

The True Cost of Ownership

Executive Summary: Seeing the Big Price Picture

With a lack of time and comparative information, business owners can struggle to make sound decisions on new technology investments. They're often left to compare the seemingly easiest factor initial capital cost. However, upfront costs rarely tell the whole story. That's certainly true when comparing premise-based to hosted Unified Communications (UC) systems.

On the surface, premise-based UC systems can appear to have the lower total cost of ownership (TCO). Buyers tend to start and stop comparing hosted systems to just the capital cost of a premise-based system, which is then depreciated over a five-year period. But a deeper dive reveals other factors associated with premise-based systems that increase the whole lifecycle costs.

Many premise-based systems have limitations in terms of scalability or functionality that only become apparent as users seek to add more advanced functionality. Common cost increases include the addition of mobility services, advanced messaging handling, contact center and system storage.

This paper brings clarity to decision-makers by comparing the actual costs and features of today's hosted and premise-based UC systems. We will look at the following areas:

- 1. System & capital costs
- 2. Maintenance, management & support
- 3. Installation
- 4. Trainina
- 5. Equipment housing & power
- 6. IT staffing

System and Capital Costs

The primary aspect of cost is the UC system price, which generally comprises of the base system cost of the unit, the phone cost, and other user licensing costs. The majority of mid-market systems have a per seat cost of in excess of \$500 today but buyers will be shocked to learn that overall opex costs can double that figure every year!

With many premise-based systems, capital costs can add greatly to the annual investment. For example, a typical small scale system costing approximately \$10,000 could have operational costs totaling \$1,200 per year—or over 60 percent of the total equipment costs—in a five-year period.

Smaller businesses considering a premise-based system need to understand the configuration model of the premise-based system. Too often, businesses overload their systems with features often leading to an earlier than expected replacement of the system. For example adding call recording or enhanced voice mail nearly always leads to a significant impact on system design and longevity. For hosted systems, there are normally no system costs, and businesses can choose how they pay for their handsets.



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Maintenance, Management and Support

Maintenance contract and software assurance costs for a premise-based UC system typically average between 17 and 18 percent of the system's value. In the case of smaller systems, the premise-based supplier will deliver maintenance and support under a single package.

While a maintenance contract arrangement can dramatically lower costs, it will not lower them to the level of a hosted system, which already includes maintenance costs.

Resellers of premise-based systems have long created lucrative business models managing systems for the smaller businesses. Typically the management contract will be around 5-10% of the system value every year. Needing to rely on a third-party reseller to manage your system creates significant delays in moves and changes. This management straight-jacket is a major driver behind why dynamic companies are selecting hosted systems.

Installation

Many hosted systems are moving toward either partial or fully self-installed options, given the fact that a hosted system can be routed over a business's broadband circuits already installed for other data applications. But this is rarely the case for premise-based systems.

Premise-based solutions have to factor in either T1 or SIP trunking services to achieve an equivalent cost. As with the hosted solution, a SIP trunk would require a data bearer circuit in addition to the SIP trunking service itself.

On average, the planning, infrastructure changes and phone/client configuration require between 1.6 and 2.5 hours of installation services per user. The variance depends on the vendor and the degree of expertise involved. Using average labor costs, installation would run between \$100 and \$200 per user—creating a major added expense.

Training

Bringing a new system onboard means significant training overhead. Year one training costs for administrators with a premise-based system typically total around \$6,000 up front.

Premise-based vendors also charge a refresh price of between 40 and 100 percent of year-one costs for administrators to maintain their system knowledge. With a hosted UC system, training is normally bundled in the installation price.

Equipment Housing and Power

For smaller on-premise systems, equipment and power costs will be relatively minor. Depending on the number of users supported in larger systems (1,000+ seats), however, expenses can increase between \$5,000 and \$10,000 a year. There are also costs associated with adding sophisticated power redundancy options.

In the case of hosted solutions, calls can be rerouted to different locations or devices—making power redundancy (and its extra expense) unnecessary.



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IT Engineering

The average cost per full-time engineer to run a premise-based system ranges from \$50,000 to over \$80,000 per year, according to a report from the Aberdeen Group.

The report also found that, depending on the vendor, businesses needed two to five engineers to maintain a large-scale premise-based system.

Because hosted systems are operated and maintained by the service provider, they require no additional personnel. The impact of these costs are brought into stark contrast in a research report by Nemertes Research which shows the opex costs per year for many of the well known PBX systems. The report looked at the capital, implementation and operational costs of premise-based system. The operational costs which include internal staff, third party partners, annual maintenance, and training are more than double the capital costs of the system on a yearly basis. Moreover new systems without a mature support infrastructure, like Lync, have an operational cost of more than twice the average. Putting this into context the average costs per year of a hosted seat, phone with minutes plan is somewhere around \$45 a month or \$540 a year, which is less than the average operational cost of a premise based system.

	Capital	Implementation	Operational	Total 1st Year
NEC	\$292	\$96	\$442	\$830
ShoreTel	\$544	\$54	\$305	\$903
Cisco	\$524	\$55	\$505	\$1,084
Avaya	\$727	\$75	\$322	\$1,125
Alcatel Lucent	\$500	\$94	\$841	\$1,435
Siemens	\$546	\$146	\$1,268	\$1,961
Microsoft	\$480	\$90	\$1,912	\$2,482
Overall Median	\$540	\$61	\$704	\$1,305

Nemertes Research: Study on the IP telephony and UC implementations of 211 companies during 2012

Determining Total Cost of Ownership

The bottom line: Initial capital costs can be deceiving. Aberdeen Group determined the main costs for implementation for a premise-based system almost doubled from the initial capital cost. The ongoing maintenance and management of a premise-based system is substantially higher than outlined in most original business plans.



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With a hosted system, a typical hosted UC seat will vary between \$25 and \$40 a month, depending on the selected feature set. This price usually includes a minutes package with unlimited national calls and, in some cases, an IP handset. The only additional costs would be data access to the sites for connectivity.

The figure below highlights the monthly costs over a 3-year term for a 35 seat premise based system versus a similar hosted system. Where the premise based system is managed by an on-site engineer, then the monthly costs are well over three times the price of the hosted system. If the premise system is covered by a management contract the monthly, costs are still over 40% more than a hosted system.

Cost comparison over three years*



^{*}Cost per month based on 35-seat premise-based versus hosted service.

Prior to making a decision on a new UC system, businesses should consider their immediate and long-term needs and ask questions such as:

- What IT systems will we need to connect now and in the future?
- How mobile do we want our services to be?
- How many extra staff might we need in five years—and will the system be able to handle this expansion?
- Will we be adding new offices in a different city? If so, will our system deliver the same services at those different locations?

Having these answers will enable leaders to make informed decisions that generate the greatest returns for their enterprise UC investment.