



UMass Boston “IT Future”

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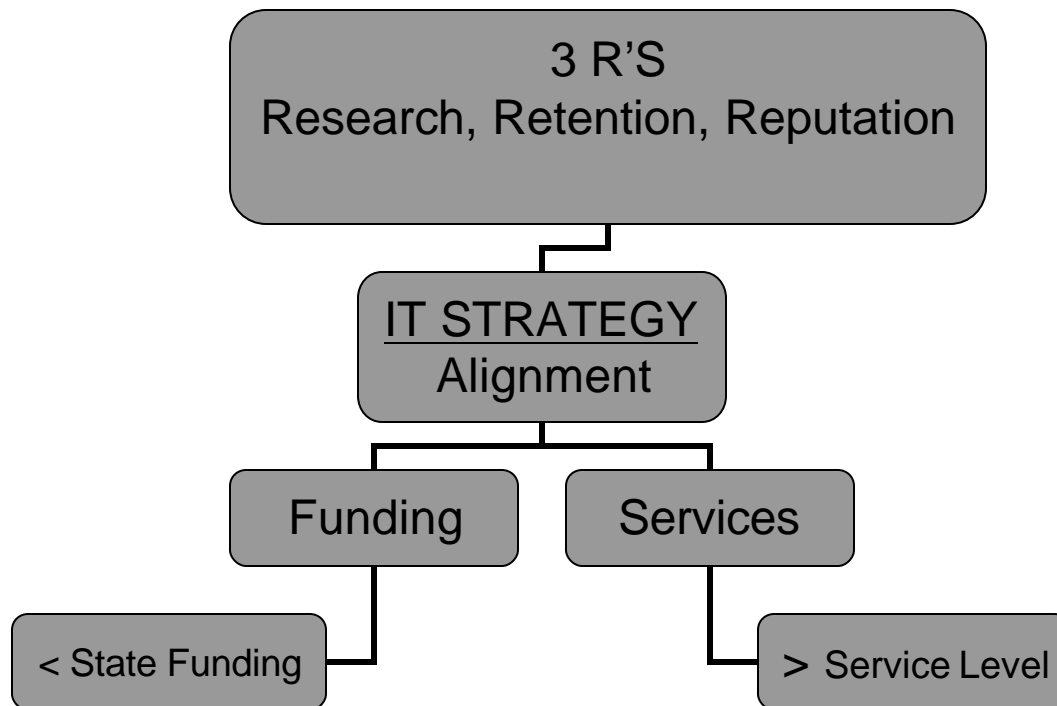
- Part of UMass System, Founded 1962
- 12K-13K Students, ~1500 Faculty & Staff
- Student/Faculty ratio 15:1
- 100% Commuter
- Six colleges and one graduate school
 - 100 undergraduate majors, minors, and programs of study
 - 90 graduate offerings including 13 programs at a doctoral level
- University Budget \$176.5 Million
- New \$75Mil, 331,000 Sq Ft Campus Center
- Alumni – 90% live in MA, 74% live in Greater Boston

Institutional Context



- University is pressed to do more with less
- Competition increasingly intense for students, employees, and external support
- Students increasingly technology literate **
- Techno savvy faculty expectations set by past experience **
- Success in job market increasingly dependant on application of technology skills **
- ** Assumptions based on:
 - Educational Market Trends
 - Initial Student Surveys – Computing Services '02
 - New Faculty History (ex: Yale, Stanford, UMich)

Priority and Challenge



Background



- Information Technology Strategic Plan – 2002
- First CIO - 2003
- IT Reorganization
 - Computing Services: Helpdesk, Network, Operations, Desktop, Public Labs, Systems
 - Telecommunications
 - Web Services
 - Instructional Technology Center
 - Administrative Computing/Peoplesoft
 - Outsource Relationship with UMass System IT
- Significant Departmental support staffing

