Research-Finance Review Summary & Response
AUGUST 2017

Executive Summary

McMaster recently underwent a review of Finance and Research Finance support across the university. This document reflects a summary of the report recommendations and responses acknowledging a commitment toward change describing how some of the recommendations will be addressed. Moving forward, further detail will be provided with input from and communication to the McMaster community.

McMaster administrative operations currently function in a highly decentralized manner. The decentralization of services and activities has evolved over decades as the University. The evolution of decentralized processes over time and the implementation of a new Oracle PeopleSoft ("Mosaic") system within the last 5 years led current leaders to request a review of the environment with the view of identifying key focus areas to consider when setting future priorities.

The jointly sponsored Research-Finance Review involved an internal and external review committee, community survey, and key person/department interviews. The review process initiated in late fall (2016) and completed in June. Upon completion of theme based recommendations the review committee acknowledged the excellent collaboration and participation of all areas involved in the review and commended McMaster staff on their drive and passion for their work.

The key themes and recommendations emerging from the report follow. McMaster's plan for moving forward begins on page 13 of this document.

Research-Finance Review Summary

Governance – Governance Framework and Process:
The Review Committee identified three overarching themes to be considered regarding finance and research-finance governance and decision-making. These are:
- Impact of how the decentralized model has evolved at McMaster as it pertains to these services.
- Lack of a transparent framework and clear ownership for strategic decision-making that allows for outcomes to be aligned to the strategic mission.
- Lack of a clearly articulated communication framework.

Recommendations:
1. Clearly define roles and responsibilities determined by senior leadership (ensuring accountability rests with the appropriate key roles).

2. Document consistent and standard business processes linked to appropriate key roles (ensuring a common transparent process framework across all end-user and support offices).

3. Manage service expectations through the creation and implementation of service level agreements ("SLA").

4. Measure and monitor performance through identification of 3-5 key performance indicators or metrics ("KPIs") that demonstrate processes and services are performing as expected.

5. Implement and communicate broadly the new IT Governance (as it pertains to MOSAIC and other enterprise administrative technology that drive these services), while ensuring appropriate consultation occurs with a newly developed Principal Investigator ("PI") user group/committee.

6. Develop an effective, institutional communication strategy regarding communication to the community on a variety of finance and research finance topics. The strategy should include a definition of the stakeholders to communicate with, the means and avenues of communication, and the timing of communications. Communications must demonstrate a strong understanding of both the audience and the messages (systems, processes, or otherwise) needing to be conveyed.

Governance - Strategic Planning Recommendations
1. Issue a strategy and communication plan that refocuses awareness on common goals and objectives so that staff can associate their own or units work and sense of purpose with those goals.

2. Ensure the structure to support decision-making and communicate priorities to the broader University community is in place. MOSAIC changes should align with the new IT governance model though other processes may also need to be established.

3. Improve user engagement to build stronger trust and cooperation, and to manage expectations of both users and units (providing a forum to share their thoughts, needs and input).

4. Prioritize systems enhancements to make the system and service easier for end users. Ensure priorities are aligned with mitigating risk and resources are adequately allocated. Where appropriate consider reasonable customizations to Mosaic.

5. Prioritize the Business Intelligence ("BI") project. While some initial functionality for pre-award and post-award offices is being delivered as a priority, the BI initiative in totality is at least 3-4 years away from providing all that is required. Given the criticality of the BI project, it should be revisited to ensure it falls under the same framework for decision-making as for all of IT and enterprise administrative computing needs. It also must be prioritized and resourced adequately.

6. It is critical that a robust institutional reporting framework be developed to address immediate information needs (what data is needed and in what format, who will develop, test and manage these reports etc.). Stakeholders regularly indicated that the data is available but there is no simple or easy way for users to get the data out to support decision-making. This results in significant work-arounds, managing shadow systems and additional work to extract and compile information for one to perform their daily work.

Governance - Risk Management Recommendations

1. It is necessary for senior leadership of the University to define its risk management framework from which, roles and responsibilities will flow. Outcomes should be incorporated into a communications plan that is revisited every year.

2. Once these priorities are established, decisions around the initiatives and work activities must be clarified and reside where the accountabilities and responsibilities make the most sense.   If the responsibility is shared, the procedure needs to be properly vetted with all parties, needs to document the "who, what and how" and be clearly communicated as an institutional policy which is easily accessible.

3. The risk management framework supports the research environment and provide guidance that helps staff and faculty identify and understand risk.

Research - Environment, Compliance and Other

1. Discussions should take place at leadership levels ensure the risk management framework is readily understood (more specifically as it relates to Tri Agency and Government awards).

2. Resources should be provided to ensure that MOSAIC issues as they relate to research accounts are addressed and given priority.   These would include, but not be limited to, provision of timely and accurate detailed reports and use of notifications related to project balances.

3. Where feasible, provide a more streamlined process for capturing PI approval, such as approval notices only once per transaction. Consideration to attaching manual PI approval is needed enabling an approved administrator to scan signatures and process the transaction.

