

## **Institutional Efficiency: examples of activities where efficiency gains have been achieved**

The information collected on [college](#) and [university](#) returns contains information on the types of activities being undertaken to bring about the efficiency gains. A list of examples of those activities taken from previous returns is set out below.

Please note that some of the activities in the list below span more than one category.

### **University sector**

#### ***Business process improvements***

1. Examination system:
  - Electronic circulation of external examiner reports.
  - Online moderation.
  - Online results notification.
  
2. Student admissions and recruitment:
  - Implementation of new online recruitment tool.
  - Online matriculation of continuing students with roll-out to new students - saving on staff and student time.
  - Use of online course applications.
  - Use of online enquiries – applicants are able to track the progress of course applications and requests for information reducing the number of email and telephone enquiries to the student records office.
  - Streamlined wireless registration – reducing need for staff to support student wireless access set-up.
  - Increased use of IT for production and submission of forms within Registry.
  - IT enabled improvements to student registration process, curriculum management process, and Post Graduate Admissions Process.
  
3. Management and maintenance of IT:
  - Automatic power-down of teaching room PCs.
  - Savings in staff time / space arising from other IT related initiatives including Sibboleth, Absence Management and Document Imaging.
  - New student information system.

- Student information extraction – system to allow the extraction of student information by individual departments will allow data to be extracted on a class basis.
  - Thin client – hardware and energy efficiencies.
  - Library – introduction of RFID technology to both improve operations and services within the library.
  - Software for staff and students will be supplied under a site license rather than purchasing individual packages.
  - Removal of duplicate systems.
4. Student attendance and monitoring:
- Online course feedback submission from students via VLE – removes the need to manually scan in the hardcopy survey returns and import data to spreadsheet for analysis.
5. Research:
- Introduction of a new Research Information Management System is anticipated to increase the rate of growth in research income.
6. Budgeting and financial management:
- Automation of financial practices – secure electronic storage of customer credit card details.
  - Change to tuition fee invoicing process with implementation of Student Account Management module.
  - Electronic invoicing and supplier statements.
  - Enhanced treasury management.
  - Improvements in debt management process.
  - Online direct debit mandate set-up – reducing input required by finance staff.
  - Online payment of student fees, accommodation and short courses – eliminating need for finance staff to process the payments manually.
  - Development of finance system.
  - Improved management of non-Sterling payments.
  - Improved return on endowment capital investment by appointment of professional Fund Managers, with advisory and discretionary roles.
7. HR:
- Employee / Manager self-service – managers and staff will have access to view and update data held against the employee record.
  - Roll out of Document Management System (DMS).

- New policy for employment of temporary staff and for additional payments to existing staff.
- Self service HR and payroll system – streamlining essential HR / payroll processes and eliminating current duplication of data entry.
- Staffing reviews of: Information Services; Technicians; secretariat; and student services.
- Vacant posts not being filled.
- Online staff performance management system.
- Automated authority to appoint process.

8. Project management:

- Project management system to drive and standardise best practice throughout the organisation.

9. Other:

- 5 day Lean intervention using Kaizen Bitz methodology – complete review and redesign of research application and award management, strategic planning process, accounts payable process, library, appeals process, estates, self-certification of student absence, staff recruitment processing, casual contracts.
- Restructuring of schools within the university.
- Joint business development team across two institutions
- Professional Services Theme Team activity – improved student retention and progression through an integrated student support service, including pro-active welfare support and a one-stop shop concept.
- Relocation of digital media loans to library enquiry desk – rationalisation of service points.
- Review of all administrative departments to support new academic structures.
- Re-organisation of records management and risk management.
- Merger of the Student Programmes & Examinations Office and the Student Matriculation & Records Office to form the Student Administration Office.
- Implementation of Project Financial, Accounting and Costing Tool (pFACT) costing system, thereby enabling a restructure of support for costing, pricing and financial administration within the area of research.
- Pilot of 'In Practice' placement administration software to streamline and create efficiencies in the way placements are administered.

