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2009

Western Washington University Information Technology Services Strengths, Challenges, Opportunities and Threats

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INTERNAL ASSESSMENT – STRENGTHS

7 Western Washington University's Information Technology Services (ITS) division has a rich history of
8 providing excellence to its constituents. That excellence primarily arises from the strength of the people
9 who work within the division. We are a division made up of people who love technology and care about
10 education, about students, about faculty. Our vision is simple: Using appropriate technology we want to
11 help Western achieve its goals of providing an exceptional educational experience for its students and
12 faculty. We recognize there are times when technology can become a stress to an individual and even
13 the institution but the personnel within ITS continually strives to provide expert guidance and
14 transparent support for the incorporation and use of appropriate technologies into Western's teaching,
15 research and administrative environments. There are indicators that tell of their success:

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- 17 • Western Washington University was named on Yahoo's initial list of "Most Wired Campuses"
18 and was one of only three institutions to receive an A+ rating. This was achieved though
19 Western's innovative implementation of student technology resources including wireless
20 computing, the laptop loan program, the President's Faculty Workstation program, and
21 classroom technology mediation. These programs continue and provide a rich technology
environment for students on our campus.
 - 22 • Western Washington University received the EDUCAUSE Award for Excellence in Administrative
23 Information Systems for our implementation of e-sign web forms for administrative processing.
24 This national award was given annually to honor "innovative and noteworthy applications or
25 practices that use information technologies to improve campus administrative and business
26 processes with creativity, efficiency, and effectiveness worthy of emulation. The selection
27 committee looks for innovative practices that address issues of widespread interest on higher
28 education campuses." The e-sign program has continued to expand and add more electronic
29 forms and routing. However, rather than just expand the number of forms, the division provides
30 business process analysis to help departments make the most efficient use of electronic,
31 personnel, and process resources.
 - 32 • Perhaps most gratifying are the numerous notes of thanks that Western employees submit to
33 the Directors of ITS when someone has provided excellence in their service to the institution.

34 ITS maintains a strong student focus through its innovative Student Tech Center that provides student
35 access to advanced technological applications and offers 'just-in-time' help to students who may be
36 experiencing technical difficulties or who wish to include new technology in completing assignments. ITS
37 also administers the Student Technology Fee (STF) process, with guidance from the student led STF

38 Committee, which annually offers the opportunity for faculty, staff and students to propose technology
39 projects for funding. Awarding over seven hundred thousand dollars a year, the STF helps Western to
40 upgrade equipment and bring new equipment to campus. The STF's mission is to increase access to
41 technology, improve the educational quality with technology, and to integrate technology into the
42 curriculum.

43 Also reporting to the CIO is Scientific and Technical Services. This group provides centralized services for
44 scientific labs and is a national leader in integrating scientific instrumentation and supporting
45 instructional material into the classroom, laboratory, and research environments through the use of
46 web-based technologies. The Integrated Laboratory Network project has been selected by the National
47 Science Foundation as one of twenty exemplary projects in the nation. SciTech also operates machine,
48 electronics, and woodworking shops for the design, manufacture and repair of academic, scientific, and
49 supporting equipment.

50 Western has also made a commitment to developing a sustainable model for maintaining and
51 developing mediated classrooms. ITS is the lead organization that, each summer, selects specific
52 classrooms for new mediation or upgrades to digital projectors, faculty teaching stations and general
53 improvements to lighting and acoustic properties. The results are classrooms that enhance both
54 teaching and learning.

