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EUNIS Elite Award of Excellence 2004 Submission

Institution and Departments

The University of Manchester

- 1) Manchester Computing
- 2) Registrar and Secretary's Department

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The following were also key staff involved, who managed technical teams of internal staff and external consultants numbering approximately 60 individuals to deliver an integrated array of IT systems for the new contact centre:

Liz Delaney, IT Project Manager
Mike Taylor, Project Design Manager
Shelley Willson, One-stop Shop Project Manager

Objective of the Project/Service

In January 2003 the University of Manchester opened the new Student Services Centre (SSC) to serve its 24,000 existing students. This project (the 'One-Stop-Shop' project) used business process re-engineering techniques to merge processes and staff from five different central administrative offices into a new organisation of 35 staff. The SSC was established as a single central customer contact centre for students using the latest customer relationship management (CRM) and call centre technology.

The objectives were:

- to offer students a single high-tech point of contact for all their administrative transactions
- to alter, enhance and streamline business processes
- to significantly improve service quality to the student customer
- to provide opportunities for increased professionalism and job satisfaction for staff

The SSC offers a five-channel customer contact centre with a walk-in service into a newly customised building as well as virtual services through the telephone call centre, the web, e-mail, and scanned-in post/fax transactions. All channels are managed in an integrated manner using an array of CRM technologies using call-to-resolution service requests, systems integration, portal services, workflow, and electronic document management (see Appendix A).

This submission for the EUNIS Elite Award of Excellence is therefore for the highly innovative IT infrastructure implemented to support the SSC. There are significant elements of systems integration, self-service facilities, and business management improvements in this implementation.

Description of the Project/Service

Overview of the IT infrastructure

Firstly, the IT solution directly enables SSC staff to assist the student customer over the two live channels which are the face-to-face and telephone queries. The solution is built using Oracle CRM 11i consisting of CRM Foundation, Teleservice and Interaction Centre & Scripting modules. This facilitates the recording of all interactions originating from web, phone and face-to-face channels; processes tasks; processes service requests including e-mail notification via workflow and step-by-step scripting which enables consistent customer service. The Oracle workflow process is used to manage various processes within the SSC.

Per-second statistics are recorded on all transactions identifying such patterns as peaks and troughs, turnaround times and maintenance of SLAs with students, popular channels of interactions, etc. This greatly assists with human resource management in terms of allocating staff to the correct channels for the correct types of query given the time of day/week/year.

Essential to ensuring the phone channel operates efficiently is the telephony system- Siemens Hicom 300 E CS, by configuring the Automatic Call Distribution System and the set-up of Flex Routing we can manage the incoming calls effectively.

The Business View Observer is a GUI MS Windows based software tool which allows the monitoring of real time activity of the call centre. As a productivity tool it presents a complete picture of the call centre so that activity can be optimised and addressed quickly, by setting thresholds in line with pre-determined SLAs. For example, when the threshold is breached for 'number of calls in queue' an alarm is triggered on the BVO and then a decision can be made by the Teamleader to deal with this level of activity by using 'overflow' agents. Business View Composer, which also resides on the Teamleader's workstation provides a simple & intuitive means to do ACD system administration, configuration & historical reporting.

Lastly, other assisting technology includes the Livelink electronic document management system, which provides part of each student's record. All paper records such as registration forms and LEA/student correspondence are scanned into this system, and correspondence sent out to the student is recorded onto it automatically. This eliminates paper systems and speeds up the process to ensure a professional service.

Specifically, the features of the IT infrastructure for the Student Services Centre can be categorised as follows:

Business Process Re-engineering (BPR)

The One-Stop-Shop project began with a four-month, major process analysis and mapping exercise involving both external consultants and internal business process re-engineering teams. These processes were streamlined and re-engineered, and only after this stage were the technical solutions such as workflow modelled and the appropriate systems procured.

