

Finance and Resources Committee - 17 March 2010

Information Technology Work Plan 2010/2011

Executive summary and recommendations

Introduction

This paper sets out the Information Technology Department's work plan for the financial year 2010/2011 and the updated IT strategy.

Although the strategy document has not materially changed it has been updated and restructured. The more significant changes have been highlighted in blue for ease of review.

Decision

The Committee is asked to discuss and agree the work plan

Background information

This document is intended to support the HPC strategy and IT strategy, and sits alongside other departmental strategy documents and work plans.

Resource implications

The resource implications of the attached document are assumptions which are already part of the HPC budget for 2010/2011

Financial implications

The attached paper's assumptions are all accounted for in the current version of the HPC budget for 2010/2011

Appendices

None

Date of paper

5 March 2010

Information Technology Work plan 2010 – 2011

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Glossary

BAU.....	Business As Usual
Blackberry.....	Remote diary and calendar management technology
CRM.....	Customer Relationship Management
Crystal Reports.....	Report writing software package
Customer	Individuals who purchase or commissions an IT service
FTE.....	Full Time Equivalent
FTP.....	Fitness To Practice
HR Info.....	Software package that provides Human Resources management functionality
ISP	Internet Service Provider
IT.....	Information Technology
ISA.....	Independent Safeguarding Authority
LAN.....	Local Area Network
Lotus Notes.....	Software package that provides application and mail functionality
MS-Word.....	Microsoft Word
PC.....	Personal Computer
User	Individuals who use an IT service

Introduction

The Health Professions Council (HPC) continues to transform from a small to a medium sized organisation. This change has a significant impact on the internal supporting service providers required to create an infrastructure that will enable the continued development of HPC.

In order to achieve the primary purpose of the HPC, to “safeguard the health and wellbeing of persons using or needing the services of registrants”, the current business strategy identifies six business objectives which embed the three central themes for the organisation: *to Improve*; *to Influence* and *to Promote*. The core function of the Information Technology (IT) department is to support and enable the business to realise the primary purpose through the achievement of the business objectives.

As an internal service provider, the IT function operates proactively managed services to enable current business processes to function. Also, a large element of the service is reactive to incidents in the infrastructure and changes to business priorities as HPC adapts to the changing external environment.

The challenge facing the IT department is to manage the conflicting demands of both reactively and proactively provided services without hindering business momentum. This continues to be achieved as we deliver substantial changes to the IT infrastructure improving the foundations of current services and introducing additional business driven services.

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The IT function needs to build on previous successes to create solid foundations that enable business growth. The overall aim of the IT function is to improve efficiency and effectiveness whilst delivering value for money. These aims will be achieved through a risk based approach adopting a process of evolution rather than revolution.

This document

This work plan is underpinned by the HPC Strategic Intent and the IT strategy and defines the current Information Technology services provided as well as the work priorities and objectives for the financial year 2010-2011. The document provides a basis against which the work of the IT department can be planned and measured.

Equality and Diversity Scheme

The Information Technology department does not have any specific action points under the HPC equality and diversity scheme but plays an important role in the delivery of action points in other areas.

The IT department continues to address specific individual needs as identified by department managers and ensures that technical standards are embedded into projects to address areas of accessibility such as W3C guidelines for web development.

Resources

Human resources

Following a reorganisation of the Information Technology Department the team consists of six employees.

Guy Gaskins	Director of Information Technology
James McMahon	IT Support Analyst
Jason Roth	IT System and Network Administrator
Rick Welsby	IT Service Support Manager
Richard Watling	IT Support Analyst
Tyrone Goulbourne	IT Infrastructure Support Manager

Role descriptions

The Director of Information Technology has overall accountability for the IT provision at HPC. The position is responsible for the security and integrity of the IT infrastructure and systems, as well as providing support to and developing the core applications of the organisation.

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Service Support Team

The IT Service Support Manager has overall responsibility for the Service desk function and manages the IT Service Support Analysts. Additionally, the role is responsible for maintaining and developing our bespoke database applications providing email and specialist application services.

The IT Service Support Analyst role reports to the IT Service Support Manager and has responsibility for the identification and resolution of incidents within the IT infrastructure. The role is the first point of contact between the organisation and the IT team; they operate the Service desk function and provide first and second level support for PC and business applications incidents.

Infrastructure Support Team

The IT Infrastructure Support Manager role is primarily responsible for the network and server hardware infrastructure support and development including backup and recovery, availability and capacity management.

The IT System and Network Administrator reports to the IT Infrastructure Manager and supports the network and server hardware infrastructure for both locally and remotely hosted services.

Resource allocation

For the 2010/2011 financial year the IT resource has been allocated against three categories of work: Business As Usual (BAU), Major project delivery and Small project delivery.

BAU effort has been estimated through a process of identifying recurrent tasks and approximating the effort required to fulfil them over a twelve month period. This includes activities such as incident and problem management, third party supplier management, capacity planning, and penetration testing etc.

Major project delivery effort has been estimated using the available high level project plans.

Small project delivery effort has been estimated looking at the high level project objectives.

Category	HPC IT FTE
Business-as-usual	3
Major projects	1.5
Small projects	1.5

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Financial resources

The 2010/2011 work plan assumes an operating budget of £1,042,000 and a capital budget of £141,000. This represents approximately a 10% increase in operating expenditure and an 86% increase in capital expenditure as compared to the 2009/2010 budget.

The increase in budget predominantly reflects the transfer of costs from other HPC budget centres to the IT budget (£80,000 Opex, £12,000 Capex), the increased running costs with the introduction of the Online Renewal system (£114,000 Opex) and the purchase of Microsoft desktop software (£50,000 Capex).