4. Develop a communications strategy to improve trust and confidence with the PI community.

5. When there are significant changes (systems or process) affecting PIs determine there must be an appropriate mechanism to seek input and feedback *in advance* to ensure that the changes meet the PI's needs and are fully understood. This may involve the following, drawing upon a PI user group, attending Faculty or Faculty Council meetings at each Faculty, setting meetings with direct target groups (PIs, PI staff, etc).

Research - Organization of Research Administration Recommendations
1. In order to reduce duplication of work, minimize risk of errors and allow offices to focus on value added services, the transfer of data between MOSAIC pre and post award modules must be addressed.

2. Pre – Award:

    i.   Enhanced coordination and communication and a clear definition of roles amongst the ROADS, MILO and HRS offices for streamlined delivery of service and more transparency. Once this framework is agreed upon, it will need to be communicated to the PI and research support community.

    ii. Consideration to expanding the research facilitator roles that currently exist in some Faculties/Departments (Business, FHS Departments) to enhance the pre award support for the PI.

    iii. Interaction and integration between the pre and post award teams need to be improved ensuring a collaborative team approach to providing the best quality PI support. This would include having input into the creation of more complex budgets and allow for better continuity and knowledge sharing between offices (especially for CFI, ORF, where there is a match).

3. Post Award:

    i.   Communication, consistency and standardization between the two research finance offices needs to be formalized and enhanced. Development of standardized processes and procedures for both these offices must be undertaken. In addition, regular meetings of staff together needs to occur to discuss and develop business processes, share knowledge (e.g. consistent interpretation of policies and standards) and to learn from each other (e.g. query writing and usage).

    ii. McMaster should consider having research accounting staff focus on value-add activities to the faculties (and perhaps be closer to the faculties that they represent). If this is to occur, a clear definition of deployed support functions must be made and reporting responsibility should be retained within the research umbrella.

4. Overall PI Experience and Service Delivery: Coordination and synergies amongst the teams must be addressed to ensure PIs are supported in a reasonable and efficient manner and in a way that meets the needs of a research-intensive university. A reassessment of the current organizational reporting may also be necessary in the long run, such as:

i.   Have the two research finance offices report to the same person to ensure synergies and a coordinated effort between the two groups is achieved.

ii. Have one administrative leader (reporting to the VP Research) responsible for Central Research pre and post award functions – a leader that understands the full spectrum of administrative research service delivery from front to back.

iii. Bring all research services under one administrative leader reporting up to VPR with HRS continuing to have a reporting responsibility to FHS Associate Dean Research.

iv. There should be clearly articulated responsibilities for the BA role. These should include who determines priorities for this role, who is included in the discussion of "needs" and how these priorities are communicated to the broader research offices and the VPR. In addition, how the BA integrates and aligns work with the technical staff in the Mosaic Sustainment team and BAs in Financial Affairs who are also working on Mosaic enhancements to the Finance module should also be defined.

5. Responsibility for the duties and activities of the compliance officer role must be clearly defined within the research finance offices to ensure consistency and efficiency of efforts.

Research - Support for Staff In Research Finance Offices - Recommendations
1. Clarity is needed on the role of both Research Finance offices. Is it compliance/policing or financial management? Most of the staff feel that compliance is their #1 priority (this is also true of the FHS Research Finance staff).

2. Clarification of roles and responsibilities for the Research Accountants and management in McMaster Research Finance. Staff and management should both be engaged in these discussions.

3. Provision of feedback and guidance around the activities and work performed in McMaster Research Finance would improve management's understanding of the daily work and related challenges, and allow for determination of appropriate priorities and guidance.

4. Development of standards, processes and templates to ensure consistency and to assist the Research Accountants in meeting their responsibilities in both offices, related to reporting requirements and reconciliations. These should be shared across both research finance offices. While there are differences between FHS and Central Research Finance offices (due to the amount of support provided in the FHS academic Departments and the nature of the research performed) there are still numerous opportunities for coordination and standardization.

5. Research Accountants in both offices need to be included during times of change so that their input is considered implementing that change. Regular meetings to share information, understand needs and prioritize work should be implemented to facilitate this communication.

Faculty of Health Sciences ("FHS") Accountability, Roles and Responsibilities
1. FHS Finance and leadership in the academic FHS Departments should clearly define and communicate the accountability for decision-making, delineated by process, and document roles and responsibilities within appropriate Job Descriptions.

2. Based on the role clarity, FHS Finance should then ensure staff possess necessary skills to perform these roles successfully, which may involve additional training focused on role, customer service support, and communication.

3. FHS Finance and leadership in the academic FHS Departments should produce and understand standards that are required within the Departments for the purposes of providing information to the central offices (both in FHS or wider University) and track standards are being met.

4. Depending on the role definition from 1. above, FHS Finance need consider their involvement in line item FTE approvals. It may be feasible to move from HR event form and hiring approvals to higher level post-transaction review.