Examples of business process improvements include:

- Transformation of tasks from staff-completion to student web self-service
- Ability for students to track progress of requests via CRM portal
- Step-change in sophistication of telephone call handling through establishment of new call centre and use of industry-standard call centre technology
- Integration of systems to provide summary information to staff, e.g. total debt position of student relative to university as a whole
- Extensive use of electronic workflow to process tasks regardless of the channel they originated from
- Use of electronic document management to scan in and retrieve paper records in order to provide a better audit trail and speed-up service to students by providing all information to the adviser on-screen.

Systems Integration

The systems integration included the close coupling of the Student Record System to CRM 11i & Oracle 9iAS Portal, CRM 11i to Oracle 9iAS Portal, Oracle 9iAS Portal to LDAP.

The applications interact through the use of bespoke intermediary tables and stored procedures in the Oracle CRM database schema.

For authentication purposes the student record number is the unique identifier as it is available in all systems. Via the Single Sign-On component of Oracle 9iAS integration between Portal & LDAP occurs which allows a query against the LDAP directory to retrieve the encrypted record, then decrypts the record and allows secure access into the SSC Portal.

The major benefit to staff working in the Centre is the provision through CRM technology of an instantly-available, single interface, with relevant, up-to-date information about the student, which is used when serving the student customer via any of the contact channels (e.g. telephone, face-to-face etc). This has empowered staff to give a comprehensive and professional service.

Self-Service

Oracle 9iAS Portal is employed to give students a range of innovative types of secure and authenticated web self-services. These include:

- self-assessment using branching logic for service eligibility (e.g. for financial awards)
- distribution of personalised information (e.g. exam timetables)
- the ability to carry out transactions directly on the web by initiating a service request (request a document e.g. Council Tax Exemption Form)
- the ability to track the progress of these service requests on the web regardless of the type of channel used to originate them
- the ability to change information such as term-time address, which writes directly back to the MIS systems.

Innovation and Leadership

The University of Manchester benchmarked a number of other universities around the world as well as commercial organisations (banks, supermarkets and call centres) in order to develop its own unique ‘Manchester’ vision of the One-Stop-Shop. The approach developed has not been found elsewhere in its scope and ambition in UK higher education, and as a result its establishment has generated significant interest.

The Student Services Centre was highlighted in the Government's White Paper on the Future of Higher Education (CM5735, para 6.11, p. 71, published in January 2003) as an example of innovation and good practice. Visitors to the new Centre have already included senior managers of a number of universities from around the UK and abroad.

Benefits of the New Service

The Student Services Centre (SSC) was established with one over-riding aim – to improve the service the University's Central Administration provides to its students. What is the evidence that this aim has been achieved?

In order to answer this question we asked the students themselves. After six months of continuous operation a web survey was conducted, and 72% of respondents rated the new service as

- ‘good’
- ‘very good’ or
- ‘excellent’.

Some of the comments given included:

- ‘very efficient’
- ‘very modern and organised’
- ‘very professional’
- ‘very swift and efficient service’

as well as

- ‘was dealt with right away and staff were very helpful’
- ‘it's good having one place where so much can be sorted out’
- ‘it gives students confidence that if they have any difficulties there is a specific place that can deal with their problems efficiently’ and
- ‘it was a pleasure doing business with you’.

Mentioned again and again to us as a huge benefit is the fact that we now have just one single point of contact for students when they need to interact with the Central Administration of the University, whereas previously students had to visit a variety of different offices spread throughout a large and confusing administrative building.

Academic staff visiting the Centre have a dedicated reception area, which ensures they are seen quickly. Staff in departments are finding it much simpler to advise their students on where they need to go to get things done – the SSC.

A major benefit for staff who work in the Centre is the increase in the level of professional service we are able to offer. The CRM system allows us to bring up instantly a student's University record and the history of all their previous contacts with the Centre. So whether we are dealing with the student face-to-face or over the phone the member of staff has confidence in talking to the student knowing that the full, detailed record is always going to be available. A major benefit for the student of course is that they don't have to explain their circumstances to someone for the umpteenth time!

