

Meeting the Needs of the App Generation: OUM Virtual Store

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Abstract

This paper highlights the need to look into setting up a Virtual Store to house the University's teaching and learning materials. As the leading ODL provider in the country, Open University Malaysia (OUM) has been producing a wide range of learning materials ever since it was first established in 2001, ranging from print modules to technology-enhanced learning materials such as web-based modules, iLectures, iTutorials and iRadio broadcasts. However, while much thought has been put into the development of the learning materials, less has been paid to the issue of storage. This paper presents the case for setting up a Virtual Store utilizing the App environment. The App platform is trendy and popular with the younger and more tech-savvy generation. It is also easy to use, cheap, flexible, and engaging. As such, setting up the OUM Virtual Store via the App platform would not only be practical but also serve to enhance the University's image. Collaboration with professional App developers is recommended to facilitate the transfer of technology. However, it is imperative that the University be an integral part of the development team for quality control and intellectual property rights issue purposes. The paper also recommends that the Virtual Store embeds a special functionality to host Open Educational Resources (OER) so that users can choose to purchase-and-view selected learning resources, or access free-share materials.

Introduction

Ever since Open University Malaysia (OUM) was first set up in 2001 offering just four programmes to 753 learners, it has grown by leaps and bounds. It is now the leading online and distance learning (ODL) university in the nation, with more than 56 programmes and a cumulative enrolment of over 120,000 learners. The number of graduates has surpassed 41,000, of whom approximately 25,000 are in-service teachers who acquired bachelor's degrees through OUM's collaboration with the Ministry of Education.

The University has made its mark not only locally but also abroad, setting up collaborations with premier institutions of learning, including Arab Open University (Bahrain), Vila College (Maldives), Ho Chi Minh City University of Technology (Vietnam), University of Science and Technology (Yemen) and Accra Institute of Technology (Ghana).

Learners in different corners of the world enjoy a quality learning experience via the blended pedagogy model. They select from a wide range of learning materials, catering to different learning styles, including print and web-based modules as well as learning objects. However, while the University has paid much attention to developing quality learning materials, there not been much concerted efforts, to date, to look into the systematic storage of such materials. Perhaps Bill Gates (2010) put it most succinctly when he said: "There are a lot of online materials being developed, but they have not been organized in a way where it is easy to find the best material that fits what you want to do... We need a simple way of taking all of the education pieces and organising them ..."

This paper attempts to address this issue by highlighting a proposed initiative to set up a Virtual Store to house the University's diverse range of learning materials, meticulously developed over the past ten (10) years. It is hoped that by setting up the Virtual Store, OUM's repository of learning materials will be made readily available to a wider segment of learners keen to equip themselves with new skills and knowledge. A Virtual Store offers learners the freedom to select the type of learning material they wish to access,

whenever they wish to access, and in whatever format they prefer. Ultimately, this translates into more equitable access to education and greater autonomy in learning, in line with the principles of democratisation of education.

The Early Years: Development of Learning Materials

When OUM was established in 2001, the primary academic focus was on coming up with new programmes to meet market demands and learners' needs. Hand in hand with this were efforts to develop quality learning materials to support learners. The blended pedagogy model adopted by the University meant that learners could attend face-to-face tutorials, engage in self managed learning and participate in online or web-based learning. Towards this end, print modules were developed, together with online learning materials such as iLectures, iTutorials, iRadio broadcasts, audiobooks, etc. The task of developing learning materials was entrusted to the University's Centre for Instructional Design and Technology (CiDT).

Over the past decade, more than 1400 modules were developed by dedicated teams at CiDT – comprising editors, instructional designers, graphic artists, desktop publishers – working in concert with external subject matter experts and faculty members who are authorities in the various fields. From 2010 onwards, HTML modules, which are more interactive, complete with coloured graphics audio, video, Flash based interactive elements and animations were also made available to learners via the University's learning management system known as my Virtual Learning Environment (myVLE). As of May 2012, 618 HTML modules have been made available to learners.

Consolidation: Enhancing Quality

Widely acknowledged as the leading ODL institution in the country, OUM has now entered a consolidation phase, where many efforts are focused on the fine-tuning of the programmes offered to ensure they are industry driven and effective in preparing learners who are ready to compete on the global platform. Coupled with this are efforts to enhance the quality of learning materials. Among the initiatives already in place is a

Module Upgrading Project which aims to ensure that modules are edited so as to be as error-free as possible. The year 2013 should see the introduction of better quality Red Spine modules with stable content (red to indicate the modules have undergone additional enhancement process). In the pipeline is a proposal to set up a Virtual Store to house selected OUM learning materials, including Red Spine modules in PDF format, HTML modules, iLectures, iTutorials and iCasts.

