JIVE

MORE THAN A PHONE: WHY THE TIME FOR CLOUD UC IN HIGHER EDUCATION IS NOW

TABLE OF CONTENTS

JIVE

Introduction

Demand for data-driven applications is rapidly compelling colleges and universities to invest heavily in Internet Protocol (IP) networks. WIth this modern infrastructure in place, the Higher Education community is perfectly positioned to access the benefits of Cloud Unified Communications (Cloud UC) solutions. This white paper explains why Higher Education institutions should leverage their technology investment now, moving beyond traditional voice solutions to advanced Cloud UC tools and features. It also outlines Cloud UC's impact on operating budgets, addresses industry readiness, and highlights the need for real-time communication and collaboration across the entire Higher Education community.

WHAT IS CLOUD UC?

Unified Communications (UC)—is an integrated set of voice, data, and video technologies delivered to an array of devices while providing a consistent experience to the end user. UC offers Higher Education institutions the ability to keep all members of the learning community connected and collaborating within a single, cohesive platform.

Cloud Solutions are accessed via an IP network. All management, routing, switching, and computing is developed, housed, and maintained in dispersed data centers (the Cloud) and does not reside on the customer's physical premises. Cloud solutions can help the Higher Education community decrease the capital expenses to deploy UC solutions and the operating expenses to support and maintain them.

Cloud UC makes UC technology accessible via an IP network. All members of the Higher Education community—students, faculty, researchers, and administrators—can now access feature rich mobile VoIP, chat/IM, SMS/text, and advanced multimedia (audio/video/web) conferencing directly from the Cloud. Cloud UC is more than just a phone, but rather a powerful suite of collaboration tools and applications with limitless possibilities.

You're Already Prepared

Colleges and universities everywhere are investing in updated network resources and infrastructure. Leveraging this investment, the Higher Education community can rapidly deploy a Cloud UC solution without additional capital outlay. Transitioning to Cloud UC allows Higher Education to stop wasting money on outdated, legacy telecommunications solutions. Institutions adopting Cloud UC are able to redirect IT spend toward other initiatives and innovations that support their central missions.

MODERN INFRASTRUCTURE

Industry research has shown that "the proliferation of consumer devices on campus is by far the biggest driver of UC adoption within higher education."[1] Many initial investments in network infrastructure have already been (or will soon be) made to enable these devices. The updated networks provide many of the requirements necessary to deploy Cloud UC solutions in the campus environment. Without the need for a specialized network buildout, institutions can leverage existing network infrastructure now to bring Cloud UC to their users quickly.

CONVERGED NETWORKS

With this modernized network infrastructure, decision makers can also choose to converge voice and data networks. This consolidation offers significant cost advantages, as resources can now be directed to maintaining a single network infrastructure. Cloud UC eliminates the need for local connections to the Public Switched Telephone Network (PSTN), sending voice traffic directly from the local network to the Cloud. Cloud UC supports both public or private Wide Area Network (WAN) connections, with the Cloud performing all call routing, switching, and configuration management.

As a result, Higher Education institutions can immediately stop paying for T-1, PRI, ISDN, and other voice circuits that currently consume a large portion of their IT budgets. A recent Frost and Sullivan report indicates that "a hosted UC infrastructure lets companies converge their voice and data access lines while saving as much as $1,200 per T1 line per month."[2] With Cloud UC, the IT operating budget is focused where it should be—on the collaboration and communication tools that keep universities and colleges competitive, top-notch students engaged, and leading instructors and researchers productive.

BUDGET CONSTRAINTS

Higher Education decision makers across the country are looking for "innovations that can limit costs and/or bring dramatic improvements in the quality of education and accompanying support services."[3] As IT budgets become increasingly constrained, Cloud UC adoption becomes more attractive, as it does not require expensive premises-based hardware or other major capital expense outlays.

