The commercialisation of MOOCs

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Abstract

Massive Open Online Courses (MOOCs), a significant disruptive innovation in the current higher education environment, may threaten the long-established business paradigms that have underpinned higher education business models for decades. Disruptive innovations have the ability to improve the way a product is delivered, attract a different set of consumers (Christensen, 1997, p. 15), and lower prices in the market. MOOCs are courses delivered online to the general public for free (Barber et al., 2013, p. 19). As they do not have any entry requirements, they provide unlimited participation and open access to online resources with support from fellow learners through online forums. The provision of MOOCs at no cost would appear to be, on the face of it, a noble and altruistic endeavour. However, the underlying truth is that all businesses must inevitably be sustainable and supplying product gratis is not a sustainable long-term business model (Cusumano, 2012). Inevitably, MOOC providers, and those considering this space, are looking at ways that MOOCs might supplement their current business models. As traditional business models of charging customers directly for products and services are often ineffective online (Dellarocas & Van Alstyne, 2013, p. 25), this necessitates looking at ways to use MOOCs to develop new revenue channels. This paper explores how MOOCs might be commercialised in support of existing higher education business models.

Keywords: MOOC; innovation; business models; commercialisation

Nomenclature: As nomenclature differs throughout the higher education sector, for the purposes of this paper the term ‘course’ will be taken to mean a discrete unit of study that, when combined with other courses in a specified form, leads to the award of a higher education qualification.

1. Introduction

The emerging 21st century higher education paradigm suggests commercialisation replacing the collegiality of prior times, with higher education providers, both public and private, becoming fierce competitors (Leeland & Moore, 2007; Barber et al., 2013, p.19). This shift requires a high level of entrepreneurship to ensure an institution can promote its point of difference through, amongst other things, the innovative ways it delivers courses.

Students today are informed shoppers; they ask tough questions and compare products rigorously. Notably, the affordability of higher education is decreasing. The National Center for Education Statistics in the US quantified this by noting that “between 2000/01 and 2010/11, prices for undergraduate tuition, room and board at public institutions rose 42%, and prices at private, not-for-profit institutions rose 31% after adjustment for inflation” (2012, Chapter 3).

This economic squeeze has resulted in non-traditional students as the norm. According to the US Department of Education, 75% of today’s student consumers juggle some combination of family, job, and education while trying to commute and attend classes (Bloom, 2012). As well, students are taking on more debt and more students are borrowing; student debt in the U.S. more than doubled in the last decade (National Center for Public Policy and Higher Education, 2008).

This increasing debt has resulted from a shift away from publicly funded higher education to a user pays model, in some cases supported by government income-contingent loans. The share of private funding at tertiary level increased in 20 of the 26 countries with comparable data between 2000 and 2008 (Schleicher, 2011).

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Along with advances in technology, the shift in the typical higher education consumer, coupled with a combination of globalisation and technology, has been a significant catalyst for the development of MOOCs.

According to Barber et al. (2013, p. 19), MOOCs are courses delivered online to the general public for free. However, the concept of "free" has multiple meanings in the business world. Free may mean that a product is transferred to the consumer gratis with no need for any monetary transaction. Conversely, free may have a different meaning in the concept of "buy one – get one free" where free actually means "at no extra cost" but a monetary transaction will nevertheless take place. In the case of the overwhelming number of MOOCs free means gratis.

How then can a business have long-term financial viability based on a business model where product is given away? This paper will explore ways that higher education providers might add value to MOOCs to ensure that even though there is no revenue from the initial interaction with the consumer, valuable income streams can be secured.

1.1. Loss leading

There is a common business practice of loss leading, selling products at prices below cost in order to stimulate the market and notably the sale of more profitable goods and services–a bait to catch the fish. For example, companies that sell razors often do so below cost knowing that customers will need to continually buy replacement blades, which is where the company has higher profit margins. Similarly, inkjet printers are commonly sold at a loss in order to stimulate the sale of replacement ink cartridges, which is where the profit lies.