Budget (,000)	2008/2009 (actual)	2009/2010	2010/2011
Operating expenditure (excluding depreciation)	£820	£944	£1,042
Capital expenditure	£83	£76	£141

Achieving the IT Objectives in 2009 - 2010

Progress against the objectives set for 2009 – 2010 can be summarised as:

Information Technology Objective 1:

To drive efficiencies within the organisation by the use of Information Technology and Information Systems, we will:

- Implement the Online Renewals Phase 1 Major project to develop a new web channel enabling Registrants to electronically self service key business processes. **Achieved.**
- Implement the IT external hosting transfer of Services to a new provider Major project which will reduce the HPC support overhead and reduce costs for our outsourced hosting and ISP services following the go-live of the Online Renewals project. **On plan, due for delivery by the end of March 10.**
- Continue to identify opportunities to consolidate infrastructure hardware and software to reduce support overhead and duplicated data silos. **Achieved and ongoing.**
- Implement the Independent Safeguarding Authority phase 1 Major project. **Achieved.**
- Implement the NetRegulate Improvements Major project to affect a number of discrete changes within the Registration system to improve function. **Small changes have been implemented throughout the year although the major**

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project was postponed following the revised release date of the Online Renewals project.

- Review the IT Network and Server infrastructure to consolidate where possible to reduce support overhead. **Achieved by implementing a virtualised environment for secure access, Test and Production environments.**
- Review key contracts to ensure value for money services. **Ongoing but external hosting service contracts were reviewed and changed accordingly.**

Timescale March 2010

Information Technology Objective 2:

To apply Information Technology within the organisation where it can create business advantage we will:

- Support the FTP Case Management system phase 1 Major project to enhance service and reduce organisational risk within key FTP processes. **Achieved.**
- Implement the IT aspects of the Stannery St building project phase 2. **Achieved.**
- Implement the Registration of Practitioner Psychologists to the HPC register. **Achieved.**
- Implement the Registration of the Hearing Aid dispensers to the HPC register. **The project continues on plan with a transfer date of the 31 March 2010.**
- Support the Fees 2011 Major project for changes to the HPC renewal fees. **Achieved.**
- Support the Renewal Cycle Review Major project to identify the business case and possible implementation for altering the Renewals cycle for professions. **Achieved.**
- Reduce the number of data and functional silos, consolidating application requirements to support generic business functions across teams and directorates. **Ongoing. There has been consolidation with the www.healthregulation.org web site transferred to our main web site infrastructure as well as the replacement of the renewals pack request service and the contact details update service by the online renewals application.**

Timescale March 2010

Information Technology Objective 3:

To protect the data and services of HPC from malicious and unexpected events we will:

- Implement the IT external hosting transfer to new provider Major project which will reduce the HPC support overhead and reduce costs for our outsourced

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hosting and ISP services following the go-live of the Online Renewals project.
On plan, due for delivery by the end of March 2010.

- Implement a Laptop technology refresh addressing obsolete hardware, improving usability, strengthening security and maintainability. **On plan, due for delivery by the end of March 2010.**
- Review the options for encrypting the backup for the NetRegulate application and if appropriate implement a relevant strategy. **Postponed.**
- Implement a service improvement to the HPC network by segmenting the network to reduce contention, improve performance, security and maintainability. **On plan, due for delivery by the end of March 2010.**
- Network drive encryption review and implement. **Management of the encryption services has been centralised, the laptop encryption software has been upgraded and software to control the writing of data to USB sticks deployed. The network encryption software is not yet mature and will be revisited in 2011-2012.**
- Conduct quarterly independent penetration tests of our environment to assure adequate security controls. **Achieved.**
- Conduct a quarterly audit of our license compliance by a third party organisation. **Achieved, although the audit has been changed to annually.**

Timescale March 2010

Information Technology Objective 4:

To meet internal organisation expectations for the capability of the IT function we will:

- Refine the change management process to protect the production environment from outages. **Achieved.**
- Refine the incident and problem management processes to efficiently process support requests. **Achieved.**
- Implement the new Service desk tool to support new ITIL processes and the Service desk function. **This has been delayed following issues with the software purchased. It is now expected to be delivered by the end of March 2010.**
- Develop a configuration management database to support effective execution of the problem and change management processes. **Ongoing.**
- Realign the published service levels to better reflect the organisation need against the service catalogue. **Postponed due to delays in the implementation of the Service Desk tool. The Service levels are reliant upon accurate statistics being generated from the service desk to support the performance indicators.**
- Document service catalogue and agreed software list; place under change control. **Achieved.**
- Develop effective availability management processes supporting the IT infrastructure. **Achieved.**

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Information Technology Activities in 2010 - 2011

The activities of the IT department can be categorised as either:

- Services that support the current operations
- Development that will alter an existing service or introduce a new one.

Services

The IT function provides a number of end-to-end services comprising several technologies and sub-services that are transparent to the Customer or User. The delivery of each service encompasses all of the enabling functions e.g. the delivery of the Registration service also encompasses the availability of the Network to connect to the Registration system.

Existing services

1. Application development
Project management, development and implementation of small scale application development .
2. Application support
Availability, capacity and performance management of the many separate internally developed applications:
 - i. Freedom of Information system
 - ii. Fitness to Practice system
 - iii. HR Starters and Leavers system
 - iv. Intranet information service
 - v. Employee database system
 - vi. Suppliers database
 - vii. Pass list database
 - viii. IT training book library
 - ix. Private Papers Document Store
 - x. Partners Database
 - xi. Meeting room/ resource database
 - xii. Registration - Temporary Registration Database
 - xiii. Secretariat – Document management system
 - xiv. Secure transmission of print files.
3. Customer Relationship Management system (CRM)
Availability, capacity and performance management of the Customer Relationship Management system iExtensions.
4. Data extraction support
Limited provision of data extraction from key systems to aid complex requirements for functions (initial support for report generation, statistical production and data extraction is within the Operations directorate and the Information Management team).