Cloud UC's pay as you go model also helps ease pressure on strained budgets, as organizations pay only for the capacity they need at any given time. With Cloud UC, monthly operating costs are lower, more predictable, and more transparent than ever before. This is especially relevant for the Higher Education community, where every cost must be carefully defined, justified, and continuously reduced.

Further, deploying Cloud UC not only eliminates obvious hard costs, it also reduces and/or eliminates hidden soft costs or other opportunity costs. These items may not be as readily quantifiable, but must be addressed by Higher Education organizations seeking to control costs.

Cost elements include:

- Technician labor and requisite expertise to maintain the system
- Parts and service for equipment
- Employee and management downtime

- Software licenses and upgrades
- End user and customer dissatisfaction
- Risk of obsolescence and responsibility to keep system updated
- Additional investment to scale solution for organizational growth
- Missed opportunities to reach new students and retain existing ones

Cloud UC shifts the responsibility for these types of costs from the Higher Education operating budget to the selected service provider. Shifting to Cloud UC allows colleges and universities to maximize the return on their technology investments.

30%	
47%	
98%	
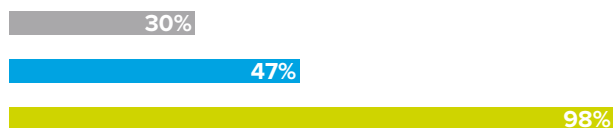
● 2010   ● 2014   ● 2020

Projected Growth in Blended Learning
This bar graph depicts the anticipated growth of blended learning, a method combining both classroom and online components.

SMARTER HUMAN RESOURCES

The Cloud UC delivery model includes all system management, support, and upgrades. This critical departure from the traditional on-premises delivery model means organizations are no longer required to recruit, train, and maintain a dedicated telecommunications support staff, or outsource system maintenance to expensive, third party,

certified technicians. That responsibility is shifted to the UC service provider, saving hundreds of thousands of dollars per year.[4]

As a result, IT is able to adjust more quickly to emerging user needs. Colleges and universities that transition to Cloud UC report that by shifting focus from maintaining the communications system, they've actually "removed ourselves from the role of putting out fires. Now, we can provide the best services for our community, with enough time to do it right."[5]

This shift also empowers IT personnel to focus on strategic initiatives and innovative ways to support their organization. Because they're not troubleshooting the phone system, they can work with departments campus-wide to identify and implement technology applications that support learning, research, and collaboration. One Higher Education Technologist reported that having that kind of creative time, "allowed us to migrate from one learning management system to another in record time and for the entire institution."[6]

The Industry is Ready

The adoption of Cloud solutions across every industry category is rapidly increasing. In 2013, 90% of companies implemented some sort of Cloud solution—representing an 80% increase from the previous year.[7] With exciting innovations in communication and collaboration functionality, industry experts are forecasting a 25% CAGR (compound annual growth rate) for Cloud UC alone over the next two years.[8] Quite simply, the industry is ready. From service delivery platforms with nearly a decade of proven quality, to solutions that are as scalable and reliable as they are easy to implement and maintain, the time has never been better for the Higher Education community to embrace the future of Cloud UC technology.

MATURE PLATFORM

Cloud UC is delivered across the proven, mature platforms that have been supporting Hosted VoIP service for nearly a decade. From the onset, the expectations for VoIP service providers have been higher than their data communications counterparts. End users demand call quality that is consistent with their traditional landline experience—real-time, crystal clear, and jitter-free. The best providers have risen to the challenge, delivering industry-leading call quality while continually raising the standard for communication features and functionality.

The importance of a mature platform in an agile development environment cannot be overstated. It provides the back-end support required to deliver stable, reliable service—and then continually push the limits of that service. Providers who build, develop, and maintain their own platforms in-house are the real leaders in the Cloud UC

industry, as they have been able to incorporate advanced UC functionality that is responsive to the real needs of their real customers.