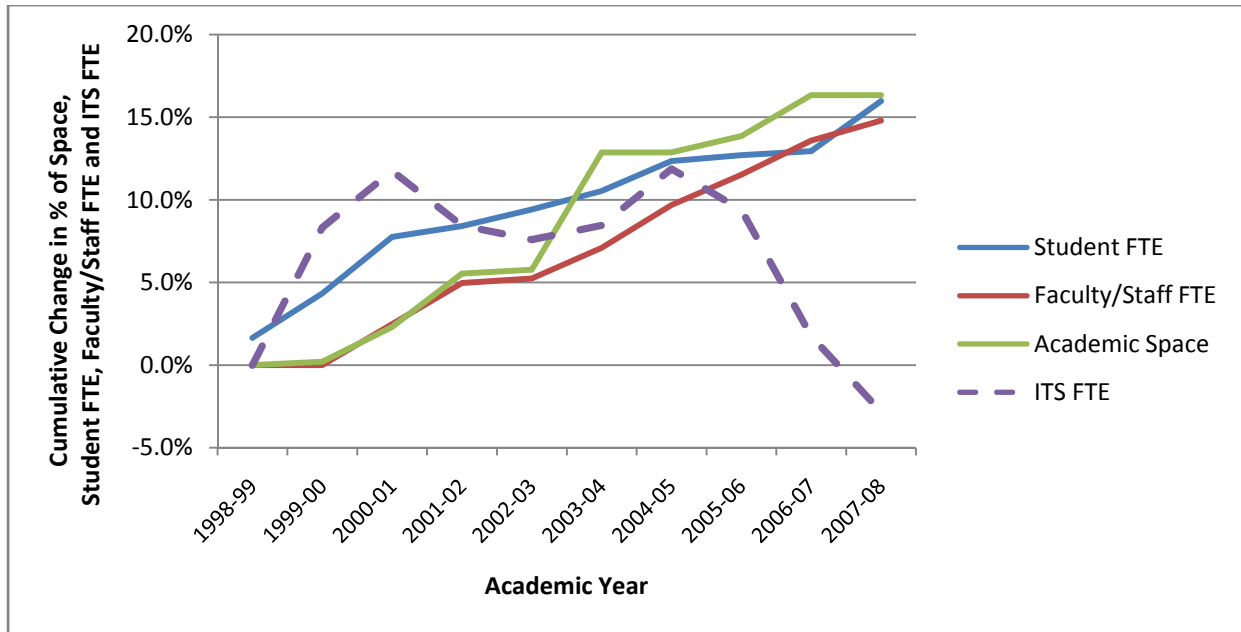
55 Western achieves 99.99% uptime with its core administrative applications such as our Exchange
56 messaging, Novell file sharing, and the Banner administrative system. This means that these applications
57 are unexpectedly unavailable (not including scheduled maintenance and repair) less than one hour per
58 year.

59 **INTERNAL ASSESSMENT - CHALLENGES**

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61 EDUCAUSE, the professional society for information technology in higher education produces a Core
62 Data Survey each year. Participating institutions submit data on staffing, budgets, etc. and then
63 institutions can see how their data compares to other institutions. The 2008 survey revealed that
64 Western is lagging behind its peers in available resources.

