

The disruptive approach...No more library systems!.....NOTE: This is 'food-for-thought' based on various readings and influences (see part two -notes). It is meant as a provocation to discuss and challenge. I am not *advocating* this as a solution. *Names of product/systems* mentioned in the scenario have been made up!

2020: An undergraduate student talks about 'the Library'

'The library? The system's great and I use it all the time. It's really easy and I get everything (pretty much) I want. Everything is centred on my course and I can easily focus on the most important tasks I need to get done-like my next assignment. I know what I have to do and have the resources on tap to do it. I like the way that I can track my GPA score and get suggestions for reading, tasks or resources that can help me improve it. My score was falling a bit last year so I redeemed some library points to get the accelerator package with access to extended resources. So when I had my regular 'viva' session with my lecturer I passed with flying colours. It's worth doing that sometimes because if I get over a 3.3 I get a part of my course fee refunded-- and that reduces my student debt.

I like the way the library helps me to work with others. When using a *CoursePiece* you can see its 'pulse' gets stronger as comments are added and more students are using it. I like to see what others thought of what I've just read and get see interesting stats, such as how many others are reading with me. We connect share and discuss what we like or dislike or what we found especially useful. I make connections not only with students at my uni but also with students all over the world. I get some really interesting perspectives that way.'

2020: Director of learning and teaching

'We shut the library and outsourced the activities we needed a few years back as part of the move to online learning. The old library building is now our campus *LearningSpace*. That also means of course we got rid of all our library systems and the VLE. The P___xxx '*ShareLearn*' cloud based platform does it all. In effect it's a commercial shared service used by universities round the world. It also provides content and infrastructure for schools so we've been able to save money by working a lot more closely with out 'feeder' secondary schools. The '*Library*' is now simply another app on the student's PD (personal device). The content is much more integrated with the courses now. We have a pay-per-use model for content and paid for resources are mixed with free OER. The world-wide 'collective intelligence' of *ShareLearn* means we have data to judge the quality and effectiveness of content measured by learning outcomes and cost. We can see not only what resources get used but what resources have the biggest GPA impact. Now the creation and selection of learning content is done based on proper metrics. It's a shared activity in a sense between students and academics'.

PART TWO: Explanatory notes and references

Disruptive innovation

The scenario imagines that a company or other organisation has looked at the 'problem' from a 'disruptive innovation' stance as advocated by Clayton Christensen.¹ So instead of taking the normal 'sustaining' innovation approach (which is what all existing library system developments do (URM, ERM, Open source, web scale etc) it looks at how those approaches might be disrupted. This 'disruptive' approach eschews the mainstream which means most university libraries will dismiss it initially as not right for them. It will typically avoid some of the complex features and approaches of existing systems and may be seen as not meeting the (complex) needs of many libraries and their users. The (initially) small number of institutions that take this disruptive route will get rid of pretty much everything we currently think of as comprising a library system infrastructure.

A different approach to meeting user needs

In taking this approach the company/organisation will have looked at needs and requirements in a different way. It may well have used the 'jobs-to-be-done' (JTBD) methodology advocated by Christensen. Rather than a conventional response to 'needs' or functional requirements the JTBD approach asks what 'problem' is the user trying to solve, how do they do it now, what alternatives they use, and consequently how might it be solved more simply and conveniently at less cost.

The HE context

Clayton Christensen applied his 'disruptive' analysis to (US) schools in 2008 and universities in 2011². His book 'The innovative University' is clearly very US focussed (and doesn't mention libraries) so might easily be dismissed by people involved in UK Higher Education. However the underlying issues and trends are more widely applicable. At heart he sees a need to deliver better quality education at lower cost and views technologies such as online learning as being critical to achieving this. Some of the issues he raises and themes he talks about are:-

- *The strategy of universities tends to be one of imitation (of the top ones) rather than innovation. This tends to solidify past educational practice among traditional universities making them more expensive but not fundamentally better from a learning standpoint. This is essentially a 'sustaining' innovation model.*
- *High quality online learning is the major technological disruptive force³*
- *There is great disruptive power coming from for profit institutions (esp. in USA). They profit from their extensive use of online technology. E.g. the University of Phoenix had revenues of \$3.8 billion in 2009. In same year it enrolled 355,800 new students...more than the 10 campuses of University of California.*

How does this play in the undergraduate student part of the scenario?