Our web survey revealed that 94% of respondents had previously used the portal service. 77% of respondents felt that the portal was ‘useful’ or ‘very useful’. 80% felt that the services provided via the portal were ‘easy’ or ‘very easy’ to access and 96% said they would use the web portal again. The most popular services that are provided by the SSC (see Appendix D for further details) are now delivered by the Student Portal.

All students are now provided with their personal, individualised examination timetables via the portal. Instead of producing nearly 15,000 timetables on paper, and sorting and distributing these to academic departments to issue, in turn, to their students, simple downloading and printing-off provides the student with everything they need. On the first occasion of moving over to this new system no problems were encountered. Students are very pleased with this new, simpler service from the Centre's Exams Team.

Students are able to log requests over the portal for academic transcripts, confirmation of award certificates, Council Tax exemption certificates, and other documents. The portal allows them to track the progress of their request, so they know when to expect delivery of what they have asked for. Students can complete certain routine tasks themselves and this has benefits for the University in terms of saving staff time, and obviating the need to reconcile updated data on different systems elsewhere in the Central Administration or in academic departments.

Previously unknown (or not widely-known) information about financial support and scholarships for students is now available from the Student Portal. This enables a student to carry out self assessment on-line in order to establish which awards they may be eligible for. This has resulted in a very large increase in applications for awards, with a consequent increase in awards made. What this means is that money available but which previously was lying dormant, is now in the

hands of the University's students supporting them through their degree programmes. This is clear evidence of the benefit of using this method of publicising information.

We are keen to make further improvements wherever we can, including the recent upgrade of the telephone system which now enables calls to be automatically routed to the appropriate teams. The CRM system, which logs all contacts with the Centre, enables us to produce statistics on the level of our activity and when this occurs (time of day, day of week, particular weeks of the year etc). These statistics can then be used to adjust our service provision to match student demand. We have also recently (February 2004) initiated a new student survey, and we will be using the results of this, along with the CRM statistics, to review the longer-term nature and level of our on-going service provision.

Supporting Documentation about the Project/Service

Appendix A

- Oracle CRM 11i screenshot
- Oracle 9iAS Portal screenshots
- Electronic Document Management screenshots
- Siemens Hicom BVO/BVC software tool screenshots

Appendix B

- Photograph of SSC front-of-house student reception area

Appendix C

- Student Portal: Types of Request

Appendix D

- Top 20 Student Services

Appendix A

Oracle CRM 11i (CRM Work Queue)

Queue	Count	No.	Type	Status	Description	Student Reg No.	Student Name
All Tasks	51	1322	Web Feedback	Open	Student Reg No: 2012...	2012703	Ranjan Rashmi
Service Request	0	1324	Web Complaint	Open	Student Reg No: 2012...	2012703	Ranjan Rashmi
My Service Request	0	1328	Transcripts	Pending Collection	Student Reg No: 9904...	99044627	Richardson Der
Group Owned	0	1330	Transcripts	Pending Payment	Student Reg No: 1494...	149427	Li Ching
My Groups	0	1338	Transcripts	Pending Payment	Student Reg No: 9904...	99044543	Rollison Helen
Back of House	0	1346	Transcripts	Pending Collection	Student Reg No: 1424...	142478	Esmail Faisal
Certificates	0	1352	Web Feedback	In Process	Student Reg No: 2493...	249378	Ahrens Jill
Direct Debit	0	1356	Transcripts	Paid	Request for Transcript	148229	Yates Andrew
Documents	0	1374	Council Tax Exemptio...	Open	Forward to front counter	43911	Jolly Mark
Exams	0	1384	Confirmation of Fees	In Process	letter requested for con...	99044279	Charalambous I
Fees	0	1392	Transcripts	Pending Payment	146141 - Is sending in ...	146141	Massri Rola
Front of House	0	1394	Transcripts	Pending Payment	148703 - Is writing in w...	148703	Psychranis Cor
Graduation	0	1460	Thesis Submission	Open	.	99044901	Martins Trava
Hardship Awards	0	1472	Council Tax Exemptio...	Open	99050951 - To be post...	99050951	Lal Simon
PG Awards	0	1510	Thesis Submission	Open	.	98048545	Ting Pei-Yuan
SLC	0	1516	Council Tax Exemptio...	Open	254213 - send to Term...	254213	Scott Deborah
Thesis	0	1520	Fees Refund	Calculated & Doc...	46104 - Refund of GBP...	46104	Mulkeen Helens
Transcripts	0	1526	PG Award/Grant Paym...	Collected	Chq collected from Fin...	154345	Smith Geraldine
UG Awards	0	1528	Transcripts	Open	Ernest Anthony Mendy	146873	Mendy Ernest
Web	0	1532	Duplicate Certificate	Open	146873	146873	Mendy Ernest
		1536	Early Certificate	Open	145778 - see notes	145778	Satta Tonino
		1538	Transcripts	Requested Inform...	151095 hoi wing ashle...	151095	Ngai Hoi

