

Council, 8 December

Information Technology Report

Executive summary and recommendations

Introduction

This report provides the Council with an update into the work of the Information Technology Directorate in September to November. Areas from the report to highlight are as follows:

- **Disaster recovery**

This departmental project is to assess the technical capabilities of a new site recovery service provided by Microsoft. The service has the potential to simplify the technical disaster recovery process for the HCPC core systems as well as reducing costs and improving the time to switch to the disaster recovery environment.

After a successful proof of concept, all of the disaster recovery services are now operating in the new environment. Following the resolution of the remaining small number of issues the legacy disaster recovery environment will be switched off. This project is estimated to reduce costs by approximately £100,000 pa.

- **Service availability**

FTP Case management system:

On Friday 23 and Monday 26 September there was an intermittent disruption in service where the application appeared to hang and required a re-start.

The outage was caused by an uploaded corrupt document that when accessed caused part of the system infrastructure to hang.

Registration system:

On Wednesday 21 September the registration system became inaccessible between 09:15 and 09:50.

The outage was caused by an administrative mistake that resulted in an 'address' conflict in the infrastructure following the creation of a new unrelated server.

Education system and other supporting systems:

On Thursday 30 September there was an outage to the Education system and a number of supporting systems between 11:00 and 11:15.

The outage was caused by a database server becoming unresponsive. The root cause is not known and has been escalated to support partner organisations. The issue was resolved by restarting the server.

Online renewal portal and online register:

On Sunday 23 October the online renewal portal and online register was unavailable for thirteen hours from 21:00 until 10:00 on Monday morning.

The outage was caused after reaching a technical limitation within the database. The service was restored with help from our third party application support provider and the threshold increased to reduce the risk of the issue reoccurring.

- **Resourcing**

A vacancy within the service support team has been filled during November bringing the team up to full complement. A vacancy within the Infrastructure team has been filled following a protracted recruitment campaign with the successful applicant due to start in early December. Two further vacancies remain within the team which are being filled currently by contract staff.

Decision

The Council is asked to discuss the Information Technology report

Appendices

Appendix 1 Information Technology Narrative Report

Appendix 2 Information Technology Management Information Pack

Date of paper

22 November 2016

Information Technology – Management Commentary, December 2016

This paper provides an update on the work of the Information Technology department from September to November 2016.

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1 Strategic objective 1

“To drive efficiencies within the organisation by the use of Information Technology and Information Systems.”

1.1 MP78 - HR and Partners systems build

This project will deliver the technology elements and the business process change as identified in the HR and Partners systems and process review project.

The project is now in its implementation stage with a two stage delivery separating HR and the Partners systems. This will allow the earlier delivery of the HR elements of the system while the project waits for the agreed Partner developments to complete.

A dual running of the HR system is running during November to validate the payroll function with the system launching towards the end of November for managers and in December for all other employees.

While the focus of the implementation partner is on the HR system work the Partner system has been paused. Although this will affect the schedule for the system implementation it also supports the business cycle of the Partner team. The Partner team will complete writing the test scripts when the final development completes.

The work to create the interfaces to HCPC internal systems is continuing with engagements with the vendors to detail the interface design completed. Once the interface designs have been completed a new schedule will be confirmed.

1.2 MP85 – Registrations transformation and improvement project

This project aims to implement the recommendations of the Registration system review project. It will be structured into three main phases starting with the implementation of a continuing professional development (CPD) online system.

The development of the CPD application continues with a further ‘show and tell’ session in November, while the business team continues to create test scripts.

The system infrastructure deployment scripts have been tested; further work will be done to bring together complete instructions to create the agreed architecture. A meeting has taken place to work through the infrastructure design which has resulted in the development of further options regarding the identity management of the system.

A number of small procurement exercises are being performed to select third party solutions for user experience design, bulk mailing and mobile text delivery.

2 Strategic objective 2

“To apply Information Technology within the organisation where it can create business advantage.”