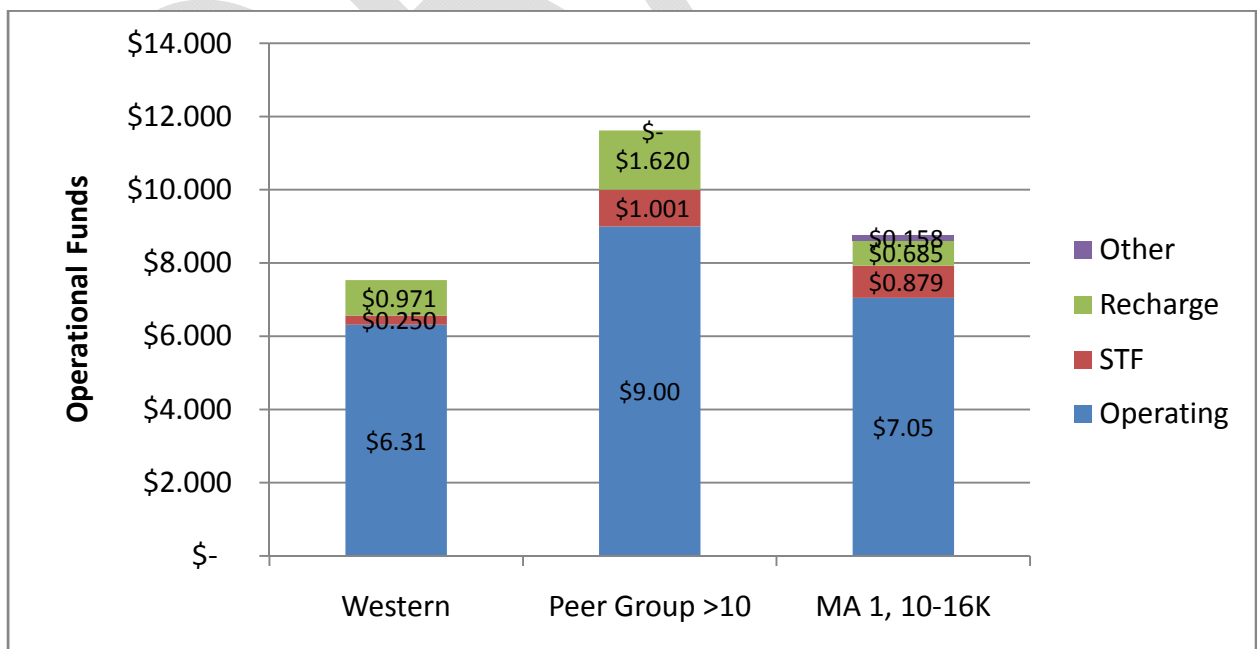
65 In 2008, our central IT staff (excluding SciTech & Secretarial) totaled 66 persons. The average for our
66 peer group (with greater than 10,000 student FTE) was 85 people. This difference of 15 FTE has a
67 significant impact on our ability to support our users. This is compounded if we consider that student
68 FTE grew a cumulative 16% in the decade 1998-2008; faculty and staff FTE grew at a cumulative 14%
69 while ITS staff declined 3% (Figure 1).



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71 Figure 1. Cumulative Change in % Space, Student FTE, Faculty/Staff FTE, and ITS FTE

72 It is our belief that Western really does ‘do more for less’ but the impact of these shortfalls puts stress
 73 on the division and results in less flexibility to respond to new opportunities. It has also prevented us
 74 from modernizing our web presence and supporting our applications, both academic and administrative,
 75 to the levels we feel the institution deserves. Similarly the budget numbers reveal the same trend.
 76 Western’s 2008 operating budget for ITS was 6.65 million. The median for our peer institutions (with
 77 greater than 10,000 student FTE) was 9 million. Total budgets including recharge and student
 78 technology fees were 7.8 million for Western and 11.6 million for our peer group (Figure 2).



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80 Figure 2. Total operational funds by peer institution.

81 This shortfall in resources has resulted in many challenging struggles for ITS, among them:

- 82 • More demand for services & training than ATUS can satisfy (among staff, faculty, and students).
83 ATUS has a support ratio of 268 devices to 1 support staff. This compares to a decentralized
84 ratio of 66:1, this compares favorably to the best practice guidance of a ratio range of 60:1 to
85 125:1. Clearly a ratio of 268:1 is not acceptable. Unfortunately the budget reductions for 2009
86 have further exacerbated this challenge.
- 87 • Keeping up with technology innovations and built in obsolescence. The good news is that
88 technology continues to innovate and evolve but the bad news is that technology becomes
89 obsolete and requires replacement. This results in a constant need of funding to keep up with
90 the evolution of technology. We do not have an equipment budget to meet this need.
- 91 • Because technology staff is in high demand (even after accounting for the current downturn),
92 technology workers can demand higher wages. The state has recognized this for our classified
93 staff but not for our exempt professional staff. This has resulted in salary compression and, in
94 some cases, inversion. When the economy turns around, Western will need to attend to this or
95 we will lose experienced members of our team.
- 96 • Far more demand for video services than Video Services can possibly fulfill, especially with a
97 student work force. The good news is that Western is using video; the bad news is that our
98 support staff FTE has not increased (see Figure 1 on page 3).