- Replacement of existing in-house Virtual Learning Environment (VLE) with Moodle.
- Student handbooks to be provided online instead of hard-copy format for all students.
- Replacement of student ID card with new smart card which will be rolled out over the next few years as a 'cashless' card.
- Student growth accommodated with only partial pro-rata increase in academic and support staff.
- Curriculum rationalisation.

### ***Estates***

#### 1. Energy:

- Energy efficiency projects.
- Carbon Management projects.
- Change to energy efficient light bulbs in Halls of Residence.
- Window replacement project.
- Installation of zone heating to allow better temperature control.
- Replacement / upgrade of air conditioning unit.
- Replacement of biological sciences chiller.
- Roof replacement.
- Various estates lighting and building controls replacements / upgrades.
- Introduction of voltage reduction equipment.
- Introduction of movement sensors to shut down power when no-one is present or moving.
- Energy awareness campaign and staff training.

#### 2. Contracts:

- Janitorial and cleaning services at lower cost.
- Renegotiation of plant maintenance contract.
- Provision of grounds and property maintenance services to third party companies.

#### 3. Staffing:

- Review of estates department staffing.
- Restructuring of grounds maintenance staffing.
- Review of working hours for security staff.

#### 4. Buildings:

- Aggregated estates project efficiencies.
- Consolidation of estates.
- Disposal of buildings – elimination of backlog maintenance and running costs.
- Improved utilisation of space out-with term time.
- Re-configure internal space to free up teaching space thereby reducing the need to hire external space.
- Vacation of leased building and relocation of staff to main campus.
- Lease of vacant, unusable office space to a third party.
- Higher proportion of planned maintenance of residential estate now being undertaken in-house rather than by external contractors.

5. Processes:

- Review and implementation of new working practices for portering staff.
- Implementation of stock control system at general stores.
- Restructure of Estates related committees.

***Procurement***

1. Contracts:

- Banking contract reduced transaction costs and reduced loan finance costs.
- Out-source: administrative function.
- Procurement of Health and Safety training requirements from in-house consultant – staff trained annually and tested in-house to ISOH qualification level.
- Re-negotiation of cleaning contract, and lease of motor vehicles.
- Re-tender of insurance, and PAT testing of electrical appliances
- More focussed contract for catering.
- Discount scheme negotiated with catering provider.

2. Systems:

- Conversion of low-value and one-off orders to Automated Procurement Card.
- Conversion of postal and faxed orders to electronic transmission
- E-invoicing.
- Electronic ordering.
- Electronic tendering.
- e-procurement systems.
- Invoice and order consolidation.

3. Processes:

- Improved tendering processes.
- Ordering process efficiencies.
- Planned approach to PC procurement.
- Procurement function outsourced to another institution.
- Professional procurement resource from another institution for capital project.
- Recycling and refurbishment of furniture stock.
- Use of purchasing / credit cards.
- Efficient procurement processes applied.

***Shared services / collaboration***

- Merger savings.
- Shared services in co-located campus.
- Single IT support service across the UHI partnership.

***Other***

1. HR:

- Improved staff recruitment processing.
- Reduction in recruitment advertising.
- Voluntary severance scheme.
- Introduction of Salary Sacrifice for pension contributions.
- Reduction in recruitment.
- Reduction in library related expenditure.

2. Systems:

- Improved remote PC support.
- Improved software deployment.
- Increasing the use of AV technology.
- Unified messaging – bringing voicemail into Outlook alongside email and calendar.
- Virtualisation of server infrastructure – reduction in the number of physical servers required.
- Wireless networking throughout the institution.

3. Other:

- Centralised administration.

- Development of centre of lifelong learning.
- Disaggregation of terrorism cover from long term insurance agreement.
- Establishment of student employment centre.
- Move away from brokered insurance arrangements.
- Renegotiation of loan agreement margins.
- Campus services – move from catered to self-catered accommodation.
- Outsource retail unit at Halls of Residence.
- Savings in bank charges.

