Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

Marino Institute of Education

IT Services Review

December 2022

Peer Review Report

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1 Context and Introduction

1.1 Members of the Peer Review Group (PRG)

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1.2 Terms of Reference

The Review Team is invited to provide an external evaluation of IT Service delivery, quality and standards and make recommendations to the Institute under the following categories:

I. IT Services department organisation and services provision at MIE and its ability to respond to: the internal and external stakeholder expectations on technology and digital services; the fiscal environment; and the present and emergent risks and opportunities.

II. The effectiveness of the IT Services department and its ability to respond to the current needs of all service users in the provision of secure, compliant and available systems for the Institute.

III. The ability to ensure decisions on information systems, services are reflective of the entire Institution's priorities and that efforts and services are not duplicated; that IT Services can provide the appropriate and necessary levels of data protection, cyber security and adequate evidence of compliance adherence to defend the Institute's reputation and protect the university from avoidable censure, sanction and penalty.

IV. The ability of the IT Services to effectively plan for, deliver, and support programmes of change, including on resource management and adhering to time, scope, quality and cost of change delivery.

V. The role of IT Services in the collection, management, sharing and presentation of data to enable the Institute to provide timely and accurate services to students, staff, academics and other stakeholders; and to support the use of reliable, complete, current, accurate and unambiguous data for effective institutional-wide decision-making.

1.3 Purpose

The Peer Review Group is engaged by MIE to undertake a Quality Review of the IT Services Division. This report reflects the finding of the Quality Review visit, in line with the Terms of Reference and in accordance with the MIE Procedure for Quality Review of MIE Corporate and Student Support Services.

1.4 Regulatory Context

Marino Institute of Education (MIE) is recognised as a Linked Provider of Trinity College Dublin, the University of Dublin (hereafter referred to as Trinity), under the Qualifications and Quality Assurance (Education and Training) Act, 2012). Trinity is MIE's designated awarding body and validates all of MIE's academic programmes leading to an Award on the National Qualifications Framework (www.irq.ie).

MIE is required under the Quality & Qualifications Act 2012 to "establish procedures in writing for quality assurance for the purposes of establishing, ascertaining, maintaining and improving the quality of education, training, research and related services the provider provides". The quality assurance systems and quality review procedures at MIE also incorporate the QQI Core Statutory Quality Assurance (QA) Guidelines April 2016; the ESG Standards and Guidelines for QA in the European Higher Education Area 2015; the QQI Code of Practice for provision of programmes of education and training to international learners and the QQI Policy on Access, Transfer and Progression. Trinity approves those procedures and is responsible for conducting effectiveness reviews of the implementation of those procedures in MIE.

The review of IT Services is being conducted under the Procedure for the QA of (validated programmes/corporate and student services). The Review Report will be approved by the PRT, MIE governance and Trinity before it will be published in the public domain. Recommendations arising from the review will be incorporated into a Quality Implementation Plan and progress on the implementation of recommendations will be monitored to completion. The review and follow-up actions will form part of the evidentiary base that MIE can provide to demonstrate effective implementation of approved quality procedures and a culture of continuous quality improvement.

2 Executive Summary

The Peer Review Team (PRT) wishes to thank Marino Institute of Education (MIE) and the Information Technology (IT) Services staff for the warm welcome and support we received throughout the quality review process. In particular, the PRT greatly appreciates the energetic, open and constructive way IT staff engaged in discussions during the review. Considerable confidence can be derived from the team's strong customer-centric ethos and track record of delivering a high-quality service. We found the self-assessment report (SAR) to be a detailed and clear account of the team's activities and a thoughtful analysis of its current environment, context and the challenges it faces. This was a valuable tool to the PRT in preparing for the review site visit.

We would also like to thank Julie O'Donnell from the Quality Office for her exceptional organisational skills and Felicity Scriver for her excellent note taking. We were provided with a high level of professional support during our review preparations and for the duration of the site visit.

We met with a range of staff, students and stakeholders during our visit. Without exception, they were all very forthcoming in their praise for the IT Services team. Comments like 'they (the team) go above and beyond', 'no matter what the issue, the lads are always on it', 'best in class service' and 'mutual respect' were terms often repeated from multiple stakeholder groups.

The 2015 to 2020 Digital Strategy, in place before the onset of COVID-19, ensured that IT Services and MIE could deal with the online pivot necessitated to keep all services running to the highest standard at this unprecedented time. Students were particularly complementary about the level of support they received from IT Services during the pandemic, which helped them navigate through this difficult period.