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5. Desktop telephony
Availability, capacity and performance management of the desktop telephony function including call recording, wall boards and queue management.
6. Education, Approvals and Monitoring
Availability, capacity and performance management of the Education and Monitoring database system.
7. Email and web browsing
Availability, capacity and performance management of the email function and ability for HPC employees to browse the internet.
8. Financial ledger
Availability, capacity and performance management of the SAGE 200 financial general ledger system.
9. Financial Payroll
Availability, capacity and performance management of the SAGE 50 payroll system.
10. Financial Purchase Order service
Availability, capacity and performance management of the PRS Financial purchase order system.
11. Human Resources Information
Availability, capacity and performance management of the 'HR Info' system for managing the HR requirements HPC.
12. Mobile personal mailing service
Availability, capacity and performance of the Blackberry function enabling remote and personal diary and mail synchronisation.
13. Online Portal
Availability, capacity and performance management of the Online Renewals system.
14. Personal computing (including printing and network storage)
Supply, installation and management of personal computers and all associated software and peripheral devices e.g. scanners.
15. Purchase Order service
Availability, capacity and performance management of the PRS purchase order system.
16. Registration
Availability, capacity and performance management of the Registration system.

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17. Service Desk
Respond to and resolve Incidents, Problems and Requests for Change within the IT infrastructure.
18. Video Conferencing
Availability, capacity and performance management of the video conference function (excluding the video equipment which is supported by Facilities).
19. Web site hosting (Internet, intranet, extranet)
Availability, capacity and performance management of the HPC websites both internal and external.

New Services for 2010/2011

1. *Fitness to Practice system.*

Development

In 2010/2011 the following Major and Small projects will be supported and/or delivered by the IT department.

Major Projects

- MP45 - Credit card handling outsourcing (PCI/DSS)
- MP46 - Education systems and process review
- MP43 - Fees 2011
- MP36 - FTP Case Management system
- MP4 - Hearing Aid Council
- MP31 - Independent Safeguarding Authority (Applicants)
- MP44 - Independent Safeguarding Authority (Registrants)
- MP49 - Linking Register to Electronic Staff Records (ESR) Project
- MP50 - NetRegulate System Improvements
- MP47 - Partner Systems review
- MP48 – Registrant publication preferences

Small Projects

- DP1 – Sage 200 improvements
- DP2 – Purchase Minitab15
- DP3 – Notes development of ISO 9001 system to integrate with the intranet
- DP4 – Notes development of customer services tracking system
- DP14 – Implementing a controlled virtual infrastructure
- DP15 – Windows 7 preparation
- DP16 – Doc XP upgrade
- DP17 – Extension of HPC network to EA
- DP18 – Telephony system development cycle
- DP19 – Blackberry server upgrade

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- DP20 – NetRegulate backup encryption
- DP21 – Remote access security
- DP22 – Upgrade MITEL controller
- DP24 – Education system small changes

Achieving the IT Objectives in 2010 - 2011

There are a number of objectives that the Information Technology department will need to achieve in 2009/2010.

Information Technology Objective 1:

To drive efficiencies within the organisation by the use of Information Technology and Information Systems, we will:

- Continue to identify opportunities to consolidate infrastructure hardware and software to reduce support overhead and duplicated data silos;
- Upgrade our existing Microsoft SQL Server databases to a new version to retain support and improve IT continuity provision;
- Support the registrant publication preferences project to improve the method by which HPC support alternative printing formats for individual registrants e.g. Braille;
- Implement an upgrade to the Scanning solution of the Registration system to apply software fixes to a number of known errors;
- Implement a controlled virtual infrastructure to reduce the proliferation of physical servers and reduce the incidents of application conflicts;
- Support the implementation of small changes to the Sage 200 Financial general ledger system to improve departmental efficiencies; and
- Support the NetRegulate Improvements major project to affect a number of discrete changes within the Registration system to improve function.

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Information Technology Objective 2:

To apply Information Technology within the organisation where it can create business advantage we will:

- Support the FTP Case Management system major project to enhance service and reduce organisational risk within key FTP processes;
- Support the Education systems and process review project to enhance service and reduce organisational risk;
- Implement the Registration of the Hearing Aid dispensers to the HPC register;
- Implement the Independent Safeguarding Authority major projects for applicants and registrants;

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- Extend the HPC network to the Evangelical Alliance building to enable employees to work effectively;
- Support the Fees 2011 Major project for changes to the HPC renewal fees;
- Manage a telephony system development cycle to implement a prioritised list of changes to improve the effectiveness of the system;
- Implement an upgrade to the Mobile Personal Mailing Service (Blackberry) to improve maintainability and security;
- Support the linking of the register to electronic staff records (ESR) at the NHS (England and Wales);
- Replace the Mitel 3300 telephony controller to retain support and apply new telephone functionality;
- Manage the application of a prioritised list of small changes to the Education, Approvals and Monitoring system;
- Support the Partner systems review project to enhance service and reduce organisational risk;
- Prepare for the upgrade of the desktop operating system by auditing and replacing applications that are not certified with Windows 7;
- Implement the Minitab business intelligence tool to support the Operations team provide higher quality statistical information;
- Support the Operations team to deliver changes to the intranet to improve the ISO 9001 system and customer services tracking system; and
- Reduce the number of data and functional silos, consolidating application requirements to support generic business functions across teams and directorates.

Timescale March 2011

Information Technology Objective 3:

To protect the data and services of HPC from malicious and unexpected events we will:

- Support the project to outsource credit card handling to reduce organisation risk of fraud;
- Review the options for encrypting the backup for the NetRegulate application and if appropriate implement a relevant strategy;
- Review and implement a two factor security mechanism for remote access to the HPC information technology services;
- Conduct quarterly independent penetration tests of our environment to assure adequate security controls; and
- Conduct an annual audit of our license compliance by a third party organisation.

Timescale March 2011

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Information Technology Objective 4:

To meet internal organisation expectations for the capability of the IT function we will:

- Refine the processes and develop reporting for the new Service desk tool to support new ITIL processes and the Service desk function;
- Continue to build the configuration management database to support effective execution of the problem and change management processes;
- Realign the published service levels to better reflect the organisation need against the service catalogue; and
- Refine the availability management processes supporting the IT infrastructure.