## College sector

### ***Business process improvements***

1. Examination system:
  - Decentralisation of results.
  - Implementation of online resulting facility.
  - New business process for registration of students going forward to examination.
  - Online graduation application.
  - Online re-sits.
  - Online results processing.
  - Real-time resulting.
  
2. Student admissions and recruitment:
  - Centralised approach to recruitment and advertising.
  - Finance staff involved in enrolment at an earlier stage, simplifying and speeding up the process.
  - Increased efficiency in deployment of teaching staff following review of student recruitment.
  - Initiative to recruit more overseas students.
  - Introduction of online enrolment and registration system for full-time students.
  - Multi skilling of staff to assist front of house during recruitment periods.
  - Online course applications – eliminates need for staff to transfer details from the hard copy forms into the student information system as this process is carried out automatically.
  - Online enrolment for all VQ / distance learning students
  - Online enrolment for full-time students.
  - Streamlined registration.
  - Self-service online enrolment with a payment gateway.
  - Student enrolment process improvements.
  - Student ID card printing – access to web-cams to capture own pictures at enrolment.
  - Student self-verification of personal data.
  - Upgrades to student admissions, recording, finance systems to reduce paper flow.
  - Use of e-marketing during student recruitment.



### 3. Management and Maintenance of IT:

- Automatic switch-off of computers at night reducing power and computer wear and tear.
- College portal provides a one-stop location for documents and forms.
- Integration of stand-alone Customer Relationship Management (CRM) system with main Management Information System (MIS), removing double handling of information.
- Development of ICT – increased use of email and information stored and retrieved electronically.
- Electronic payments. Remittances, purchase orders and production / distribution of reports.
- Implementation of patch and power management software.
- Implementation of new intranet based on Sharepoint 2007.
- Installation of Deep Freeze software on all PCs.
- Incident and asset management software.
- Increased use of video conferencing to reduce travel budget.
- Installation of SITS resulting in more efficient application and enrolment and more timely student absence information.
- Installation of document management system.
- Investment in ICT systems has improved services reducing downtime.
- MIS electronic distribution of standardised reports.
- Enhance MIS function through development of real-time electronic systems, effective procedures and staff structures. Improve student activity management information, student pastoral data, activity forecasting and planning.
- Purchase of scanner allowing questionnaires to be processed and results compiled more quickly. Data entry is more efficient with less opportunity for data input errors. Reporting functionality is also improved.
- Real-time management information via the intranet.
- Roll out of Edutext.
- Server virtualisation.
- Server virtualisation – reduced costs in terms of server purchase and maintenance costs.
- Use of e-Portfolio for automating letters.
- Use of Enquirer.
- Review of MIS and IT costs and services.
- Amalgamation of MIS into the ICT department.
- Introduction of Moodle for online learning.
- Introduction of online surveys from a paper based system.

4. Student attendance and monitoring:
  - Development of e-register reporting format.
  - Electronic registers.
  - Implementation of web register system and enhancement of electronic timetabling system.
  - Improvements in bursaries, online services and attendance automation.
  - Increased use of web-registers.
  - Move to online student surveys.
  - Online attendance recording – allows the college to identify at risk students quickly and marshal support facilities as quickly as possible to improve retention rates.
  - No inputting of attendance into MIS for non-full time programmes.
  - Retention programme developed to encourage students to remain at the College.
  - Review of student retention.
  - Update of content management system.
  
5. Marketing:
  - Joint marketing of course with other colleges.
  - Joint working with other colleges to share marketing costs.
  - Reduce marketing costs of publications.
  - Reduction in marketing and advertising costs.
  - Use of e-prospectus on website.
  