Proven, mature platforms mitigate many of the risks associated with deploying an end-to-end communications solution. Service providers with established platforms have extensive implementation experience and can anticipate and prevent challenges related to deploying the solution. They also have widely varied experience, extending across a diverse customer base with highly specialized requirements that translates into a stable, responsive solution.

SCALABLE SOLUTIONS

One of the greatest advantages of the Cloud service delivery model is its ability to scale effortlessly with changes in organizational usage (up and down). Cloud solutions eliminate the need for on-premises hardware and software

licenses—and with them the worries associated with paying for unused capacity or the ability to increase capacity to meet future growth. Because thousands of users can be hosted on a single virtual cluster, scalability in the Cloud environment is nearly limitless.

Scalability is especially important in the Higher Education environment because it supports phased deployments. While cost is often cited as the greatest obstacle to deployment of a UC solution, organizational culture is a close second.[9] Getting organizational buy-in and support for a comprehensive solution can be difficult and deploying it can place a large burden on an already-strained campus IT staff. Often, it is best achieved with a phased deployment strategy that allows users to creatively adapt to new tools. A phased deployment methodology alleviates the strain on IT resources and enables the following:

- Trial or pilot deployments across specific departments to evaluate actual ROI and increase stakeholder support.

- One-on-one training to improve end-user experience and ensure UC tools are used to maximum benefit across the organization.

- Solution customization to specific organization needs.

RELIABLE SERVICE

Cloud-based services consistently deliver highly available, highly reliable services. Cloud service providers make it their business to deliver four 9s (99.99%) or better availability and uptime in a given year. They invest in the resources required to support their service level guarantees. With the diverse and competing demands placed on campus IT department resources, it is nearly impossible to match that availability in-house.

Cloud UC service providers also take responsibility for providing 24/7 solution-specific support. End users across the organization are empowered to access Customer Service and Technical Support directly from the Cloud UC service provider. Support resources are extended to all users, regardless of their physical locations—even those outside the reach of the organization's IT staff.

SIMPLIFIED MANAGEMENT TOOLS

With responsibility for all back-end system management shifted to the service provider, the organization's IT department is only required to manage UC features and functionality. The UC service model excels here as well. While traditional on-premises solutions require a PhD in telephony to configure, update, and maintain them, the same functions in the Cloud UC environment are accomplished simply and easily with a browser-based, graphical user interface. Using

drag-and-drop functionality, user administrators are able to manipulate their entire solution from one window, in real-time, with as little as one hour's training.

Adding users, extensions, lines, and devices is equally as easy. Regardless of their physical locations, new user profiles (and associated lines, devices, customized features, etc.) are quickly and easily added—often with the assistance of an intuitive wizard application that guides the entire process. Bulk changes (like an incoming freshman class, faculty new hires, etc.) can be uploaded

wholesale and immediately incorporated into the system. Designated IT staff can access and update the system on-the-go, from any mobile device.

Cloud UC solutions are also service enablers for other as a Service (aaS) solutions (e.g., computing, analytics, networking, etc.), interfacing seamlessly with many productivity-enhancing solutions—including those developed specifically for a unique campus environment.

SECURITY IN THE CLOUD

Transmitting UC data through and hosting data in the Cloud has many security advantages when compared with traditional premises-based data handling. Cloud UC providers must be transparent and willing to provide potential customers with specific information on their security methodology, with key emphasis on the following.

- *Access Control: Employees with access to customer data complete comprehensive security screens prior to assignment. All employees complete security training emphasizing company security policies and best practices. The principle of least privilege (or authority) is practiced, and access rights and security privileges are role-based.*

- *Data Location and Integrity: Datacenters are geographically dispersed, physically monitored, and access controlled. There are clearly defined*

processes/procedures in place governing data storage and transmission. In a multi-tenant architecture, security boundaries are established to separate and isolate customer data and protect it from being accessed or compromised by another customer.

