Report of the Information Technology Task Force

May 2009

Geoff McBoyle (Chair)
Alan George
Dennis Huber
Ken Coates
Tom Coleman
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Summary

The IT Task Force was convened in response to a request from the Vice-President, Academic and Provost for information on current IT practices, and for suggestions to improve the effectiveness and efficiency of IT activities at UW. Input was sought by the Task Force through a broad consultative process, and the results collated and evaluated. The assessment process brought to light problems that derive from the dual nature of IT service delivery at UW through both IST and local units (Faculties, library etc.), especially the ambiguity in the delineation of roles and responsibilities between the two groups, and the duplication of effort that often arises.

The IT Task Force has focused on two major areas for its recommendations: the role of IST; and the provision of appropriate means of communication both among IT service deliverers in local units, and between the two source groups, IST and the local units.

The Role of IST

The Task Force is recommending a streamlining of IT service delivery, with associated savings in time and staff, by centralizing in IST certain campus-wide functions now provided by local units, e.g. network management and email services. As a result, some personnel reassignment may be required. The Task Force recommends that IST place greater emphasis on client support (rather than technology support) to provide users of its services with clearer points of contact, reduced problem response times, and timely information dissemination.

Furthering Communication

Frequent and open communication between IST and IT personnel in faculties/local units is essential to ensure best practices are employed in IT service delivery at UW, and that UW is kept at the forefront of new developments. Typically, this process has occurred only on an ad hoc or impromptu basis. To promote interaction within and between IT groups, the Task Force is proposing that a Computing Technology and Services Committee (CTSC) be set up comprising senior IT personnel and chaired by the Associate Provost, IST. CTSC would focus on issues of hardware, software and network systems, and would undertake IT information gathering and dissemination, along with providing guidance regarding: equipment acquisitions; standardization and compliance with standards; service delivery improvements; and the development and promotion of IT innovation across campus.

In order to prevent duplication of effort between CTSC and UCIST, it is proposed that UCIST’s mandate focus exclusively on the application and management of IT in teaching, learning and research, along with the development of future strategies for these areas. Issues of a purely technological nature would fall within the purview of CTSC. It is proposed that UCIST be renamed the Committee for IT Application and Management (CITAM). The roles of other IT advisory committees may also be modified in light of the proposed changes.
Report of the Information Technology Task Force

On November 11, 2008, an Information Technology (IT) Task Force was mandated by the Vice-President, Academic and Provost to undertake the following activities.

1. To identify the collection of UW essential IT services;

2. To identify the most efficient and effective way(s) in which those services can be provided; and

3. To make recommendations for changes where services are currently being delivered in ways inconsistent with 2 above.

The members of the Task Force are Ken Coates, Tom Coleman, Alan George, Dennis Huber and Geoff McBoyle (Chair) (Appendix A).

This report summarizes the Task Force’s findings and is based on 21 meetings with, and 18 submissions from, relevant personnel involved in IT activities as well as student groups at UW.

Note: IT activities undertaken by faculty and students related to personal research were not addressed by this Task Force.

1. Compilation of IT Services

The major organization responsible for IT at UW is Information Systems and Technology (IST), with a staff of around 133. The group comprises eight functional units each with a Director reporting to Dr. Alan George, Associate Provost, Information Systems and Technology. The units are: Client Services, Computing Systems Services, Instructional Technologies and Multimedia Services, Network Services, a Special Projects group currently developing a new Cooperative Education and Career Services’ system, and three Information Systems groups each responsible for certain enterprise-wide information systems. In addition, a Manager of IT Security and the IST Executive Officer report to the Associate Provost. The groups provide service in their individual areas of expertise; for example, the ‘Client Services’ group provides in the primary level of service of desktop equipment and related training.

Faculty computing units provide primary computing support for research, teaching labs and several other aspects of instruction. Along with IST, they provide student email services, software licensing, workstation management and desktop support. The Library, Housing and Residences, and Cooperative Education and Career Services (CECS) also provide in-house IT support. At least 170 people provide IT support in Faculty and other local units.

Those IT services considered essential to the University’s smooth operation have been identified and compiled in Appendix B at the end of this report. The chart clearly indicates the shared nature of IT responsibilities at UW between IST and local IT units. Of the 15 services listed, 14 of them are delivered from more than one source.

The duplication of service delivery evolved over a period of time when resources were less constrained in Faculty IT groups than in IST, and when IST had not yet been given the authority to manage campus-wide IT activities. Now much of the IT resources of the University, and the related decision-making, are located in the Faculties and other local units. The proximity to the client base provides for prompt attention to clients’ needs, but often creates a mindset that is wholly focused on the local unit.

The problem was identified in the Barnard Report\(^2\) in 2003, and since then a number of initiatives drawing on the participation of both central and decentralized IT staff have proven successful. Appendix C summarizes some of these activities, specifically, UW-ACE, Desktop Rollover System, Open Network Administrator (ONA) and the Web Advisory Committee (WAC). Similar initiatives are proposed below that would specify the role of IST in providing universally needed functions, at the same time as allowing local units to focus more on special requirements of their respective constituencies.