Timescale March 2011

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Information Technology activities for 2011 - 2012

We plan to implement best practice and further develop our infrastructure to gain efficiencies whilst improving value for money by:

- Continuing to improve our processes and procedures;
- Upgrade the PC operating system to Windows 7;
- Review the IT policy;
- Review for the next 4th generation Registration system; and

We will also support the Major projects which are expected to include:

- The technical implementation of the Education System;
- On boarding of new professions, potentially:
 - Acupuncture, Traditional Chinese Herbal Medicine and Herbal Medicine;
 - The Outcome to Modernising Scientific Careers (MSC);
 - Dance Therapists
 - Psychotherapists and Counsellors;
 - Assistance practitioners.
- Independent Safeguarding Authority implementation phase 3;
- Online Renewals Project phase 3;
- HR and Finance systems consolidation review;
- Purchase Order system review;
- Newsletter emailing;
- Telephony system review;
- Implementation of the Partner system review.

We will also deliver the agreed Small project list to support the achievement of the directorate work plans.

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Risk Management

The Information Technology department manages those organisation risks that are primarily concerned with:

- Information security - the authentication and authorisation of individuals to gain access to defined services and data
- Information Technology Continuity – the ability to recover from a disaster scenario
- Perimeter protection – the ability to manage the threat of external intrusion through hacking and virus propagation
- Obsolescence – management of the supportability and maintainability of the IT infrastructure

Please see the appendix below for details.

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Appendix: Risks Managed by the Information Technology department

Category	Ref #	Description	Risk owner (primary person responsible for assessing and managing the ongoing risk)	Impact before mitigations February 2009	Likelihood before mitigations February 2009	Risk Score = Impact x Likelihood	Mitigation I	Mitigation II	Mitigation III	RISK score after Mitigation February 2009	RISK score after Mitigation September 2008
Operations	2.10	Telephone system failure causing protracted service outage	Director of IT	4	3	12	Support and maintenance contract for hardware and software of the ACD and PABX	Backup of the configuration for both the ACD and PABX	Diverse routing for the physical telephone lines from the two exchanges with different media types	Low	Low
IT	5.1	Software Virus damage	Director of IT	4	5	20	Anti-virus software deployed at several key points. Perimeter controls enabled.	Adherence to IT policy, procedures and training	Regular externally run security tests and probes	Low	Low
		Links to 2.3, 10.2									
	5.2	Technology obsolescence, (HW or SW)	Director of IT	2	2	4	Delivery of the IT strategy including the refresh of technology	Employ mainstream technology with recognised support and maintenance agreements	Accurately record technology assets.	Low	Low
		Links to 2.6, 10.2									
	5.3	IT fraud or error	Director of IT	3	3	9	Adequate access control procedures maintained. System audit trails.	Regular, automatic password changes. External reviews. Daily backups.	Regular externally run security tests and probes	Low	Low

	5.4	Failure of IT Continuity Provision	Director of IT	4	3	12	Annual IT continuity tests	IT continuity plan is reviewed when a service changes or a new service is added	Appropriate and proportionate technical solutions are employed. IT technical staff appropriately trained.	Low	Low
	5.5	Malicious damage from unauthorised access	Director of IT	4	2	8	Security is designed into the IT architecture, using external expert consultancy	Regular externally run security penetration tests	Periodic and systematic proactive security reviews of the infrastructure. Application of security patches in a timely manner. Physical access to the IT infrastructure restricted and controlled.	Low	Low
Education	7.5	Education database failure	Director of IT	3	2	6	Effective backup and recovery processes	In house skills to support system	DR/BC tests	Low	Low
Registration	10.2	Protracted service outage following a NetRegulate Registration system failure	Director of IT	5	3	15	Effective backup and recovery procedures	Maintenance and support contracts for core system elements	Annual IT Continuity tests	Low	Low
HR	11.1	Loss of key HPC employees (person cover risk)	President, Chief Executive and EMT	4	4	16	Chief Executive succession plan held by HR Director. Succession planning generally	Departmental cross training (partial or full) and process documentation		Low	Low

	11.6	High sick leave levels	EMT	2	3	6	Adequate staff (volume and type) including hiring temporary staff	Return to work interviews and sick leave monitoring	Regular progress reviews	Low	Low
Policy and Standards	14.4	Inadequate preparation for a change in legislation (Health Professions Order, or other legislation affecting HPC)	EMT	3	1	3	EMT responsible for remaining up to date relationships with government depts and agencies	HPC's 5 year planning process	Legal advice sought	Low	Low
Finance	15.2	Unexpected rise in operating expenses	EMT	3	1	3	Budget holder accountability for setting budgets and managing them. Timely monthly reporting and regular budget holder reviews held. Finance & Resources Committee review of the monthly variances, year to date accountability.	Six and nine month reforecasts with spending plan revisions as feasible and appropriate.	Legal cost insurance for FTP cases. Capped FTP legal case costs.	Low	Low
	15.3	Major Project Cost Over-runs	EMT	4	2	8	Effective project specification including creating decision points. Effective project management and timely project progress reporting (financial and non financial).	Creation of a project capex contingency budget. Project exception reports including revised funding proposal is presented to EMT for approval.	Finance & Resources Committee review of the project spending variances to date	Low	Low

Data Security	17.1	Electronic data is removed inappropriately by an employee	Director of IT	5	3	15	Employment contract includes Data Protection Agreement	Adequate access control procedures maintained. System audit trails.	Laptop encryption. Remote access to our infrastructure using a VPN . Documented file encryption procedure	Low	Low
	17.3	Loss of electronic data held by third party suppliers in the delivery of their services	Director of Ops and Director of IT	5	3	15	Data Protection/Controller agreements signed by the relevant suppliers. Use of electronic firewalls by suppliers.	Data transfer using file level encryption. Physical transfer of back up tapes using specialist company with locked boxes and sign out procedure.	Remote access to our infrastructure using a VPN. Access to third party infrastructure using agreed secure methods.	Low	Low