- *Continuous Monitoring and Reporting: Network activity is continuously monitored to prevent, detect, and mitigate service breaches. Customers have real-time access to at-a-glance system status and ongoing system monitoring.*

- *Regulatory Compliance: Service providers complete regular system compliance audits and can provide results/reports to the customer organization.*

Your Users Are Waiting

The Higher Education community is ready and waiting for the anywhere, anytime collaboration that Cloud UC can deliver. The millennial student population requires access to technology that is relevant and convenient. As students continue to demand a greater return on their education investment, colleges and universities must respond with technology that enhances the education experience. Similarly, instructors and researchers want to work in real-time with their students, colleagues, and peers to advance research and scholarship. University and college administrations are also ready to expand the learning environment beyond traditional classroom walls, enriching the student experience and extending opportunities to remote and non-traditional students.

ENHANCED COLLABORATION

The communication and collaboration tools offered by Cloud UC can attract and empower the best teachers and researchers. Cloud UC offers many communication and collaboration tools that enhance workplace productivity, including:

TELEPHONY

- **Mobility:** Routes calls from a single inbound number to a variety of device, internal/external numbers, information, or voicemail options. Eliminates phone tag or the need to dial several numbers in an attempt to reach users who are not always in their offices.

- **Unified Inbox:** Forwards voicemails directly (and automatically) to user inboxes. Eliminates the need to check multiple locations for the latest messages and enables easy message retrieval/archiving.

CONFERENCING

- **Audio Conferencing:** Simplifies and improves traditional conference calling. Call management functions are simple and intuitive and call quality remains consistent regardless of the number of users.

- **Video Conferencing:** The same platform supports simple, ad-hoc conferences via WebRTC as well as high-quality, multi-point video conferencing.

- **Web Conferencing:** Screen sharing enhances online training and enables real-time collaborative content development and editing.

- **Multimedia Conferencing:** Combines the power of audio, video, and web conferencing to support more productive meetings and more impactful training. Users feel they are actually there—even when they're not.

COLLABORATION

- **Presence:** Users can quickly see if the individual they are trying to reach is available now, busy, in do not disturb mode, or off-network. Presence awareness eliminates the time and opportunity costs associated with waiting for a response from an individual who is not likely to reply.

- **Chat/Instant Messaging:** Enables real-time conversation—even when voice communication is not convenient or possible. Chat capability also makes it easy to exchange files and resource links.

- **Enterprise Social Software:** Inter-network tools like blogs, wikis, walls, and group calendars allow users to efficiently share and organize information across user groups.

Telephony, conferencing, and collaboration tools have a specific impact for the Higher Education community. These tools allow leading experts to participate in the campus learning environment from wherever they are. For example, Cloud UC enables faculty members to work with on-campus colleagues on a new initiative while performing the supporting research in the field, deliver presentations abroad without missing valuable classroom time, or edit scholarly work collaboratively across a group with competing schedules.

ADVANCED COMMUNICATIONS CAN ADVANCE HIGHER EDUCATION

Forward-thinking colleges and universities are using UC to create more touch points across the student lifecycle. For instance:

- *On-demand WebRTC video to chat with prospective students.*

- *Multimedia conferencing to support virtual campus visits and orientations.*

- *Chat/IM to connect students with all campus departments (e.g., administration, counseling, clubs etc.)*

- *SMS/Text and push notifications to provide mobile users with school information whenever they need it.*

- *Mobile VoIP that makes faculty accessible, without requiring them to stay in their offices.*

- *Integration with social media and learning management systems for more powerful collaboration.*

- *HD end-to-end video to support distance learning initiatives.*

ENRICHED STUDENT EXPERIENCE

Millennial students want a larger voice in their education experience. They expect real-time access to learning resources and anytime mentoring and collaboration with peers and instructors. Where Cloud UC can enhance productivity in the workplace, it has the ability to revolutionize the Higher Education community. Whether connecting with members of a study group across separate campus locations, chatting with an instructor while working through an assignment, or participating in a classroom discussion while traveling for a school-sponsored event or competition, Cloud UC delivers truly unified communications and collaborations.