### 2. Efficient and Effective Methods of Service Delivery

To derive as broad an understanding of the efficiency and effectiveness of UW IT services as possible, information was gathered from a wide number of sources across campus. A different set of questions was used for: a) those individuals or groups not involved in IT service delivery; and for b) those persons responsible for managing and delivering IT services, including IST managers and computer groups in the Faculties and academic support units. Appendix D outlines the nature of those questions.

The response to the Task Force’s questions covered a wide variety of IT issues, from broad, overarching principles to specific technical issues addressed daily. The responses have been grouped into three categories relating to:

- a) Role and Responsibilities of IST
- b) General Process and Management Issues
- c) Specific Issues

a) The Role and Responsibilities of IST

i) Services

The current services provided by IST are summarized in Appendix E. Input to the Task Force showed a broad (but probably not universal) agreement that IST would be the best unit to deliver certain IT services currently undertaken by both IST and other groups (see Appendix B), with certain provisions that reflect local needs. These services are:

- Network Management

Open Network Administrator (ONA) was in Engineering and successfully transferred to IST. ‘Maintain’ was developed at Oregon State University and has been successfully adapted for use at UW. Assuming campus-wide consistency in equipment and practice, IST would be the logical location for management of the UW network (up to and including wall jacks).

- Email

Providing multiple email services to students does not appear to provide advantages, and almost certainly represents duplication of funds, effort and staff time. In addition, disparities can occur in service quality provided to students in different Faculties. A single email service provides ease of email account creation and de-activation by IT staff, and provides simplicity and clarity for students. Some Faculties have already moved their student email service from the Faculty to IST ‘mailservices’. Similarly if suitable protocols can be developed, IST could be responsible for delivering primary email service to all University faculty and staff.

- Anti-virus and Windows Update Servers

Duplication in support for Anti-virus and Windows Update Servers could be avoided by centralizing the responsibility for their delivery in IST.

- Blackberry Devices

Currently there are several IT personnel across the University who, as part of their responsibilities, provide support for Blackberrys used by their constituents. IST also provides service for Blackberrys. This is an ineffective way to deliver service, particularly since only about 500 are used on campus. IST should provide a robust and reliable Blackberry service, and should be responsible for support of all Blackberrys on campus.

- Software Purchasing and Licensing

Although IST currently holds the primary responsibility for software purchasing and licensing, local units – Faculties and other IT groups on campus – do undertake these activities on their own. Closer communication between IST and other groups would encourage local units to be more willing to rely on IST for these functions and potentially bring about greater economies of scale.

- Web Content Management System (WCMS)

Maintaining a state-of-the-art web site for the University involves the coordination of content, design and technical infrastructure. Uniform design and standard technical infrastructure that is appropriately isolated from the management of content would free content developers to
focus wholly on subject matter rather than grappling with the complexities of web technology. The provision and management of the technical infrastructure properly belongs with IST (with close consultation with the user community, of course); the design and content development of the web space belongs elsewhere within the University.

**Recommendation 1:** The provision and management of the technical infrastructure for the services listed above should become the responsibility of IST after consultation with the relevant local client group(s).

Implementation of this recommendation has implications for staffing. For IST to provide the additional services listed above, additional staff may be required. At this time of financial constraints, this could only be achieved by the reassignment of some staff currently providing these services within Faculties and other units. This is recognized as a significant change, with potential impacts in the Faculties. Such reassignments would be implemented after consultation and with agreements on how to remediate any significant local impacts.

- **Active Directory**

There are two major active directory forests used at UW – ADS and NEXUS. ADS is the IST authentication domain used to access QUEST, and to log on to academic support computers. ADS is also used by many corporate resources and provides a single source for account maintenance in the University. NEXUS is managed by the Engineering computing group, and provides the major network for student labs. Separate passwords are needed for those using both systems.

Given that there are twice as many NEXUS workstations – 4,000 – as ADS units, and that NEXUS is used in most student labs across campus, rationalization of the services could be achieved by folding ADS into NEXUS, with Engineering and IST computing staff collaborating in managing the system for the University as a whole.

**Recommendation 2:** The University should consolidate, to the maximum extent possible, Active Directory forests and domains, with a preference to move to NEXUS, if feasible.

**ii) Enhancing Service Quality**

Some of the recommendations of the Barnard Report have been acted upon by IST, for example, the desktop rollover procedure which has proven highly popular with local units. Nonetheless, input to the Task Force indicated that IST still underperforms in certain areas, for example: slow response times; hierarchical obstacles; and inadequate management of change information.

Further, IST lacks a priority system for responding to client requests. Those groups in the University that experience demands from external sources, especially those that have legal time requirements, need and expect first priority of response from central IT services, which is often not the priority given.