6. Timetabling and related tasks:
  - Academic teaching timetable / contact time reviewed.
  - Centralised timetabling system.
  - Implementation / enhancement of timetabling software.
  - Improved room utilisation information.
  - Introduction of automated timetabling system.
  
7. Budgeting and financial management:
  - BACS payments to suppliers.
  - Efficient management of educational supplies.
  - Email of purchase orders and remittance advices.
  - Implementation of new student funding software (Tequios) and integration of hardship funding with finance function.
  - Implementation of online payment system for student fees and suppliers.

- Implementation of web-based purchase order system linked to finance system.
- Improved access to budgets online for budget holders.
- Increased use of BACs.
- Increased use of video conferencing to reduce travel budget.
- Introduction of zero based budgeting.
- Lower permanent and temporary teaching costs arising from increasing use of new technologies and new pedagogical approaches.
- New finance system introduced.
- New payroll service provider and elimination of weekly payroll.
- Online timesheets and travel claims for staff.
- Revised ICT hardware replacement strategy.
- Support for improved budget monitoring.
- Use Sharepoint software to help monitor financial statements – save on Vision software.
- Deposit of funds, streamlining of cash management and competitive interest quotes.
- Reduce the number of secure cash collections.
- Full utilisation of debt collection module.

#### 8. HR:

- Centralisation, rationalisation and streamlining of processes in administrative functions and student administration functions.
- Changes to structure of senior management team.
- E-enable HR services.
- HR system developed to allow all employees access to records and information updated online. Also option to receive payslips by email for all staff.
- Improved sickness absence procedure.
- Improved absence management reporting.
- Lower support staff costs arising from automation of procurement processes.
- Online approval of temporary staffing contracts.
- Rationalisation of technical support staff structures.
- Recruitment advertising reduction.
- Restructure of support functions.
- Restructuring of senior management team.
- Upgrading payroll / HR system.
- Switch to online staff recruitment from use of employment agencies.
- Introduction of flexi time policy to reduce overtime.

9. Curriculum:

- Continual review of curriculum; planning with other colleges in the area to reduce inefficient classes and improve provision to the students.
- Curriculum review.
- Delivering CPD activities in-house.
- Development of blended learning.
- EFQM model is used for systematic review of process leading to improvements.
- Flexible blended learning.
- Increased use of online course materials and blended learning.
- Increased use of remote learning centres.
- Joint curriculum development with other colleges in all subject areas.
- Networking of HN Business teaching units with other colleges.
- Review of portfolio to achieve more efficient delivery of HN programmes.

10. Other:

- Business process review of key college processes.
- Increased centralisation of customer relationship management facilities.
- New back office integrated system.
- Organisational Development Project – identified a number of projects that should improve and or streamline processes.
- Reduction in paper usage.
- Replacing staff desktop printers with smaller number of larger copier/printers on phased move to new build.
- Delivery of PDP by learning assistants instead of lecturing staff.

## ***Estates***

### 1. Energy:

- Energy efficiency projects.
- Carbon Management Plan.
- Installation of PIR sensors.
- Switch electric heaters in switchroom to frost protection mode.
- Set electric heaters in lift shaft to frost protection mode.

### 2. Contracts:

- Change security arrangements.
- Consolidation of term maintenance contracts.
- Review of ground maintenance arrangements / change to in-house arrangements.
- Change from night shift cleans to evening shift cleans to save energy costs.

### 3. Buildings:

- Caretakers undertake minor maintenance.
- Improved timetabling and room utilisation.
- New building – savings in running costs.
- Relocation of units to a purpose built facility – efficiencies in running costs.
- Renting out surplus accommodation.
- Review of leased premises – tie in lease period with contract duration.
- Review of outreach centres.
- Shared accommodation / estate - working in partnership.
- Review of college opening hours.
- Closure / sale of property.
- Re-negotiation of lease.
- Reduction in use of external premises.

### 4. Equipment / Fittings and Fixtures:

- Extending use of VOIP phone system into new build – reduction in rental and call costs.
- Increased level of sensor lighting throughout the building.
- Installation of energy monitoring equipment.
- Refurbish oil tanks instead of replacing.