5. FHS Finance should work with leadership in the Departments to create an FHS budget process that is workable for both the Departments and FHS Finance to provide the information needed for the operating budget process. This may require education for Departments to understand what is needed and why and flexibility on the part of the FHS Finance staff (noting that requirements are often driven by requests and the approach outside of FHS). Mechanisms need to be developed to pull the information from the system more easily in a way that is understandable for all and to eliminate the use of shadow systems.

FHS - Budget Process and University Operating Budget Requirements
The following recommendations are made with the intent and ultimate goal of ensuring a mutual understanding of both central oversight required and FHS-specific funding nuances and clinical relationships.

1. The Provost Office and key Budget Committee members should consider working with the FHS Finance and Senior staff to understand the full FHS Budget and define a budget process that provides the information needed by the Provost Office (oversight) while also supporting the FHS staff in achieving a reasonable budget process. This could be achieved by having an overall FHS information/ budget session whereby funding and issues that this Faculty has and faces are well understood with a view to providing a budget process that is educational and useful.

2. FHS should consider providing an overview of the work that is done by the FHS Finance Committee (detailed review of each department) so that the Provost Office and Budget Committee can see and understand how much effort is placed vetting the individual and consolidated budgets prior to submission to the Budget Committee.

3. The Dean and VP, FHS(with the Provost) needs to build a strong relationship and identify a budget framework or criteria around which to effectively work together.

4. One final consideration is that senior level FHS administrative representatives be actively involved in the new budget model review to ensure that the nuances and complexities of the FHS environment be appropriately considered.

Service Delivery and Processes - Customer Service and Expectations Management
1. A "standard" of service of how the University believes the PI should be supported at the University needs to be determined – at minimum a base-level standard should be defined, to provide more

consistent messaging to staff and minimize risk of confusion. The service standard should be prepared with relevant stakeholders input balancing needs and resources. Once developed, the service standard should be widely communicated.

2. A PI User Group with representation from each Faculty should be created and used to provide input on user needs, feedback on proposed changes, make recommendations regarding priorities and help to oversee the communication to the PIs in the community. This user group must be incorporated into the overall governance framework and have clear reporting lines (either the VPR via McMaster Research Council or as part of the new IT Governance model relating to IT priorities). The inclusion of additional user groups could also be considered – research accountants, departmental administrators supporting research etc.

3. Clear ownership for all of the services delivered by finance and research finance units much be clearly defined and communicated. If a shared ownership or collaboration amongst units then offices having responsibility and accountability for identifying issues and developing resolutions (be it to process, service offerings, Mosaic functionality) must work together.

4. Existing service and functional training needs to be reviewed to determine if it is meeting the needs of administrative staff in academic departments. A centralized training focus should be considered and provided for administrative staff specific to payroll, accounts payable, procurement etc. as an end to end service or process (rather than small, independent modules or documents). Best practice in this area would include formalized professional development offered and run by various service units within the university (e.g. HR addressing hiring, labour distribution, etc.). This could ultimately be offered as an internal certificate, be delivered consistently across the institution and could be a mandatory requirement.

5. Alternative training/user information for Faculty members should be considered. For example, immediate access when in the module or screen, to a 2 minute, voice-over powerpoint on a very specific topic, would be a much more effective way to provide user information to Faculty members. Meeting directly with Faculty users to understand how best to provide the information they need is critical.

6. McMaster should revisit the current model in place for transaction generation and initiation in MOSAIC from a strategic standpoint. It may be prudent to reconsider developing administrative hubs to assist with data entry and other administrative activities. While self-service has been an underlying philosophy of Mosaic, time and training challenges provide the impetus for considering this specialized expertise and "hub" model. Ideally few well-trained experts in a hub performing systems roles will save time and improve data quality. The Committee understands that where this has been implemented, it is working well (e.g. School of Business). Education and training around roles and responsibilities for data entry would be required (so users were aware of this new structure).

7. To address the concern around workflow approvals, McMaster should consider the creation of a journal entry policy and also supplemental guidelines to enhance existing documentation around the meaning of various approvals for transactions (including travel and expense). This may assist approvers to understand the accountability and meaning of their own approval in the process. Investigation into eliminating multiple approvals required for one individual should take place to

determine whether logic can be introduced to by-pass approval or complete the transaction if an individual has already approved.

8. Customer service should be at the forefront for each of the central offices providing service included in scope. This philosophy must be felt and led from the top. Proactive engagement of stakeholders is necessary to actively address and solicit feedback.

9. Consideration should be given to an independent customer service audit to identify areas of improvement to processes. Units (service providers) should act upon feedback received and look to continuously improve their services.

Service Delivery and Processes - Payroll Services

1. Consider identifying dedicated resources to payroll processing only. Ensure dedicated payroll staff are appropriately trained in payroll rules, regulations and processes and focused on payroll only.

