The Communication Pain Points

That are Costing Your Bottom Line













Executive Summary



According to a recent study of 400 companies across 8 industry verticals prepared by SIS International Research: small businesses with at least 100 employees stand to lose a staggering \$524,569 annually as a result of hidden costs associated with communication barriers and latency.

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Today, communication environments present a double-edged sword for small business owners. Those who made a big down payment on their current, outmoded legacy environments and refuse to adopt scalable, high speed software-based systems – have invariably limited the growth of their operations.

While those growing companies who have invested in emerging communication technologies are beginning to realize that the proliferation of available tools and applications has also paved the way for significant communication inefficiencies.

The following whitepaper examines the hard costs of workflow disruption and reputational stress due to communication inadequacies, and how to correct these pain points through the proper implementation of integrated technology which will allow businesses and individuals to manage all of their communications in one place.

With scenarios and research from the likes of the Center for Strategic and International Studies (CSIS) and the Ponemon Institute, our aim is to help you recognize the value of Unified Communications and help you on your way toward improved business operations and revenue.

RISING COST OF ANALOG

At its peak, plain old telephone line networks connected nearly every American household but by the end of 2011, less than half of these households relied on a wire connection. By 2015, that number hovered close to 25% and today it has slipped even further into in obscurity.

One Georgetown University researcher suggests that telecom companies spend as much as \$13.5 billion a year maintaining their old phone networks-a cost reflected in the bills of end-users.

As much as 50% of current wire line expenditures among small businesses go toward maintenance while the rest are spent on unpredictable and inconsistent carrier bills and the addition of new phone lines.

Session Initiation Protocol (SIP), is a unique Internet protocol which offers a superior and more costeffective method of carrying external phone calls on an existing PBX system compared to the old standard of an analog circuit which switches through wire trunks.

The national average cost per analog trunk is \$38 per month per trunk or a single phone line which can handle only one conversation at a time; whereas SIP trunks cost an average of \$20 a month for unlimited inbound and local calling, simultaneous calls, and a long distance rate that rings in at under 2 cents per call.

The result is a 30% or more savings on monthly telephone costs.

A 2016 survey of a combination of 10 small businesses and large enterprises by Nemertes Research identified and measured the following benefits of moving to an all-IP environment:

- 22% reduction in Full-Time Equivalents (FTEs) required to manage the systems
- 34% reduction in the cost of equipment maintenance
- 31% reduction in the cost of Moves, Adds, and Changes
- 71% reduction in Mean Time to Repair (MTTR)

Overall, those organizations which moved to full IP saved 8% on their total capital, implementation, and operational costs.

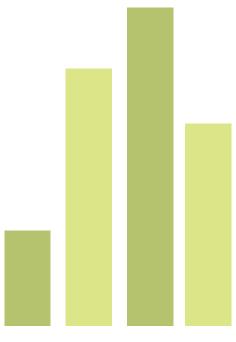
Why do small businesses slowly shift away from standard copper cables?

In some cases, an organization cannot upgrade their existing infrastructure. For example, installers may not be able to penetrate the stone walls of old university buildings or corporate campuses to upgrade the cabling. In other cases, overtime pay or unavoidable network outages may make upgrades cost-prohibitive.

When compared to the national average cost per analog trunk, SIP trunking offers a 30% or more savings on monthly telephone costs. As opposed to a \$4 million spend on migrating an old system and suffering temporary downtime, hybrid and SIP trunking systems offer an affordable solution which is growing in popularity.

"The most significant change in communications isn't as much analog versus digital versus VoIP, but a shift from hardware to software-based solutions," says Dave Michels, a UC strategies consultant. "Software controlled solutions offer a superior upgrade path and more advanced features for integration with existing and future business systems."

Of the companies surveyed by Nemertes 45% operate a mix of IP and digital systems while 31% rely on full IP. Clearly, businesses of all sizes and composition are beginning to realize the benefits of an IP interface which offers voicemail delivery to email, transcription to SMS, and click to dial options at a much lower cost than a traditional phone line.



