How to explain the real cost of cloud computing to your C-suite

The benefits are well known yet some IT leaders still have a hard time convincing CEOs, CFOs and COOs to fund cloud projects. Here's expert advice on breaking it down in a way they can understand.

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December 20, 2018
08:54 AM

If a CIO cannot successfully communicate something IT to the rest of the C-suite, that's a problem.

As it turns out, 56 percent of CIOs say it is very difficult to explain to C-suite peers capital expenditure or operational expenditure ins-and-outs when vying for IT budgets and approvals, according to Black Book's 2018 Health IT Trends report. That could be bad news for cloud computing, a technology that holds much promise in healthcare.

CIOs encounter difficulties working with the rest of the C-suite on CapEx versus OpEx because by making comparisons between the cost of running an on-premise data center versus the cost of moving to the cloud, communication and overall understanding can get misconstrued, said Michael Archuleta, CIO and HIPAA and information security officer at Mt. San Rafael Hospital in Trinidad, Colorado.

"Unless the cloud numbers are significantly higher, there are many beneficial aspects to cloud economics that would cause the remaining C-suite to view it as a very strategic approach," he said. "In my opinion, a much better strategy would be to identify decision criteria for determining whether a given app should be hosted on-premise or could be moved to the cloud."

Cost center or strategic partner?

Another issue CIOs face is that at times IT is considered a cost center versus a strategic partner, which can be a major problem when a CIO is trying to implement a digital transformation strategy, Archuleta added.

"Healthcare organizations are digital companies that happen to deliver healthcare services," he offered. "Cloud computing is a foundation for digital business and a key element in improving outcomes so it is extremely important that the remaining C-suite understand the importance."

David Chou, chief information and digital officer at Children's Mercy Hospital in Kansas City, Missouri, believes that this explanation should not be such a conundrum.

"I don't think it is difficult to explain: It is similar to paying your utility bill, your electric bill, you're paying for it on consumption," he explained. "The challenge is hitting your operating budget, which translates to your P&L, and that is where the true story lies. It is hitting your profit margin. Where if you are a traditional organization, it hits your P&L all at once. It's not about capital or what have you, it's about the historical financial model the organization usually takes."

So if the operating expense goes up – and it will go up when moving to a cloud model – it is something a CIO must trend for and start predicting, and most probably the CIO is not prepared for it, he said.

"It could be a big sticker shock," he added. "They just prefer not to have that overhead hit them in the P&L."

CapEx: A blessing

For the CFO in a stable market with a solid core of proven long-term IT staff, CapEx can be a blessing, said Jim Fitzgerald, chief strategy officer at healthcare cloud technology vendor CloudWave.

"They can lower operating costs, gain investment benefits, depreciate over multiple years, and have a shot at financial upside as their team becomes more efficient managing the asset," he explained. "Freeing up OpEx allows more flexibility in managing the labor force and pursuing unexpected opportunities. On the downside, large CapEx investments in IT with operating lives of 3-7 years tie the organization to a specific suite of software or a specific technology platform."

If financial survival means being able to rapidly change course to adopt new therapies, diagnostic tools or IT innovations rapidly, an operating model may be the organization's best shot at quick response to changing market patterns, he added.

"Sometimes, the deep secret is that OpEx-style IT investment becomes the only option for hospitals whose credit ratings have been beaten down by years of financial uncertainty," he said. "Software and platform providers become 'the bank' under these circumstances, although at little actual risk, as services can be withheld if bills are not paid."

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— Michael Archuleta, Mt. San Rafael Hospital

CIOs should cultivate relationships with the rest of the C-suite where they become an active collaborator in corporate risk management, he advised.

"Too often the CIO can be viewed as a pariah who is clinging too hard to either a traditional CapEx-heavy model that is unresponsive to change and can have unpredictable budget variances or perhaps rushing too fast to offload everything to OpEx without considering the impact on organizational flexibility," Fitzgerald said. "That may well be the source of the tension."

As it pertains to cloud, it may be that "all IT is multi-cloud," which leaves room for a mix of CapEx and OpEx investments that suits the organization's risk management and financial needs across the spectrum of local private cloud, managed private cloud services and public cloud services, he added.

Convincing tactics

The difference obviously comes down to buying hardware and software up-front versus paying for it on a monthly subscription basis. So what are some strategies or tactics that healthcare CIOs can use to convince other members of the C-suite about CapEx versus OpEx when moving to the cloud? The experts have a variety of ideas.

"You cannot look at cost as the reason for moving to the cloud, there are times when it may cost more but you are paying for the agility," said Chou of Children's Mercy Hospital. "Think about when you buy new hardware, you have to secure the hardware, and configure the hardware, and a legal review for terms and conditions of the new software. And that takes months."

A hospital is paying for agility and the ability to scale downward, he explained. Most people know how to use the cloud but they never think about taking it out or not using it when not using it – one can spin up or down, and most people only think about spinning it up, he added.

"The agility is about the so-called digital transformation that needs to occur," he said. "And that is how I explain it to my organization. I went through the same explanation with the increase in operating expense but show a decrease in the capital expense. And not just a little: I cut my capital expense by half and I did not increase my operating expense by half. You have to be able to show it and project it out."