**HPC Information Technology
Strategy**

**Guy Gaskins
Director of Information Technology**

Version 1.0 March 2010

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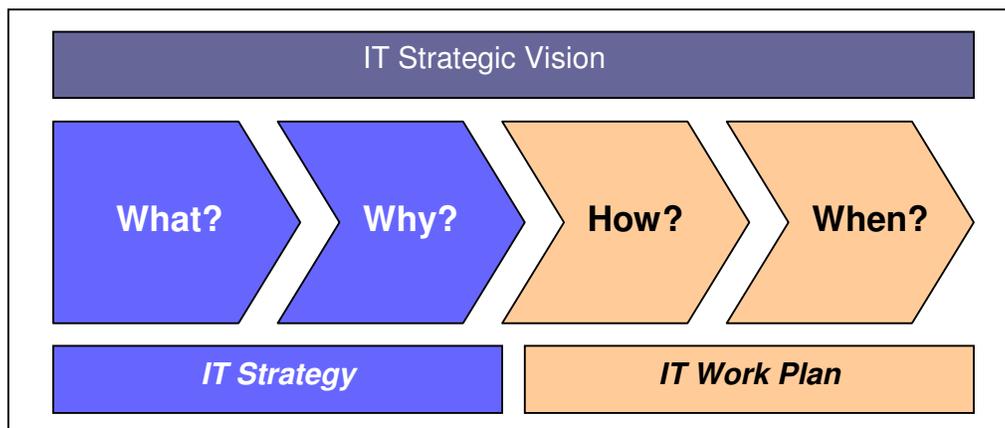
Introduction

The provision of Information Technology (IT) and Information Systems (IS) are central to the success of a modern organisation. Investment in IT should drive the efficiency of the organisation and enable it to become more effective in achieving the corporate objectives.

The Health Profession Council (HPC) IT strategy supports the organisation strategy as detailed in the Strategic Intent document. The IT strategy identifies the overall vision for the medium term and a number of strategic objectives or themes. The objectives seek to group common challenges together which are addressed in the context of each of the areas of the organisation.

The IT strategy is reviewed each year to incorporate changes in the organisational drivers but represents the medium term view for HPC.

The IT strategy identifies the 'what' and the 'why' for the technology direction of HPC; the 'how' and the 'when' are addressed in the annual Work Plan which is attached in the appendix of this document.



The IT function supports a growing organisation with employee numbers continuing to rise. The majority of employees are located at the HPC office which consists of several co-joined buildings on Kennington Park road. There are a small number of employees working ad hoc remotely as home workers and a larger population of occasional roaming users notably within the Approvals and Monitoring, and Fitness to Practice teams.

The core organisation processes operated by HPC and supported by the IT function are:

1. Standards of Education Training driving the Approvals process;
2. Standards of Proficiency driving the Registrations process;
3. Conduct, Performance and Ethics driving the Fitness to Practice process; and
4. Standards of Continuing Professional Development (CPD) driving the CPD assessment process.

HPC has an income predominantly driven by Registrant numbers and their associated fees.

It is notable that there are circa six aspirant groups awaiting regulation and HPC is also seeing growing telephone enquiry call volumes and Fitness to Practice investigations.

Glossary

COTS.....	Commercial Of The Shelf package
CPD.....	Continuing Professional Development
Customer.....	The person who purchases an IT service
Drivers.....	External influences that require an adaptation by the organisation
FTE.....	Full Time Equivalent
.	
FTP.....	Fitness to Practice
HPC.....	Health Professions Council
ISA.....	Independent Safeguarding Authority
IT.....	Information Technology. The underlying hardware, software and communication infrastructure which is used to create information services.
ITIL.....	Information Technology Infrastructure Library
IS.....	Information Systems. The combination of business software applications, procedures and activities that utilise IT components to deliver an information service.
OGC.....	Office of Government Commerce
PC.....	Personal Computer i.e. desktop or laptop computer
Service Delivery	ITIL category for service management encompassing: service level management, IT continuity management, financial management, capacity management and availability management.
Service Support	ITIL category for service management encompassing: service desk, incident management, problem management, configuration management, change management and release management.
User.....	The person who consumes an IT service

Health Professions Council Strategy

The main objective of the HPC as set out in Article 3 (4) of the Health Professions Order 2001 is:

'To safeguard the health and well-being of the persons using or needing the services of registrants'.

The strategy of HPC is to continually improve the organisation, influence the regulatory agenda and promote best practice.

To achieve this HPC uses six guiding principles:

1. Protect the public;
2. Communicate & respond;
3. Work collaboratively;
4. Be transparent;
5. Provide value for money & audit; and
6. Deliver a high quality service.

The IT strategy supports all aspects of the organisation strategy but the Strategic Intent document highlights in particular the 'investment in systems and procedures to provide a value for money service for registrants and the public and to build capacity for the growth of the organisation' as a key method to achieve the organisation objective.

Drivers for change

According to one understanding, a strategy should include:

*"A rich and holistic understanding of causes, trends and possible futures"*¹

The starting point is to understand the external Drivers that require HPC to adapt. The list of Drivers can change frequently but they will contain a core that is relevant for the medium term.

This IT strategy is based upon a number of Drivers listed below; each has an indicator to the expected trend:

- Political will for regulation: remaining constant or increasing.
- Customer service expectation: higher service expectation from registrants, which are free to use.
- Devolution: an increasingly fragmented political environment, rather than one of unity.
- Regulation of new professions: It is expected that HPC will regulate more professions and that the type of profession will be more varied.
- European Union (EU): expect more directives to originate from the EU.
- Models for Regulation: Introduction of alternative licensing models.
- Litigious nature: It is expected that HPC will receive increasing complaints against Registrants.
- Flexible working: increasing remote access from employees.
- Security standards: increasing requirements to achieve IT security standards.
- Alternative therapies: Changing attitudes becoming more inclusive.

¹ Geoff Mulgan, Head of the Prime Minister's Strategy Unit 2002.