In addition, because of the duality of roles between IST and local units, there is very often no clear, single point of contact or line of authority for clients to approach. The result is that efficiency in IT service delivery often relies on the level of communication and cooperation between the two IT service delivery groups. In other words, good IT service is very often a
matter of individual personalities rather than effective service procedures. The tenuous nature of the situation underlies many of the problems identified to the Task Force.

Recommendation 3: IST should ensure that: a) a higher level of staff deployment be made in the client service area; b) points of contact be clearly defined; c) the approval process be streamlined within IST wherever possible; and d) prior information be disseminated to affected parties of any impending changes.

Recommendation 4: The delivery of IT services by IST should be prioritized according to a hierarchy of needs to be determined by the Associate Provost, IST, in consultation with the relevant Director(s) within IST.

b) General Process and Management Issues

i) Communication

Of the three major issues identified by respondents to the Task Force – communication, standardization and lines of authority – poor communication was identified as the most fundamental obstacle to effective IT service at UW. Insufficiency of information and of interpersonal interaction was blamed for unnecessary duplication of effort; inappropriate responses resulting from lack of prior consultation; lost opportunities through ignorance of IT capabilities in the wider University community; and a general absence of trust among IT practitioners. The insularity of occupational activities is undermining the effectiveness of IT service delivery and hurts the University’s reputation of computer excellence.

Where IST and local units have cooperated, several successful joint ventures have resulted (Appendix C). Further means of promoting communication and cooperation are suggested below.

a) WatITis

WatITis has proved to be a highly popular forum for IT specialists to interact. However, there is little opportunity beyond informal means for subsequent communication and collaboration on innovative concepts arising from the conference.

Recommendation 5: IST be encouraged to organize follow-up seminars on potential innovative applications within the UW computing community.

b) Secondments and Team Projects

Promoting secondments and team projects between IST and other units would initiate interpersonal interaction and foster a number of practical benefits, including a greater appreciation of each other’s job requirements, and a meaningful and focused exchange of technological information. In terms of communication, it would be reasonable to expect also
the development of a mood of collegiality, and new, informal lines of communication between the two groups.

From a technical expertise perspective, secondments could help overcome some occurrences of points of failure and provide IT staff with new insight and knowledge that would provide a good platform for further career development. In terms of mapping out career paths for IT staff, this type of cross-group experience should be given greater emphasis in considering an individual for professional advancement. Management training would also assist IT staff in appreciating and dealing with administrative and policy issues.

Bringing IT innovations to fruition is very often best achieved in a team format, drawing on specific expertise from different sources. The ‘skunk works’ type of projects has similar benefits to those of secondments in terms of improved communication links and advancement in expertise, as well as the same implications for demands on staff time. ‘Thin client’ technology and virtualization represent two themes suitable for team investigation.

**Recommendation 6: Senior IT personnel should look for opportunities for staff secondments and for team projects.**

c) Forum

The Barnard Report made the following observation. ‘Structure does not accomplish things. People accomplish things.’ (Barnard Report, page 14). Accomplishing a more cooperative and collaborative perspective between IT providers will require enthusiasm and commitment from key people in both central and decentralized IT areas. No structure can guarantee the desired result, but providing a forum for exchange of information and ideas can at least encourage a continuing dialogue on IT technical and management issues.

Keeping the UW at the forefront of IT service and innovation takes strong leadership that recognizes the necessity of an ongoing consultation process. A forum is proposed to provide one mechanism in that consultation process.

To be effective, this forum should meet frequently to address shared problems, new developments, etc., and to relay that information to relevant personnel in their respective units. The forum could be also responsible for organizing two items that respondents to the Task Force frequently mentioned: a compendium of the IT expertise that exists across campus; and a record of best practices for future reference. Besides their practical benefits, these items would help to provide a greater sense of transparency in IT services, something which was also frequently sought by respondents. The forum would be a useful medium to devise and promote team projects oriented toward developing innovative new services for campus-wide use.

**Recommendation 7: A committee should be created, chaired by the Associate Provost, IST, and composed of a subset of Directors of IST, the Manager of IT Security, and heads of computing groups in Faculties, the Library and Housing and Residences for the purpose of ensuring the exchange of information on IT developments, both active**

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3 ‘Skunk Works’ is a registered trademark of Lockheed Martin.
and planned, in a timely and efficient manner. As a working title, the name Computing Technology and Services Committee (CTSC) is suggested.

A proposed mandate for, and membership of, CTSC is outlined in Appendix F. The establishment of this Committee will have an impact on the University Committee for Information Systems and Technology (UCIST) and other existing computing advisory groups (see Impact on IT Committees later).

**Recommendation 8:** The Computing Technology and Services Committee should have, as priority objectives:

- the development of a compendium of IT expertise at UW;
- the development of a ‘library’ of best practices in IT service solutions;
- the formulation and/or promotion of team projects to develop innovative technologies and services.