BARRIERS TO COLLABORATION

According to a recent study by Insignia Research, the cumulative cost of productivity losses resulting from communications barriers reach an estimated \$26,041 per knowledge worker per year. Broken down another way, nearly 40% of the work week is lost to communications inefficiencies among respondents who largely operate in customer-facing and decision-making roles. This factored in the time spent dealing with the hidden communication costs detailed on page 9 and the compensation rate for knowledge workers in each of the countries and 8 verticals surveyed.

Fragmented technologies and an increasingly mobile workforce who rely on disparate applications only exacerbate these numbers. That same survey revealed the most common communications technologies utilized among small businesses:

- 79% use a traditional PBX
- 73% use the internet to IM
- 60% use a contact center system to receive, route, queue, and respond to large volume communications
- 56% use the internet for video conferencing and fax services
- 47% use social networking for business activities
- 41% use VoIP

These findings are contradictory. In light of all of the Internet-based technologies deployed by small businesses, significant inefficiencies persist. If 79% of small businesses surveyed use a traditional PBX and vet 73% of that same group regularly rely on the Internet to instant message and coordinate with colleagues - those businesses are sorely missing out by neglecting to invest in Unified Communications.

"Even if companies are buying IP PBXs for new employees or executives, they'll maintain a lot of the old analog phones because of the cost savings, so there still is quite a large installed base," says Diane Myers, principal analyst at research firm Infonetics. "I know anecdotally from talking to vendors that there are still a lot of analog PBXs being used."

And yet, those initial cost-savings of maintaining a legacy system quickly give way to costs associated with a lack of alignment within a team. When there is a communication break down, small teams start to experience redundant or duplicate work, fail to meet deadlines. and the quality of customer service which they provide suffers.

More than 50% of respondents identified themselves as mobile workers in various capacities, whether traveling for work or choosing to work remotely. However those very same respondents lamented a lack of cohesion and consistency in regards to their mobile communication methods. In order to capitalize on the expediency of mobile technologies - the need for a unified solution is apparent.

40% of the work week is lost to these communications inefficiencies among respondents who largely operate in customer-facing and decision-making roles.

"MEASURING THE PAIN: WHAT IS FRAGMENTED COMMUNICATIONS COSTING YOUR ENTERPRISE?"

Cost/Worker/Year

Small Business vs. Large Enterprise

\$47, 692 vs. \$50, 562

Waiting for Info	\$9,970 \$9,806
Unwanted Communications	\$7,254 \$6,793
Inefficient Coordination	\$6,609 \$6712
Barriers to Collaboration	\$6,009 \$7,454
Customer Complaints	\$5,354 \$5,678
Planning to Plan	\$5,199 \$5,656
Offsite Work	\$3,751 \$2,986
Travel to Sync Up	\$2,245 \$2,866
Cost of Working from Home	\$682 \$294
Cost of Business Travel	\$619 \$2,317

TOTAL

A small business with 100 employees stands to lose a staggering \$524,569 annually as a result of hidden costs associated with communications barriers and latency.

SIS International Research, Jan. 2009

CFO DISCONNECT

The CFO is increasingly becoming the top technology investment decisionmaker in many organizations, according to a recent study by Gartner and the Financial Executives Research Foundation. In nearly 500 enterprises surveyed, 42 percent of all CIOs report to the CFO, and in three out of four companies, the CFO has a major hand in all IT spending.

Unfortunately, however, not all CIOs and CFOs work well together as the financial leaders sometimes are not aware of the benefits of moving all communications to the same IP platform or they have a difficult time justifying the budget required to "fix what isn't broken." Yet, to remain competitive and grow their operations, small business have everything to gain by leveraging the latest technologies and Unified Communication solutions: increased productivity, operational efficiency and more.

Small businesses have everything to lose by failing to adapt. A small business with 100 employees could be leaking a staggering \$524,569 annually as a result of hidden costs associated with communications barriers and latency. Not addressing these everyday hidden communication costs leads to increased operating costs, unsatisfied customers, and impaired competitive advantage.