2. Determine what the role should be for payroll dedicated staff and other HR staff, including discussions with users to clarify needs and then clarify roles and responsibilities (including FHS users). Once this is complete, a mapping of services available and where the community can go to get services (e.g. a Service Catalogue) must be communicated. Consideration should include where services should take place (e.g. some services may be provided at the department level to better service users).

3. Work with FHS Human Resources to clarify roles and responsibilities between Central Human Resources and FHS Human Resources and provide mapping of services or Service Catalogue available to the FHS community.

4. Ensure that the payroll-dedicated staff are resourced appropriately to be able to handle work load, including addressing issues and concerns from employees and administrative staff.

5. Activate the "termination date" in the HR module to eliminate the risk of continuing to pay someone who is no longer employed at the university.

6. Consider prioritizing the use of a user interface or electronic HR Event forms that do not require duplicate data entry by payroll staff. It appears that errors are currently occurring, at least in some cases, due to data entry errors in HR and not because the forms are incorrect.

7. Ensure staff are appropriately resourced and trained to assist with errors that do occur to allow for consistent resolution of overpayments, errors and communication to employees.

8. As part of the HR Continuous Improvement project, appropriately address other issues raised and prioritize/resource their resolution. This prioritization exercise should take place with end users to understand the impact of each of the process/system issues on their work. Simplifying processes should be at the forefront of this activity to mitigate risk of error and reduce frustration and workload on end users.

Service Delivery and Processes - Accounts Receivable, Collections and Payment Allocation

1. The University should relaunch the non-student accounts receivable system that enables decentralized invoicing and centralized collections, with sequential invoicing and consistent invoice format. McMaster is encouraged to make this a significant priority with the implementation to occur as soon as possible.

2. Each Faculty and Research Finance Office should work together to determine who should be invoicing with regard to research accounts and develop processes, standards and reasonable oversight to ensure that invoicing and collections are happening appropriately, in a timely manner and are complete.

Service Delivery and Processes - Purchasing and Payment (including Strategic Purchasing, Accounts Payable and other payment services)

1. Functions should sit strategically where they belong based on requisite knowledge and skillsets (not according to MOSAIC module). For example, a review is needed around both HR and T4A payments and P-Card setup and AP.

2. Consideration should be given to increasing resources in Strategic Purchasing to ensure that they are able to perform value added work including: looking at strategic purchasing opportunities for consolidated purchasing to achieve economies of scale (mentioned by many on campus as an unmet need); preparing policy and procedure documentation surrounding strategic purchasing; review of purchasing policies to ensure they are aligned with current processes and practices; supplier relations and follow up of supplier issues; and examination of support to PIs and Research offices to ensure there is an understanding of needs and how to meet them (including CFI).

P-Card Set Up and Reconciliation Recommendations

1. Consider posting P-Card transactions on a monthly basis, prior to central review rather than after the amounts are reconciled, to improve timeliness of capturing items in accounts. Any unreconciled transactions would be posted to the default account. The timing of this process would not permit a pre-approval but instead require post-transaction review. The onus is then on the PI/departmental administrator to move the transactions to other accounts as required. If there is a concern around Tri-Agency accounts, do not allow PIs to use these accounts as default.

2. Accounts Payable or Strategic Purchasing Services should discuss any supplier issues to ensure that the P-Card is not creating "price" issues that will ultimately flow to the end user.

3. Given the considerable concern over the p-card reconciliation process, prioritization of an initiative to streamline this process, including consideration of paperless filing and electronic approval workflow, should be made including looking at alternative ways to simplify and automate the reconciliation process. One example was provided for a department that now has 1.5 FTE's dedicated to support the P-card reconciliation process for 35-40 active researchers.

Cash Management, Treasury and Investments Recommendation

1. The University receives US funding from foreign funding agencies (largely $US but also others) and is also paying in US funds (especially for high dollar research equipment). This creates a situation where foreign currency exchange and potential exchange losses may erode the spending available to research accounts and also departmental operating accounts. Consider having the Treasury

department review the situation to determine if there is a way to reduce or eliminate exchange exposure to research (and other) accounts exposed to foreign currency uncertainty. This would be a value-add service to the PIs particularly who can often have significant USD or other foreign purchases.

Travel and Expense Reporting Recommendations

1. Consider changing the "title description" of the drop-down menu from business purpose to something else (e.g. "Type of Expense").

2. Ensure that the "Business purpose" text box is a required or mandatory field in MOSAIC (so that it must be completed before the claim will process). Or at a minimum clearly state requirements for business purpose and whether this needs to be included in the text box or in an attachment (e.g. prospectus of conference). There is lack of clarity and therefore lack of consistency.

3. Investigate root cause of the significant number of rejections to determine if there is an issue around this process with inconsistent application of policies, or perhaps too strict an interpretation of policies by some. Consider options other than just rejecting in order to prevent some of the multiple rejection situations (e.g. call claimant to see if the claim issue can be resolved and processed rather than rejected).

4. Allow administrators who are responsible for budget preparation and account monitoring adequate access to the T&E claims that have been processed in accounts for which they are responsible.