**ii) Standardization**

Different IT systems and unmanaged\(^4\) machines are frequently mentioned as stumbling blocks to efficient client service. Standardization of products and processes can result in cost savings through consistency of implementation, streamlined support and improved service depth through multiple people with common technical expertise. Standardization also allows savings on bulk purchasing of items commonly used across campus.

Standardization implies limitations on personal choice of purchases in, for example, hardware and software technologies, and brings with it the necessity for an effective consultation process prior to establishment of standards. Further, it requires compliance among different units to the directions issued on behalf of the University as a whole. Indeed, recent experience with use of the Document Management System in support of the Graduate Admissions Project is a compelling example of the need for more consistency and standardization. The multitude of browsers and operating systems, coupled with the extent to which systems are not managed through an Active Directory, has led to much unnecessary effort and seriously impaired the success of the project.

**Recommendation 9:** The Computing Technology and Services Committee should have, as priority objectives:

- the development of a set of preferred configurations of desktop equipment across campus;
- the development of a strategy to encourage all faculty and staff to
  - adhere to the preferred configurations

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\(^4\) Not operating consistent with the usual local unit standard
have their computers managed so they remain up-to-date and so that it is convenient to update and install software in a timely and efficient manner.

Recommendation 10: The acquisition or development of new information technologies that have potential for campus-wide impact or use should be reviewed by CTSC and be subject to approval by the Associate Provost, IST.

iii) Lines of Authority

If the functions mentioned in section 2a become wholly the responsibility of IST, some of the problems that have arisen in the past from unclear lines of authority may be resolved. Nonetheless, respondents to the Task Force frequently pointed to the ‘haziness’ in the delineation of responsibilities between IST and other IT service groups as a major hindrance in finding the appropriate service provider. What ensues is client frustration, often leading to a wider search for assistance, duplication of effort and unnecessary time wastage. Informal contacts were often overused for assistance, leading to an unfair burden on the provider who also has to meet regular job requirements.

Where policy directives are clear but are simply not adhered to, the act of non-compliance leads to frustration on the part of IT staff and loss of goodwill.

Recommendation 11: The problem of unclear lines of authority should be addressed by the proposed Computing Technology and Services Committee, and its recommendations for clarification of responsibilities be forwarded to the Associate Provost, IST, for final decision.

Recommendation 12: Issues of non-compliance should be addressed by the proposed Computing Technology and Services Committee, and its recommendations to encourage better compliance be forwarded to the Associate Provost, IST, for final decision.

c Specific Issues

i) Single Points of Failure

Very often client service depends on a single person with the relevant expertise. Any period of absence by the individual means the solution to the IT problem is on hold. For the most part, there is little awareness of solutions already found, and even less documentation for ease of reference. The lack of effective information management leads to time loss, frustration and unnecessary duplication of effort.

Recommendation 13: The directors/managers of IT units, through the CTSC, should address the issue of single points of failure in their unit to ensure that adequate backup expertise is available whenever possible, and as a minimum, require documentation of problem resolution be made in a timely and well organized fashion; and that it be made available to all appropriate IT staff.
ii) Request Tracking System (RT)

IST operates a request tracking system (RT) that provides a single interface for client requests and allows quick reference of the problem to the most appropriate staff person. Several groups on campus use the system, two use an incompatible system and others may have no system at all. Uniform use of RT across campus would ensure smoother client service provided, of course, requests for service were promptly addressed. Further, if the solutions to client problems were to be documented as part of the tracking process, the information could provide valuable input into the development of a ‘library’ of best practices.

Recommendation 14: A common request tracking system, such as the IST RT system, should be employed universally across campus.

iii) Backup Costs

IST provides a centralized management backup service for servers and workstations. While it is widely regarded by local units as a useful service, most find it too costly.

Recommendation 15: Backup costs should be reviewed by CTSC to determine whether the fee schedule could be revised to improve utilization.

iv) Onboarding

The ‘onboarding’ of new faculty and staff is made more complicated by the absence of a single source of information on technologies and procedures relevant to the position.

Recommendation 16: Local units should make: a) prior arrangements for IT service for new faculty and staff; and b) document procedures for ongoing assistance.

v) Satellite Campus Linkages

The growth of satellite campuses in recent years brings with it the potential for their IT personnel to feel disconnected from the main campus and to adopt an independent approach to IT service procedures. The situation could provide fertile ground for many of the problems identified above, especially those related to lack of interpersonal communication.

Recommendation 17: Faculties with linkages to satellite campuses should appoint a liaison person in both the home Faculty and the satellite campus IT staffs to ensure that satellite IT activities are both compatible with and leverage the wider University systems.
vi) Training

Training sessions offered by IST are well received. Several respondent groups expressed the need for more in-depth, ‘how-to’ sessions than presently offered in order to attain the skills level required for evolving technologies, and get the maximum benefit from IST training resources.