Using MOOCs to introduce a new customer demographic to higher levels of study or knowledge may "lead" to subsequent sales of other products. For example, MOOC's might act as a "taster" for some consumers to determine if they like a particular discipline area and would consider further studies. In this case a free MOOC may lead to a participant enrolling in a full fee-for-service course with an institution. In essence the MOOC becomes part of the institution's marketing strategy. Furthermore, the MOOC may allow the student to gain some credit towards a qualification, further incentivising continued participation on a paying basis.

A MOOC also offers potential students an insight into the quality of a higher education provider through the content and support provided in the MOOC. For example, if a MOOC participant was suitably impressed with the content and support provided as part of a MOOC they might be more disposed to participate in a full fee-for-service course with the same provider. If this is the case, the way a MOOC is run and supported becomes critical in achieving a potential further sale. A MOOC that delivers substandard content with little or no support from the institution may in fact damage that institution's reputation and turn away potential students.

In the final analysis, a loss leader is only of value if it leads to the generation of greater profit otherwise the sales effort, in and of itself, is not sustainable. Therefore a MOOC offered for free must deliver some tangible financial benefit in some other form. This paper will now explore some of those possibilities.

1.2. Complementary services

While a MOOC's content may be free, MOOC consumers might pay for other services that complement the MOOC, such as assessment and certification. This has been referred to in the literature as "unbundling" (Anderson & McGreal, 2012, p. 381; Barber et al., 2013, p. 32; Ryan et al., 2013).

Core to the existence of higher education institutions is their right to validate their students' achievements and ultimately confer their award; the historic monopoly of higher education providers (Wiley & Hilton, 2009). What is often not specifically stated is the role of assessment as an inherent validation requirement.

Assessment as a discrete product is not a new concept in tertiary education business models. Assessment only pathways are long established in the vocational training sector. If an individual has already acquired the specified knowledge (and skills), either on the job, through self-learning or through participation in a MOOC, all that remains is for the individual to demonstrate that acquisition through an appropriate assessment against the learning outcomes for the particular course in question. In turn, this assessment may incur a fee.

With MOOCs offering free content to tens, or hundreds of thousands of students, the conversion rate from MOOC participants to those seeking assessment does not need to be high to create a significant source of revenue. The incentive for students to pay a fee for assessment is the offer of credit towards an award of which the course forms part. Once sufficient credit has been obtained by a student the institution can grant the appropriate award, and again, a fee may apply.

Taking the concept to its limits, assessment only products may become more about providers assessing students who have gained knowledge across multiple learning platforms and models, both on-the-job or with multiple institutions. Validating this knowledge and providing credit or indeed, if the learner warrants, appropriate certification is a valid revenue stream for higher education providers.

1.3. Syndication

Syndication is a broad concept of sharing content through multiple outlets. In the online environment web syndication involves making material available to multiple sites through licensing arrangements (Dellarocas & Van Alstyne, 2013, p. 28).

The source of content is no longer necessarily the most critical part of the learning experience. Rather it is the validation of learning where a student demonstrates the understanding and application of the knowledge contained in the content that has become increasingly important. Consequently, significant commercial opportunities exist for higher education providers to develop MOOCs core to a specialisation with broad appeal. Over time one or two MOOCs might own the space for a niche area, such as *Introduction to Hospitality and Tourism*. Consequently, other providers may elect to adopt the predominant MOOC rather than develop their own. Institutions that develop MOOCs with this appeal may potentially license their MOOCs, allowing licensees to avoid the unnecessary burden of duplicating the up-front costs associated with MOOC development.

Credit plays an important role in syndication. The broader recognition of another provider's content and/or assessment allows multiple institutions to work together to form flexible learning experiences for students. Industry consortia and independent accreditation bodies such as the International Centre of Excellence in Tourism and Hospitality Education (The-ICE), the International Council on Hotel, Restaurant and Institutional Education (ICHRIE) or its Asia Pacific chapter (APacCHRIE) may provide opportunities for members to merge syndication of MOOCs with streamlined cross-institutional recognition and credit between members.

1.4. B2B

So far, this paper has focused on the student as the consumer. However, in the traditional sense, businesses are the primary customers of higher education institutions (Barber et al., 2013, p.63). ClickBank claims to have launched the first B2B platform for MOOCs (ClickBank, 2013).

