

## Board of Management

### Finance & Physical Resources Committee

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|---------------------------|------------------------------------|
|                           |                                    |
| <b>Date of Meeting</b>    | <b>Wednesday 15 March 2023</b>     |
| <b>Paper No.</b>          | <b>FPRC3-F</b>                     |
| <b>Agenda Item</b>        | <b>4.3</b>                         |
| <b>Subject of Paper</b>   | <b>Digital Strategy Update</b>     |
| <b>FOISA Status</b>       | <b>Disclosable</b>                 |
| <b>Primary Contact</b>    | <b>Barry Ashcroft, IT Director</b> |
| <b>Date of production</b> | <b>March 2023</b>                  |
| <b>Action</b>             | <b>For Discussion and Decision</b> |

#### 1. Recommendations

1. To discuss the update on the Digital Strategy Strategic Aims.

## **2. Purpose of Report**

2.1 In 2021 a new Digital Strategy was launched to ensure the College was equipped to overcome the macro-environmental challenges being faced and ensure that Student & Staff needs were met to “Let Learning Flourish”.

## **3. Consultation**

N/A

## **4. Key Insights**

4.1 The Digital Strategy contains 6 innovative Digital Strategic Aims underpin the purpose of “leveraging technology to provide a personalised, innovative and inclusive IT Service empowering the City of Glasgow College to truly “Let Learning Flourish”.

4.2 The Director of IT and team continue to implement the projects and plans to deliver the strategic outcomes of the Digital Strategy.

4.3 Appendix A provides an update on the Digital Strategy outcomes.

## **5. Impact and Implications**

5.1 The effective delivery of the strategy has clear implications in terms of potential impact upon College students and staff, as well as the College’s wider reputation.

5.2 This strategy has a potential strategic impact upon the College and the achievement of its strategic priorities and the range of systems and processes required across the College to deliver these strategic imperatives.

## Digital Strategy Update March 2023

### ***Digital Aim #1 Active Collaborative Learning***

#### College Virtual Learning Environment (VLE)

Working in partnership with our Learning & Teaching Academy and academic colleagues, the IT Team supported the design, configuration and rollout of the new “Canvas” Virtual Learning Environment (VLE).

#### Wi-Fi Coverage & Performance

The Network Team completed scans of City of both campuses to identify wi-fi coverage “blackspots” and understand what the issues are. These identified a number of issues with the location of the wireless Access Points (AP’s) from the initial build; some were located behind electrical equipment (lighting), others located in core stairwells with low coverage and others fitted sub-optimally. The Network Team have relocated these into prime positions, for example moving the AP’s that cover the library into the library, rather than behind equipment outside the library. As part of the required network refresh in AY 23/24, the network will be more focussed on wireless, than fixed devices, with a full scan of both campuses undertaken and recommendations made to provide optimal wireless coverage and performance.

#### College Mobile Devices

As well as managing the Student Loan Laptop scheme, the Service Desk Team also supported the purchase, configuration, setup and delivery of 557 Chromebooks (and Mi-Fi connectivity devices) for the ESOL (English as a Second Language) cohort. These 557 devices, added to the 2,000 student loan laptops and an additional investment in another 1,000 Chromebooks has resulted in a 370% increase in mobile devices alone, from circa 1,500 in AY 19/20 to 5,581 in AY 22/23, requiring to be managed by the IT Team. This number of mobile devices is forecast to grow further with the adoption of hybrid learning & working at the College.

## Active Learning Suites

In partnership with the Learning & Teaching Academy, 3 classrooms (2 x City and 1 x Riverside) have been transformed into active learning suites, as prototypes for potential future learning spaces. This new approach to learning leverages technology to encourage collaboration through group work & peer learning, where a lecturer can discuss material on a central screen and “push” learning tasks out to the groups of students to discuss and complete at their group screens.

## City Life

City Life has been developed as a Student “Intranet”, available as a mobile app, to provide key information to Students about the College, from timetables through to bursary advice. The 2<sup>nd</sup> phase of this project will be to extend aspects of City Life out to students who have applied and had an offer accepted, but not fully enrolled due to the time of year. The objective being to keep these applicants engaged with the College, support them at the start of their Student Journey and to help the College improve the Student application to enrolment conversion.

## ***Digital Aim #2 Access Anywhere***

### Consolidation of Office 365\Teams Tenancies

The implementation of a consolidated student and staff Microsoft Teams tenancy was successfully completed providing every course with an individual Team Site to further improve our learner experience.

### Cloud Backup – Office 365

A significant 3-year five figure investment has been made in the Barracuda Office 365 backup solution which provides resilience for College data stored within the Microsoft Office 365 cloud platform and the ability to recover data that has been deleted. This solution is now in place for all Staff.