2.1 Upgrade of Microsoft Sharepoint

The project objective is to upgrade our current implementation of Sharepoint 2010 server that primarily supports the document management functionality of the FTP case management system.

A test environment for the FTP case management system has been created and deployed. The FTP case management system interface has been changed to work with the new version and is in system test.

The user acceptance testing is combined with a larger maintenance release of the FTP system and both the upgrade and the maintenance release will be deployed together. Issues identified during testing have now been resolved and further regression testing is proceeding according to business team priorities.

A meeting has been held with the business teams in FTP following key personnel changes, to reposition this work. A fortnightly conference call has been arranged to move this work forward now that the business team has completed its realignment and recruitment activities.

2.2 Migration of the Intranet to Office 365

The project objective is to create a new intranet using the Microsoft Office 365 environment. This will enable the removal of the current intranet from legacy technology and offer an opportunity to refresh the look and feel, and usability of the site. This builds on the 2015-16 project to move the corporate email service to Office 365.

A selection exercise for an ‘accelerator’ product to shortcut the development of the intranet on the Microsoft Sharepoint Online platform has concluded and a preferred supplier has been selected. Business engagement and change analysis is proceeding but the technical delivery is delayed while recruitment proceeds for additional IT resource.

2.3 Disaster recovery

This departmental project is to assess the technical capabilities of a new site recovery service provided by Microsoft. The service has the potential to simplify the technical disaster recovery process for the HCPC core systems as well as reducing costs and improving the time to switch to the disaster recovery environment.

Following a successful proof of concept, all services are being replicated to the proposed new environment to allow further testing.

All of the disaster recovery services are now operating in the new environment. Following the resolution of the remaining small number of issues the legacy disaster recovery environment will be switched off.

2.4 Website review and build

This project will review the processes, systems and purpose of the HCPC's current web and internet activities with the intention of building new services.

The project has initiated and is now proceeding through a tender process to select the partner for the initial phase of the project. This will be to determine the requirements for the website as well as to create an initial design including producing low fidelity wireframes for the proposed new site. A preferred supplier has been appointed, activity will now focus on confirming costs and agreeing contracts.

2.5 NetRegulate changes 2016-17

This project delivers an annual programme of consolidated changes to the registration system. This year it includes changes to annotations and modalities for a number of professions. It affects NetRegulate as well as the mobile applications (apps) and existing integrations from the Education system.

The project was initiated in April 2016 and delivered the first release on 13 October containing the bulk of the required changes. The Education integration changes will be delivered later in the fiscal year.

2.6 Office moves

This activity supports the major project to redevelop the building at 186 Kennington Park Road. A series of office moves have completed during November to reposition teams within 184 Kennington Park Road and 33 Stannery Street offices. This has required the movement of IT equipment and the extension of the corporate network as meeting rooms are temporarily converted to office space.

The next move is scheduled for the end of January.

3 Strategic objective 3

"To protect the data and services of HCPC from malicious damage and unexpected events."

3.1 MP87 – Payment Card Industry Data Security Standards (PCI DSS) compliance

This major project will initially audit the HCPC processes and systems used to manage credit card payments against the latest PCI DSS standard. Any remediation changes required will be delivered through a consequential implementation phase of the project.

The initial 'soft' audit was performed on 4 May 2016 and the report was published on 21 June 2016. A feedback session was held with the auditor to clarify the next steps for the project on 5 October 2016. A revised report has been produced in early November and a review is underway.

3.2 Replacement firewall project

This project will replace the existing corporate firewalls with a next generation firewall. The existing firewall does not have features needed to interconnect with the Microsoft Azure cloud services and is no longer developed by the manufacturer. The replacement firewall will have additional features that improve the ability to connect to cloud services and improve the protection applied to the network.

A selection process has completed with different products tested in parallel on the production network. A product has been selected and purchased. The implementation and switchover is being planned after the New Year following the closure of the social workers renewal cycle and the availability of technical support personnel.

