

5. Disinvestments

ITS disinvestments⁶⁵ may include:

- service level reductions and
- service elimination.

While these disinvestments will save ITS cost, they will not result in institutional cost savings. Nevertheless, certain disinvestments in ICT services must be undertaken to re-direct resources to services that better align with institutional directions and priorities.

ITS offers core services that are used by instructors, students, researchers and staff in all colleges and departments daily. While a reduction in service level may save ITS costs, it does not result in reduced institutional costs. Faculty, researchers and staff will “waste” time waiting for service or spend time performing ICT work rather than their own work. In response to reduced ITS service levels, some colleges or administrative departments will be forced to offer ICT services on their own (in duplication to ITS’ services) in order to meet the required service levels of their faculty, researchers and staff.

- For example, in the case of inadequate desktop support, a percentage of faculty, researcher and other staff time is lost to workstation setup, troubleshooting hardware and software problems, installing software and security patches, developing a data backup strategy and backing up data. The lost opportunity becomes one of the hidden costs of computing; as a result, no one at the University knows the *true cost* of computing.
- In the case of inadequate support levels for network services, faculty, researchers and staff must wait a longer time before problems are resolved. The wait time is often unproductive and is another hidden cost of computing. More importantly, instructional, research and service delivery activities are delayed.
- Inadequate support levels for other services such as e-mail will force some colleges and departments to provide those services on their own rather than endure the reduced support levels. Providing duplicated services will cost the University more than the cost to provide one service.

As with service level reductions, service eliminations will save ITS costs but will not result in savings to the institution. Faculty, researchers, students and staff who depend upon the eliminated service will be forced to find another service provider; this results in an off-loading of ICT costs. In some cases, colleges and/or departments will deliver the service themselves through parallel, or even competing, ICT support organizations. Having separate and disparate services causes interoperability problems, creates confusion and frustration for users, and likely increases overall cost to the institution.

⁶⁵ ITS’ service planning process considers instructor, student, researcher and staff requirements within the context of institutional directions and priorities; service usage trends; changes in technologies; vendor support (or lack of support) for hardware, operating systems and software applications; existing service levels; service delivery costs; opportunity costs; ITS budget constraints. The resulting service plan specifies the technologies that will be used, service changes or enhancements that will be undertaken, service support levels and budget. Inevitably, the service plans identify areas of maintenance, investment and disinvestment.

ITS often has been forced to eliminate services, rather than to reduce service levels across the board, in order to address increasing service delivery costs in times of decreasing or flat budgets. The elimination of services did not lead to lower institutional costs. Colleges and/or departments began offering the discontinued services. The cost of delivering ICT services was transferred to others but was not reduced.

- Other than Computer Science, ITS established the first student computing facilities on campus in Thorvaldson, Arts 144, Health Sciences and Law. The facilities were established using one-time (project) funds. ITS was unable to acquire an operating budget for the support and renewal of these facilities and divested this service.

Colleges assumed responsibility for student computing facilities. In order to obtain adequate funds to support and renew these facilities, many colleges implemented student computing fees.

In addition to facilities, colleges also provided e-mail, file, web and print services to their students. Students, who took courses from more than one college, could have multiple e-mail, file service and web service accounts—one set of accounts for each college. Likewise, students had to pay computing fees and purchase pages for printing at each facility. Unused pages from one facility could not be used in another. ITS and the College of Arts and Science began offering services, often on a fee-for-service basis, to the colleges who choose not provide student computing facilities on their own.

Student complaints led to the development of campus-wide services. ITS provides e-mail, file and web services for all students; these services can be accessed at all college student computing facilities. A campus printing solution was implemented in fall 2003; students who purchase printing can now print in all college student computing facilities, the Learning Commons and other campus locations. Foundational student computing facilities were developed; these facilities are open to students in all colleges. College student computing fees were eliminated.

- ITS (and others) identified the need for a campus portal about four years ago but did not have the resources to begin implementation. Because it was a priority, the College of Arts and Science developed a college portal (my.usask.ca). The University is now operating two portals, my.usask.ca and PAWS.

As part of this planning process, ITS has considered divesting other services. We have not identified any service, which when eliminated, would save the University money. For example, we have considered eliminating support for institutional administrative information systems. “Business units” would be then become responsible for the technical support of those systems. However, the transfer of responsibility will not reduce institutional costs—“business units” will have to pick up the cost for supporting the administrative systems (an off-loading) or ITS would probably have to transfer the resources currently assigned to supporting those systems to the business units. Each business unit would form their own ICT department. Each business unit would need their own systems, database and applications support staff; total institutional costs would likely rise. If license management is not coordinated centrally (to take advantage of volume or site license pricing), institutional costs will also increase. In order to take advantage of economies of scale, the University would eventually combine the various business unit ICT groups into one unit.