One of the first key items to focus on in hopes of convincing other member of the C-suite about cloud initiatives is to align one's organization's preferred capital utilization model to build a strong return on investment toward one's cloud strategy, said Archuleta of Mt. San Rafael Hospital.

"Tactics that are incorporated into the ROI are cost reductions, increased productivity, security improvements, ability to network and store data, and improving data transfer," he said. "Therefore, if you are a healthcare organization, interoperability is a key element in improving better patient care outcomes and if you can show strong data transfer tactics and incorporate it to your ROI, you will have much better buy-in from the remaining executive team."

A philosophical shift

Moving to the cloud really implies a fundamental philosophical shift from managing IT as a series of interconnected processes and platforms and managing IT as a blanket of interwoven services, said Fitzgerald of CloudWave.

"While there is some variability in how cloud investments are made, and multi-cloud environments can include capital investment, most cloud models are OpEx heavy," he explained. "One excellent tool the CIO can use in helping the C-suite manage risk is a total cost of ownership calculator or an IT operating model."

The model should account not only for obvious costs like space, electricity, people, maintenance and capital, but also for opportunity costs and risk-avoidance benefits, he explained. Ironically, an organization moving some IT functions to the cloud may find security, availability and disaster recovery all improve, so it is important to develop supportable measures for the value of avoided downtime and enhanced security, as the

organization may not have spending in these areas budgeted properly in prior business models, he added.

"Other strategies that help C-suite executives gain comfort with cloud IT models are tours of network operating centers, data center facilities, and live or remote conferences with similar organizations further along in the cloud adoption cycle," he said. "These explorations can be eye-opening. Healthcare organizations that have always had homegrown IT may not understand the benchmarks that their IT facilities and staff are being measured against in the outside world of audit, compliance and insurance."

Interacting with other professionals who have made the transition and viewing facilities and operating models that exemplify IT best practices may help C-suite executives develop new benchmarks for IT budgeting and risk management, he added.

Informing the C-suite

To aid in the CapEx versus OpEx understanding surrounding the cloud, there are a variety of things that the CEO, CFO and COO need to know about buying into the cloud model.

It is extremely important to facilitate transparent, informative and comprehensive dialogue with the CEO, CFO and COO in hopes of aiding them in the transformation of their perspective with regard to the cloud and, more specifically, when buying into a cloud model, said Archuleta of Mt. San Rafael Hospital.

"Prior to speaking to any of the C-suite individuals, a CIO must have a strategy in place to be able to show them the overall return of their investment," he said. "A great informative model to use would be an ROI, which will contain technological data that will display the information they will require in hopes of understanding the process of involvement with cloud-based models."

A cloud strategy clearly defines the organization's outcomes a CIO seeks, and how the CIO is planning on getting there, he explained. Additionally, a CIO will need to explain a cloud model that would support cost savings, create efficiencies, improve security and create growth while ensuring healthcare organizations remain compliant with HIPAA and HITECH regulations, he added.

Chou recently was at a users' group event with many CIOs, and he was extremely surprised that he was all for the cloud, wanting to move as much to the cloud as possible, but few of his peers agreed. His peers were all thinking in a traditional data center premise.

"They were not thinking long-term, about the agility, about the digital world," Chou said. "My executive team has a CIO pushing for the cloud, and they take me seriously because they are thinking beyond traditional IT, they are thinking about making the organization a digital enterprise."

Assess operating risk

The CEO, CFO and COO need to be willing to support the CIO in doing an honest assessment of operating risk in multiple areas, said Fitzgerald of CloudWave.

"Staffing, for example: Is the IT staff budget and deployed personnel adequate to the range of tasks and the pace of change that will be dictated by the hospital strategic and operating plans?" he asked. "Are there hidden 'single points of failure' in any staff roles, any technology deployed, or any facilities? Has the CIO been getting by with 'just good enough' for staffing because the rest of the C-suite did not understand the real scope of an appropriate IT operating model? Does a partial or complete migration to a cloud model alleviate significant staffing complexities?"

Another area is security. Has the past CapEx and OpEx budget been sufficient to create a defense-in-depth IT security design and operating model, Fitzgerald said.

"How are systems logged and monitored?" he asked. "What is the update frequency? What are the internal resources and escalation levels? Who are the on-call outside resources? What is the breach protocol and when has it been tested? What is the organizational cybersecurity awareness program? Can a cloud migration actually enhance security without making a series of 'emergency expenditures'?"

Availability and performance is another area for Fitzgerald.

"Is the current budget model keeping up with changes in the software/hardware platform driven by quality, administrative and compliance requirements?" he asked. "How is unpredicted data or utilization growth handled? How sustainable is the current IT operating model? Cloud models tend to offload these management tasks on the cloud services provider and allow for consumption-based scalability."

And the final area Fitzgerald pointed to is recoverability and data protection.

"Are current methodologies in place, tested and viable to secure crucial PHI and other data for which the healthcare organization has accountable stewardship?" he asked. "When was the last successful test restore? Was it validated by application specialists? What is the recovery window? What is the IT operational continuance plan? Cloud often integrates these functions and processes to core services and measurable SLAs."

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