party.