In order to attract and recruit the best new students, the Higher Education community must offer access to advanced communication and collaboration resources. Colleges and universities that don't transition to UC solutions will have a difficult time staying competitive. Cloud UC allows students to move seamlessly between voice, data, and video communications from a single browser-based (and by extension device-agnostic) interface. This enriched student experience translates into improved retention, increased matriculation rates, and the development of lifelong learning and leadership.
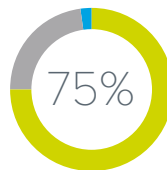
54% ● 54% training   ● 46% no training
Over half of students said professors provided training for the tech used in their classes.
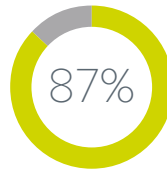
87% ● 87% revisit   ● 13% don't revisit
Most students revisit lectures on mobile devices.

75% ● 75% tablets   ● 23% smartphones
● 2% eReaders
Student reading sessions primarily occur on tablets, followed by smartphones, and eReaders.

EXPANDED CAMPUS REACH

The Cloud UC model also allows the Higher Education community to extend campus reach and resources beyond that limits of traditional classroom walls and specific campus locations. Cloud UC can enrich distance learning, connecting remote learners to campus—and connecting campus learners to remote locations.

As more and more non-traditional students are entering the Higher Education community, it is imperative that colleges and universities increase their distance learning and online (anytime) courses offerings. Because Cloud UC makes distance learning more collaborative, it becomes more relevant and more impactful. For instance, integrating multimedia components and real-time interactive capabilities enriches online courses and provides remote students with the same experience as their on-campus counterparts.

Conclusion

Cloud UC offers Higher Education institutions the ability to dramatically enhance collaboration and communication for every member of the learning community. Current or planned investments in IP network upgrades makes deploying a Cloud UC solution easier and more cost effective. The Cloud UC market has matured and with it the roster of service providers with proven, reliable solutions that are purpose-built for Higher Education. As colleges and universities move beyond traditional voice solutions to these advanced Cloud UC tools and features, they have the opportunity to improve education quality, enhance the universal body of research knowledge, and reach more students than ever before.

JIVE

REFERENCES

1. "Can Colleges Afford to Ignore Unified Communications?" EdTech Magazine, Summer 2013.

2. "Betting on the Future with Unified Communications: Hosted Services can Drive Business Value and Create New Opportunities" A Frost & Sullivan White Paper, July 2013.

3. "Balancing Innovation with Execution", Discussion with the Educause IT Issues Panel, March 24, 2014.

4. "Betting on the Future with Unified Communications: Hosted Services can Drive Business Value and Create New Opportunities" A Frost & Sullivan White Paper, July 2013.

5. "How a Community College Brought Its Network into the Mobile Age" EdTech Magazine, Winter 2014.

6. "Balancing Innovation with Execution", Discussion with the Educause IT Issues Panel, March 24, 2014.

7. "3 Reasons UC Will Be A Big Deal in 2014, by Yorktel's Vishal Brown", IMCCA, February 21, 2014.

8. "3 Reasons UC Will Be A Big Deal in 2014, by Yorktel's Vishal Brown", IMCCA, February 21, 2014.

9. "Strategic Planning Foresights Emerging Technology Survey", Gartner Research, 2012.

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.

HEADQUARTERS

1275 W 1600 N, Suite 100
Orem, Utah, 84057
866.768.5429
jive.com
info@jive.com

SALES

24 Hours, 7 Days/Week
866.768.5429 *(General)*
888.850.3009 *(Public Sector)*
sales@jive.com

SUPPORT

24 Hours, 7 Days/Week
877.548.3003 *(Toll-Free)*
jive.com/support
support@jive.com

PRESS

Mon—Fri (8am—6pm MST)
801.804.7111 *(Local)*
866.372.5429 *(Fax)*
jive.com/press
press@jive.com