SSC Portal utilising Oracle 9iAS Portal technology

SSC Portal

SSC Portal Homepage | SSC Homepage | Banner: Student Services Centre | Student Intranet | Search FAQs

Welcome, One Dummy
(If you are not One Dummy, [Click Here/Logout](#))

Welcome to the Student Services Centre (SSC) Portal!

The SSC Portal provides you with online information and self-service facilities covering:

- Award Self Assessment** (check your eligibility for additional financial support)
- Request a Document** (request personal documents such as Council Tax Exemption Forms and Transcripts)
- Track Progress** (track your thesis/dissertation submission, and view your request history)
- Course Units** (check your Course Units)
- Exam Timetable** (check and print your Exam Timetable)
- Search FAQs** (search the extensive FAQ library)

Sign-in and gain access to areas such as Course Units and Track Progress.

Please let us have any comments, suggestions or other feedback by clicking on this [link](#)

Student Services Centre
The University of Manchester
Burlington Street
Manchester, UK
M13 9PL

This site is maintained by the [Student Services Centre](#).
If you have any comments or suggestions please feel free to contact us.
Last updated: **December 23, 2002 11:51 AM**

SSC Portal

SSC Portal Homepage | SSC Homepage | email us | University Homepage | Student Intranet | Search FAQs

Welcome, One Dummy
(If you are not One Dummy, [Click Here/Logout](#))

Your Requests

Request Number	System Creation Date	Request Type	Description	Status	Last Updated
10743	17/01/2003 09:51:20	Council Tax Exemption Form	Student Reg No: *****. Post to Term-Time address.	Open	17/01/2003 09:51:20
10715	14/01/2003 22:25:14	Council Tax Exemption Form	Student Reg No: *****. Collecting from Student Services Centre.	Cancelled	15/01/2003 17:02:15
1348	14/01/2003 22:25:13	Transcripts	Student Reg No: *****. Collecting from Student Services Centre.	Cancelled	15/01/2003 16:58:40
1326	10/01/2003 15:34:24	Transcripts	Student Reg No: *****. Post to Home address.	Cancelled	14/01/2003 16:31:29
1318	03/01/2003 09:25:44	Application Form Request	HFUG / HL. Post to Home address.	Cancelled	14/01/2003 14:00:07
1316	03/01/2003 09:25:43	Application Form Request	ORS. Post to Term-Time address.	Cancelled	14/01/2003 14:00:57

Home Page
Award Self Assessment
Request a Document
Track Progress
Course Units
Exam Timetable
Search FAQs

EDM in the Student Services Centre

University of Manchester

This guide will follow the scanning of those volume documents such as registration forms and also miscellaneous documents received by the SSC at the University of Manchester