5. If there are additional approvals required above and beyond what is articulated in the official policy, these approvals need to be defined to provide meaning to the user as to what they are for and articulated in a supplemental guideline or document.

EXT (Mass) Journal Entries ("JE") Recommendations

1. Ensure that back up is readily available for administrative staff in departments to verify charges.

2. Ensure that departments using these journal entries are able to and willing to assist departments to verify charges and correct errors. Where no back up is available and the department is sure that the charge is not correct, the EXT issuing department should be responsible to "keep" the charge.

3. Ensure that there is a reasonable way for PIs to approve these charges (with appropriate back up) on a monthly basis that is acceptable to the Tri-Agency for research accounts.

Financial Reporting Recommendations

1. A clear process should be developed identifying clear ownership for data quality, hand-off of reporting responsibilities etc. so that the various stakeholders in the financial reporting process clearly understand. Those responsible for data quality should have intimate knowledge of the data and be in a position to validate and ensure accuracy.

2. The University should also consider the development of an institutional reporting framework which would help guide the activity above and also allow for better understanding of reporting needs and requirements across the institution. While certain reports and queries have been developed (e.g. public and private queries, canned reports), departments still spend a significant amount of time

manually manipulating and compiling information for reporting purposes (compiling data from various sources, working to compile different time periods etc.). This is both risky in terms of human error as well as taking up precious time that could be spent providing value-add services.

Other Recommendations
1. Engage with end users in the development of priorities and solutions - it is expected that the new governance model for IT will provide an overall framework and structure for MOSAIC and enterprise administrative technology (including Hyperion). Engaging the right stakeholders and directly obtaining their input into functionality needs and solutions will go a long way to improving satisfaction with this process. McMaster needs to understand what the top priority MOSAIC issues are and then appropriately address them.

2. Prioritize the rollout of the Business Intelligence initiative. This will provide the University the opportunity to drastically improve the ability for users to extract and manipulate the information they need to perform their work and make strategic decisions. This initiative is criticial and cannot wait for 3-4 years before all functionality is available.

3. Analyze the end user impact of maintaining a "no - or limited - customization" philosophy. At some point, the cost to the University (through increased work, duplication of work, manual workarounds, risk of error etc.) outweighs the benefit of this decision, particularly for high impact or high priority issues/JIRA. If the decision is not to customize, reengineering business processes to address the changes must take priority.

4. Prioritize MOSAIC enhancements and fixes to make the system and service easier to use for end users. Corrections and enhancements need to be resourced to ensure that needs are met. Electronic forms or front end data capture (e.g. GUI) should be implemented where possible to reduce the risk of error and continued user frustration. This may mean a software overlay on MOSAIC (e.g. HR Event Forms) or a human overlay on MOSAIC to create a user-focused ERP. The focus must be on making the system easier and more straight-forward to use.

5. Introduce help menus and guidance documents in MOSAIC directly in the module where the user is working. This will increase efficiency over the current system of finding help documents (that may be outdated) outside of the module and reduce the need for training. The guidance documents will help to standardize practices and can be updated as policies and processes change.

6. Integrate modules or improve data transfer to avoid need for rekeying and re-entering of data in multiple locations (e.g. HR data, pre and post award modules). Rekeying and re-entering is a significant risk and is time-consuming to these offices.

7. While BI is in progress, prioritize reporting needs and support users to easily extract data they need from the system.

8. Develop a robust communication plan. While departments providing services are attempting to communicate, end user communities are not receiving the information they require. In many cases, the communication that is being shared causes more confusion than clarity and therefore negatively impacts the trust and confidence that the community is trying to build. It is frustrating for those trying to communicate; however, without understanding what communication is

required, when and how and what training methods will best be accepted, this frustration and confusion will continue.

9. Develop a focused and robust training plan for administrative staff in conjunction with end users to ensure that the methods and topics are reasonable and priority. Consider the enhancement of existing training to be an internal administrative certificate that could be made mandatory for administrative and other users.

10. Continue to investigate performance issues and address those that will have the biggest impact (these could include archiving of tables, running reporting/queries off data warehouse and not production).

Conclusion

1. There is currently a strong appetite for change evident across various levels of the institution. A real sense of urgency was felt and the need to simplify and eliminate unneeded complexity, as it relates to research finance and finance services, processes and activities was consistently raised.

2. The current culture and environment at McMaster is not uncommon for institutions that have evolved without having a strategic approach to its decentralized framework. The recommendations that have been laid out in this report will enable researchers and staff alike to be better supported in their research and operational endeavours. They should pave the way for more clarity and transparency around services and thus lead to simplification and ease in the use of these services.

McMaster Management Response

McMaster's senior leaders in Finance and Research Administration[1] appreciate the thoughtful input provided by the Research-Finance Review Committee and the McMaster community. We agree that the recommendations suggest a sense of urgency and priority, and it is clear that change is needed in order to support the needs of the community and to further our institutional mission. McMaster leadership will take the necessary actions to simplify processes and ease administrative burden. We look forward to further collaboration and communication as we support and enable change.

