Digital Estate Working Group – Apps Position Paper

This paper outlines the position of the digital estate working group on the development of UCC apps for mobile devices.

# Introduction

An app (short for “application”) is a piece of software developed for mobile devices. There are many different types of app – from a simple game to apps for booking hotels to apps for accessing bank accounts and transferring funds. An app is just another way to provide the end user with access to particular services and information.

There are two major platforms for apps – Google Android and Apple iOS (with Windows Mobile also becoming more significant in recent times). It is worth noting that the student population tends towards Android devices as these tend to be priced at this particular market.

In general, an app should provide value to the end user and help them achieve their goals quickly. Apps make use of specific device native functionality such as location and notification services of the device.

But apps are not the only way for an organisation to provide information and services to users of mobile devices. There is a strong trend towards the development of Responsive websites. These are websites that display and reflow information in different ways, depending on the screen size of the end user. The main UCC website has been developed as a responsive website.

The focus of any development should be the end users actual needs and not on perceived need, driven by peer pressure from competitors. There is often a drive towards app development because some people feel that everyone else has one so we should too.

# Challenges

## **App development is expensive:**

A basic web app can cost between €15K and €30K. There needs to be a clear business imperative for the development of an app instead of a responsive website. An app is only available to mobile device users whereas a responsive website is available to users across a wider range of devices.

## **App promotion also costs:**

Once an app has been developed, people need to be able to find it (via the Google play store or the Apple App Store). If we are going to spend money on promoting an app, that money might be better spent directing people to a website that is more widely accessible and contains more detailed and richer content across a wider array of devices.

## **App development is complex and requires commitment to the full life cycle of the application:**

Given a user base across a broad range of mobile devices, it is not just one app that needs to be developed but several different apps with several different coding platforms so that the app runs on Android, Apple, Windows and other platforms. A responsive website on the other hand just needs a browser to run, as it is developed in HTML, CSS and jQuery – technologies that are device independent.

Once an app has been developed it also needs to be maintained and updated as security issues and other changes to the underlying technology emerge.

## **Apps need to be more than just an empty piece of software:**

An app should do something that you cannot do with a responsive website that returns value to the end user – it has to be more than just a marketing gimmick. An app that provides little or no value to the user is unlikely to be used on a regular basis. There needs to be a clearly realisable benefit to the app. That benefit maybe in driving student engagement in a particular area of the university’s business or allowing students to perform actions more easily and hence enhancing the student experience. This needs to be balanced with the costs of developing and maintaining apps.

## **Our backend systems need to be more integrated:**

We would still need to do significant work in order to let an app access the systems and information that a student would find useful. If it is difficult to achieve this integration at the desktop level, it is going to be even more difficult in the context of an app.

## **Key Metrics**

1. How many downloads have there been of the app?
2. How long do end users spend using it?
3. How often do they access the app?

# When is an app appropriate in the university context?

There are times when the development of an app is appropriate:

1. Location based services (such as route finding and check-in)
2. Event services (providing event listings that are bookable)
3. Dynamic information (personalised based on the end user)
4. Personalised timetabling
5. Easy access to restaurant menus and facilities
6. Access to online services such as email, student records, blackboard, library services
7. Engagement of the end user, making it easier to do the things that they want and need to do.

Basically, when the end user is actively engaging with the service or information, an app may be appropriate. But it must be noted that if these services themselves are also designed responsively, it reduces the specific need for an app.

On balance, given that a responsively designed site will provide much, if not all of what an app can provide, for a UCC unit to commission the development of an app, they need to describe a problem that absolutely requires an app as the solution. Otherwise, we would advocate investing such resources that may be available into improving the responsiveness and content of the unit’s web presence.

# Further Reading

1. “Make sure the app route is the smartest option” by Katie Roche, Irish Independent, 13 June 2013 (<http://www.independent.ie/business/small-business/make-sure-the-app-route-is-smartest-option-29341069.html>)
2. “Mobile Application Primer Report” from HEANet, Telefonica, iQContent (The objective of this project was to produce a prototype mobile application for UCC while also to document the design and development, to assist other HEANet clients who are considering embarking on mobile application project – report available on request).