TCO BENCHMARKING: CLOUD VS. ON-PREMISES VOICE
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Introduction

The cost savings and feature depth of Cloud Voice solutions have brought them to the forefront of many organizations’ IT budget narratives. What can we do to manage our telecommunications spend? Which of the IP options are right for our organization? Do we have the resources to take on an on-premises solution? Are we willing to outsource such a crucial aspect of our business?

To fully comprehend the value of making the move to the cloud when it comes to telecommunications, the TCO analysis is a critical tool. As budgets continue to shrink, rigorous TCO analysis is a must for considering telecommunications spend and for bringing all key stakeholders on board with a change. This white paper draws on industry analyst research and extensive Jive experience to paint an accurate picture of the total cost of ownership of Cloud-based systems vs. on-premises (both VoIP and legacy) systems. Jive’s signature Total Cost of Ownership Analysis tool is also discussed and examples are given.

Research concludes that Cloud voice solutions offer substantial savings in both upfront and recurring costs, leading to a lower total cost of ownership. This is attributable to advantages in the Cloud voice service model which allow costs to be consolidated and core competencies to be more efficiently managed. Drawing from Aberdeen’s 2012 Analyst Insight Report “The Total Cost of Ownership Benchmarking Study for Unified Communications,” the categories discussed in this white paper are based on best practices benchmarking and figures detailed in the report.
Minimal Upfront Cost

Cloud-based voice systems allow the organization to take advantage of IP telephony with minimal or sometimes no initial capital expenditure and minimized upfront costs for deployment and implementation. This substantial difference in upfront costs is the largest contributor to Cloud voice’s lower total cost of ownership.

SYSTEM HARDWARE

Cloud voice systems require very little capital expenditure for hardware, especially if a data network already exists. Often IP phones are the only capital required, and these can be rented if a solution with no capital expenditure is desired. Broadband circuits and Internet access can also be acquired through your Cloud voice provider, but most reputable providers have extensive experience deploying Cloud voice over existing broadband networks. By comparison, on-premises voice deployments require large capital expenditures for servers, phones, and LAN upgrades required to support the solution. These costs, combined with implementation and licensing costs, often make an on-premises solution cost prohibitive for many organizations. The legacy and on-premises solutions studied in the Aberdeen report averaged $421–$596 in capital cost per phone. Because capital expenses are limited to IP phones, which can be bought or rented, cloud voice solutions offer a much more affordable—often negligible capital cost.

NETWORK UPGRADES

Cloud voice equipment is standards-based, commodity (or vendor agnostic) equipment. It works with any service provider who supports the same open standards. Commodity equipment offers the organization more flexibility and equipment options from a variety of different vendors. In contrast, on-premises systems typically include proprietary equipment and contracts, resulting in limited equipment options, expensive upgrades and maintenance, and vendor lock-in—all at higher prices. Companies studied in the Aberdeen report spent an average of $165 per phone to upgrade their LAN and $33 per phone to upgrade their WAN for legacy and on-premises systems. The advantage with Cloud voice systems is the ability to deploy over existing WANs without the need to upgrade the LAN—or any of its included hardware.
TRUNK LINES

Organizations often utilize multiple, separate access lines to carry their voice and data traffic. Cloud voice allows the organization to converge voice and data onto a single network, freeing the excess lines to be combined for greater bandwidth, used for backup, or eliminated entirely. This plug-and-play capability of Cloud voice systems eliminates the capital costs associated with trunk lines in legacy and on-premises solutions. Even if a company decides not to converge, a cloud voice solution allows them to pay for 2 data connections, instead of paying for both a data connection and LAN or trunk lines for an on-premises solution, which can be much more expensive. Converging voice and data can also assist in eliminating “stranded” capacity—capacity that is not consistently utilized and is being wasted. Adding voice to an existing data access line increases the traffic over the connection, thereby utilizing the stranded capacity.

UPFRONT TRAINING

Leading Cloud voice systems require no more than a half day of initial upfront training to train administrators on all system functions and configuration, and most (if not all) of this training is included as a part of the on-boarding process without additional cost. Further education is continued through blog posts, help articles, video tutorials, email newsletters, and user guides. Legacy and on-premises environments typically require “extensive upfront training to administer switches and software, troubleshoot new phones, and to monitor the system and network” (Aberdeen). These upfront training costs ranged from $2,333–$6,767 per administrator for legacy and On-Premises solutions in the report (Aberdeen).

OPERATIONAL IMPLEMENTATION

Operational implementation is a much simpler process with a Cloud-based voice solution than with legacy or on-premises deployments. Once numbers are ported and network QoS speeds have been verified, Cloud-based systems are virtually plug-and-play. This allows internal staff and even staff without typical IT expertise to deploy and manage the system without significant delay or extensive know-how. Legacy and on-premises solutions require much more by way of implementation, resulting in the need for extensive expertise, additional man-hours, and project management. Of the deployments studied, respondents averaged 2.5 man-hours per phone when using internal resources to implement traditional legacy and on-premises solutions (25 hours per 10 phones). Cloud voice solutions are associated with many less man-hours, as system setup is accomplished during the onboarding process, and changes are made in real time through simple changes in the web portal.
Predictable Ongoing Expenses

Cloud-based voice systems offer predictable ongoing expenses. Legacy and on-premises solutions are often associated with fluctuating (and extensive) costs as organizations change size, shift utilization patterns, or as system components break down or become obsolete. Advantages in the Cloud voice model lead to more streamlined billing, allow organizations to predictably plan expenses, and contribute to a lower total cost of ownership.