## Multi-Factor Authentication (MFA)

The College implemented Multi-Factor Authentication (MFA) for Office 365 for both Staff & Students, the only Scottish College to have done so for Students due to the complexity and support required.

## Upgraded Campus Connectivity

Both Campuses have been upgraded to 10Gb external connections to the internet from the original 1Gb connection, the only College possessing this “University level” of connectivity. This ensures we have increased bandwidth for Students & Staff as we transition to more “cloud-based” systems such as Office 365 and Microsoft Teams.

## ***Digital Aim #3 Cyber Security***

### CISCO ISE (Identity Services Engine)

The IT Team have successfully upgraded the College CISCO ISE (Identity Services Engine) to further improve our cyber security posture and renewed the Boxfish cyber security education and testing platform in partnership with Organisational Development. This will continue to keep phishing and cyber security at the forefront of all of our staff through regularly cyber security education and training.

### Cyber Essentials Plus Accreditation

We have again successfully achieved Cyber Essential Plus accreditation for a further 12 months. This accreditation is becoming more difficult to achieve due to the huge number of compliance pre-requisites which essentially requires a significant amount of the IT Team resources to be dedicated to this task. To this end, a number of Colleges are now considering remaining compliant with the framework, but not seeking certification unless additional digital funding is released from the Scottish Government.

### Security Information and Event Management (SIEM)

The College has invested in IBM's QRadar (SIEM) platform to improve our ability to proactively monitor internal network traffic to proactively identify potential threats/breaches based on machine learning and automated monitoring.

### IT Disaster Recovery & Business Continuity Planning (and Test)

As part of our ongoing commitment to improving the IT Team's response to Cyber Incidents, on 11th October 2022, we successfully completed a 2hr "real world" Cyber Incident exercise facilitated by Chris Lintern from Ashton Resilience.

The objective was for Ashton Resilience to create a "real world" Cyber incident scenario for the Team to test out our response and decisions, including the processes and plans we have in place; Computer Emergency Response, Business Continuity, Cyber Incident Response & Disaster Recovery Plans.

### ***Digital Aim #4 People Centred***

We continue to engage with key stakeholders on a daily basis to ensure that the technology solutions provided meet their business needs.

### Microsoft InTune Design & Implementation

To support blended learning and hybrid working, the IT Team configured and implemented Microsoft InTune to enable seamless support, irrespective of location, to both Students & Staff. Devices can now be supported off campus including both remote support and the ability to install applications remotely.

### Azure Virtual Desktop (AVD)

Noting feedback from both Students & Staff that the current Citrix & thin client computing experience wasn't meeting their expectations, twinned with the c£2.5m server replacement costs, the strategic decision was made to replace Citrix with the "cloud-based" Azure Virtual Desktop (AVD). A successful pilot was completed March-October 2022 with a full "go live" date of March 30<sup>th</sup> 2023 where there will also be a planned rationalisation of thin client devices from c,2,700 down to c1,300 to avoid future replacement costs. This consolidation was agreed with the Academic Teams to provide more leverage to the

“active and collaborative learning” ethos promoted within the Student Academic Experience Strategy in “re-imagining” the configuration of the 40 “thin client” labs which have been re-designated as “mixed use” learning spaces.

### New IT Service Desk

Following the development of a detailed functional specification and competitive tender process, the new Service Desk will be [4me](#). We are currently designing the automated workflows and end user portal, with an emphasis on self-service and knowledge bases, rather than having to continually raise tickets, with a “go live” date due June 2023.

### ***Digital Aim #5 Data Driven Decisions***

#### MS Dynamics - Customer Relationship Management (City CRM)

Phase 1 development of the initial “College Contacts” CRM system has been completed with the system now handed to our end users for User Acceptance Testing (UAT). Once initial UAT is completed, further development and testing will be completed iteratively until all of the functionality agreed within the system design specification is completed.

Phase 2 “Contract Management” is currently being scoped to provide the college with a multi-faceted fully digital customer relationship management capability to streamline and improve engagement with key stakeholders and improved reporting functionality.

#### College Data Warehouse

With data now such a key strategic asset for the College and the lack of data “specialist” within the College IT Team, new posts of “IT Database Manager” and Business Intelligence (BI) Developer were created and successfully filled.

Phase 1 of the College Data Warehouse has now been completed, automating data feeds from “live” systems for the first time into the custom built reporting environment. The first dashboards have now been redesigned in Microsoft Power BI, fed from the Data Warehouse, including a number of key Student dashboards and a new Balanced College

Scorecard dashboard which will provide Senior Management and the Board with a number of dynamically generated key performance indicators.

***Digital Aim #6 System Integration***

By design, we continue to ensure that any new or future technology solutions will seamlessly integrate into the current College technology stack to further improve our user experience.

All IT projects and plans supporting the delivery of all the strategic aims within the Strategy are designed and implemented to ensure continued or improved system integration.