GET US TO THE CLOUD ON TIME!

December 11, 2013
11:00 AM – 11:45 AM
CIO Solutions Gallery
Agenda

- BGSU
- Issues
- Strategic Goals
- 2010
- Shared Services
- 2010-2013
- 2014-2016
- Desired State
- Q&A
Question

What would you do differently?
Bowling Green State University

- A residential campus located in rural NW Ohio with 18,000 undergraduates, 3,000 graduate students, and 2,800 faculty and staff
- One branch campus in Firelands
- Education, Business, Music, and Liberal Arts
- 1,400 acres, 157 buildings, 1 airport and 1 golf course
- Must meet HIPAA, PCI and FERPA compliance
- Total University Budget is $389 M
- State Support is $61 M
- “The university time forgot!”
IT at BGSU

» 95% centralized
» Helpdesk support for 35,000 calls and emails per year
» Desktop support and purchases for 9600 devices
» Academic support and purchases for 300 classrooms
» Networking including 2000 wireless access points
» Telephone and voicemail
» Application development and support
» Security, forensics and access control
» Server and database administration
Issues for IT

» **Staffing** - Hiring replacements for retirements, etc. is difficult – BG is not a destination for IT employment

» **Single Points of Failure** across the staff – particularly DBA, Sever Admin’s and Storage

» **Data Center** is sub Tier 1

» Over 200 different proprietary software vendors

» **46,000 devices** on the network – including residence halls, offices, classrooms, labs, clinics and athletic facilities

» **Budget reductions** 4 of the last 5 years
Strategic Goals for IT

» All things Digital – in the classroom, online and through Hybrid learning
» Move to the “cloud” and BYOD
» Information Collection, Protection and Dissemination
» Great Customer Service
» Electronic Processing (eliminate paper)
» Innovate
» Virtualize – servers and desktops
2010

- 4700 Sq. Ft. Data Center – 3rd floor – one elevator – one generator – one UPS – windows along west side - reliability had been good due to the efforts of ½ FTE
- 36 racks of equipment on the floor (35% virtualized)
- Avaya Phone switch (2001) – 2 upgrades behind
- One Network MDF
- Double redundant core fiber ring – 1 Gig
- 100 Meg connection to each building
- No Disaster Recovery site or program
- 200+ Propriety Software applications to care and feed
2010

» No IT governance model or process
» No Project Management model or process
» $16.2 Million Central IT budget
» 41% personnel – (98 FTE’s)
» 90% of staff came from within 25 miles of BG
» 59% supplies, services and equipment
» #1 expense Software ($2.7M)
» #2 expense Desktop computers ($2.1M)
» OARnet only ISP at 1.5 Gig
**IT Direction**

» Define what the “cloud” is and what is an acceptable risk to BGSU community

» Get approval of General Counsel to store data in the “cloud”

» Move applications to the “cloud”

» Move applications to Open Source

» Establish a Disaster Recovery plan and site

» Move the Data Center to a commercial facility

» Upgrade the core to 10 gig and each building to 10 gig

» Build redundancy of infrastructure
Shared Services – Inter-University Council

» Commercial Data Center  RFP and Purchase order
  » Ohio Data Centers only - connected to OARnet
  » Includes floor space and/or virtual environments
  » Cyrus One/CBTS, DataCenterBZ and Expedient
  » Effective August 2012 for 10 years- renewable

» OARnet upgrade to 100 Gig backbone and 10 Gig to every university March 2013

» Cisco VoIP shared RFP and purchase June 2013

» Microsoft software and Office 365 shared agreement
Shared Services – Inter-University Council

» VM shared purchase and support 2007, 2010 & 2013
» LDRPS shared purchase and support since 2003
» Shared Federated Identity Management – in process
» Shared SIP Trunking – in process
2010 - 2013

» Started Disaster Recovery Plan – systems prioritized
» DR Plan approved by President Cabinet
» UPS failed in May 2012 - hard crash – 5 days - heightened awareness and importance
» Created IT standards for “cloud” sourcing
» Obtained General Counsel’s approval for data
» Replaced LMS and ePortfolio with Open Source in Amazon Cloud
» Replaced on premise Exchange email with Office 365 cloud offering
2010 - 2013

» Replaced point of sale system with cloud offering
» Replace web content manager with Adobe cloud
» Replace purchasing and travel paper processes with cloud offerings
» Replaced the hiring and on boarding paper process with a cloud offering
» Reduced number of racks on the data center floor from 36 to 24 increased virtualization to 60%
2010 - 2013

» Initialized DR site at Expedient for Tier 0 and Tier 1 DR systems and environments
» Budget Cut by $800,000 (now $15.4 M)
» IT staff down to 90 FTE’s (45% of budget)
» Created an IT Governance process with VP’s
» Created a simplified Project Management Program
» Added second ISP with Time Warner
» Added second network MDF
2014 - 2016 - Targets

» Complete build out of DR site
» Reduce racks to 14 by summer of 2014 (80% VM)
» Continue to look for cloud applications
» Upgrade the PeopleSoft systems (HR, FIN and SIS) by January 2016 to latest versions and tools
» Migrate PeopleSoft system to IaaS or SaaS by June 2016 or migrate to WorkDay by 2020
» Migrate remain 6 racks to a second Expedient DC
» Create a high availability between the two Expedient data centers
**Desired State**

» Vacate on campus DC
» Return 4700 Sq. Ft. of prime space back to campus
» Maintain 2 Network MDF’s on campus
» Maintain the redundant fiber backbone at 10 Gigs
» Maintain each building connection at 10 Gigs
» Maintain 2 ISP’s for 2 - 3 Gigs of service
» Maintain a minimum production and DR footprint at Expedient with high availability (Tier 3 or 4)
» Maintain a 80% + virtualization rate
**Desired State**

- Maximize the shared cloud applications, services and utilization
- Improve the uptime and reliability by using cloud based standards and penalties/rewards
- Savings by eliminating the on campus data center used for Expedient costs and new projects
**Desired State**

» Reduce costs and number of proprietary software by 40%
  » By moving software to Open Source
  » By utilizing “cloud” subscriptions
  » By reducing the multiple vendors for the same purpose

» Manage staffing reductions from 90 to 70 staff
  » Eliminating the need for difficult to find positions
  » Reducing the Single Point of Failure positions
  » Hire and train our own graduates
  » Share staffing between IUC schools
Question

What would you do differently?
THANK YOU