HARDWARE MAINTENANCE

Few organizations would consider themselves expert data center operators, yet with on-premises solutions, organizations are required to host their phone system at their own location and manage it at their own expense. Given the importance of communication, this creates a large staffing and resource burden on the organization. Aberdeen found that legacy and on-premises solutions averaged $117.18 per phone each year in system maintenance and software assurance costs (combined, not including full-time labor). With Cloud voice, infrastructure management is in the hands of the service provider, who is better qualified to manage the resources and personnel necessary to keep data and hardware secure and up to date. This core competency is a part of the product offering included without additional cost and eliminating it as a separate expense.

SOFTWARE ASSURANCE

Typically an ongoing expense (including licensing and support costs with legacy and on-premises solutions), software assurance in the Cloud voice model is a part of the service provider’s core competency, and is reflected in the standard per-user seat price. Placing this core competency in the hands of the service provider allows organizations to pay for an all-inclusive, fully-managed solution for a standard per-user seat price.

MOVES, ADDS, CHANGES, DISCONNECTS

MACDs are another area of key functionality where Cloud-based systems both lower cost and dramatically improve effectiveness. Legacy and on-premises solutions typically require external, certified support techs to make even the most basic system changes. These third-party or in-house service costs represent the most substantial recurring costs with legacy and
on-premises solutions. The Cloud voice model gives control of MACDs to user administrators or even end users themselves, who can change and configure all system settings from their web portal simply and in real time based on their permission level. This not only allows the organization to be more agile in making intuitive changes to their system, but also relieves a significant cost burden traditionally associated with the need to pay for third-party assistance or dedicated staff in making MACD changes.

SYSTEM MANAGEMENT (SUPPORT)

Another of the more significant costs avoided in the Cloud voice model is support. With on-premises solutions, dedicated phone system support is a costly necessity often requiring full-time attention. The Aberdeen report cites an average cost per 1,000 phones of $137,000 based on an average of 2.6 Full-Time employees dedicated to phone system management. The Cloud voice model transfers this responsibility to the service provider, who offers 24/7 customer support. This allows internal IT personnel to focus more of their time on IT initiatives other than the phone system and puts qualified support resources at the organization’s fingertips. This specialized support is consistent and always available. Several Cloud voice providers are leading the industry with a commitment to 24/7 US-Based support, which can mean big advantages for organizations seeking to fully utilize their technology without system downtime and frustration. This quality of support is often one of the most popular benefits of the model.

RECURRING TRAINING

In legacy and on-premises environments, management and support of the phone system requires extensive expertise, often resulting in the need to train administrators on a recurring basis. In addition, most vendor solutions are proprietary, so changing vendors requires a complete re-train for all support personnel. These costs vary substantially depending on the type of on-premises or legacy solution supported. Aberdeen found that recurring training costs varied from $551–$6,391 per year for the solutions surveyed. While in large organizations these costs may seem minimal compared to the other much larger costs of the solution, they are a significant advantage in the Cloud voice service model. Much of the utility of a Cloud voice solution has to do with its ability to transfer expertise to where it is most efficiently employed. Responsibility for crucial technical expertise is assigned to the service provider. Internal staff are empowered to quickly and easily self-serve and manage local changes and organizational customization. Thus, recurring training costs are avoided entirely while both
giving the organization more flexibility to customize their own system’s configurations and lowering their total cost of ownership.

NETWORK ACCESS

Legacy and On-Premises environments often utilize multiple networks (LAN and WAN) to deliver full functionality, and rely on more than one provider for network, circuit, and long distance services. This leads to difficulty in routing calls effectively and efficiently, often resulting in increased costs due to poor routing. Aberdeen found that for respondents surveyed, an average of 27% of long distance calls were actually inter-office calls being routed incorrectly. These and other findings led the report’s authors to speculate that respondents were likely overpaying for over 80% of inter-office voice traffic. Cloud voice solutions deliver functionality through the WAN, eliminating the expense and complexity of navigating through the LAN, and include unlimited local and long distance calling at the standard seat price. This leads to greater predictability, and eliminates the errors so often made in routing calls incorrectly.
Conclusion

The Cloud voice model consolidates costs and manages core competencies efficiently, leading to a substantially lower total cost of ownership. Cloud voice systems require minimal upfront cost and offer predictable monthly expenses while making phone system management simple and intuitive. Organizations looking to increase the utility of their telecommunications while limiting the attention necessary to managing them are a good fit for Cloud voice solutions.

Jive offers a signature TCO Analysis as a part of the quoting process. For more on the Jive TCO Analysis, contact your sector’s sales team, or visit jive.com/tour.

About Jive Communications

Jive Communications provides enterprise-grade Hosted VoIP and Unified Communications to businesses and institutions. Jive is rapidly becoming the standard for business communications worldwide. All of Jive’s hosted services run on Jive Cloud, a proprietary, cloud-based platform. The Jive Cloud architecture has been purpose-built to deliver the most reliable, powerful, and economical hosted communication services available to the enterprise market.