Even though service level reductions or the elimination of services does not save the University money, certain disinvestments in ICT services must be undertaken. These disinvestments provide the opportunity to re-direct resources to services that better align with institutional directions and priorities,⁶⁶ to replace old services with improved services or to focus on technologies that better support the needs of users. For example:

- ITS will eliminate support for SIS and FRS when the Si! and Unifi projects are completed. This assumes that the projects convert seven years of historical data into the new systems to meet regulatory requirements.

This disinvestment will not result in lower costs for the University. The annual software and database license cost for the new student information system will be several times higher than that for the current system. The amortized yearly server cost for the new system will be higher than those for the current system. The technical support (staffing) costs will also be higher. Likewise, the functional (non-technical) staffing required to operate the new student system will be higher than the staffing currently deployed.

Even though this disinvestment will not result in lower costs, the University has decided to implement the new systems to improve services for students and faculty.

- ITS has announced the discontinuation of the faculty and staff dial-up service (scheduled for April 30, 2003).

The service provides low speed (28 Kb per second) access to the Internet. A vendor no longer supports the hardware and software used to provide this service. The equipment is seven years old and replacement parts are not available. The cost to provide this service is increasing.

Nevertheless, this service is used by 500 faculty, sessionals and staff on a regular basis. With the elimination of this service, the affected people will need to purchase Internet access service (e.g. from Shaw, SaskTel, or U-Connect), or come onto campus to do the work now done off-site. Some sessionals have indicated that they don't have offices on campus and therefore are forced to incur additional costs to do their University work.

This service is also used by staff in University offices or research labs that do not yet have network access (e.g. Poultry Centre, Crop Sciences Research Lab, Kernan Farm, University Feed Mill, Physics RadarSat station and some offices in Royal University Hospital). ITS is working with the staff and departments affected to provide alternate network access; the cost to provide this access is sometimes high (for example, when long-distance wireless internet access equipment must be used). Alternatively, University staff or their departments must buy commercial Internet service (if it is available at that location).

The elimination of this service will likely increase institutional costs (including the costs for the affected users to purchase commercial Internet service and ITS' cost to provide network service to the areas affected). Even though institutional costs may increase, elimination of this service is the best course of action. The provision of Internet access to homes should not be a core competency of the University. The

⁶⁶ In business terms, this may be stated as the ability to re-direct resources to services that provide a better return on investment.

commercial service delivered to faculty and staff homes will provide a higher quality of service. Likewise, the provision of ITS network service to affected campus areas (or even commercial Internet access services in areas where the cost of campus network service is prohibitive) will also provide a higher quality of service to faculty, researchers and staff.

- The POP e-mail protocol will no longer be supported after September 1, 2004.

The POP protocol downloads users' e-mail from the e-mail server onto user desktop computers and deletes the e-mail from the server. Incorrect e-mail configurations on desktop computers, desktop hard drive failures and user error can also cause the e-mail to be deleted from the desktop computer. ITS spends about 20 days per year trying to recover lost e-mail (sometimes the e-mail cannot be recovered).

The IMAP protocol only stores e-mail on a server. This saves both users and ITS the time it now takes to recover e-mail that is accidentally deleted. Additionally, e-mail can be accessed from any computer that the user chooses.

The change in e-mail protocol will affect 1,700 users. Those users must reconfigure their desktop computers to use IMAP.

While the cumulative user and ITS cost to reconfigure these workstations will likely require more than 20 days of effort, it is still the best course of action.

In addition to the above, ITS will undertake the following disinvestments within this planning cycle. ITS yearly operating plans will identify further disinvestments.

- Support for Word-11 will be eliminated by fall 2005.
- Support for coax network wiring will be phased out by 2005 (replaced by support for Cat-5, Cat-6, and fibre connections).
- Support for the Appletalk network protocol⁶⁷ will be phased out by 2005.
- Support for the application development tools⁶⁸ that were used to develop our existing legacy administrative information systems will be discontinued when those applications are replaced by new systems. The legacy applications include: SIS, FRS, Course Inventory System, DMT's billing/inventory system, Dental Clinic system, Supplemental Chequing, General Receipting, Student Fees, Emergency Loan and other systems.

⁶⁷ This is following Apple's direction regarding the Appletalk protocol—Apple is recommending the use of TCP/IP protocol instead of Appletalk. Note: Apple Macintosh products will still be supported even though the Appletalk protocol will not be supported.

⁶⁸ These tools include RDB, Rally, Datatrieve, CDD/Repository, SAS on the OpenVMS operating system, RDO, Periphonics, TDMS and CMS.