Recommendation 18: IST training sessions should be further developed to meet the evolving skills needs of IT personnel.

d Impact on IT Committees

The proposed CTSC has implications for the operation of UCIST. To avoid duplication of effort, it is suggested that UCIST’s mandate focus exclusively on the application and management of IT in teaching, learning and research, along with the development of future strategies for these areas. It is proposed that UCIST be renamed the Committee for Information Technology Application and Management (CITAM). A proposed mandate and membership for CITAM is outlined in Appendix G. CTSC itself will determine which of the existing technical committees the Committee would wish to retain as advisory bodies, however, Appendix H provides one overview of potential modifications.

3. Conclusion

Although the report aims to achieve greater efficiencies and effectiveness in IT service delivery, it is recognized at the outset that there may be constraints in implementing change at a time of financial stricture. The majority of the Task Force suggestions may be implemented with minimal budgetary impact.

UW’s pre-eminence in IT innovation, application and service has been eroded in recent years. To regain its earlier standing, IT activities across the University must operate optimally. Because of the historical development of the two lines of IT service delivery, IST and the Faculties, there is need for clarification of roles, responsibilities and decision-making authority. The disconnection of the two groups has also led to less cooperation with the other. This ‘stand apart’ philosophy has created a climate at best of insularity, and at worst of distrust. Establishing communication linkages between the two groups, whether formal or informal, would help to overcome this problem. The Task Force Report makes several suggestions as to how this might be brought about.

The Task Force addressed the issue of duplication by considering opportunities for standardization of procedures (wherever possible), or centralizing functions where they have campus-wide application. Certain issues of a specific nature were also addressed where they showed University-wide implications.

The Barnard Report in 2003 called for IST to reorient its focus from ‘support to technologies’, to ‘support to users’ (Barnard Report, page 13). This report documents some of the successful efforts that have been made. Response to the Task Force indicates that more could still be achieved in improving client services, and proposals to that end have been outlined above.
The optimum route forward can only be achieved through an ongoing, consultative process that identifies both the problems and the potentials of IT; devises procedures and allocates resources to address both; and operates within the framework of the University’s circumstances, priorities and related policies. To promote awareness and dialogue on IT issues, and to help formulate an appropriate strategy for the future, the Task Force has recommended the formation of a Computer Technology and Services Committee.
4. Summary of Recommendations

Recommendation 1: The provision and management of the technical infrastructure, namely—Network Management; Email; Anti-virus and Windows Update Services; Blackberry Devices; Software Purchasing and Licensing; Web Content Management System; should become the responsibility of IST after consultation with the relevant local client group(s).

Recommendation 2: The University should consolidate, to the maximum extent possible, Active Directory forests and domains, with a preference to move to NEXUS, if feasible.

Recommendation 3: IST should ensure that: a) a higher level of staff deployment be made in the client service area; b) points of contact be clearly defined; c) the approval process within IST be streamlined wherever possible; and d) prior information be disseminated to affected parties of any impending changes.

Recommendation 4: The delivery of IT services by IST should be prioritized according to a hierarchy of needs to be determined by the Associate Provost, IST, in consultation with the relevant Director(s) within IST.

Recommendation 5: IST should be encouraged to organize follow-up seminars on innovations of potential application within the UW computing community.

Recommendation 6: Senior IT personnel should look favourably upon staff requests for secondments and for team projects.

Recommendation 7: A committee should be created, chaired by the Associate Provost, IST, and composed of a subset of Directors of IST, the Manager of IT Security, and heads of computing groups in Faculties, the Library and Housing and Residences for the purpose of ensuring the exchange of information on IT developments, both active and planned, in a timely and efficient manner. As a working title, the name Computing Technology and Services Committee (CTSC) is suggested.

Recommendation 8: The Computing Technology and Services Committee should have, as priority objectives:

- the development of a compendium of IT expertise at UW;
- the development of a ‘library’ of best practices in IT service solutions;
- the formulation and/or promotion of team projects to develop innovative technologies and services.

Recommendation 9: The Computing Technology and Services Committee should have, as priority objectives:

- the development of a set of preferred configurations of desktop equipment across campus;
- the development of a strategy to encourage all faculty and staff to
  - adhere to the preferred configurations
  - have their computers managed so they remain up-to-date and so that it is convenient to update and install software in a timely and efficient manner.

*Recommendation 10:* The acquisition or development of new information technologies that have potential for campus-wide impact or use should be reviewed by CTSC and be subject to approval by the Associate Provost, IST.

*Recommendation 11:* The problem of unclear lines of authority should be addressed by the proposed Computing Technology and Services Committee, and its recommendations for clarification of responsibilities be forwarded to the Associate Provost, IST, for final decision.

*Recommendation 12:* The issues of non-compliance should be addressed by the proposed Computing Technology and Services Committee, and its recommendations to encourage better compliance be forwarded to the Associate Provost, IST, for final decision.

*Recommendation 13:* The directors/managers of IT units, through discussions at the CTSC, should address the issue of single points of failure in their unit to ensure that adequate backup expertise is available whenever possible, and as a minimum, require documentation of problem resolution be made in a timely and well organized fashion; and that it be made available to all appropriate IT staff.