5. Systems:

- Update to building management system.
- Upgrade and greater use of capital asset software.

6. Other:

- Increased recycling of waste.
- Rescheduling of borrowing –over longer period.
- Sustainability policy.
- Reduced number of refuse collections.
- Review of estates team.

***Procurement***

1. Contracts:

- Bulk buying paper for annual usage.
- Purchase of cheaper quality paper.
- Contracting out of catering services.
- Consolidating supplier base and annual contract negotiations.
- Job advertising and printing of publicity materials to be re-tendered.
- Out-source printing.
- Purchase of two college cars instead of staff claiming mileage for use of their own cars.
- Rationalise the: number of printers / photocopiers – use more versatile machines; student / staff printing – under one supplier.
- Re-negotiation of telephone maintenance contract.
- Re-tender of contracts, including catering, cleaning and photocopying, insurance, cleaning, printing, maintenance, waste disposal, PR and advertising, and fleet vehicles.
- Review of international mailing costs, PR and advertising.
- Review of catering activities, insurance resulting in better cover and less cost, telephone line rental and mobile phone contract.
- Stationery / toner price reduction.
- Hire of a bus to transport students as opposed to paying the students daily bus fares.
- Reduction in college contracted bus routes due to low demand.
- Use of APUC and Procurement Scotland contracts.

2. Systems:

- e-purchase requisitioning.
- e-goods received notes.

- Sharing IT infrastructure with the local authority.
- Implementation of e-procurement.
- Introduction of PECOS for order punch out and automated authorisation.

### 3. Processes:

- Implementation of a revised strategy for the management and control of printing and photocopying.
- Lower supplies costs arising from review of purchasing arrangements (non-APUC).
- Planned approach to PC procurement.
- Procurement of fixtures, fittings and equipment for new campus.
- Reduced energy usage in new build.
- Reduced use of external buildings.
- Rental income from shared services in new build.
- Staff adverts now on College website where applications can be downloaded – savings in postage, paper, staff time etc.
- Use of procurement manager.
- Use / more effective use of purchasing / credit cards.
- Creation of a Procurement Officer post.

### ***Collaboration / Shared services***

- Sharing of a Health & Safety Manager with another institution.
- Creation of shared FM and ICT services with another institution on a shared campus.
- Joint appointment of an International Officer.
- Partnership with another college for Flexible Blended Learning.
- Shared accommodation by working in partnership with other colleges and agencies.
- Rural colleges working together to market land-based courses.

### ***Other***

#### 1. HR

- Academic restructure.
- Functional review carried out to improve staff utilisation reducing level of agency staff required.
- HR systems development to enhance HR monitoring and planning.
- Installation of new HR system CIPHR.
- Staff restructuring / reorganisation.
- Teaching staff utilisation improvements.

- Use of instructors.
- Vacancy management – non-replacement and deferral.
- Voluntary severance scheme.
- Work load analysis for teaching staff.

2. Systems:

- Installation of virtual servers.
- Installation of Asset management software.
- Introduction of wireless network hotspots throughout the College.
- Investment in USB sticks for staff and students to provide learner materials rather than use paper based materials.
- Set up staff and student intranet to allow online access to information.

3. Other:

- Elimination of requirement for College subsidy to canteen.
- Elimination of climate change levy on utility bills.
- Improvement in efficiency of student refectory.
- Introduction of 'one stop shop' for student support.
- Mobile learning vehicle to provide IT training to rural and remote communities – reduces the need to rent premises.
- Photo ID cards for students enhancing security.
- Replacement of walkie talkies with mobile phones.
- Review of catering services.
- Review of efficiency across the college with focus on class sizes and reducing less efficient areas of portfolio.
- Sustainable transport partnership to enable students, staff and the general public to access the college.
- Refectory opened during term time only.