UIS User Experience Platform Update

Purpose of this paper

This paper summarises the initial progress investigating a User Experience Platform (UXP) following individual discussions with committee members. It covers:

- Review of UXP and Gartner feedback
- updates on technology investigations

Actions requested

Endorsement to continue the investigation into UXP by

a) undertaking a research/requirements capture activity
b) evolving the initial proof of concept based on user feedback (user centred design)

Provide a steer on the mobile strategy/approach, for example

a) undertake scoping exercise
b) explore in-house development options
c) explore external service providers

1   Introduction

The investigation into whether a User Experience Platform (UXP) is appropriate for the University was initiated in response to the report to the Council and the General Board of the Review of IT Infrastructure and Support (February 2013) which stated in paragraph 47 that all staff and students should have *"a configurable web portal providing access to email, internet and relevant university information services".* Paragraph 53 reiterated this point; *"It is unsatisfactory that students were not able to access all the services they needed through one, easy-to-use web portal … something which was said to compare badly with other Universities"*

Gartner define a UXP as an integrated set of technologies used to provide interaction between a user and a set of applications, processes, content, services or other users. A UXP has several components, including portals, mashup tools, content management, search, rich Internet application (RIA) tools, analytics, collaboration, social and mobile tools. It may be delivered as a suite of products or as a single product.

According to Gartner, UXP vendors tend to be focused on a specific audiences i.e. external (customers) or internal (employees), with little crossover between the two. It is considered that the external customer facing offerings are more advanced. Alongside an audience focus, vendors also differ on the level of pre-built integration with other applications, with some UXPs offering a high degree of pre-built integration with proprietary systems from the same vendor, and others offering open standards but fewer delivered integration options.

The UXP market is being dominated by a mixture of Portal and Content Management vendors who are expanding the capabilities of their offerings either by enhancing current products, or by acquisition/integration with other products.

The current trend is for organisations to assemble their own UXP from a mixture of best-of-breed components, rather than purchase a single product or suite from a single vendor.

It is recognised that the implementation of a UXP cannot improve user experience in isolation, which will also require a review of the activities/processes undertaken to optimise them for the relevant community (e.g. academics, students and administrative staff). The redesign of activities to enhance the usability for the occasional user is expected to be part of an iterative development cycle that aims to provide incremental improvements over a period of several years.
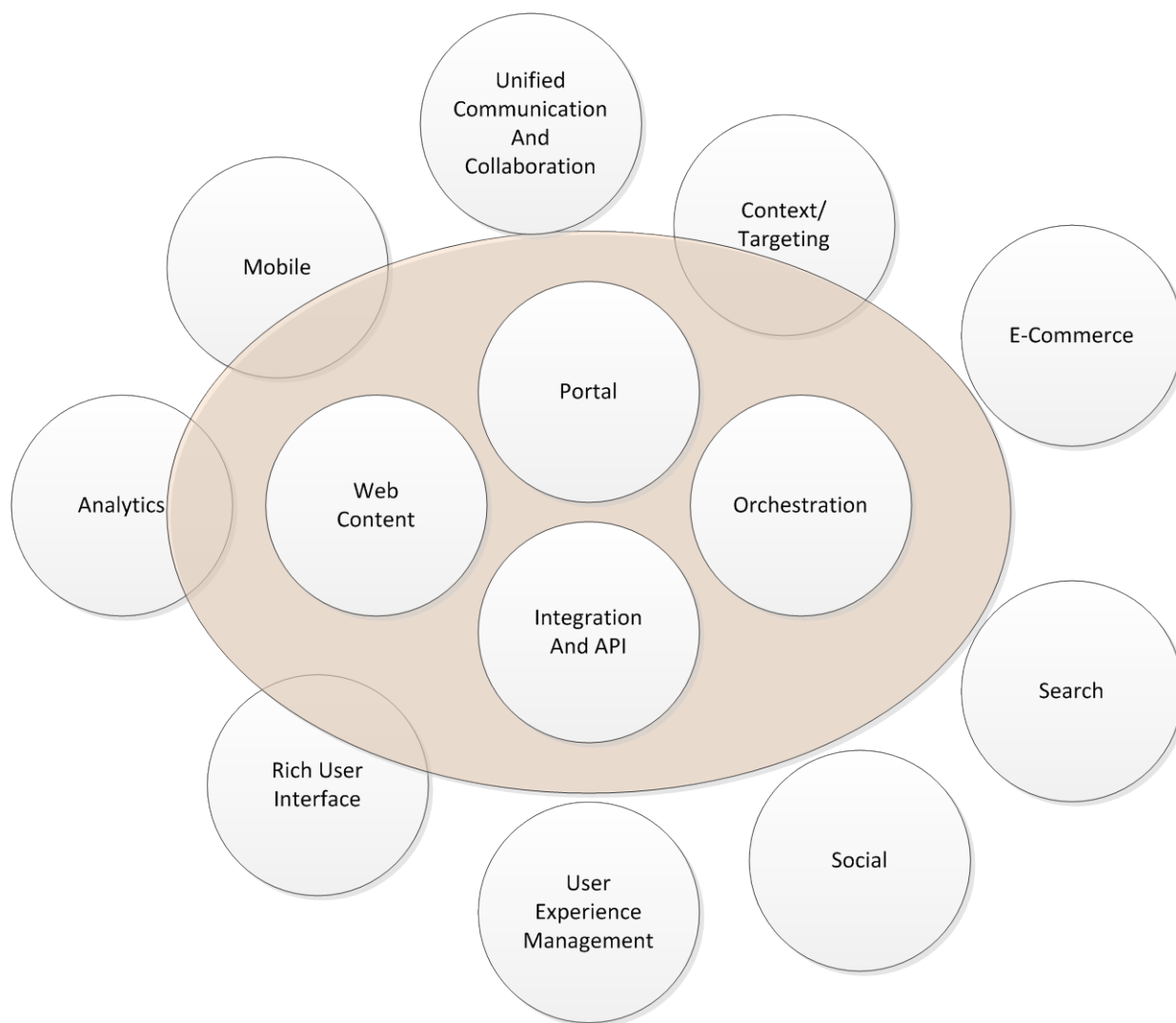
Adapted from Gartner MarketScope for User Experience Platforms 31 January 2014