*Recommendation 14:* A common request tracking system, such as the IST RT system, should be employed universally across campus.

*Recommendation 15:* Backup costs be should reviewed by CTSC to determine whether the fee schedule could be revised to improve utilillation.

*Recommendation 16:* Local units should make: a) prior arrangements for IT service for new faculty and staff; and b) document procedures for ongoing assistance.

*Recommendation 17:* Faculties with linkages to satellite campuses should appoint a liaison person in both the home Faculty and the satellite campus IT staffs to ensure that satellite IT activities are both compatible with and leverage the wider University systems.

*Recommendation 18:* IST training sessions should be further developed to meet the evolving skills needs of IT personnel.
Appendix A

Announcement of Task Force

To: Members of Executive Council
    Faculty Executive Assistants
    Department Heads
    Daily Bulletin

From: Amit Chakma, Vice-President, Academic & Provost

Re: Information Technology Task Force
    Marketing & Communications Task Force

Date: November 11, 2008

__________________________________________________________________

Information technology (IT) services at UW are quite decentralized. In addition to IST, there are significant computing units in the Faculties and in the Library, and there are also staff members whose primary responsibility is IT support in numerous other units on campus. Similarly, Marketing & Communications (M&C) services are provided within the Registrar’s Office, Communications & Public Affairs, Development & Alumni Affairs, Office of Research, the Faculties, Business Operations and numerous other services.

There are advantages to decentralization. Staff members who are regularly or permanently resident within a unit can provide timely response to local services request and are aware of requirements unique to that unit.

There are disadvantages as well. Decentralization can lead to unnecessary duplication of services and suboptimal use of resources. It can also make it difficult to establish overall institutional directions, standards and best practices.

As always, but particularly in these times of fiscal constraint, we have a responsibility to ensure that we make the best possible use of our resources. Accordingly, through this memorandum I am announcing the creation of two Task Forces as described below.

An Information Technology Task Force whose mandate is to:

1) Identify the collection of UW essential services

2) Identify the most efficient and effective way(s) in which those services can be provided

3) Make recommendations for changes where services are currently being delivered in ways inconsistent with 2) above
The members of the Task Force are Ken Coates, Tom Coleman, Alan George, Dennis Huber and Geoff McBoyle (Chair).

A Marketing & Communications Task Force, whose mandate is to:

1) Identify the marketing and communications needs of UW
2) Determine the most efficient and effective way to meet those needs
3) Identify the skills and experience needed to meet those needs
4) Recommend changes needed to address 2) and 3) above

The members of the Task Force are Meg Beckel (Chair), Terry McMahon, Leo Rothenburg, Peggy Jarvie and Deep Saini.

The Task Forces will be consulting with individuals and groups on campus during the next several months, and are expected to have preliminary reports for Executive Council review by February of 2009.

I am grateful for the members of the Task Forces for agreeing to serve.
### Appendix B

#### Suggested UW Essential IT Services

<table>
<thead>
<tr>
<th>Service Description</th>
<th>Serviced presently by:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Networking infrastructure (DNS, DHCP)</td>
<td>I/F</td>
</tr>
<tr>
<td>2. Network and Server Security</td>
<td>I/F</td>
</tr>
<tr>
<td>3. Telephone Services</td>
<td>I</td>
</tr>
<tr>
<td>4. Physical Security (locks, surveillance etc.)</td>
<td>I/O</td>
</tr>
<tr>
<td>5. Web service technical infrastructure and maintenance</td>
<td>I/F/o</td>
</tr>
<tr>
<td>6. Email services for students</td>
<td>I/F</td>
</tr>
<tr>
<td>7. Email for faculty and staff</td>
<td>I/F/o</td>
</tr>
<tr>
<td>8. Active Directory (management of workstations, software distribution, desktop support)</td>
<td>I/F/o</td>
</tr>
<tr>
<td>9. Teaching labs</td>
<td>i/F</td>
</tr>
<tr>
<td>10. Instructional support: UW-ACE, DE, CE, e-classrooms, video-conferencing, AV capture and delivery</td>
<td>I/F</td>
</tr>
<tr>
<td>11. Instructional support other than items in 10</td>
<td>i/F</td>
</tr>
<tr>
<td>12. Technical support for information systems in academic support areas: Research, Human Resources, Finance, CECS, Library, Quest, Housing and Residences, etc.</td>
<td>I/O</td>
</tr>
<tr>
<td>13. Research computing</td>
<td>i/F</td>
</tr>
<tr>
<td>14. Software licensing</td>
<td>I/F/o</td>
</tr>
<tr>
<td>15. Document management and work flow services</td>
<td>I/F ?/o?</td>
</tr>
</tbody>
</table>

I = mainly IST; F = mainly Faculty; i = less input from IST; f = less input from Faculties; O = mainly other units; o = less input from other units; ?= unsure.
Appendix C

Successful IT Developments at UW

Of necessity the report focuses largely on areas of possible improvements in IT delivery at UW, but it should be pointed out that a number of developments have been implemented successfully in recent years.

a) **UW-ACE**

The UW-ACE web-based course management system enables instructors to manage course materials and to interact with students. Through UW-ACE students can access course notes, announcements and resource links, and can submit assignments. The system’s success is demonstrated by its growth in numbers: from an initial 30 courses in spring 2004, to over 1,000 courses by fall 2008 involving over 25,000 students.