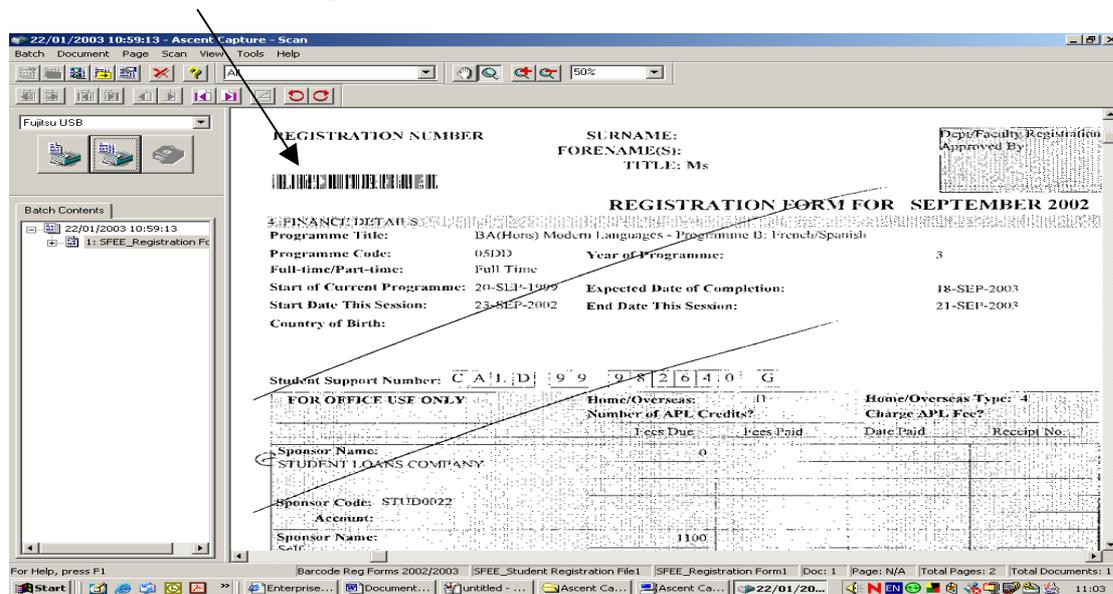
Volume or Production scanning

Eg. Student Registration Forms

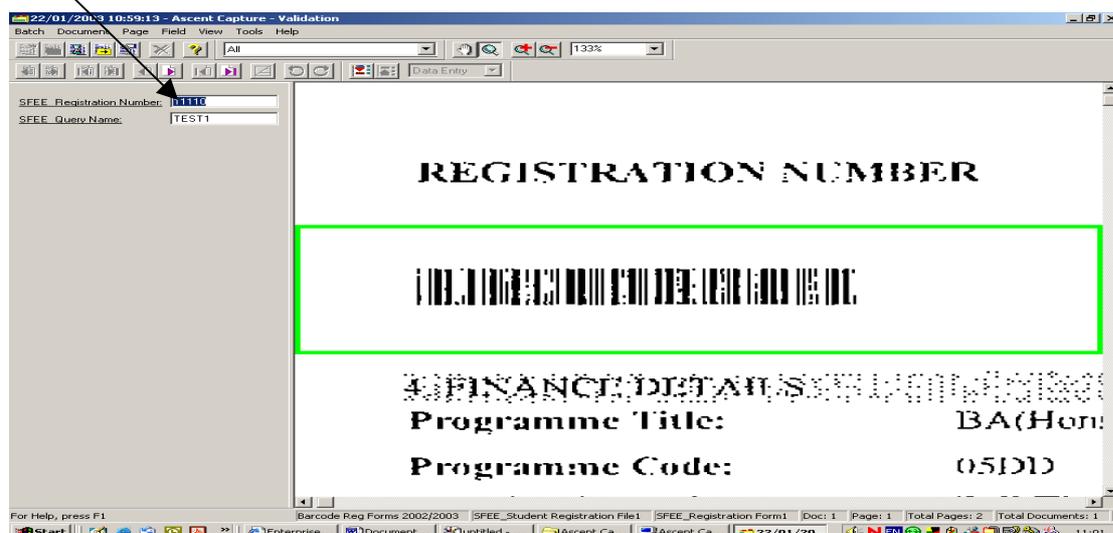
Scanning Software: Ascent Capture V5.5

Sample screenshot showing UOM student registration form scanned at 150 DPI. Student Details have been removed intentionally for Data Protection reasons.

