Program Summary

DoIT provides collaboration and conferencing tools for hosting academic classes, training courses, webinars and demonstrations; attending virtual meetings through audio or video conferencing; and sharing documents and other files in real-time collaboration.

These collaboration and conferencing tools include:

- audio conferencing using either traditional phones or through the Microsoft Skype for Business offering;
- document sharing and collaboration using Google Docs (students), Microsoft OneDrive (faculty, staff and students) and Microsoft SharePoint; and
- video conferencing with Blackboard Collaborate, Microsoft Skype for Business, and the BlueJeans pilot.

DoIT support includes ensuring these applications are secure and highly-available, customized and configured to meet campus requirements, and properly licensed and funded.

Criterion 1: Importance to University Mission / Operations

Importance to Mission

Students often come to NIU already using these technologies and the business world certainly expects students to be already proficient in these skills. This program supplies the foundation for online collaboration and conferencing at NIU: document sharing in real-time and audio/video conferencing encourages collaboration across disciplines and communication with colleagues in other institutions.

Moreover, this program provides that basis for NIU to offer distance learning and flip classrooms to engage students at multiple levels. Faculty can assign group projects, confident in their knowledge that students have the tools and can receive help through online knowledge articles or 24x7x365 at DoIT’s Service Desk.

Importance to Operations

Only 10 years ago, collaboration and conferencing almost always took place face-to-face. One traveled to conferences to meet colleagues, solve problems, and advance learning. Perhaps documents were shared by emailing them to a colleague, who marked them up, and returned them later for another round of editing, but that was the extent of most electronic collaboration. Today, NIU can use any number of applications to author and edit documents in real-time, virtually travel to meetings with colleagues at other institutions, or receive direct and online IT support by sharing one’s desktop with IT staff anytime, anywhere.

These same technologies support business continuity, allowing for online office hours, virtual real-time lectures, or online discussion groups that allow the university to function regardless of where faculty, staff or students are located.

Program Portfolio

Students come to NIU expecting at least the same level of technical capabilities they had at home or in high school. They are used to video-chatting and even watching feature-length films on phones or tablets. From there, it is easy for them to participate in a world of supplemental online lectures, online “meetings” with graduate assistants and study groups, and collaborating on group assignments requiring the creation of online documents, photos and videos. Moreover, businesses expect university graduates to have this experience.
The university administration must continue to do more with less: online collaboration and conferencing saves travel time and money; job applicants can be interviewed with high-quality videoconferencing; and creating a more mobile office of the future can optimize campus space and support a university-wide policy for telecommuting. When everyone has a laptop running Skype for Business, then any room, even one’s living room at home, becomes a conference room.

**Program Synergy**

As demand continues to grow from both academic and administrative units, this program will become more foundational to processes across the institution. Just as it is unthinkable today that faculty, staff or students would give up wireless network access, it is only a matter of time before these online tools become part of the fabric of teaching and learning at NIU.

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**Criterion 2: Quality / Effectiveness**

**Functions and Services**

The core functions and services of this program include:

- MeetMe audio conferences using traditional phone sets, available with toll-free options, call recording, and locking conferences to invited participants only
- online collaboration spaces using
  - Microsoft Office 365’s Skype for Business client, providing audio or video conferencing for NIU’s O365 users;
  - Microsoft OneDrive for online document collaboration;
  - Microsoft SharePoint for online discussions and document sharing, available in 2016 to all NIU faculty and staff; and
- video conferencing using
  - Blackboard Collaborate for academic courses or non-academic web conferences, training sessions and virtual meetings; and
  - BlueJeans for high-quality video conferencing, currently in pilot with DoIT and selected users.

**Measures of Quality**

1. System availability is measured against both planned and unplanned downtime.
2. Mean Time to Resolve (MTTR) measured by the time between the reporting and the resolution of an incident
3. Mean Time to Fulfill Requests measured by the time between the request being made and customer notification of fulfillment.
Evidence of Quality

1. System availability for Blackboard Collaborate is 99.2% which includes 3 hours of unplanned downtime and 61 hours of planned downtime for upgrades; audio conferencing with NIU telephones has 100% availability; and O365 services were available 99.96% since its implementation in 2014.

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<thead>
<tr>
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<th>2. Mean Time (hours) to Resolve Incidents</th>
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Quality Improvement

For 15 months ending in June 2015, DoIT modernized NIU’s email infrastructure by migrating all faculty and staff to Microsoft Office365 (O365). Along with this upgrade, NIU gained both OneDrive and Skype for Business at no additional cost. These collaborative technologies, along with a future implementation of SharePoint, will eliminate Vibe: a Novell product with a nearly-nonexistent market share in higher education and the private sector. This upgrade has changed how NIU does business in many ways — some difficult, some not — and ultimately put NIU on track to use the industry leading application architecture for a core service.