This potential revenue generating source may take on several forms. Business has a legitimate interest in training its staff, as "giving existing workers skills can be cheaper than hiring new workers" (Dellarocas & Van Alstyne, 2013, p. 27). MOOCs in the workplace may be less about degrees from a particular provider and more about gaining specific knowledge or skill sets. Not physically having to leave the work place to attend a particular college means that sources of knowledge broaden considerably and the cost to the employer and employee is significantly less, especially if the MOOC is free.

Developing MOOCs to play a pivotal role in the continuing and professional development space for staff is also considered a significant and viable commercial option as MOOCs provide flexibility and as noted above, ameliorate the need for employees to leave the workplace. This may be particularly desirable for the hospitality and tourism industry where, by nature, employees are afforded limited opportunities to leave the workplace for such professional development.

It is also considered that MOOCs will in the future play a pivotal role in better aligning the authors of new knowledge and the commercial world of publishers. This concept opens up significant B2B opportunities through traditional published textbooks adopting MOOCs as a primary channel to access a new potential audience. In this example the author and publishers both win through a number of commercial arrangements that might evolve from the model. Examples might include; publishers financing the development of MOOCs; a shared profit arrangement through increased textbook sales; and the MOOC not being available to the user unless the student purchases the aligned text.

1.5. There is no substitute for quality

MOOCs are not a shortcut to a higher education qualification; they are simply a methodology to deliver content and learning support in an innovative way to an expanded student demographic. If the student does not put in the required work and expend sufficient cognitive effort, they will most likely not achieve the results (Lodge, 2013). The basis of what constitutes quality in distance learning methodologies still holds true for MOOCs and again the quality of the learning experience in a MOOC remains critical.

Price is an important signal of value and offering courses for free may create a perception that what is on offer may not be worth paying for (Cusumano, 2012, p. 2). Consequently, the quality of the learning experience associated with a MOOC will set the tenor for an institution's other offerings. As argued previously, a MOOC that delivers a substandard experience is as likely to damage an institution's brand and turn away potential students as it is to attract new students; therefore quality is an important commercial consideration in the development of MOOCs.

MOOCs may offer an opportunity for students to "pick and choose courses and learning experiences to construct their own higher education" (Bruner, 2013), a concept known as disaggregation. There are warnings that disaggregation leads to a fractured student experience and does not deliver deep enough knowledge in the discipline area. Those cautioning against disaggregation believe that there is no substitute for the "traditional" student experience borne out of a broad body of knowledge and depth of experiences delivered in a systematic way. Institutions offering MOOCs will need to ensure that students that are granted credit for completing a MOOC do in fact have the breadth and depth of learning that would be expected of a student undertaking that course in any other mode of learning.

2. Conclusions, limitations and future research

Stanford, MIT, Harvard et al. have already opened a kind of Pandora's box by offering MOOCs at no cost to consumers, and it may prove difficult to go back and charge consumers for access to MOOCs (Cusumano, 2012, p. 2). In contrast, however, Udacity has recently changed its model to directly charge consumers for its MOOCs, leaving behind its promise of "free quality higher education for all" (Lodge, 2013) in an admission that its product, and by extension its business model, was "lousy". A similar dynamic is evident in business models for online newspapers where previously free content now requires a subscription for full access.

In order to promote discussion on the commercialisation of MOOCs this paper has suggested a number of revenue streams that might derive from the development and delivery of MOOCs. Future research might be able to quantify the financial outcomes from the delivery of MOOCs as well as identify other potential revenue streams available to institutions that develop and deliver MOOCs.

Commercial-in-confidence considerations place significant limitations on determining the financial success or otherwise of MOOCs. Furthermore, the aggregated nature of financial data might mean that any financial benefit derived either directly or indirectly from MOOCs may be buried deeply within an institution's financial management system and difficult to quantify.

The development of MOOCS and associated business models has significant implications for the higher education industry. Governments may need to rethink their regulatory models (Barber et al., 2013, p. 5) that were designed in era before global technologies have become intricately interwoven in modern learning and teaching methodologies.

Given that MOOCs are here to stay and will become an increasingly important part of the higher education landscape, those providers that develop viable business models around massive open online courses will be able to exploit this disruptive innovation and enhance their long-term sustainability.

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