With Documents originating in house a bar code has been added under the registration number. This has been designed to increase the accuracy of identifying students first time when being processed in a fast moving scanning process such as during the two week registration period.



Zonal Optical Character Recognition (OCR) is used to 'capture' the student registration number which will subsequently be used to identify or 'index' the student document. The use of Barcodes enables an accuracy rate of around 98-99% first time recognition. A database lookup is used to confirm the student identity pre processing.



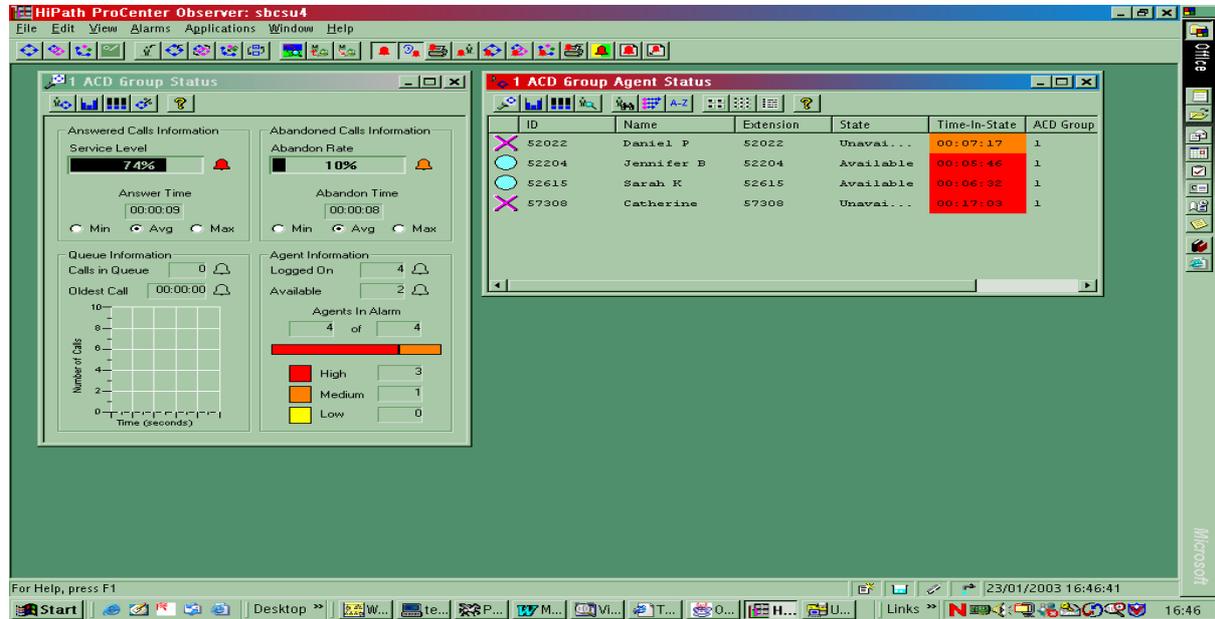
Following validation the image will then be 'released' into Livelink and filed against the student unique registration number.

- Since August there have been over 40,000 documents scanned and released into Livelink.
- The scanners used in the 'back of house' volume processes will scan approximately 40 pages per minute,

- Completed documents are released into Livelink at the rate of approximately 8 documents per minute. In a single working day therefore some 3360 documents can be processed working on a seven-hour working day.
- Pre processing validation is used to minimise errors
- Recall time of documents within Livelink is timed at approximately 3 seconds from entering student details

Siemens Hicom ACD monitoring tool – Business View Observer

This software enables the Team Managers to monitor the incoming calls and the service being provided.