Blackboard Collaborate continues to be maintained and upgraded as part of the larger Blackboard ecosystem. It is, however, one of several videoconferencing applications available for online learning. Most notably at NIU, it almost entirely duplicates the AdobeConnect application supported by the Outreach division. Improvements in this area must take this duplication into account before committing to additional upgrades or purchases for either platform.

Criterion 3: Productivity / Efficiency

Scope of Program

DoIT performs these core duties to securely and appropriately deploy collaboration and conferencing systems to NIU faculty, staff and students:

- Long/short-term planning and management of infrastructure;
- Infrastructure enhancements to increase reliability, availability and serviceability;
- Technical support for
  - 2,383 users and 94 courses using Blackboard Collaborate for 625 video conferences each year;
  - approximately 450,000 minutes of audio conference time;
  - an average of 3,000 active Skype for Business sessions per month out of a total of 52,550 student and 14,600 staff accounts;
  - 80,000 OneDrive user sessions per month; and
- Incident response and request fulfillment for the entire collaboration and conferencing infrastructure
Productivity Comparison

According to CDW-G’s Cloud Report in 2013, NIU has joined the more than 30% of other universities, including Southern Illinois University, who have migrated to Microsoft Office 365’s cloud-based collaboration and conferencing solutions.

Many universities, including Princeton, Emory, Stanford, Northeastern, and the University of California system use Blue Jeans for for high-quality, scalable and multi-vendor video conferencing. And, of course, there have been millions of Skype users for a number of years.

DoIT works hand-in-hand with Faculty Development to provide outstanding support for Blackboard and its related systems. This collaborative model is recognized as a best practice in higher education and is one other institutions strive to replicate.

Resource Comparison

This program is adequately supported with less than 4 FTE worth of effort distributed across DoIT. This is because DoIT uses a more efficient shared service and support model versus the tradition dedicated support resource at other institutions. This support model with cloud hosted services also enables us to quickly respond to meet new requirements for students, faculty and staff.

Cost and Revenues

This is not a revenue-generating program. Most of the services are parts of other programs and applications and their costs trend with the cost of the parent program. The one notable exception is Blue Jeans. This is service is ending the pilot phase and the adoption of this platform as the default video conferencing solution could be funded by the elimination of duplicative services.

Criterion 4: Internal & External Demand

External Demand

By license and contract, there is no external demand for Microsoft Office 365 products or Blackboard, although NIU’s licensed students, staff and faculty may invite online guests to audio and video conferences.

Adobe Connect, currently supported by the Outreach division, is largely a duplicate service of Blackboard Collaborate. NIU must engage in a comparison of currently-supported conferencing and collaboration tools, seek out duplicates, decide which is the more viable tool, and then decommission the other(s).

Internal Demand

There is a growing demand for these online conferencing and collaboration solutions and we are nowhere near capacity. From September to November, the number of active Skype for Business sessions each month has grown from 3,000 to 7,400 – an increase of 147%. In the same two-month period, the number of OneDrive user sessions has grown from 80,000 to 85,000 – an steady increase of 6.25%.
Criterion 5: Opportunity Analysis

**Cost Savings Opportunities**

This program’s savings for both licensing costs and support staff costs lie in reducing duplication. Already, DoIT is planning to eliminate the Polycom conferencing system, but there remains duplication between Adobe Connect, supported by the Outreach division, and Blackboard Collaborate, supported by DoIT and NIU’s Faculty Development staff.

**Future Revenue / Resources**

By license and contract, this service cannot be resold to gain revenue.

**Improvement Opportunities**

If NIU will commit to reducing duplication of applications and hardware for conferencing and collaboration in classrooms, conferences, labs and offices, then the support time and cost for support the infrastructure can be reduced. Of course, experimentation and pilot programs should always be in place to try out and review new products, but the installed base of applications should remain as consistent as possible to allow faculty ease of teaching in any number of classrooms.

**Opportunities in the Field**

Imagine what it would be like if the use of online conferencing and collaboration tools became a priority.

- Remote office hours using these high-touch technologies could be a portion of total office hours.
- Distance learning and online degrees could attract and retain non-traditional students and full-time professionals that cannot afford the time to commute. The University of Illinois in Springfield currently offers completely online graduate degrees that include group projects, document collaboration, and teaching sessions all based on Microsoft Office365 and Skype.
- These technologies could be used to train current and future teachers to use these tools in their own education practice.
- Finally, faculty could bring business leaders directly into the virtual classroom for guest lectures, Q&A sessions, or special projects – all of which further the potential for student career success at NIU.