The IT team has cultivated a working environment that is dynamic, innovative and agile in all aspects of higher education and organisational technology.

As MIE embarks on the next stage of its journey, we commend the institute on the publication of the 5-year strategic plan. The plan espouses a future vision of the Institute based on five strategic priorities. The role of technology is integral to MIE and as such has been recognised by its own pilar – 'Technology'.

The IT department wrote a new digital strategy in 2022, which feeds into the MIE Strategic Plan. Institutional support for this digital strategy is imperative for its successful implementation.

Our detailed recommendations in the following sections will, we hope, provide a roadmap for areas of enhanced development of IT services into the future.

3 Review Findings

3.1 Organisational Governance, Mission & Strategy

Strategy: The PRT commends the work of the new Strategic Plan 2021-2026, and we note the plan was complete during COVID-19. The strategy outlines the mission, vision and organisational objective over the coming years. The IT objectives (No 9) are unambiguous and measurable with a direct linkage to mission. Of particular note are five priorities of the strategic plan – Teaching, Research, Universal Access, Sustainability and Technology (TRUST) and it was noted that there is a focus on eLearning and digital education. Institutional support for this strategy is imperative for its successful implementation. The PRT would strongly recommend a costed implementation plan for the IT department that allows:

- prioritisation;
- cost allocation and capex budgeting;
- reporting on progress made.

Governance: Strong governance practices were in evidence within the institution. There are clear organisational structures with defined reporting lines. Evidence of IT representation at a senior executive level was noted and similarly at Trustee level, which was of particular benefit in relation to escalation of the issue of cyber security. The PRT concurs with the importance of external audit reviews, which should be included in the Internal Audit Charter and schedule. The PRT recommends that a progress update would be beneficial to measure progress against audit findings, e.g. password policy recommendation. It would be useful to benchmark IT against the required code of governance. The risk register and risk committee should be kept up to date on progress made.

Funding: The PRT echoes the need for additional state funding. The college has the statutory requirements of a large college but the resources of a small team. It is especially obvious to the PRT, that staff go above and beyond the requirements of their role, with evidence of staff taking calls on Sundays and other out-of-office times. Growth aligned to the need for additional resources to manage the increase in numbers would be advisable.

Access to budget appears very onerous with very low approval limits which cause delays in procurement of what should be simple operational spends. As budget holders for the IT requirements of the MIE, the dept must prepare memos for purchasing items of relatively low value. It was noted by the PRT that appropriate procedures for procurement are required by all institutions, but a review of thresholds might prove useful and reduce the administration burden on IT Services, but the PRT acknowledges the appetite for setting procurement levels must be assessed by senior management.

Organisation of Team: Similarly there are clear reporting lines with defined division of duties. There is noticeably unambiguous evidence that the team are extremely effective and are cohesive in supporting each other, staff and students. There is collegiate element to the team that was echoed by every stakeholder group we met. The PRT also noted that the addition of a new staff member, IT Support Engineer, has allowed for standard operating procedures to be documented and enabled the team to deal with a larger volume of queries, which was welcomed by the department. The PRT understands that resources are always difficult in a small college, but it was mindful of the volume and variety of systems, applications, and users that IT Services support. It would be useful to consider a model that tracks students to resources. The diversity and wide range of responsibilities of the Director of IT & eLearning was also noted. Consideration should be given to allocation of time between operational and strategic planning.

Commendations:

- Evidence of good governance practices has clearly been demonstrated. The PRT does not underestimate the energy required given the small team in place.
- The use of external auditors to identify risks which are then managed through the risk management policy and register.
- The alignment of operations to strategy. There is clear evidence of delivering on previous strategies and the PRT are confident this will continue with the current strategy.

Recommendations:

- At institutional level, ensure sufficient support for implementation of the Digital Strategy.
- Develop a costed IT Department Implementation Plan. The PRT would strongly recommend a costed implementation plan for the IT department that allows for a review of thresholds.
- Develop a log of all outstanding audit items. A progress update would be beneficial to measure progress against findings, e.g. password policy recommendation, with regular updates issued to the Risk Committee.

3.2 Functions, Activities, Systems and Processes

The PRT commend the IT Services team for the range and quality of services and support that they provide with limited resources. They are a focused and customer centric team that managed the transition to online lecture delivery overnight and to remote working within 5-days from the onset of the COVID-19 pandemic.