The Drivers can be used to determine a number of possible futures for HPC. The IT strategy addresses the following possible future with increasing social and political expectations, and increasing and more varied professions:

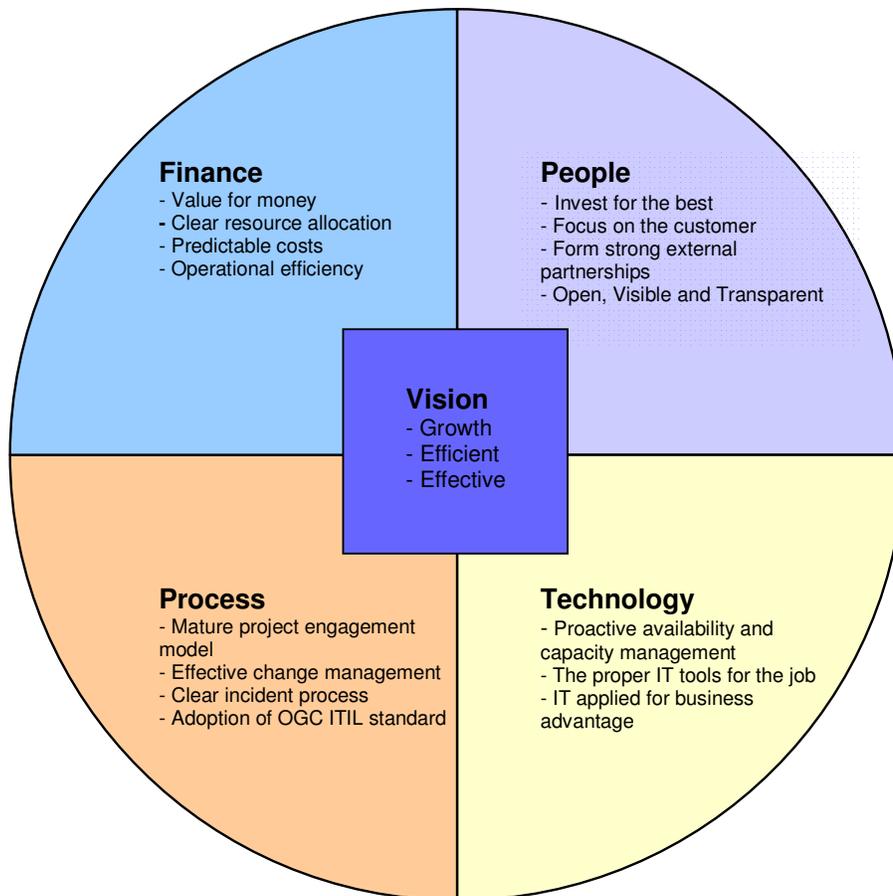
- More and varied professions regulated by HPC.
- Regulation of Assistants.
- A reduction in the number of UK regulators of healthcare professions.
- An increasing number of registrants results in increasing revenue and resources.
- An external cost focus.
- Increasing influence in the regulatory environment.
- Some anti-regulation pressure.
- Increasing allegation rates.
- An increasing requirement to attain international security standards.
- Risks of diseconomies of scale.

IT Strategic Vision

The strategic vision describes from an Information Technology perspective the desired outcome for HPC. The vision is:

To enable the continued growth of the Health Professions Council by exploiting Information Technology and Information Systems to drive efficiency and effectiveness throughout the organisation.

This could be viewed against the four key areas of: People, Technology, Finance and Process.



IT Strategic Objectives

The IT strategic objectives identify the key themes that link the strategic issues faced by the organisation. Each strategic issue is addressed by using a number of tactics which together support the strategic objective.

Information Technology Objective 1:

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

This addresses the following strategic issues:

- HPC cannot continue to increase employment costs as a percentage of turnover to meet the demands from the growth in Registrant numbers;
- The ability to meet the rising expectations from the public and Registrants for HPC to process Applications, Re-admissions and Renewals etc, ever more quickly;
- To reduce risk and improve accessibility for the core business processes;
- Requirements derived from external authorities such as the initiatives of the Independent Safeguarding Authority (ISA); and
- The growing usage of divergent technologies increasing the overhead and raising risks of business continuity and support.

This will be achieved by:

- Exploiting the web by providing more interactive services on line and driving a self service culture with Registrants and the public;
- Define technical architecture standards which new systems must adhere to;
- Review the core business processes through Major projects and investigate the benefits for applying IT to better support and improve the function;
- Identify opportunities to consolidate infrastructure hardware and software to reduce support overhead and duplicated data silos;
- **Commoditise the IT infrastructure driving towards a homogeneous environment to allow greater flexibility:**
 - Reduce the number of technologies deployed to increase the depth of the support for those that are used;
 - Standardise on Microsoft software for personal performance tools and operating systems unless there are specific technical or commercial reasons to use an alternative; and
 - Deploy mainstream proven commercial software and hardware to maximise interoperability between vendors and availability of third party support.
- **Adoption of Virtualisation technology to enable improved service levels and to avoid the proliferation of hardware;**
- Review key contracts to identify resource savings and service improvements; and
- Improve the IT control model to ensure that business changes are supported by a valid business case.

Information Technology Objective 2:

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

This addresses the following strategic issues:

- The highly skilled Registration advisors spend a disproportionate amount of time responding to low skilled telephone enquiries which does not fully utilise their potential;
- [There is an expectation that HPC will continue to take on aspirant groups;](#)
- There is an over reliance on manual processes and basic databases to operate key business functions;
- There is a need to accurately import and process data from disparate systems when on boarding new professions for statutory regulation by HPC such as the Practitioner Psychologists and the Hearing Aid Council; and
- The rising expectations of the public to interact with HPC electronically and to perform key processes immediately via the internet at any time.

This will be achieved by:

- Exploiting the web by providing more interactive services on line and driving a self-service culture with Registrants and the public;
- Review the core business processes through Major projects and investigate the benefits for applying IT to better support and improve the function;
- Developing systems to enable the registration of additional health care professions; and
- Develop effective partnerships with key suppliers to support our development needs.

Information Technology Objective 3:

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

This addresses the following strategic issues:

- The need for the organisation to quickly become operational following a major disaster to the premises or services;
- [External organisations increasingly require adherence to recognised security standards to access their services;](#)
- To protect the information services from malicious damage; and
- To secure the data collected and created by HPC from loss or theft. This risk is highlighted following the loss of personal data by the United Kingdom government in 2007.

