



The Oracle Student System (OSS) Implementation Project

A Learner-Centred Approach


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Preface

In a global marketplace differentiation by product is becoming increasingly difficult and organisational success increasingly dependent on the quality of customer service. In HE, this mandates the development of a learner-centred approach. At JMU we are trying to adopt such an approach in our implementation of the Oracle Student System, as an essential component of Learner Relationship Management - a systems approach enabling both the learner and the University to more effectively and directly manage the learning experience. Implementation of such an approach raises issues around process management, cultural change and learner engagement; JMU is struggling to find the solutions essential for delivery of learner-focussed higher education in the twenty-first century.

1 The 'Big Picture'



In March 1997 the Executive stated that JMU should:



- make customer responsiveness its number one priority;
- develop an integrated support system, drawing on world-wide resources, to ensure the delivery of high value-added services;
- invest further in the development of all its staff




Following this, a cross-University Transformation Design Team was brought together 'to create... an enabling strategy for the foreseeable development of JMU'. Their report was published in December 1997.

Two specific strategic themes identified were The Student Environment and Institutional Systems and Processes. In these areas JMU stated that '*a review should be carried out of all major administrative processes and procedures with a view to the elimination of duplication and non value-added activities*' and identified the need for '*combining ICT opportunities... and systems and processes reviews to bring about a better and more direct service to staff, students and others*'.

To achieve these objectives JMU required an appropriate systems infrastructure, aligned with efficient, effective and customer-focused processes, and understood and delivered by a properly prepared and supported workforce - the three key components of Transformation: Systems, Processes, and People.

Since publication of the Report, effort has been invested in each of these:

Systems. JMU is nearing the end of a process of replacing all main corporate information systems. Human Resource and Financial Management systems have been replaced with



technical platforms which will support delivery of strategic objectives, and implementation of the Oracle Student System (OSS) commenced in February 2000 with a completion date of December 2001. JMU is working, as Oracle's first UK development partner, to both implement the system, and assist Oracle in redeveloping a product based on an Australian system for the UK market.

There has also been significant work in the area of Self-Service. Between September 1998 and December 1999, JMU conducted a JTAP-funded pilot on student self-service. The technical approach developed has now been applied successfully to our Personnel database, and live self-service access to this system for all employees and managers has been available since June 2000.

Processes. JMU has developed an approach to Process Review and a supporting internal consultancy resource, and detailed reviews have been carried out in a number of student-focused areas: Acquisition, Induction, and Information Systems. The results of these provided the process-based specification of requirements for a new Student System, and are now informing the OSS Project, within which further process review activity is taking place.

A 'thematic review' of support services has been conducted to provide more streamlined and cost-effective support for delivery of business processes. This has led to restructuring of services in a number of areas, including student administration, and has included development of campus offices to provide a one-stop shop for student access, and redesign of central Student Services around a process model.

People. As part of thematic review, significant effort was invested in working with staff to engage them with new roles and responsibilities. In addition, as part of the OSS Project, the process of identifying the new ways of working and associated behaviours required in staff to enable them to operate in an environment based on system self-service, customer-focus, and process management across cross-functional teams, has received some initial attention.

Whilst the overall vision encompasses integrated systems providing self-service access in all areas of the business, the focus of current work is on systems to enable learners to actively manage their relationship with the University, and on preparing staff to support this approach.

Learner Relationship Management (LRM) is a model based on commercially available Customer Relationship Management (CRM) systems, applied to the specifics of Higher Education. The core concept of CRM is the creation of a single, comprehensive Customer Profile, derived from an array of source databases, but accessible directly by the customer, or by staff acting on the customer's behalf, and enabling easy input of and access to all details of the customer's current status, history, and personal preferences. Through this mechanism the customer is provided with high quality service at reduced cost to the supplier, who also derives additional market intelligence from the data captured.

In HE, this involves creation of a unified learner profile, linked to the learner's current status with the University, and accessible either directly or by a member of staff on the learner's behalf. This model will enable an HEI to provide personalised and up to date

customer service either directly, which would be the preferred route for reducing staffing costs in student support, or indirectly via a staff member; whichever route is chosen should provide access to the same information and the same level of input and retrieval capability. It will over time enable the learner to conduct an increasing percentage of their interaction with the University, including learning delivery, via the LRM interface.

OSS was selected by JMU as an essential component of this approach, embodying as it does the core concept that a student system is ‘for’ not just ‘about’ students. As a working definition, JMU is describing a learner-centred system as one which is:

- Comprehensive - covering all aspects of the student life-cycle, from enquiry through to alumnus, and providing appropriate and full information throughout. OSS is designed to cover the whole student lifecycle within a single integrated product.
- Responsive - the system must be able to change swiftly, efficiently and effectively; changes in the University must not require upgrades to the system; changes in the University must be reflected in the system through user configuration. In OSS this is achieved through the user configurable Rules Engine
- Personal - Information presented to students or staff should be personalised and event-driven.
- OSS has configurable self-service, managed via the Rules Engine, which can be used to provide a highly personalised approach; it is integrated with Oracle’s Customer Relationship Management (CRM) suite, which JMU is considering implementing to complete the Learner Relationship Management vision.
- Accessible - the system should be channel independent - the means of access should not be dictated by the system; it should provide consistent student information whoever accesses and wherever accessed from. OSS is only accessible via the web from day one, and has rich self-service functionality.
- Inclusive - if the system, in the holistic sense, is to be learner-centred, then it is essential that the project engages with learners in the implementation process; this area is covered in the next section, ‘OSS Approaches and Adoption and Learning’.