The Institute has in place a number of policies for the security of computers and portable devices which contain sensitively classified information. We would recommend that these policies state that laptops should be encrypted, Two Factor Authentication (2FA) enabled, devices lock automatically after 10 mins of inactivity and be kept up to date with security patch releases from the manufacturer.

It was noted that Cyber Security is on the risk register and should be addressed by increased investment in Security training for IT staff and users. Use of security tools in Office 365 such as Intune and other resources (some linked to level of licensing, A5) should be investigated as part of the move to Office 365. 2FA must be enabled as a priority. The IT Team has made steady progress with recommendations from the previous audits. Some of the prioritised recommendations outlined below will help further this work and address concerns around authentication controls, privileged level access and access security. Recommendations are grouped under four over-arching areas for improvement.

Commendations:

- The external support and maintenance agreements in place to assist with core infrastructure and system support.
- The transition to remote working during COVID-19 which was completed by the team within five days and included 850 continuous professional development (CPD) students which were enrolled on a summer course at the time.
- The general controls around mobile device management which include device imaging, anti-malware and VPN service.

Recommendations:

- Consider the following steps for improved security:
  - Enable the full Office 365 suite including OneDrive and SharePoint as a priority which will provide access to secure cloud-based storage.
  - Roll out Two Factor Authentication (2FA) as soon as possible which will negate the use of standard accounts to access MIE systems remotely.
  - Ensure all MIE -owned mobile devices are encrypted e.g. (e.g. Bitlocker /Apple FileVault / Trucrypt). Particular emphasis should be placed on senior management, particularly those who hold sensitive data/information (e.g. Finance and HR).
  - Ensure "Admin" rights are revoked where possible and a Client Configuration Manager is considered to provision devices, deploy OS, patches and applications (e.g. Endpoint Manager -Intune).
  - Consider the encryption of "data at rest" for the MIE storage platform.

- Suggested systems for improved performance
  - Review the distribution and coverage of existing wireless access points. Arranging a HEAT Map report from a wireless specialist will identify areas where wireless coverage is insufficient. Criteria for the testing should be based on 3 devices per person and maximum occupancy in all teaching and social spaces. Additional access points can then be installed to cover the areas identified within the HEAT Map.
  - Consider the installation of wireless collaboration facilities (Mersive Solstice) for all rooms with presentation facilities. This would resolve physical connection issues and in turn reduce calls to Service Desk.
  - The Institute is considering the introduction of a Room Booking System with interactive screens outside bookable spaces. An alternative would be QR codes outside all rooms which once scanned would immediately connect to back-end room booking system via smart phone (e.g. Office 365 Resources, Scientia).

- Implementation of Policy and Procedure
  - Review, or if necessary, develop Business Continuity Planning and Major Incident policies and procedures. A documented Computer Emergency Response Team (CERT) process should also be established to manage any major incidents.

- Training and Support Considerations
  - Introduce compulsory Cyber Security Training for all staff (e.g. UCISA Cyber Course).
  - Consider employing students to train as "Learning Support Assistants". Their main role would be to carry out regular operational checks in teaching rooms. This will also help with reduction in support calls to Service Desk.

3.3 Resources

The PRT believe the IT Services team is a small team to cover the range of services supported. Although stakeholder feedback indicated that this is not currently an area for concern, should there be team absences or as the Institute grows and support requests increase, this is not sustainable. The culture of MIE appears to be very collegial, and users are patient and appreciative of efforts made and of the level of service they receive. Changes in staffing numbers, the introduction of more part-time staff, and an increase in service requests may mean that this is not always the case.

Succession planning is an area of concern for the PRT and must be addressed as a priority due to the small team, which has long-standing members carrying large amounts of knowledge and experience, the loss of which would likely be detrimental to the ability to offer such a good service.

Documentation should be developed and maintained to ensure service coverage, knowledge management and succession planning. Although external support is available, for quality of support and to enhance skills, training of IT Staff is important. Use of a service such as LinkedIn Learning, with appropriate time allowed to take courses, would be very beneficial for individuals and for the Institute in general. Continued professional development contributes towards staff retention. Consideration should be given to training up a Security Officer.

IT is recognised as pivotal to the future strategy of MIE. Although there has been investment in recent years, to progress the Technology (T) pillar of the TRUST strategy, there must be further increased investment in IT to support the developments in digital education. It was indicated that access to WIFI can be problematic, likely due to the type and age of buildings in use.

The PRT are of the opinion that it would be worth investigating the possibility of additional support from the VLE team/Instructional Designer, which we believe would be of assistance to the IT Services team.