SIP Trunking is an often under-rated technology which relies on voice over IP (VoIP) to facilitate the connection of a private branch exchange (PBX) to the Internet. It is more reliable than traditional telephone system and often results in significant cost-savings.

TOP 10 BENEFITS OF SIP TRUNKING

- 1. Pay for the number of call paths you need, not a physical line.
- 2. Adjust the number of lines instantly.
- 3. Keep your telephone number, if you move your office location.
- 4. Add numbers in any area of coverage for just the cost of the number.
- 5. Use an existing system to perform Internet searches.
- 6. Externally send videos, emails, and text messages.
- 7. Conduct voice call to any phone on multiple networks.
- 8. Obtain access to emergency dialing and directory assistance.
- 9. FCC and regulatory fees don't apply to international calls.
- 10. Save hundreds on your monthly bills.

INADEQUATE SECURITY PROTECTIONS

According to the latest statistics released by cyber security firm Symantec, more than half (52.4%) of spear phishing attacks carried out in 2015 targeted small businesses.

Small businesses feel that they aren't likely or desirable targets due to their size-but in reality the exact opposite is true. The returns are great, and the risks are low for cybercriminals - and as more business functions move online and more advanced technology becomes widely accessible - the costs will only continue to rise for unwittingly vulnerable small businesses.

According to the 2015 CyberThreat Defense Report, for the second consecutive year, mobile devices (smartphones and tablets) are perceived as IT security's weakest link, closely followed by social media applications. Nearly one third of all the businesses surveyed lack tools to inspect SSL-encrypted traffic for cyberthreats.

"Hackers prey on the knowledge that small businesses tend to have lower defenses than larger organizations, usually due to lack of financial and human resources. By their very nature, thriving small businesses are innovative and niche, which again is very attractive to the bad guys who may be interested in customer data and intellectual property," said cybersecurity expert Sarah Green to The Guardian in February 2016.

You may not think that your Internetbased communications system is at risk but if improperly secured, it may be one of the first places where a hacker seeks desirable information. What do hackers seek from small business?

- To gain access to larger, partnering enterprises which are more difficult to penetrate.
- To steal customer credit card numbers and personally identifiable information
- To extort funds by holding critical business applications hostage

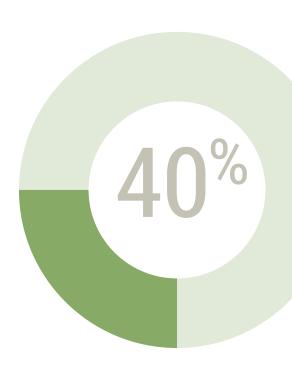
"SMEs are being viewed as a softer target by criminals, and are often a route to a 'bigger prize' if they are contracting with larger organizations, who may be harder to penetrate directly," Green adds. One example would involve the theft of sensitive negotiating data that would give one party an advantage in a business deal.

Even mom-and-pop businesses are at risk from ransomware schemes, where access to their computers or data is blocked by attackers until they pay up.

Information theft accounts for 40% of the external costs associated with cybercrime on small business.

In addition, to information theft, cybercriminals cost small businesses in downtime. On an annual basis, information theft accounts for 40 percent of total external costs while costs associated with disruption to business or lost productivity account for 38 percent of external costs.

Numerous surveys have also found that the cost of recovering from cyberattacks, including reputational damage, where the trust in a company decreases and their brand loses value, is also on the rise.



SECURITY CONTINUED

Fortunately, small businesses have the ability to obtain data and network security as a service from a provider with third-party data security certifications which cover the key risk areas and meet various regulatory requirements.

Your communications system should feature a variety of components which ensure the protection of your digital assets and privatize all of your transmissions: firewalls, access control, threat protection, and encryption for voice and video.

Through the use of virtual private networks, also known as VPNs, vou can communicate remotely and access applications—such as unified messaging applications—from any location over a secured network.

Your Unified Communications provider will also have the ability to encrypt all backup data.