This will be achieved by:

- Implementing a remote, service managed facility where the core services of HPC can be replicated and accessed remotely in the event of a disaster. The specific services covered and the time taken to bring them on line is specified in the business continuity plan;
- [Allocating resources based primarily on Risk, ensuring that services are secure and available;](#)
- Regularly test the integrity of our systems with external security specialist organisations;
- Ensuring that we have active scanning of all personal computers, high risk servers, web and email traffic for malicious software;
- Applying build standards for new services that are focused on security and service continuity;
- [Instigating rigorous patch management policy ensuring appropriate patching of servers and applications to address risk;](#)
- [Adopting recognised industry standards for the delivery of IT services:](#)
 - [Adoption of the ITIL framework for Service Management.](#)
 - [Adoption of the ISO27001 standard for security.](#)
 - [Application of SANS standards for secure server design.](#)
- Encrypting all Laptop data to secure data from loss and theft; and
- Applying technology where appropriate and proportionate to support the encryption of sensitive data for removable media in HPC, including backups and portable devices.

Information Technology Objective 4:

To meet internal organisation expectations for the capability of the IT function.

This addresses the following strategic issues:

- The need to improve the method of prioritising resources to achieve business benefit;
- The increasing expectation of HPC for the IT department to meet larger change programmes whilst maintaining business services within agreed service levels;
- To provide an efficient service that the organisation can depend upon to support the organisation need;
- There is an increasing reliance on technology to run business processes effectively; and
- To have transparent internal IT processes and procedures minimising any impact on the business function.

This will be achieved by:

- Developing IT team to improve to separate functions and improve effectiveness;
- Formalising the key processes that drive the IT services;
- Defining the engagement model for third party support providers to improve the effectiveness of their services and forge closer relationships;
- Adopting the key principles of the Office of Government Commerce (OGC) Information Technology Infrastructure Library (ITIL) framework for Service Management;
- [Outsourcing or forming close partnerships with external support providers for key technologies and services that underpin core business services; and](#)
- Identifying and implement key tools to support the Service Management processes and PC support.

IT Function Scope

Resource

HPC is the most economical of the nine United Kingdom statutory regulators of health professionals. The IT function accounts for approximately 6% of annual expenditure (figure 1) and is supported by a team of six FTEs. The department structure and how the functions are separated are depicted in figure 2 and figure 3.

Description	Value (,000)	% (-depreciation)
Fixed Opex		
Human Resources	338	33
Support costs	619	59
		Subtotal 92
Variable Opex		
Hardware	14	1
External support	17	2
Small project costs	53	5
		Subtotal 8
Capex		
Switches, servers and PCs	53	37
Software	89	63

Fig 1 – high level financial overview for 2010-2011 budget.

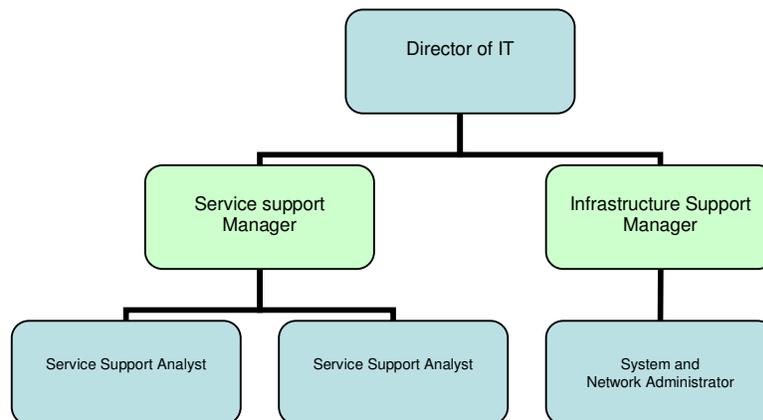


Fig 2 – Department structure

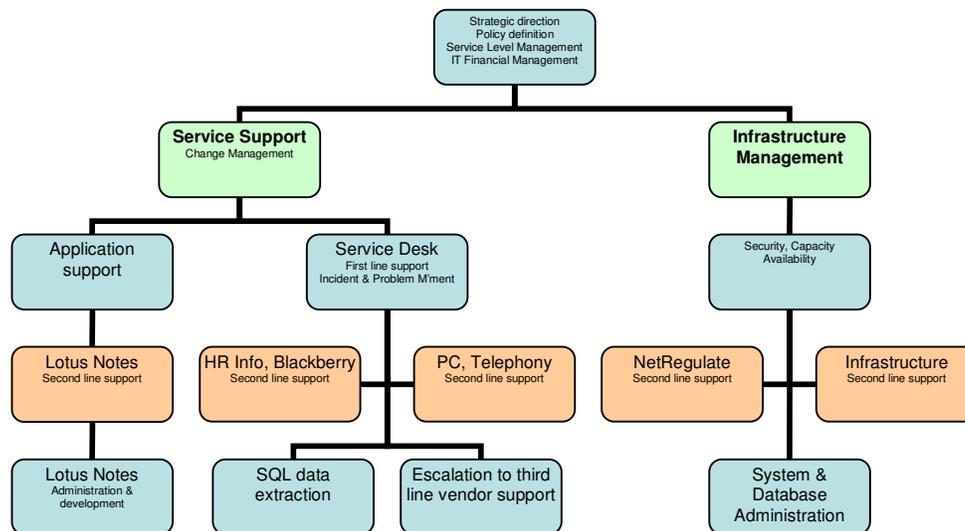


Fig 3 – Department functional separation

The IT function is predominantly delivered internally to maintain high levels of flexibility and control, and to more ably manage costs incurred through change.

The service desk operates from Monday to Friday between 08:00 and 18:00 to match the operating hours of the organisation.

Each member of the IT team is responsible for specific areas of the IT infrastructure and receives appropriate specialist training as identified in the Performance Development Review process. To maximise the effectiveness of the team all members have a broad knowledge of the technologies deployed.

The IT team is structured against four principles:

- To utilise the IT resource effectively we need to have **clear ownership** and separation of responsibilities;
- To have functional specialists that excel at their core specialism - we want to **increase the depth** of the IT team skills and knowledge;
- We need to recognise that as a small team every team member will still need to be able to 'triage' incidents i.e. we need to retain a **breadth of understanding** albeit at a higher level;
- Allocate resource to **proactively manage** the IT infrastructure.