Innovation: The Case for a Virtual Store

The need for setting up the Virtual Store is due, in part, to the rapid changes in technology in the education arena. Where previous generations used to come to class with books and pens, today's learners are equipped with smart hand phones, iPads, tablet PCs, laptop computers and portable media players like iPods.

While such developments have opened the door for ODL institutions to explore new modes of teaching and to transform curricula, including inventing media-rich forms of content to suit different learning styles and leveraging on technology as platforms for collaboration, it has also propelled us to think seriously on how to store the plethora of all the available digital learning materials.

While OUM has paid much attention to developing good learning materials, there has not been enough thought being put into setting up a good repository for the materials produced, so that they may be made readily available and easily accessible to all.

Setting up a trendy online store for holding quality learning materials that can be made accessible and available to anyone, any time, from any corner of the world, will redefine ODL, more so if the store comes with a discerning factor – the ability to direct users to a “pay-and-access” or a “free-share” collection of digital resources.

This “free-share” collection can be made possible by embedding the University's Open Educational Resources (OER) as an added functionality within the Virtual Store to promote free sharing of educational learning materials, as licensed by the Creative Commons. Sir John Daniel (2012) described OER as “educational materials that may

be freely accessed, reused, modified and shared”. There is a lot of potential in OER, especially in difficult times when “... free and open online resources can make the economics of blended learning enticing” (Horn & Staker, 2012). It is proposed that the OER allows all users to contribute and share their OER resources.

The end result would be a Virtual Store capable of offering rich multimedia content that is easy to access via both online and offline modes, either on a pay-and-purchase, or a free-share, basis. And if this is done using the latest technology, which happens to be the App environment, there will be the added benefits of the Virtual Store not only in enhancing access to education but also boosting the image – and branding – of the University as well as for the nation.

Rationale

The case for setting up a Virtual Store via the App environment is thus clear:

- a. App is easy to use. Defined simply, App is just an application on a phone or tablet device that facilitates users to do things like checking out the weather, tuning in to the latest news, tracking finance, etc. One does not need to be tech-savvy to use App – just a simple click at the STORE icon via the tablet device will show the apps that can be downloaded and made immediately available for use.
- b. There is an App for practically everything, so setting up the OUM Virtual Store in the App environment increases the University’s visibility. Ultimately, this contributes to building trust and confidence in the OUM brand;
- c. App is flexible, with interesting features such as push notifications, instant updates, one touch linking or calling, a bookshelf, etc;
- d. Most Apps are free, or available for a small, one-time downloading fee;
- e. App is engaging and able to keep learners engrossed;

- f. It has a social networking function which promotes camaraderie and will make learners feel part of the OUM community. Many pioneers of educational App – for instance, Missouri State University, University of Nebraska, College of Charleston, the College of Saint Rose, University of Virginia, University of Georgia and University of Texas – have gone the extra mile by incorporating features that allow learners to download wallpaper and ring tones, watch videos online, etc.
- g. Setting up the Virtual Store will facilitate content aggregation and enhance the quality of learning materials produced;
- h. It will also facilitate easy distribution of learning materials to learners who can preview, select and click to purchase;
- i. There is potential for income generation as it reaches out to a world audience;
- j. After the initial capital outlay, there is reduced printing, storage and distribution costs.
- k. The Virtual Store will boost the nation’s OER initiative, giving it a “trendy” image which should capture the interest of the younger generation. Ultimately, this promotes the nation’s Lifelong Learning initiative.

Boost for OER and Lifelong Learning

As the first ODL education provider in the country, OUM plays a significant role in championing the cause of lifelong learning and helping people realise their ambitions of attaining higher education. The launch of the national blueprint on the *Enculturation of Lifelong Learning for Malaysia: 2011-2020* by Deputy Prime Minister YAB Tan Sri Muhyiddin Yassin on 14 November 2011 is both testimony and endorsement of OUM’s efforts to make lifelong learning a culture among Malaysians.