"Hackers prey on the knowledge that small businesses tend to have lower defenses than larger organizations, usually due to lack of financial and human resources"

Criminals know that risk and cost are low while rewards are high. Luckily, however, when you invest in UC technology, you also invest in the security of every piece of information you have and ever will transmit.

HIGH LATENCY

Network latency is a term used to indicate any kind of delay that happens in data communication over a network. Connections in which small or infrequent delays occur are referred to as low-latency and generally facilitate optimal business performance. High latency, on the other hand creates data transfer bottlenecks which decrease your communication bandwidth across the board.

Common problems which result include audio breaks (like broken words) or the presence of odd noises and audio distortion, such as echo, and watery or robotic voice quality. One-way audio, that is, a conversation between two people where only one person can hear anything can also occur.

Redundancy is a common approach to improve the reliability and availability of a system when you can't afford the cost of disruption to your operations.

UC systems deploy multi-tenant, redundant systems to ensure that your network will stay up even if an individual server goes down which prevents dropped calls and the loss of consumer confidence. Small businesses which do not have the space or employee backbone and expertise to house and manage their own data systems will rely on their VoIP service provider for off-site, remotely managed data centers which are kept up-to-date and fully operational without any disruption to your phone line.

"Rather than throwing more bandwidth at the problem, using more intelligent analysis to optimize bandwidth is often a better way to solve a bandwidth contention," says Jason Peach, principal consultant at Networks First. This means, the best course of action for a small business owner is to trust an expert with reducing operational overheads, properly maintaining and adding functionality to their network.

LACK OF USER DEMAND

In the SIS International Research study of small business communication methods, nearly half of the 2000 participants indicated that of the multiple devices and phones they use for work --each phone has its own number. Only 9% of business owners reported that all of their business phones have a single-number identity.

Without a unified solution that links devices under a single-number identity, a business owner using a cell phone while on the road may not recognize that an incoming call is from an important client—or may not have access to necessary data only accessible on a work phone directory.

There are more potential downsides to using separate devices: missed calls, separate voicemail boxes for each device, separate contact lists and directories and no singular corporate identity.

41% of respondents stated that having a system to reduce the time spent addressing all of these hidden communication costs and collaborative difficulties is a very or extremely high priority for their businesses.

The fact that so many owners and employees continue to use multiple devices suggests a lack of awareness of the benefits of using **Unified Communications technology** Very few had the recourse to address the following most popular complaints and disruptions:

Waiting for Information. Many small businesses suffer delays because information is inaccessible due to disorganization and communication barriers. These delays take up to an average of 3.5 hours per week.

Unwanted Communications. Joke emails, spam emails, low-priority and unsolicited sales calls cause small business employees an average of two or more hours of lost time per week.

Inefficient Coordination. When small business team members and their clients use different communications tools such as landlines, cell phones, applications, and email systems - often calendar invites get lost, deadlines missed, and much more. This pain point reportedly causes an average of 3.7 hours lost per week.

Customer Complaints. On average, a small business employee spends 3.3 hours per week dealing with complaints from customers about their inability to reach that employee in a timely manner.

According to Blair Pleasant, president and principal analyst at CommFusion, having a different number to correspond with each device can also present data accessibility issues.

"Salespeople who use cellphones store potential customers' information within them," she says. "If the salesperson leaves the company, that person leaves with all the data." Unified Communications prevent such losses by storing the information in the company's database.

Roughly two-thirds of small business users (62 percent of owners and 68 percent of employees) currently have no way to access a user's availability when they connect to the network. In other words, there's no way for them to tell whether or not their fellow employees are online.

The need is evident but the knowledge of an effective solution is not.

ABOUT BEACON

Beacon Telecom provides custom-fit cloud solutions to a diverse collection of businesses all of which rely on a phone system to support their critical and every day operations.

While other providers may offer similar technology solutions, the Beacon experience is second to none.

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SOURCES

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Net Losses: Estimating the Global Cost of Cybercrime CSIS Research, June 2014