2 OSS Approaches and Adoption and Learning

The essential concept that JMU is trying to embody in the project is that students are ‘inside’ and not ‘outside’ the system. Traditionally, student information systems are designed for use by University administrators in the management of the student lifecycle; students sit outside this, and are seen at best as objects to be held as data items within the system, at worst as disruptive influences who must be controlled and held at arm’s length. This traditional view has and is changing across the sector and the globe; increasingly the learner is seen as a mature and active participant in the management of his or her own learning, and this is the view that is taken at JMU.

Having accepted that student participation is essential for the effective delivery of learner-centred systems, the problem is then to devise a means of engaging with the students in the development and implementation of such systems.

As stated above, prior to the OSS project, JMU had carried out several of reviews of key student-facing processes: Student Acquisition, Student Induction and Timetabling. The methodology developed for the conduct of these reviews included the involvement of all stakeholders, and as a matter of course review groups had members representing the student body. JMU is currently carrying out the implementation of a revised Student Financial Management process, and again, there is Students' Union representation on the project team.

For the OSS project, learner input is being obtained in two ways:

- through the manner in which the project management is structured and resourced
- through the focus on Adoption and Learning

The project is structured according to the UK government's standard recommended approach to large Information Systems projects, PRINCE (Projects In Controlled Environments). This approach mandates the creation of a three-tier structure of Project Board, Project Management Team and Project Stage Teams, with a separate Project Office providing support and advice across this hierarchy. There is formal student representation on the project at the Board level, via the President of the Students Union, and on Stage Teams as appropriate, and specifically on those teams looking at processes or the student-facing aspects of the system, ie Self-Service; Induction; Acquisition; Student Finance; Research; Progression.

In addition, placement students from the Business School make up most of the permanent staffing of the Project Office, providing essential support, learning new skills, and providing additional student input.

Finally as part of formal project arrangements, the Self-Service Stage Team have been working with student focus groups to ensure that requirements for self-service access to OSS are driven by the customer, not just the supplier.

Within the project structure there is a specific Stage Team focussing on Adoption and Learning - the change management aspects of systems implementation which must be addressed if the three core components of technical systems, processes and people are to be brought together to obtain real benefits for the organisation. This team is developing a comprehensive adoption and learning strategy, including a communications plan, training programme, and awareness-raising campaign, targeted at both staff and students with the objective of ensuring that all participants in the system have both the ability and understanding to properly engage with new ways of working.

3 Progress and Findings to Date

The OSS Project commenced in February 2000 and has a final implementation deadline of December 2001. A significant aspect of the project is that it is both development and implementation at the same time; this adds an additional level of complexity as for implementation purposes assumptions have to be made about software functionality which may subsequently be proved wrong. Current project milestones are as follows:

- September 2000, Research Student Administration live

- January 2001, all future business processes defined
- March 2001, OSS version 11i installed
- September 2001, all business procedures, interfaces and data migration tested
- December 2001, all live students on system

In line with the delivery schedule, the Adoption and Learning Task Team is developing its strategy to ensure that staff and students are able to take advantage of the capability of the new systems as they are rolled out.

Findings to date in relation to staff and learner engagement with the project have fallen into two main areas:

- the OSS implementation is based on the assumption that JMU will manage business processes supported by appropriate use of ICTs. It is proving to be the case, however, that process management is not necessarily well understood or implemented across JMU. Where the University may have become more skilled in reviewing processes, difficulties arise in implementing a properly managed end-to-end process, working across functional departments and line management structures. JMU is addressing these issues through two routes. First, the Vice-Chancellor chairs a working group which is looking into the structures required to effectively manage business processes; this group is sponsoring the Student Financial Management project as a practical demonstration of business process management. Secondly, a key Adoption & Learning task is to deliver management & staff development related to the key behaviours and competences required for working in this new environment - learner and process focus; working in cross-functional teams; making effective use of ICTs. This work will be critical if the University is to realise the benefits of investment in systems and process reviews - on the other hand, if the University cannot manage its business processes and enable its staff to work effectively with them and the underlying technical infrastructure, then the investment will have no value.
- Student self-service focus groups have proved, as anticipated, that the learner view of the University is not as a series of separate functional departments, but as a single entity with which to interact in all aspects of the learning lifecycle. These groups have therefore not simply identified the administrative functions residing within OSS that they would like direct access to, but the whole range of facilities delivered by the University that they would like to see within the self-service development, including learning and teaching as well as learning management and administration functions. This finding confirms the need for JMU to develop the integrated Learner Relationship Management system for which OSS is both an essential component and a catalyst. It should be born in mind, however, that just as process management and learner focus may be a cultural shift for University staff, placing the learner at the centre and then trying to engage with students on this basis is an equally radical change for the student body. There are significant issues to be addressed if the balance of responsibility for managing learning shifts from the University to the individual learner, and whilst the OSS and other systems projects can provide the technical capability to support this shift, it requires the active engagement of learners to really make it happen. By actively involving students on the OSS project JMU is attempting to address this, but



we are equally aware that a much deeper engagement is required, and the Adoption and Learning Task Team are struggling to develop an effective approach.