The increasing uptake of tablet devices such as the iPad is having a dramatic impact on how users interact with content. The scenario suggests that ‘resources’ and learning have become increasingly intertwined in order that students can get their ‘jobs’ done better. There has always been a problem in how libraries interface with the learning and teaching environment. Typically integration between library management systems, VLEs and reading list system has been weak and problematic.⁴ Developments we are already seeing in textbooks⁵ and in ‘trade’ (i.e. rather than scholarly) ebooks suggest what a more integrated and ‘social’ approach might look like⁶. What we think of as social media forms an integral part of the ‘experience’. So in the scenario the ‘library’ is the device itself (or something like an ‘app’ running on the device) and the student is provided with a very integrated learning environment that includes the learning tasks and the content combined together and available at all times. There is also close feedback to academic performance.⁷ This then *becomes* the library system, and indeed the VLE.

How does this play in the Director of learning and teaching part of the scenario?

An organisation such as Apple, combined perhaps with Pearson and other content providers might provide a very compelling offer to a university to transform the library and learning environment. Outsourcing is much discussed at the moment.

Such an approach can be imagined as one that has a highly focussed approach to content being better coupled with learning in order to better meet the real need of students. At the heart of this ‘disruptive’ proposition to the university would be a converged digital library and learning offering that could enable significant economies. From the library perspective alone the university might decide to no longer ‘waste’ resources on librarian selected material that is never used⁸. It might also decide to no longer ‘waste’ resources on librarians leaving the selection of course content to academics assisted by the much improved metrics from the new environment. It looks very unlikely that a conventional library or VLE system would play a part in the offering.

To get the full benefit of such an approach the university would transform to a completely online learning environment and abandon courses that could not be delivered in this way. It and might also abandon research. Christensen argues that such a strategic focus could increase the *quality* of the course and the student experience. The efficiencies gained would allow academic staff to be paid more than at competing institutions. Such an environment might also enable an *increase* in the time students spend with lecturers—online or indeed physically. Instead of a library full of stuff that isn’t used there would be a state of the art learning space that promotes collaborative learning.

Finally one of the characteristics of a disruptive innovation approach is to provide solutions for what were previously considered ‘non consumers’. The scenario suggests that the university is providing service for its ‘feeder’ secondary schools. It might go further and offer

services to alumni as part of their continuing education—and in doing so maintain a further subscription based revenue stream. An important aspect to Christensen’s notion of disruption includes business model innovation as well as technology. The two often go hand in hand

¹ For background see my recent article; ‘The positive power of disruption’. SCONUL Focus 52 (November 2011) <http://www.sconul.ac.uk/publications/newsletter/52/2.pdf>

² ‘The Innovative University. Changing the DNA of Higher Education from the inside out’. Clayton M Christensen and Henry J Eyring. Jossey-Bass (Wiley). 2011

³ For some of its disruptive potential see; ‘Online learning course start-ups offer virtually free college’ By Jon Marcus, Washington Post. 1st February 2010 http://www.washingtonpost.com/local/education/online-course-startups-offer-virtually-free-college/2012/01/09/gIQA6J6VGQ_story.html

⁴ For a recent summary and analysis see: ‘A perspective on resource list management.’ By Ken Chad. Library & Information Update (p.39-41). CILIP June 2010. http://www.kenchadconsulting.com/wp-content/uploads/2010/07/Perspective_on_ResourceList_Management_CILIPUpdate_June2010.pdf

⁵ For example several initiatives, are described in ‘The new wave in education – Interactive textbooks!’ By NovaNews. January 23, 2012 <http://novanews19.wordpress.com/2012/01/23/the-new-wave-in-education-interactive-textbooks/>

⁶ The ‘pulse’ idea for example is taken from ‘Kobo brings books to life with Kobo pulse™.’ By Anna Bittner. Kobo blog. 27th September 2011. <http://blog.kobobooks.com/kobo-brings-books-to-life-with-kobo-pulse%E2%84%A2>

⁷ The reference to GPA score was influenced by: ‘Two tribes’ to the wall? Elite set may adopt GPA. US system seen to offer a more continuous scale, say breakaway group. By Simon Baker. Times Higher Education 23 June 2011. <http://www.timeshighereducation.co.uk/story.asp?storycode=416582>

There has been some interesting work on correlating the use of library resources with academic achievement – notable the JISC Library Impact Data project <http://library.hud.ac.uk/blogs/projects/lidp/about/> See also: Stone, Graham, Pattern, David and Ramsden, Bryony (2011) Does library use affect student attainment? A preliminary report on the Library Impact Data Project. LIBER quarterly <http://eprints.hud.ac.uk/11011/>

⁸ One of the main rationales for ‘Patron Driven Acquisition (PDA)’ models for the selection of ebooks is that users are ‘better’ at selecting resources than librarians. –Much library selected material remains unused. See for example: ‘Reader Choice, Not Vendor Influence, Reshapes Library Collections’. By Kristin Murphy for The Chronicle of Higher Education 7 November 2010 <http://chronicle.com/article/Reader-Choice-Not-Vendor/12527>