Governance:
The review provides recommendations covering broad governance matters and the need for a transparent framework and clear ownership for strategic decision-making, role clarity and process improvement.

In an effort to prioritize actions and put forward meaningful and clear changes the senior leaders will first review, assess, and clarify McMaster's Risk Management Framework (hereafter "Framework"), and conduct an environmental scan across peer universities. Following that review, roles and responsibilities will be aligned with McMaster's Framework to ensure clarity and to minimize overlap. Role and responsibility review will include the identification of key (or major) business processes for standardized business process mapping. Process maps will be developed for role clarity, training, and customer awareness. To measure and monitor performance, the offices will develop key performance indicators ("KPIs") related to business processes and ensure KPIs are communicated and tracked to evaluate ongoing effectiveness of operations. Progress regarding the Framework, clarification and re-definition of roles and deployment of user-friendly processes will be reviewed against KPIs; the need for Service Level Agreements ("SLAs") will then be explored.

Organization of Research Administration
A new administrative position has been developed to strengthen McMaster's research portfolio. The Assistant-Vice President, Research Administration, reporting to the VP Research, will work with leaders of the pre- and post-award research offices to provide more seamless integration and movement of information between offices. One aspect of this will be further development of the MOSAIC post-award module to enable improved acceptance of information sent from pre-award. Other pre- and post-award processes and services will be more clearly defined and communicated to the community. For example, while support for research applications is at times best provided by a single pre-award office, for some opportunities a blend of support is beneficial; these partnerships will be further explored.   Processes will be reviewed to determine those which should be consistent and those where some variance is a better approach. The activities and responsibilities of staff, including the Compliance Officer and

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[1] Senior Leaders refers to the project response leads: Kathy Charters (Assistant Vice-President Research Administration), Debbie Martin (Assistant Vice-President Finance and Administration, FHS), and Deidre (Dee) Henne (Assistant Vice-President Administration & Chief Financial Officer) who report to the Vice-President Research, Vice-President & Dean FHS and Vice-President Administration respectively.

Business Analyst for research, will be explored. Staff will be supported through enhanced training, management practices and oversight. Regular meetings of personnel within and across offices will take place on a regular basis to ensure enhanced and consistent training, understanding of roles, responsibilities, agency and institutional policy, and provision of service.

More coordination at every level of the central and decentralized offices will ensure consistent service delivery, communication and training/development across the University. Once processes are revised to respond to a clear risk management framework, staff will focus on value-added activities such as financial management as well as the possibility of budget development for complex grant applications. As roles and responsibilities for the research finance staff evolve, reporting lines and administrative structures will be considered.

The Faculty of Health Sciences will undertake the creation of a working group to review roles and responsibilities of positions within both central Faculty offices and departments to ensure greater clarity around roles. This will include discussion on current processes with an effort to eliminate duplication of effort. Staff training and development will be a focus at all levels once role definition is complete.

Communication:
The success of future actions is tied to better communication strategies. There is a critical need for clear and concise messaging for the McMaster community. The senior leaders will lead research and finance messaging and collaborate to deliver a cohesive communication strategy. Individuals from the research and finance offices, who understand end-users needs, systems, and processes, will provide input into future communications. It is anticipated that future communication strategies will include senior leaders or system leads attending Faculty, Chair, or research group meetings to provide report action plans, status updates and offer question and answer time.

Community Consultation:
To further enable the report's actions, a new Principal Investigator ("PI") user group will be established by the Office of the VP Research, to aid with priority setting and stakeholder input. With representation from each Faculty, the membership will be diverse in terms of scope, needs, technological experience and availability of administrative support. A Research Administrative user group will also be established. These groups, together with staff from research and finance will help identify and prioritize initiatives.

Customer Service:
The senior leaders will ensure consistent customer service is a priority across all groups. The need for excellent delivery of service will be at the forefront of all discussions regarding roles, with each staff member and manager having personal responsibility for the service they deliver or oversee. The approach to customer service, along with a mechanism for measuring success, will be vetted with the new user groups to ensure actions taken are meaningful. Ongoing customer service training will be provided to all support staff and senior leaders will consult with staff and user groups to identify ideal mechanism(s) for additional user training on the system, including the potential development of a support hub. Excellent customer service means a user-friendly process, so customers can expect real-time conversations and reduced rejections from the MOSAIC system. Feedback from staff, user groups and the research community will be essential. Once changes are implemented, a focused survey of the community will be undertaken to measure progress and customer satisfaction.

FHS Operating Finance

Senior leaders in FHS Operating Finance will work to develop roles and responsibilities for the many finance functions within the Faculty including, but not limited to, the development of the operating budget for the Faculty and the many AR functions. This will be done in conjunction with department leaders to ensure roles and responsibilities within departments align with those in the central FHS office.