The IT Services Team work very well together and are dedicated to providing a good service to users. The "always-on" nature of their work should not be underestimated. It is currently covered on a goodwill basis outside of normal working hours and weekends, which the team and users appear happy with at present. Users seem to be cognisant of the limited resources available and are patient. However, if calls and requirements increase, that arrangement will become unmanageable. There is a duty of care to the IT Staff, so hours should be monitored.

Commendations:

- The continued focus of the dedicated IT team to provide high-level customer service, as evidenced by the very positive feedback received from all stakeholder groups.

Recommendations:

- At Institutional level, formalise processes and procedures for succession planning,
- Ensure sufficient resources are in place for staff training and development (e.g. security training).

3.4 Quality and Compliance

MIE's commitment to quality is embedded in all aspects of the Institution, including provision of assurance about the quality of information technology. As a Linked Provider of Trinity College, there is a comprehensive quality assurance framework in place, supported by the Quality Office.

The IT Department have a very customer-centric support team. Customer feedback is regularly received by the IT team as part of the call closure mechanism on the Helpdesk system and forms part of their quality assurance and enhancement mechanism. The PRT are of the view that there is room to improve the feedback mechanism. An annual staff/student survey, or targeted focus groups with individual cohorts of stakeholders, would provide an additional mechanism for gathering customer feedback. As with all effective feedback mechanisms, notifying staff and students of actions taken as a result of feedback would further enhance this process and ensure a systemised approach to closing the feedback loop.

Although we heard many plans for current and future projects, there was little evidence demonstrated of a systematic approach to IT change management. The PRT recommend, as a matter of priority, the implementation of a structured and systematic change control procedure.

Commendations:

- The continued focus of the dedicated IT team to provide high-level customer service, as evidenced by the very positive feedback received from all stakeholder groups.
- The comprehensive quality assurance framework in place supported by the Quality Policy Statement and Quality Assurance handbook.
- The implementation of an 'accessible content' tool which has benefitted learners with additional requirements.
- The documentation of standard operating procedures as a training aid for new staff.

Recommendations:

- Prioritise the development and implementation of a systematic IT Change Control Procedure.
- For future reviews, ensure the student voice is included in the self-evaluation process.
- Ensure standard operating procedures are regularly reviewed to ensure they remain fit for purpose and up-to-date.
- Consider documenting a higher-level 'key business process' (service catalogue) for IT Services, detailing the range of services available to staff and students.
- Formalise the process of gathering and acting on 'customer' (staff and student) feedback, ensuring it incorporates a systemised approach to closing the feedback loop.
- Consider an online "Knowledge Base" to provide solutions to Level 1 type queries without the need to contact Helpdesk.

3.5 Communication

Communication initiatives such as the TELMiE, the "Monday Moodle Moments" and "Tuesday Teams Tips" are excellent and well received by users. Efforts should be continued but supplemented by more security focussed messaging. Improved statistics re phishing response in Cyber Security Month, presumably after awareness training/communications shows that this would be a worthwhile effort.

It was suggested that new interactive screens and digital signage around the campus for communicating with students would be very helpful, particularly for students with additional needs. This, however, would have resource requirements for managing and scheduling of content.

Students indicated that they only receive emails from IT for important matters, which they appreciated, as they knew they could not be ignored. However, there is a lack of communication around security awareness. The TELMiE and "Monday Moodle Moments" initiatives should be extended to students during induction and on an ongoing basis also.

All requests/calls/incidents with students, including calls to the drop-in service, should be logged on the helpdesk to facilitate tracking and reporting to Senior Leadership to support budgetary and resource requests for the IT Service.

The PRT welcome the IT Manager's involvement on Campus Development Plan committee. All too often, IT do not hear about projects until too late and lose the opportunity for input that could save time and money later and improve deliverables.

Commendations:

- Communication initiatives such as the TELMiE, the "Monday Moodle Moments" and "Tuesday Teams Tips" which are excellent and well received by users.

Recommendations:

- Consider the introduction of new interactive screens and digital signage around the campus for communicating with students, particularly for students with additional needs.
- Extend initiatives such as the TELMiE and “Monday Moodle Moments” to students during induction and on an ongoing basis also.
- Ensure consistent logging of all requests/calls/incidents with students, including calls to the drop-in service, on the helpdesk to facilitate tracking and reporting to Senior Leadership to support budgetary and resource requests for the IT Service.