IT Strategic Plan: Goals



- Enhance educational excellence
 - Instructional technology -> Academic Computing
 - Establish Cohesive IT governance
 - Reorganizing resources, decentralized input for policy and planning
 - Change paradigm for technical support, training, & professional development
 - Paradigm shift to client oriented, more training and professional development
 - Communication and collaboration
 - Support administrative effectiveness
 - Standards, increased access, interoperability and efficiency
 - Improve capacity of and access to technical infrastructure
 - Ubiquitous managed-access environment
 - Support richer community life for UMB stakeholders
 - Raise awareness of campus resources, make them easily accessible
 - Align financial resources with UMB IT vision
 - Consistent budget reflecting needs and future growth for campus
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Some of the Progress FY'04



- REPLACE Program
 - 300+ computers to be installed this year
- Network Upgrade
 - Backbone to 10Gb .. 1 Oct '03
 - Desktop connections – switched 10/100 Mb – Spring '04
 - Limited authenticated Wireless Campus Center – Spring '04
- Rewiring the campus Infrastructure – Cat6
- Enhanced Helpdesk/customer service center automation
- Peoplesoft Admissions/recruiting in production
 - Student record, finance, financial aid being implemented

Short Term CIO Priorities



- Staffing
 - Staff retirements require short term and long term solutions
 - Skilled employees
 - Options – Automation, Outsourcing
- Data Collection – Better, more accurate information to guide future decisions
 - Student expectations – Survey(s)
 - Existing Technology resources across campus (hardware, software, space, services, staffing) – Survey
 - Colleges/Institutes/Faculty – Personal Interviews
- IT Governance
 - Standards
 - Policies
- Communication
- Strategy Planning
 - How can IT impact 3 R's? How does IT impact Master Planning?
 - Paradigm shift in IT to Service Culture

“University Beyond the Bay”

UMB in 5 Years



- Extend current real learning and support environment to real and virtual flexible learning spaces delivering anytime, anywhere, anyplace access
- Expand learner-centric education model with services that are personalizable, user sensitive, and mobile
- Enhance research by developing collaboratories that leverage national resources with local investment on strategic initiatives

University Beyond the Bay



- Puts the learner at center stage
- Personalizes the UMB experience to match the lifestyle of the user, be they student, lifelong learner, or alumni, any place, any time, any where
- Empowers the faculty with new levels of learner contact and interaction
- Endeavors to put at their fingertips all the resources needed to both learner and researcher
- Internationalizes the reach of the educational experience

Underlying Implications



- Cultural Shift
- Communication and Collaboration Technology
- Service Architecture
- Emerging Technologies

Steps to Cultural Shift



- Hypothesis:
 - Our students are experiencing this model in “market” today
 - UMB is already moving in this direction – “Network” as the system to deliver services
- Impact:
 - Students
 - Tools, learning environment, new skills
 - Faculty / Colleges
 - Tools and Skills, expanded intimacy with students
 - Content/Service Owners
 - Physical Facilities (On and off campus)
 - Resources (Library, Lab Seats & Jacks, Digital Infrastructure)
 - Policy – Organizational, Financial
 - Support infrastructure – Change Management

Communication and Collaboration Technology



- Learner centric focuses attention on interaction between learners and with faculty
- Small and Large Group & Individual
- Persistent collaboration workspace in both physical and virtual dimensions
- Ubiquity and consistency of user “appliances” (desktop, tablets, pda’s, mobile vs stationary)
- Policy – privacy, security, acceptable use
- Research endeavor focused outward
- Awareness, cultural acceptance

Service Architecture



- Standards and policy
- Definition and Delivery of Service Levels
- Technology framework (Portal, development standards, middleware i.e. authentication)
- Centralization: Management or Delivery
- Service priorities
 - Research, Learning, Outreach, Administration
- Service (Product) identification and development
- Risk Management
 - Security

Emerging Technologies



- Mobile/interchangeable appliances
- Immersive virtual reality
- High-end computation and modeling
- Simulation technologies
- Multi-user Collaboration tools (“virtual community”)
- Knowledge management – multi-disciplinary data farms
- Communication Convergence (unified messaging, voip)

Conclusions



- IT Futures –
 - Leverage financial constraints to determine priorities and drive standards
 - Partner with customers to define services definitions
 - Augment internal staffing with Automation and rational outsourcing
 - We're only at the beginning at a very exciting future