Annual Report on the IT Council and IT Executive Council

July 2017
Prepared by the chair of the IT Council: Paul Padley
For: President Leebron and the Faculty Senate

Introduction:

Over the course of the past year, three subcommittees have been formed: Academic Technologies, Administrative Technologies, Research Computing. In addition, one working group has been formed for Shared Research Infrastructure – which is the working group providing guidance of the high performance computing clusters. Below, the membership and activities of these groups will be described.

Academic Technologies

The membership of the Academic Technologies Subcommittee is
Scott Rixner, Chair (Professor, Computer Science and ECE)
Diane Butler (staff)
Sid Burrus (Professor Emeritus ECE)
Justin Denney (Assoc. Professor, Sociology)
Josh Eyler (Director, Center for Teaching Excellence)
Klara Jelinkova (IT)
Kathy Matthews (Professor, Biochemistry and Cell Biology)
Paul Padley (Ex – Officio)
Renata Ramos (Lecturer, Bioengineering)
Rafael Salaberry (Professor of Humanities, Director, Center for Languages and Communication)
David Tenney (Registrar)
Lesa Tran (Wiess Instructor, Chemistry)

In 2015-2016 academic year, the Academic Technologies subcommittee recommended the adoption of Canvas as the Learn Management System for classes at Rice. In the past year the subcommittee has been actively engaged with IT to provide advice and guidance with the roll out of this system to the campus. Beginning this fall, Canvas will the in use for all courses at Rice.

During the past academic year the subcommittee has undertaken a study of the various type and uses of computer labs across the campus. One outcome of this was to define a set of requirements for the renovation of the Symonds II computer lab. This also helped establish a process for involvement of the subcommittee in future classroom upgrades.
The subcommittee also completed a comprehensive inventory of all computer labs both centrally provided and departmentally owned. They interviewed faculty to gage need for these

labs into the future and assessed the impact of virtualization. The subcommittee expects to return to this topic next year.

Administrative Technologies

The membership of the Administrative Technologies subcommittee is:
Paul Padley, Acting Chair
Randy Castiglioni (IT)
Elaine Brewer (Director of Technology, Jones School)
Jana Callan (Chief of Staff, Provost Office)
Brad Fralic (Controller)
Klara Jelinkova (IT)
David McDonald (Director, Residential Colleges)
Edith Reed (Assistant Dean of Administration and Human Resources, Brown School)
Rachel Miller (Director of Academic Affairs, Wiess School)
Wayne Robinson (Director of Recruitment and Operations, Human Resources)
Terie McClintock (FE&P Business Analytics)
David Tenney (Registrar)

A primary focus of this committee has been to provide guidance to IT as to the relative priorities of the extensive list of Administrative IT projects that are underway and that are being contemplated. After consultation with the IT Executive committee the list priorities that have been identified by the subcommittee are (in no particular order):

- Dean of Undergraduate Office Records
    - Highly sensitive student information stored in paper files and routed across campus
- Graduate student admissions application
    - Current application is outdated and platform is vulnerable
- Financial and Budget Systems
    - Hyperion Budget application is unstable and not configured according to Oracle's best practices
- HR Records System
    - Inefficient paper processes in HR administrative functions
- HR Benefits Management System
    - Process improvements needed due to regulatory changes
- PI Portal
    - Current process for PIs is inefficient, requires faculty to navigate multiple systems

- Banner Security Review
  - Role based access rules would assure consistency and security of information
- eSignatures
  - Community expectation to sign files electronically
- Faculty HR - Digitize Records
  - Inefficient paper processes; risk of data loss

There was also extensive discussion of Rice's enterprise computing environment. In particular a major new version of the Banner system is being release by the vendor. Implementing this new version will provide a number of Benefits to the Rice community, but doing so will place an extraordinary demand upon the administrative computing group. In light of this, and the extensive list of projects that are underway it was recommended by the subcommittee that IT add temporary staff to deal with the necessary surge in effort required to implement the banner upgrade while also addressing the issues that have been identified as important priorities for the university,

Research Computing
Members of the Research Computing subcommittee are:
Farès El-Dahdah, Chair (Professor, Director of the Humanities Research Center)
Jan Odegard (IT)
Dominic Boyer (Professor, Anthropology)
Anthony Brandt (Assoc. Professor, Shepard School)
Cecilia Clementi (Chair of Cyber Infrastructure Working Group)(Professor, Chemistry)
Keith Cooper (Professor, Computer Science, ECE)
Klara Jelinkova (IT)
Sara Lowman (University Librarian, Vice Provost)
Paul Padley (Ex-officio)
George Phillips (Professor, Biochemistry and Cell Biology, Associate Dean for Research)

Previously the subcommittee had identified the need for university provided mounted disk storage in addition to the cloud based storage that is already provided. The committee worked closely with IT to develop the specification of this storage system. Subsequently bids were solicited and in consultation with the subcommittee a vendor selected. This system has been purchased and is being rolled out now in preparation for Fall semester.

The basics principle of the storage is "ask and you shall have, ask for more and you shall pay." That is faculty will be allocated a pre-set size of disk space that is funded by the university. They will then have the option of adding to that disk space by purchasing additional storage capacity.

In addition the subcommittee has been considering what sort of VM infrastructure would be useful on campus and aiding with the preparation of infrastructure proposals. In response to

input from the subcommittee OIT reallocated positions to allow for the hire of two research computing facilitators. These hires will improve communication about services and assist faculty across campus.