Consultation in the early stages between faculty members, Faculty staff (both IT and non-IT), IST, students and other relevant groups brought to light individual needs and expectations, and laid the groundwork for a level of collaboration that underpinned the system’s success and fast growth.

b) **Desktop rollover system.**

Following from the Barnard Report’s (2003) comment on the lack of institutional responsibility for managing the turnover of desktop computers, IST instigated a four year program for administrative units whereby each fourth year the employee is given a new, standardized desktop computer which is centrally supported through the entire process from purchase, to set up, to on-going maintenance. This practice permits a significant saving of staff time for IST, and has been copied in some Faculties.

c) **Open Network Administrator (ONA)**

The ONA network management tool can perform a variety of maintenance operations and many switch point configuration changes. ONA is a good example of an innovation conceptualized and developed in Engineering, and managed effectively by IST.

d) **Web Advisory Committee (WAC)**

Each of the above examples owes its successful integration into UW’s computer-based operations to effective communication and collaboration between relevant IT personnel in different organizations. In terms of web development, WAC has provided an effective forum for administrators and those personnel across campus who are involved in web site activities. By creating a common infrastructure, content providers are able to devote their time to enhancing usability etc. By adopting a proactive approach, WAC provides timely advice to the University Committee for Information Systems and Technology (UCIST) and the Web Steering Committee.
Appendix D

Questions from the IT Task Force

Questions for individuals who are **not** involved in service delivery:

1) Do we offer an appropriate level of IT service to faculty, students and staff? You might consider areas such as email, teaching labs, research labs, web services, provision of desktop equipment, desktop support (software, trouble shooting, and training), internet access (including wireless), printing, backup/recovery.
   a. What areas do you feel are delivered particularly well?
   b. Where there are deficiencies, what do you suggest doing to improve on campus?

2) Where do you see overlaps in IT services among the Faculties, Academic Support units, and IST? Does this overlap present problems in the delivery of services to you? If so, how?

3) What do you see as the main barriers to improving IT services to UW clients?

4) How would you describe the IT service culture at UW (reflecting on the people that you work with when you have problems or are seeking advice)?

5) How would you rate the overall IT services at UW, particularly compared to other places where you or your colleagues have worked or studied? When compared to its competitor institutions?

6) Can you identify one or more initiatives -- organization, technical, service-oriented -- that would carry significant benefits for the operation of IT services at UW?

7) UW prides itself on being an innovative and creative institution. With full consideration of our current financial situation, what areas of development should UW consider that could make this campus shine in comparison to other institutions?

The following questions would be added for meetings with Faculty Computer Managers, IST Managers, Library IT Managers, CECS IT Managers, etc., i.e. individuals who **are** involved in service delivery

8) Do we offer an appropriate level of IT service to faculty, students and staff? You might consider areas such as email, teaching labs, research labs, web services, provision of desktop equipment, desktop support (software, trouble shooting, and training), internet access (including wireless), printing, backup/recovery.
   a. What areas do you feel are delivered particularly well?
   b. Where there are deficiencies, what do you suggest doing to improve on campus?

9) Where do you see overlaps in IT services among the Faculties, Academic Support units, and IST? Does this overlap present problems in the delivery of services to you? If so, how?

10) What do you see as the main barriers to improving IT services to UW clients?

11) How would you describe the IT service culture at UW (reflecting on the people that you work with when you have problems or are seeking advice)?

12) How would you rate the overall IT services at UW, particularly compared to other places where you or your colleagues have worked or studied? When compared to its competitor institutions?

13) Can you identify one or more initiatives -- organization, technical, service-oriented -- that would carry significant benefits for the operation of IT services at UW?
14) UW prides itself on being an innovative and creative institution. With full consideration of our current financial situation, what areas of development should UW consider that could make this campus shine in comparison to other institutions?
Appendix E
Organization Structure: Information Systems & Technology

IST is organized into six functional groups with group directors, along with four Strategic Consultants, reporting to Dr. Alan George, the Associate Provost Information Systems & Technology.

- The Administrative Support (AS) group of IST looks after budgeting, space management and other administrative functions.

- Information Systems (IS) supports all aspects of the system life cycle of the University’s information systems. This includes: business process and system analysis, design, software acquisition, development, implementation, documentation, and ongoing maintenance.

- Client Services (CS) is responsible for the desktop computing environment including the software, tools and techniques and the consulting, training, communications and services required to support this environment for members of the UW community.

- Computing Systems Services (CSS) provides services in the area of computing systems.