4 Summary of Commendations and Recommendations

4.1 Commendations

1. Evidence of good governance practices has clearly been demonstrated. The PRT does not underestimate the energy required given the small team in place.
2. The use of external auditors to identify risks which are then managed through the risk management policy and register.
3. The alignment of operations to strategy. There is clear evidence of delivering on previous strategies and the PRT are confident this will continue with the current strategy.
4. The external support and maintenance agreements in place to assist with core infrastructure and system support.
5. The transition to remote working during Covid which was completed by team within five days and included 850 continuous professional development (CPD) students which were enrolled on a summer course at the time.
6. The general controls around mobile device management which include device imaging, anti-malware and VPN service.
7. The continued focus of the dedicated IT team to provide high-level customer service, as evidenced by the very positive feedback received from all stakeholder groups.
8. The comprehensive quality assurance framework in place supported by the Quality Policy Statement and Quality Assurance handbook.
9. The implementation of 'accessible content' tool to provide learners with additional needs the ability to download course content in a format that meets their needs.
10. The documentation of standard operating procedures as a training aid for new staff.
11. Communication initiatives such as the TELMiE, the "Monday Moodle Moments" and "Tuesday Teams Tips" which are excellent and well received by users.

4.2 Recommendations

1. At institutional level, ensure sufficient support for implementation of the Digital Strategy.
2. Develop a costed IT Department Implementation Plan. The PRT would strongly recommend a costed implementation plan for the IT department that allows for a review of thresholds.
3. Develop a log of all outstanding audit items. A progress update would be beneficial to measure progress against findings, e.g. password policy recommendation, with regular updates issued to the Risk Committee.
4. Consider the following initiatives for improved security:
    - Enable the full Office 365 suite including OneDrive and SharePoint as a priority which will provide access to secure cloud-based storage.
    - Roll out Two Authentication (2FA) as soon as possible which will negate the use of standard accounts to access MEI systems remotely.
    - Ensure all MEI owned mobile devices are encrypted e.g. (e.g. Bitlocker /Apple FileVault / Trucrypt). Particular emphasis should be placed on senior management, particularly those who hold sensitive data/information (e.g. Finance and HR).
    - Ensure "Admin" rights are revoked where possible and a Client Configuration Manager is considered to provision devices, deploy OS, patches and applications (e.g. EndPoint Manager -Intune).
    - Consider the encryption of "data at rest" for the MEI storage platform.
5. Suggested systems for improved performance:
    - Review the distribution and coverage of existing wireless access points. Arranging a HEAT Map report from a wireless specialist will identify areas where wireless coverage is insufficient. Criteria for the testing should be based on 3 devices per person and

maximum occupancy in all teaching and social spaces. Additional access points can then be installed to cover the areas identified within the HEAT Map.

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6. Implementation of Policy and Procedure
    - Review, or if necessary, develop Business Continuity Planning and Major Incident policies and procedures. A documented Computer Emergency Response Team (CERT) process should also be established to manage any major incidents.
7. Training and Support Considerations
    - Introduce compulsory Cyber Security Training for all staff (e.g. UCISA Cyber Course).
    - Consider employing students to train as “Learning Support Assistants”. Their main role would be to carry out regular operational checks in teaching rooms. This will also help with reduction in support calls to Service Desk.
8. At Institutional level, formalise processes and procedures for succession planning,
9. Ensure sufficient resources are in place for staff training and development (e.g. security training).
10. Prioritise the development and implementation of a systematic IT Change Control Procedure.
11. For future reviews, ensure the student voice is included in the self-evaluation process.
12. Ensure standard operating procedures are regularly reviewed to ensure they remain fit for purpose and up-to-date.
13. Consider documenting a higher-level ‘key business process’ (service catalogue) for IT Services, detailing the range of services available to staff and students.
14. Formalise the process of gathering and acting on ‘customer’ (staff and student) feedback, ensuring it incorporates a systemised approach to closing the feedback loop.
15. Consider an online “Knowledge Base” to provide solutions to Level 1 type queries without the need to contact Helpdesk.
16. Consider the introduction of new interactive screens and digital signage around the campus for communicating with students, particularly for students with additional needs.
17. Extend initiatives such as the TELMiE and “Monday Moodle Moments” to students during induction and on an ongoing basis also.
18. Ensure consistent logging of all requests/calls/incidents with students, including calls to the drop-in service, on the helpdesk to facilitate tracking and reporting to Senior Leadership to support budgetary and resource requests for the IT Service.