Working group on Cyber Infrastructure

Within the sphere of research computing, there is also a need to provide operational advice on the high performance clusters that IT operates. To address this specific need a working group was formed chaired by Cecilia Clementi. The members are:

Stephen Bradshaw
Cecilia Clementi (Chair)
Erik Engquist (staff)
Klara Jelinkova (IT)
Alan Levander (Professor, Earth Science)
Caleb McDaniel (Assoc. Professor, History)
Jan Odegard (IT)
Amina Qutub (Assistant Professor, Bioengineering)
Tayfun Tezduyar (Professor, Mechanical Engineering)
Moshe Vardi (Professor, Computer Science)

This group has been meeting regularly and provided guidance on the policies implemented on the high performance clusters and the fees charged for their use.

IT Council
The IT Council is comprised of
Paul Padley (Chair)
Farès El-Dahdah
Scott Rixner
Andrew Colopy (Architecture)
Colin Zelt (Earth Science) – withdrew from committee at end of academic year.
In addition the relevant IT people participate in the meetings and discussion:
Jan Odegard
Randy Castiglioni
Diane Butler
Klara Jelinkova

Each of the issues raised in this report was brought to the IT Council for further discussion and input. This allows for different perspectives to be brought into the discussion. This also allows for the identification of issues that are impacting various communities. An example of such is Virtual Machines (VMs). In both the Research and Academic computing communities the

suggestion that Rice provide VMs to students and researchers has been brought up. Hence the IT Council has asked that IT explore how to provide VMs in scalable manner.

The IT Council also discussed how to best collaborate with the Faculty Senate. Just like the Library IT is a common good that every member of the Rice community relies on. How to best communicate decisions or seek input will be a topic of discussion next year.

The IT Council also discussed rotation period for chair and vice-chair. In the coming year Farès El-Dahdah will become and chair of the IT Council.

IT Executive Committee

The issues raised in this report have all been discussed in the IT Executive Committee that provided valuable input into the process.

Concluding Remarks

This has been the second year of the IT Council. It would be worthwhile in the coming months to evaluate how well it is working and contemplate whether it would be advantageous to change its structure or procedures and how to best align them with the overall university faculty governance.

Appendix:
Historical background about the IT Council

In April of 2014, the Rice University Task Force on Information Technology produced a report on IT principles, governance and organization. Amongst its recommendations was the formation of an IT Council that reports to an IT Executive Committee. The IT Executive Committee would be comprised of the Provost, IT Council Chair, CIO, VP Administration, and VP Finance. The IT Council would have various subcommittees to cover different aspects of IT with the chairs of those committees comprising the IT Council (along with the chair).

The report laid out the following for the IT Council:
The council is advisory to the CIO and the IT Executive Committee, and replaces the existing Information Technology Advisory Committee. It has the following responsibilities:
   a. *Recommend goals / priorities for the IT units to the IT Executive Committee.*
   b. *Recommend priorities for IT investments to the IT Executive Committee as input to the university's annual budget process.*
   c. *Understand annual budgets of IT organization(s) in order to provide informed and integrated advice.*
   d. *Review and recommend to the IT Executive Committee all new major IT projects   at the university.*

e. *Recommend IT policies and procedures.*
f. *Recommend IT standards (e.g., service levels, hardware and software)*

The report also described the role of the IT Executive Committee as follows:
a. *Approve IT goals and priorities for the university.*
b. *Incorporate IT priorities into the university budget process.*
c. *Approve all major IT projects (what constitutes a major project should be determined by the IT Executive Committee) as part of the annual budget review.*
d. *Conduct post-implementation review of major IT projects.*
e. *Oversee, and ensure the effectiveness of the IT principles, governance, and organization.*
f. *Perform an oversight role of the performance of the IT unit(s).*

The formation of the IT Council and establishing how it operates is a work in progress. It is a very new model of governance for IT at Rice, and the attitude has been to try things, and change them as we learn better ways to do things. It has subsequently been decided that it would be good to have two faculty members from the at large university committee sit on the IT council to broaden representation on it (although to date only one such member has been added).

Formation of the IT Council and its current practices:

The IT Council chair was selected in May 2015 and work began on forming the council and its subcommittees. The initial approach was to start small, not to create a subcommittee for every aspect of IT all at once but rather start with a couple of subcommittees and then expand as needed going forward. It was also decided to keep the membership in the committees small so that there could be effective discussion and decision making.

It is worth making a side remark at this point. The IT Council and its subcommittees are very different in nature from the previous IT Advisory Council and its subcommittees (ITAC). ITAC strove for broad representation from all relevant communities on campus and as a result was quite large. One consequence of this is that it effectively played no advisory role, but rather was used as a forum to present what was happening within IT. While there was potentially an opportunity for feedback from the ITAC this rarely happened. In contrast, the goal of the IT Council is to provide timely and effective advice for decision making and resource allocation by the IT Executive Committee. This is happening and in fact many useful discussions between the IT Council and or its subcommittees and the IT leadership, that are difficult to capture in a report, are taking place. This appears to be helped by the limited size of the committees. However, given the limited size of the committees, it is important that all members of the committees are there to represent the entire university community and not just their own constituencies.

The membership of the subcommittees of the IT Council comes from the faculty and/or user communities. The corresponding representatives from IT who manage the functions that are receiving the advice provide staff support for the committee. They are non-voting members. They provide information and analysis for the deliberations, help organize the meetings, receive advice and keep committees updated on next steps.

In addition to subcommittees it was eventually realized that there was a need for "Working Groups." For example, the remit of the Research Computing subcommittee is very large, however at the same time, IT needs detailed advice on policies governing the computing clusters on campus. The queuing policy for a particular cluster is a good example of an issue of extreme importance to the users of that facility but not the broader campus research community. It was found that by delegating computing cluster specific issues to a working group, the Research Computing committee could be free to consider issues of interest to the broader Rice research community and not get bogged down in nitty gritty details of narrow focus. It is anticipated as other narrow but important issues arise, "Working Groups" should be formed to address them.