- Instructional Technologies and Multimedia Services (ITMS) provides services and facilities in support of the teaching and learning environments of the University. This includes UW-ACE, the e-classrooms, media production and conversion, and presentation equipment loans.

- Network Services (NS) provides services and infrastructure for wired and wireless data networking, voice communications, and physical security/surveillance. Telephone Services is also part of the group.

- IT Security (ITS) provides services in the areas of network security, incident response, and public key infrastructure. The group also provides leadership in the areas of IT audit, security awareness, and security policy development, compliance, and enforcement.

Appendix F

Proposed Mandate for the Computing Technology and Services Committee (CTSC)

In the last decade, IT functions at UW have grown at a rapid rate. Many of the objectives of the University Committee for Information Systems and Technology (UCIST) outlined in the 2002 Directions Statement (UCIST, 2002)\(^5\) have been fulfilled and even surpassed.

To ensure that UW remains alert to the opportunities of new technologies, it is important that senior IT personnel, in IST, Faculties and other units, be in regular communication with one another. Accordingly, the IT Task Force recommends the establishment of a Computing Technology and Services Committee (CTSC) whose proposed purpose and responsibilities are outlined below.

**Purpose**

To advise the Associate Provost, IST on matters regarding the technical aspects involved in the planning, design, implementation and operation of IT technologies at UW.

In order to provide effective and timely advice, the CTSC will meet regularly to exchange information on the operational aspects of IT developments including, but not restricted to, computing hardware, software and networks.

**Objectives**

The objectives of CTSC are:

- To encourage information sharing among CTSC members regarding new and existing IT activities in their respective Faculties and other units;
- To improve preventative problem-solving through information collation and sharing on IT activities;
- To cooperate on the planning, design and implementation of team projects which draw upon IT expertise from across campus;
- To support standardization of IT systems and processes, wherever possible;
- To devise strategies, pilot projects and initiatives that improve campus-wide connectivity;
- To communicate with the Committee for Information Technology Application and Management (CITAM being a modified form of UCIST, Appendix G) as common issues arise.
- To facilitate other IT developments, where needed.

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Membership

CTSC will comprise:

- Associate Provost, IST (Chair);
- One IT Manager from each of the six Faculties;
- Five IST Directors (one of whom will be the Director of Instructional Technologies and Multimedia Services);
- IT Manager, Library;
- IT Manager, Housing and Residences;
- Manager of IT Security;
- Other personnel as required.
Appendix G
Committee for Information Technology Application and Management (CITAM)

The establishment of the proposed Computing Technology and Services Committee (CTSC) with a mandate relating to the technical and operational aspects of IT delivery, has implications for other IT-related committees at UW, especially UCIST. It is envisaged that UCIST be modified to become the Committee for Information Technology Application and Management (CITAM) focused on the use and management of, and future strategies for, IT technologies in teaching, learning and research activities. The joint membership of the Associate Provost, IST and the Director of Instructional Technologies and Multimedia Services would ensure an effective linkage between CITAM (strategic and management aspects of IT activities) and CTSC (technical and operational activities of IT service delivery).

Purpose
To advise the Associate Provost, IST on matters regarding the use, management and future direction of IT services in teaching, learning and research activities at UW.

Objectives
In order to provide effective and timely advice, CITAM will meet regularly to fulfil the following objectives:

- To develop an integrative strategy for the future of IT at UW in conjunction with CTSC;
- To disseminate relevant information to the committee members’ constituents on IT developments for use in teaching, learning and research;
- To monitor the effectiveness of IT applications in teaching, learning and research at UW;
- To advise CTSC on IT needs and issues regarding teaching, learning and research;
- To ensure that IT technologies for teaching and learning across campus are based on best practices in computing;
- To monitor the development of e-classrooms and videoconferencing across campus;
- To communicate with the proposed Computing Technology and Services Committee (CTSC) where common issues arise.

Membership
CITAM will comprise:
- Associate Provost, IST (Chair);
- Associate Deans of Computing of the six Faculties;
- Director of Business Operations;
- Director of Instructional Technologies and Multimedia Services;
- Director of Centre of Teaching Excellence;
- Director of Distance and Continuing Education;
- University Librarian
- Other personnel as required.
Appendix H

Other Campus Computing Committees

At present there are five advisory groups to UCIST, namely: ITAC; WAC; CNAG; CSAG; and WNAG. Other Campus Computing Committees, which are not advisory, are: FACCUS; SWG; and ASCRG.

With the establishment of CTSC and CITAM (the modified UCIST), it is possible that CTSC might find that the following committees: SWG, CNAG, CSAG, ASCR and FACCUS are no longer necessary or required only on an ad hoc basis.

Any committees/groups, that remain or are reconstituted, will have revised mandates set for them by either CITAM or CTSC.

ITAC becomes advisory to CITAM.

WNAG becomes advisory to CTSC.

WAC becomes advisory to CITAM, CTSC and the Web Steering Committee.