This blueprint, developed by OUM in collaboration with the Ministry of Higher Education (MOHE), listed strategies to reinforce lifelong learning infrastructure and mechanisms, improve public awareness and participation in lifelong learning programmes, ensure the continuity and appreciation of lifelong learning among Malaysians, and provide funds and incentives to support lifelong learning programmes. The blueprint was highlighted at the International Conference on Lifelong Learning 2011. Co-organised by MOHE, Universiti Kebangsaan Malaysia and OUM in collaboration with e-ASEM (Asia-Europe Meeting), the conference saw more than fifty (50) papers presented by speakers from Australia, China, Denmark, India, Indonesia, Iran, Japan, Korea, Latvia, Pakistan, Saudi Arabia, Slovak Republic, Taiwan, Thailand, United Kingdom, Vietnam and Malaysia.

Clearly then, the proposal to set up the Virtual Store, with a dedicated section for OER, will help promote lifelong learning and boost the nation's effort to become a regional hub for education of world class stature.

Project Ownership

As the App environment is new, it makes sense for OUM to collaborate with experienced App developers for various reasons. Basically, such a move would:

- Result in a more gradual learning curve;
- Minimise trial and error;
- Shorten the development period; and
- Free time for exploring different features in the App environment.

In other words, OUM proposes to outsource the development of the platform to professional App developers to ensure smooth and timely development, delivery and transfer of technology.

Several App developers have already been invited to showcase their products and company portfolios, with the final choice narrowed down to a local company, Fireworks. Fireworks is to work in close consultancy with a dedicated OUM Virtual Store team, comprising of selected staff from CiDT and headed by its Senior Vice President. This is

necessary to ensure the University exercises quality control and retains intellectual property rights to all materials in the repository.

Proposed Content

The proposed content in the OUM Virtual Store comprises a diverse range of learning materials, including the following:

- E-modules (PDF and HTML formats)
- Learning objects
- E- publications – *OUM Today*, *Learners' Connexions* and *Tutor Connexions (TCX)*
- iRadio learning segments, iRadio learning capsules, audio books and examination-based materials for the visually impaired
- iLectures
- iTutorials
- courseware
- Lectures via YouTube, etc.

The Virtual Store will also provide the gateway for learners to access OUM's online learning portals such as: Educational Portal for Internet Courses (EPIC); the Math Resource Centre, Electronic Gateway To English Resources (eGATE); portal to support postgraduate students (Myreach).

Besides the General Information portal which will update users as to the latest news about OUM in terms of events, visits by international partners, upcoming conferences, etc, users can also use the Virtual Store to access OUM downloads like wallpaper, e-cards, images, etc.

Timeline

The timeline for setting up the Virtual Store and making it fully operational is tentatively set as follows:

- a. Preliminary stage (Jan~Aug 2012)
 - Identifying and selecting the “best” App developer
 - Awaiting approval and budget

- b. Development (Sept~Oct 2012)
 - Identifying categories. Tentative ones include the following:
 - ❖ About Us;
 - ❖ OUM Store – Faculty, Course, Titles, Topics, Resources;
 - ❖ Bookshelf;
 - ❖ Open Educational Resources;
 - ❖ Contact Us;
 - ❖ Membership.

 - Identifying and selecting learning materials:
 - ❖ Red Spine Modules
 - ❖ Star Modules
 - ❖ Courses with large number of learners
 - ❖ Courses with rich multimedia and interactive content

 - Screening and adapting materials to ensure only the best are put in the Virtual Store so as to enhance the University’s and nation’s image.

- c. Upload and testing (Oct~Nov 2012)

- d. Launch (Target date: Dec 2012, in conjunction with ICI-12 Conference)

Funding

Open University Malaysia had recently approved the funding for this project.

Conclusion

It is clear that setting up a Virtual Store is both fitting and timely, given the fact that technology is increasingly becoming both ubiquitous and integral to learning today. The volume of learning materials produced and made available by the day has been overwhelming and as such there is a real danger of learners getting swamped by the avalanche of materials. To avert this, efforts need to be directed in coming up with a proper system of storage so that there is some form of gate-keeping of learning materials, with options for quick and easy retrieval, either via the pay-and-access mode or the free-share OER option.

The OER functionality in the Virtual Store is something that is worthy of attention and discussion. The OER movement is "... developing fast but it needs government involvement to bring it fully into the mainstream of education. Moreover, governments will be major beneficiaries because of the potential of OER to improve the cost-effectiveness of their large investments in education" (Daniel, 2012).

As OUM enters its consolidation and innovation phase, it hopes to explore new ways of harnessing technology to enhance the uptake of quality learning materials that will be made readily available and accessible for learners and, at the same time, come up with new programmes that will give learners the extra edge to compete globally and meet the challenges of the 21st Century workplace.

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