99 We need to do a better job communicating with the campus community. Rather than being a
100 mysterious force existing somewhere out there in the Ethernet, we must communicate our services,
101 standards and policies so that people will be able to do their jobs with technology.

102 INTERNAL ASSESSMENT – OPPORTUNITIES

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104 Western Washington University has a strong history of decentralization that has served us well in many
105 ways. However there is a downside when groups do not work together and standards, either imposed
106 by the state or other outside organizations, are not followed. It would be beneficial to map all of our
107 technology assets and see what we really have here to work with and what we can do better.
108 Technological 'gems' are hidden throughout the organization and we must find ways to work with each
109 other so that each organization can shine. This means developing a trust between our various
110 technology groups. The central group must understand the need for colleges and departments to
111 differentiate themselves. We can and must help them achieve their goals. But the decentralized groups
112 must understand that we need to work together and agree on certain common standards to help us all
113 survive and even flourish in today's technology environment. We must bring the bright minds that we
114 have on campus together for brainstorming sessions to find new ideas and new methods of doing things
115 that will work better--together.

116 To assist faculty to graduate technically literate students, we must continue to integrate IT more
117 intentionally into the curriculum. This requires constant communication with faculty: teaching the
118 teachers about what's possible. For example, we have interactive white boards purchased by STF, but

119 few faculty members know about them, or how to apply this technology to their pedagogy. We must
120 find ways to reach out to faculty without becoming irrelevant because of the frequency of messages or
121 content that is not germane to their teaching and learning style.

122 We must become more “web centric”. The real opportunity is to understand that what we really mean is
123 to become “user centric” by using our World Wide Web presence to communicate a rich message to our
124 constituents. WWU has some compelling stories to tell our constituents whether they are prospective
125 students, current students, parents, donors or the public at large. But we have been hindered by our
126 inability to focus resources on creating and delivering content via our website. Those resources have not
127 been wasted, focusing instead on our Learning Management System, but we are behind the curve with
128 our web site. Creating compelling content is not enough; we must deliver it in such a way that the user is
129 in control and can tailor their experience on our website to receive the information they desire.

130 E-learning technologies continue to evolve and gain mainstream acceptance within educational
131 communities. Open campus and open source initiatives such as MIT’s *iCampus* provide clear examples
132 of campus communities sharing resources to enhance the educational opportunities available to faculty
133 and students. These technologies and initiatives provide one avenue for Departments and IT services to
134 more fully share and enhance Western’s extensive educational resources. IT services will need to play a
135 central role in this transformation.

136 **INTERNAL ASSESSMENT – THREATS**

137 In the current economic condition and with reductions proposed to Higher Education, it will be difficult
138 to maintain morale. We will need to continue to focus on ways to organize ourselves to work smarter
139 with what we have. Since our major strength is our people, we will work hard at encouraging people and
140 making sure that they are valued for their many contributions.

141 In technology, change is constant. Training and professional development become an issue if funding
142 demands reduce travel and training budgets. We will continue to encourage distance learning for
143 training opportunities and look for opportunities to travel as appropriate to present at regional and
144 national conventions.

145 IT security continues to be a concern. Not only are we concerned with the potential for unauthorized
146 access to our data but we must continue to be vigilant about social engineering techniques which may
147 trick our users into giving out information or clicking on files that in turn become a way to infect a
148 computer. We will need to continue (and increase) our vigilance to protect the institution through
149 technological (firewalls, virus protection software, etc.) and social (education, policies, etc.) methods.

150 Finally, remaining in silos, both within ITS and throughout the University, will remain a major threat to
151 our accomplishing our job of supporting our constituents. When communication stops at a silo wall, the
152 entire University suffers. We must address the issue of centralization of certain technology resources as
153 the most efficient method of delivering service. We must also address the “how” to accomplish the
154 centralization of technology resources in a manner that provides support for each component of the
155 institution to achieve their goals.