Business Intelligence:

The Business Intelligence (BI) project will deliver information dashboards drawing on data collected by Oracle PeopleSoft modules (Campus Solutions, Human Resources and Finance) and Hyperion (Budget). The BI tool draws information from a data warehouse housing all these data sets. The BI project is not, however, a solution that will address all university information needs. As such, a recommendation to expedite the project for this purpose is not an effective solution.

What is required, however, is the development of a robust Reporting Strategy to inventory the tools McMaster has procured to address user needs, which is currently identified as one of the Enterprise Administrative Technology Committee's top 10 projects. Delivering a Reporting Strategy will ensure that needs regarding information, reporting and query-writing are identified and delivered in a streamlined, understandable and accessible way. The Strategy as it pertains to finance and research finance will be developed in collaboration with the senior leaders and in consultation with the PI and Administrative user groups.

The BI initiative rolled out Research Awards data this summer and will roll out Research Accounting data this fall. The Research Awards (pre-awards) dashboard enables users to see awarded and applied data, while the Research Accounting dashboard will relate to, not replace, the Research Project Statements. The dashboards will enable filtering and drill-down to the granular level. Users will be able to access the data according to defined data security levels.

Users will receive a direct notification when the system will be available and will be invited to attend training. The project will monitor system performance needs during the initial pilot launch.

Relation to Information Technology (IT) Governance:

A new IT governance structure was launched in January 2017. While still in its initial year, the new model involves thematically focused or subject-based committees or working groups who understand the University's strategic directions and user needs. This user-and-needs-based membership structure will be used to establish IT priorities. Where finance and research IT is involved, matters will be connected to the IT Governance model. The senior leaders will work with the IT governance structure and highlight the need for customization when required.

The communications associated with the new governance model included postings on the Daily News (Worth Mentioning), the UTS website, and IT Town Halls.

Budget and Hyperion:

A Budget Model review involving internal and external reviewers has recently been completed. The report has been released to the Provost and VP Administration, as well as the Budget Committee. The review involved interviews of many areas, including FHS administrators, however internal reviewers were limited to ensure a more balanced internal/external perspective.

There are approximately 200 Hyperion (budget) system users, all of whom are on a Hyperion communication distribution list. A subset of the Hyperion users from Faculties, departments and ancillaries form the Hyperion working group used to plan priorities and system improvements. The entire Hyperion budgeting system is customized for McMaster and the entire Hyperion user group is sent an annual customer satisfaction survey, which scores over 80%. The training plan is based on both user group and broader user feedback. Current strategies include refresher classroom training prior to budget submissions, open house sessions to aid individuals with budget submissions, updated tip sheets and guidelines issued annually prior to submission process. The Hyperion support team has reviewed the recommendations and will discuss any desired changes with the user group. Consideration will be given to connecting the guidelines into the tool as one recommendation suggests. Finally, system performance for Hyperion is being monitored and reviewed by UTS and McMaster continues to work with Oracle on performance issues.

The Faculty of Health Sciences will work with the Provost's Office on the recommendations related to the University budget process to ensure a balance between central oversight and a manageable process within the Faculty for the University Operating Budget.

Research Project Statement:
Revisions to the research project statement resulted in an updated format with detailed revenue and expense lines and accurate commitments. Further development will be explored with the new PI and administrator user groups.

Mosaic Approvals:
The review identified that some researchers find providing electronic approval within the Mosaic system to be cumbersome. As part of our commitment to development of user-friendly processes, we will investigate the possibility of manual signatures, which can be scanned into the system by a delegate or administrator. Solutions such as this would not be a required one-size-fits-all model but will be provided as an option to accommodate researchers with varying needs and levels of administrative support within their groups. As with other changes affecting researchers and their staff, advance input will be sought from the PI user and Research Administrative user groups.

HR/Payroll:
In relation to Payroll recommendations, Human Resources Services commenced a continuous improvement initiative in 2016/17 to address many of the issues and concerns highlighted in this review. The HR initiative highlighted several priority payroll processing and data quality issues that the team is working to address, in addition to customer service, training and documentation concerns. Work is also underway to realign certain payroll tasks within the Central Human Resources office, to address challenges with combo-codes, and to increase the capacity of the HR Advisors to perform other important HR support functions. Despite these efforts to create efficiencies and build capacity, resourcing continues to be a challenge within the HR Service Centre. Further work to clarify roles and responsibilities with FHS HR is also needed. The AVP Human Resources and the Director, FHS HR are in the early stages of collaborative dialogue on this subject.   A separate HR Review is planned for 2018, which will highlight further opportunities to address these issues.

In the interim, process improvement discussions are underway in consultation with the Directors of Financial Administration, special interest groups and subject matter experts to implement a process

change which would activate the 'termination date' in the HR module and to consider how best to eliminate widely used paper forms (such as the HR event form and special premium payment form). HR has also noted the recommendation for a Service Catalogue and will prioritize this work. FHS HR is engaged and will partner in the drafting of the Service menu. Significant progress on all of these items is expected by the end of Fall 2017.