3.3 Service availability

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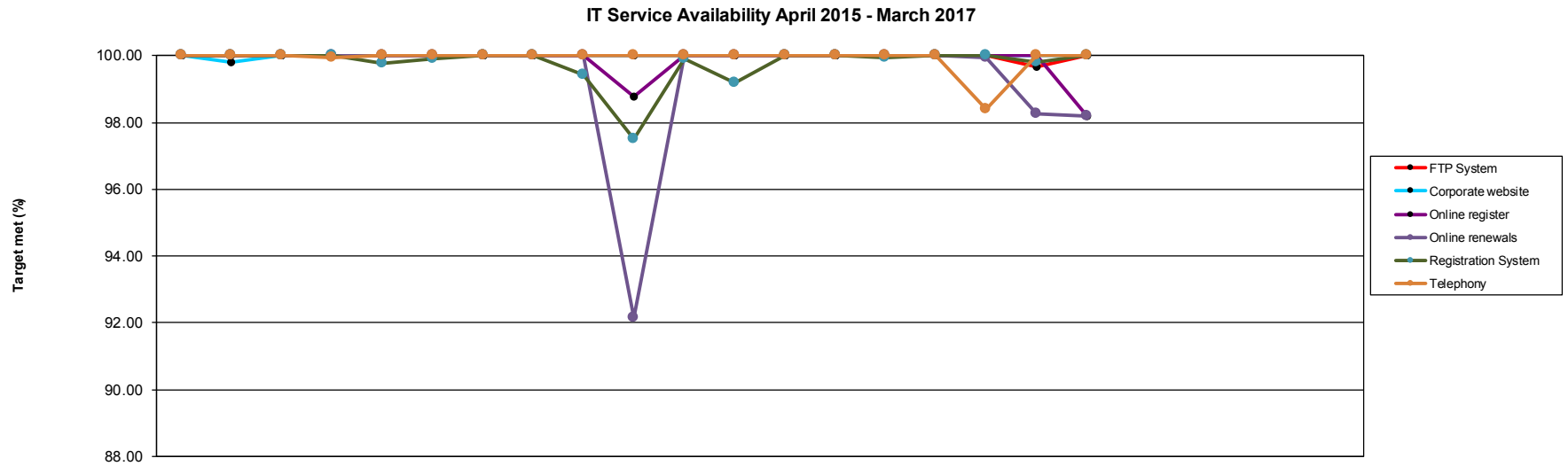
The outage was caused after reaching a technical limitation within the database. The service was restored with help from our third party application support provider and the threshold increased to reduce the risk of the issue reoccurring.

4 Information Technology Department Management Information Pack

Guy Gaskins, Director of Information Technology

December 2016

4.1 Service availability statistics



Service availability	2015			2016									2017									12/13	13/14	14/15	15/16	16/17			
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	FYE	FYE	FYE	FYE	YTD
FTP System	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	99.68	100.00						99.97	99.99	99.99	100.00	99.95
Corporate website	100.00	99.80	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00						100.00	100.00	100.00	99.98	100.00
Online register	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	98.76	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	98.19						99.87	99.96	100.00	99.90	99.74
Online renewals	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	92.14	100.00	100.00	100.00	100.00	100.00	100.00	99.93	98.25	98.19						99.93	99.97	100.00	99.35	99.48
Registration System	100.00	100.00	100.00	100.00	99.77	99.92	100.00	100.00	99.41	97.51	99.89	99.20	100.00	100.00	99.95	100.00	100.00	99.81	100.00						99.97	99.99	99.96	99.64	99.97
Telephony	100.00	100.00	100.00	99.94	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	98.39	100.00	100.00						99.56	99.99	99.87	100.00	99.77

Performance targets	Uptime target*	Period
FTP System	98.45	10 hr X 5 days
Corporate website	98.30	24 hr X 7 days
Online register	98.30	24 hr X 7 days
Online renewals	98.30	24 hr X 7 days
Registration System	97.85	10 hr X 5 days
Telephony	98.45	10 hr X 5 days

*excludes planned maintenance