2   Progress to Date

The UXP project proposed two areas for investigation and user input, namely Portal and Mobile. To date, initial work has started in the Portal area considering technical feasibility and looking to build a proof of concept that could help support any future requirements and user centred design phases. Work on the Mobile area is awaiting discussion on University priorities and guidance on whether we should look to develop an in-house capability, or use an external service.

2.1   Portal Proof of Concept

Following both industry best practice and advice from Gartner, the project has adopted a "start small and iterate" approach. Since we are looking to utilise open standards and also minimise software costs the proof of concept is being built using Liferay, an open source portal platform that Gartner rated as "Positive" during their 2014 Market Scope for UXP. (Ratings are at five levels; Strong Negative, Caution, Promising, Positive and Strong Positive.) Liferay does offer commercial level support that comes with Shibboleth (Raven) integration, but this has not been purchased as part of the proof of concept work.

It is anticipated that following the more detailed analysis phase, and prior to any major development work being undertaken, a formal product evaluation would be conducted to determine if Liferay is still an appropriate choice or another option would better meet the requirements of the University.

2.1.1   Technology evaluation

The initial phase of the project has involved the evaluation of Liferay as a suitable platform to build the proof of concept, to understand the level of user configuration possible, and to gain a better understanding of the options for integration with other applications.

In the period from December 2014 to Jan 2015 the following milestones were achieved:
   (a) Initial meetings with members of the User Needs Committee.
   (b) Installation of proof of concept platform (Liferay).
   (c) Building a basic portal to help understand the technology and support discussions during subsequent phases of the project.
   (d) Established working API between Liferay and CamSIS to demonstrate integration capabilities.

2.1.2   Next steps

If endorsed by this committee, during the period from March to September 2015, UIS plans to achieve the following milestones:
   (a) To conduct a requirements gathering exercise to determine the needs and priorities of the various communities (academics, students, administrative staff, etc.). This will include relevant metrics on system usage across the communities.
   (b) Implement the necessary analytics/metrics to allow an accurate measure of both current state and the results of any changes made.
   (c) To evaluate the necessary levels of system integration to support user requirements and associated ongoing maintenance costs (this is also required for any Mobile development)
   (d) To utilise user centred design concepts in the creation of a high-level design (incorporating responsive web design techniques).
   (e) To determine appropriate communication plan for the project.

UIS expects to provide regular updates to the committee on project progress during this period.

3   Mobile Strategy

Although the Portal will include elements of responsive web design, the majority of organisations and UXP vendors offer separate mobile applications to access a subset of services available via the Portal. The mobile applications may also offer other services such as:
   1. Transport information (live bus timetables, car park capacity, etc.)

2. Directions to lecture rooms, examinations, etc.
3. Urgent Safety and Security information
4. Contact information (with search)
5. Weather forecast

3.1 Mobile options

Within UK HE, institutions have opted for two main mobile strategies. Either build a solution internally or use a commercial offering. The commercial offerings can also be split into solutions that are internally managed, and those that are externally hosted.

This paper asks the committee to consider how the University should look to improve the current disparate mobile offerings e.g. the official University iOS application, CamSIS Mobile, etc. The proposal is to conduct a requirements gathering exercise (potentially alongside that for Portal) to determine the University priorities in this area.

Dr Steve Smith
17 February 2015