HPC will create long term partnerships with external vendors where there is a need to provide recurrent specialist services that cannot be delivered internally.

Business Services

The IT function supports the following end-to-end business services comprising several technologies and sub-services that are transparent to the Customer or User. The delivery of each service encompasses all of the enabling functions e.g. the delivery of the Registration service also encompasses the availability of the network to connect to the Registration system.

1. Application development
Project management, development and implementation of small scale application development.
2. Application support
Availability, capacity and performance management of the many separate internally developed applications:
 - i. Freedom of Information system
 - ii. Fitness to Practice system
 - iii. HR Starters and Leavers system
 - iv. Intranet information service
 - v. Employee database system
 - vi. Suppliers database
 - vii. Pass list database
 - viii. IT training book library
 - ix. Private Papers Document Store
 - x. Partners Database
 - xi. Meeting room/ resource database
 - xii. Registration - Temporary Registration Database
 - xiii. Secretariat – Document management system
 - xiv. Secure transmission of print files.
3. Customer Relationship Management system (CRM)
Availability, capacity and performance management of the Customer Relationship Management system iExtensions.
4. Data extraction support
Limited provision of data extraction from key systems to aid complex requirements for functions (initial support for report generation, statistical production and data extraction is within the Operations directorate and the Information Management team).
5. Desktop telephony
Availability, capacity and performance management of the desktop telephony function including call recording, wall boards and queue management.
6. Education, Approvals and Monitoring
Availability, capacity and performance management of the Education and Monitoring database system.
7. Email and web browsing
Availability, capacity and performance management of the email function and ability for HPC employees to browse the internet.

8. Financial ledger
Availability, capacity and performance management of the SAGE 200 financial general ledger system.
9. Financial Payroll
Availability, capacity and performance management of the SAGE 50 payroll system.
10. Financial Purchase Order service
Availability, capacity and performance management of the PRS Financial purchase order system.
11. Human Resources Information
Availability, capacity and performance management of the 'HR Info' system for managing the HR requirements HPC.
12. Mobile personal mailing service
Availability, capacity and performance of the Blackberry function enabling remote and personal diary and mail synchronisation.
13. Online Portal
Availability, capacity and performance management of the Online Renewals system.
14. Personal computing (including printing and network storage)
Supply, installation and management of personal computers and all associated software and peripheral devices e.g. scanners.
15. Purchase Order service
Availability, capacity and performance management of the PRS purchase order system.
16. Registration
Availability, capacity and performance management of the Registration system.
17. Service Desk
Respond to and resolve Incidents, Problems and Requests for Change within the IT infrastructure.
18. Video Conferencing
Availability, capacity and performance management of the video conference function (excluding the video equipment which is supported by Facilities).
19. Web site hosting (Internet, intranet, extranet)
Availability, capacity and performance management of the HPC websites both internal and external.

Technical Services

Technical services are transparent to, but underpin the Business services. Here we highlight some of the key services and the approach that HPC has taken to deliver them.

IT Continuity

To maximise service and performance and minimise cost the majority of the IT infrastructure is located at the HPC office premises in dedicated facilities addressing cooling, power and physical security needs. As an exception the Internet service is hosted and managed remotely at a dedicated data centre by a managed service provider.

HPC also employs its data centre as part of its IT Continuity plan and hosts copies of the core data applications, notably:

- Registration system (NetRegulate);
- Finance systems (Sage100, Sage200, Sage payroll);
- Mail service;
- Shared network drives G: and N: ;
- Approvals and Monitoring application; and
- FTP applications.

This allows for rapid availability of the core elements of the HPC IT infrastructure to a reduced user group in the event of a critical outage.

Data is synchronised using several methods over a 24 hr cycle. Additionally backups are taken internally and cycled weekly to provide a more granular method of recovery, with a reference backup of all systems archived off-site each month.

IT Security

A strength in depth approach is taken to address IT security.

Authentication and Authorisation:

- Users require complex passwords for authentication to PC and Network services;
- Users are only granted access to services to which they have specific authorisation;
- Passwords for PC and Network services are changed every four weeks; and
- Additional passwords are required to access each core application service e.g. Registration system.

Perimeter security:

- The IT systems are tested quarterly for vulnerabilities from external attack using a specialist security company;
- All incoming and outgoing email and web traffic is scanned for viruses and malicious software;
- All personal computers and servers running Microsoft technologies have virus protection software deployed;
- The latest security patches are deployed automatically to the personal computers on the network;
- Laptops are encrypted to protect any sensitive data; and

- Physical access is restricted to the HPC offices and is further restricted to the server infrastructure.

Service Management

Service management is delivered focused primarily on the Service desk, Incident management process and IT continuity. Service levels for the availability of key services are published monthly.

HPC is applying elements of the Information Technology Infrastructure Library (ITIL) guidelines as published by the Office of Government Commerce (OGC) to its Service Management processes. This is a key method for driving efficiency and effectiveness through the use of IT and is a key development within the IT strategy addressing areas of Service Support and Service Delivery.

The implementation of more formal service management is aimed to increase transparency to the user and customer and to drive efficiency and effectiveness within the IT function without excessive bureaucracy.

Application Development

The development of business critical applications that support the core business processes of the organisation is supported either:

- through bespoke development outsourced to a specialist company where there does not exist a commercial product that can be efficiently applied against our substantive requirement; or
- by purchasing a Commercial Off The Shelf (COTS) package.

It is more desirable and advantageous to purchase a COTS solution and be able to leverage the increased investment in the software development and typically higher levels of support availability.

In house development will continue where:

- a viable commercial software solution does not exist;
- to prevent the proliferation of small technically diverse software with specialist support requirements; and
- there is a need to deploy a low risk solution quickly and economically.

IT Action Plan

~~The Action Plan is a series of candidates for action to achieve the Information Technology objectives. These candidates for action can and will change to reflect current organisation need. Each year the IT Work Plan will detail the candidates for action that have been selected for implementation during that financial year. The priority is set each year following discussions between each directorate as part of the financial planning cycle.~~

~~Objective 1 Candidates for Action...~~