Appendix B

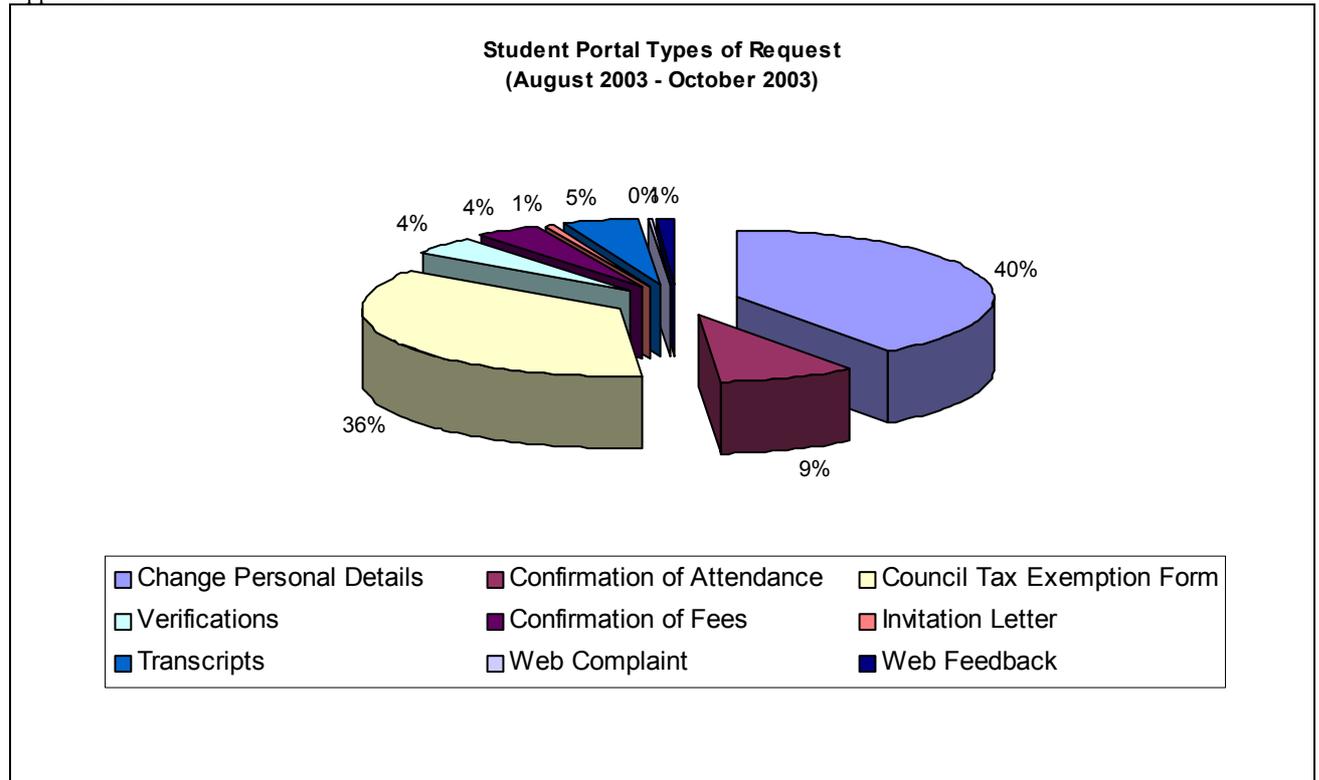


Student visitors to the Centre are seen personally by a member of staff who has instant access on screen to that student's full record. This includes the history of all their previous contacts (by whatever means) with the Centre.

Students coming to the Centre's front-of-house reception area can now get all their administrative tasks done in one place, at one time. The reception area for students is spacious and welcoming.



Appendix C



Appendix D