Mosaic Accounts Receivable/Invoicing Module:

The recommendations also identify the need for the non-student accounts receivable module to be re-launched. A project manager has been assigned to this initiative to work on the project plan within the new IT governance structure. This project will re-launch as a pilot with the intent for a wide roll-out in 2018. A call for participation has been made to the Directors of Faculty Administration focused on 1-2 key leads from each Faculty who need this capability. Members involved in the previous pilot will be asked to participate on this revised project implementation plan. In order to be successful, centralized control of the customer database will be necessary, ensuring paid invoices clear the bank consistently for easy reconciliation.

Strategic Procurement:

The resources in strategic procurement are being examined in preparation for the eProcurement project implementation and post-go-live support. It is envisioned that this project will deliver a consolidated purchasing strategy. The project involves vendor database clean-up and consolidation, which has not been achieved previously due to local department vendor relationships and rebate deals. The ability to deliver economies of scale on contract price will mean consolidation of the vendor file. A working group to support this project will be formed to assist in the delivery of changes necessary to realize the comments in this recommendation section.

Mosaic PCard Module

The PCard module is not as developed as the other Mosaic (Oracle) modules, however purchasing by PCard eliminates the need to prepare purchase requisitions and non PO vouchers. Purchasing using the PCard is more efficient, goods are received more quickly and the supplier payment is timely. The reconciliation process has improved since go-live and now needs to be performed only once/month. The consensus of the PCard Focus Group was that most users prefer to complete the monthly reconciliation to ensure charges are posted to the correct chartfield. Posting to default accounts has posed issues in the past, particularly at year-end.

While there are several advantages to continuing to using PCard for purchases, the delivery of the e-Procurement project will look at a simpler way to use PCard payment while easing the reconciliation workload. A business case to implement e-Procurement is being drafted to initiate this project in May 2018 (with a 12 to 18 month delivery). The plan is to enable pilot suppliers with high transaction volumes with low dollar values first. These would include many of the scientific suppliers used by research-intensive labs. The e-Procurement system is a self-service shopping experience that will dispatch the purchase order to the supplier once the requisition has gone through approval workflow. We plan to develop an efficient payment alternative that requires little, if any, reconciliation on the part of the user. This system has been adopted by several other Ontario universities and has proven to be an efficient option, particularly to researchers.

Foreign Exchange

Foreign exchange and currency hedging considerations are managed at a central consolidated level by Treasury and not at a project account or department level. Depending on the project or department impacted by foreign exchange risk, special consideration can be made by Treasury. For example, the central and FHS libraries now have a fixed exchange rate program. Risk and needs vary by area and it is recommended that individuals with a concern contact the Treasurer directly.

Mosaic Travel and Expense (T & E) Module

The recommended configuration changes to the Travel and Expense will be investigated. Further, a review of expense report rejections and additional approvers will be undertaken following the priority actions identified earlier. Policies and processes affecting transactions will stem from the Framework and will align to the needs and requirements of the Tri-Agencies. A focus of the Tri-Agencies' renewal initiative is the development of a more client-centric approach to reduce administrative burden, increase efficiencies and provide clarity to institutions and researchers. Future Tri-Agency monitoring visits will take a risk-based approach focusing on the institution's internal controls, considering materiality and risk.

The recommendations identify that administrators require 'View' security in order to view T & E reports. This access is not department or chartfield specific. With 'View' security the user may access all reports in the Travel and Expense module. In consultation with the PI and User groups, opening the view access will be explored, recognizing the need to balance efficiency with privacy.

Mass Journal Entries and "EXT"

A review is currently underway for all mass journal entries charging internal customers for services – both those that bypass approvals (referred in the system as "EXT") and those that do not. In reviewing all types of entries and developing a journal entry policy, which will include how to manage these entries, McMaster will clearly document the need to maintain appropriate back up for charges and state that the onus of proof is on the issuing department/service provider.

Financial systems support is currently investigating options and reporting products that will facilitate a monthly research statement 'sign off/approval' that must be completed by the PI or delegate to meet the approval needs of Tri-Council projects in the absence of transaction by transaction approval.

Summary

The senior leaders accountable for the review outcomes have read the report and agree that the recommendations suggest a sense of urgency and priority. It is clear that change is needed in order to support the needs of the McMaster community and to the further our institutional mission. Informed by the recommendations in the report, we will move forward in a strategic fashion. First steps will focus on the governance structure beginning with development of a Risk Management Framework. This framework will lead to aligned roles and responsibilities with clear business processes that facilitate the provision of service, minimize overlap and are monitored using KPIs. Changes will involve input from stakeholders prior to implementation, as part of the broader communications strategy. Further system development and process improvement will be undertaken based on user feedback. Overall, swift action and excellent communication throughout will be the priority.

This document reflects a summary of the report recommendations. The full report is available to McMaster personnel. For a copy of the full report please contact:
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