

# Altruism is dead! - The Perfect Storm: BYOD + CLOUD meet MOOCs

M J Clark<sup>1</sup>, P Hopkins<sup>2</sup>

<sup>1,2</sup> HE-Associates.

## Keywords

MOOCs, BYOD, Cloud, Office365, Transformation, Re-purposing.

## 1. ABSTRACT

Storm clouds are gathering on the horizon! A revolution is under way and will reverberate within the HE community for the rest of this decade and may reshape Universities! So what is this revolution? What we are supporting is transformational change to academic processes but for us there may be a complete reengineering of the supporting business processes.

The arrival of portable, permanently internet-connected devices demand new paradigms of engagement between institutions, students and staff. Since the mid-80s, Universities have been improving access to IT-based systems and services to support education and administration. We have been obsessed initially by access ratios (student to PC seats) and then by networks and latterly by Wi-Fi provision. Initially, we were defeated by the seemingly fixed price (\$1000) of the hardware and life-time costs. Now a SMART phone/tablet revolution, supported by pervasive 3G/4G networking and affordable contracts, has brought transformation!

The revolution isn't just technological but includes substantive impacts on the relationship and operational paradigms of students and institutions. The SMART device environment is dominated by lightweight applications utilizing cloud-based environments in which users have almost 'blind' confidence; usage models based on economics which are 'seemingly' invisible/free at the point of use. Services which shift responsibility to end-users often with no more thought than a tick in an acceptance box! Our students will operate across multiple domains and paradigms with multiple authentications which are often hidden after initialization. Interfaces to an ever-growing resource of rich applications/information/knowledge are rewarding and compulsive. Institutions are trailing even as they adopt cloud-based public services for core activities (Hotmail, Gmail, etc...). We use portalization to join disjointed applications and very focused on those 'PC-seats' or via controlled access (VPNs, etc.). The market for core supporting business systems has dwindled with few new competitors and no significant trailblazers. Many institutions see no benefit in significant investment in new systems and instead are looking to maximize value from existing suites using integration-ware and maximizing potential from exploiting the data itself. Productivity suites such as SharePoint and Office365 are bringing new approaches and progress is good<sup>1</sup>.

The core of the university education delivery model has progressed relatively little since the birth of the University (Bologna 1088). The lecture and tutorial has been at the heart of learning and its delivery has evolved slowly. A perfect storm brings circumstances together which deliver significant change and whose consequences are enormous; the 'storm' clouds gather before us!

The economic climate and globalization create demand for increased skills and capability in the workforce and the cost of higher education (for all) is becoming unaffordable to most nations; lifetime repayment models (tax or loan) based upon 'conceptual' increased earnings are deployed. So, unsurprisingly, there is a desire to lower the cost or increase the efficiency (or both) of educational delivery. We see the new phrase 'student experience'; increasingly important is the view of the 'customer' with respect to experience, value for money and alignment to objectives which must be interpreted as career benefit. Massification has created increasing anonymity where the student is able to pass through their institution without significant engagement or recognition.

---

<sup>1</sup> University of West London - <http://www.youtube.com/office365atuwl>

Staff, under pressure from Staff-Student Ratios (SSR's) or competing agenda (e.g. research), fail to build a relationship or engage in the personal tutor relationship! Students, under financial pressure, spend disproportionate time on income-based activities wishing to minimize debt and are thus unable to engage in those activities which enriched the experiences of previous generations.

Principals of institutions respond by cost-saving/efficiency initiatives, and direct activities towards enhancing student experience. Most have invested in eLearning initiatives, with Blackboard and Moodle being dominant delivery platforms, with varying levels of success. However, the 'not-invented-here' syndrome means institutions 'reinvent' every lecture and all associated resources. Furthermore, those same lectures are podcasted (or similar) regardless of quality and with little of the professionalism associated with media production<sup>2</sup>. The MOOC, massive open online course, was initiated from an expectation of industrial-scale educational technology premised in 2008; it was in 2011 that Stanford University launched 3 courses, each of which had an enrollment of about 100,000. Now in the UK, a platform to rival established providers in the US has been launched by The Open University. *Futurelearn* is to carry courses from 12 UK institutions which will be available to students across the world free-of-charge following in the footsteps of US providers (including Coursera, edX and Udacity).

Institutions are widely autonomous and self-governing bodies often in competition and quasi-collaboration with each other. Individual Institutions cannot separately take on the significant investment cost required to radically reshape their services to support the requirement and pace of the timetable! The existing market providers lack the agility to supply new services. At the same time, 'for-profit' institutions with access to significant investment capital, see a new market-place ripe for 'picking'. Loosely-coupled administrative systems supported by portals and integration are no defense against systems and services built to scale on an international basis and designed to be user-centric whilst delivery high quality performance and with dynamic response mechanisms.

Sadly, education is now a business, not altruism! Academia may yearn for the past but must face its future. The community could build those new IT systems or partner with those who could build them for us; the UK Government has put in place initiatives that could facilitate shared partnerships. These opportunities could be UK- or even EU-wide and of course significant parts of platforms would have global capability. HE argues it is 'special'; what is true is that historically the IT applications market has serviced us poorly and we have treated commercial players badly! If we want service infrastructures to match the best in the cloud then we must collectively be in at its instigation, design, and delivery. We must recognize that partners need a commercial return whilst providing leadership and planning for an environment to see us through the storm. The circumstances are such that radical transformation is inevitable! As with all perfect storms their impact is long lasting!

Universities are re-thinking IT but see the pace of technology as a hurdle and do not wish to make the traditional 5-7 year financial commitment in core systems with associated contracts. We see medium term investment being made to 'sweat' our existing assets and to use integration-ware to maximize potential. Core systems can be retained whilst interfaces and business flow processes are externally facilitated. We support institutions as they seek to review their business mechanisms and then bring in integrators to support the delivery of solutions which facilitate rapid connections between disparate applications/services. Increased 'agility' enables services to be reconfigured around the needs of individual courses (or even students!). Globally-scaled collaborative services (from Microsoft, Google, Facebook, Amazon, etc.) can be rapidly configured to provide HE-specific functionality - a trend which questions the future viability of the market-leading VLEs! Their impact is to drive IT support towards the core mentor/learner relationship; the focus is to improve key educational outcomes. IT departments need new skills, attitudes, knowledge and composition to meet the challenges. And we will need to find ways to personalize and individualize aspects of teaching and learning whilst utilizing the economies of scale of globally provided services.

The IT department of the near future will therefore be radically different to that of today and with different relationships with its customers within the Institution and also with external services providers/partners. As Jon Madonna, former CEO of KPMG said "*Nothing stops an organization faster than people who believe that the way you worked yesterday is the best way to work tomorrow.*"

---

<sup>2</sup> Example - Oxford Lectures see <http://podcasts.ox.ac.uk/>

## 2. REFERENCES

[http://www.microsoft.com/casestudies/Case\\_Study\\_Detail.aspx?casestudyid=71000000967](http://www.microsoft.com/casestudies/Case_Study_Detail.aspx?casestudyid=71000000967)  
<http://www.apple.com/uk/education/itunes-u/>  
<http://futurelearn.com>  
<http://www.forbes.com/sites/darden/2013/03/29/the-imminent-shakeout-disruptive-innovation-and-higher-education/>

## 3. AUTHORS' BIOGRAPHIES



### **Paul Hopkins**

Paul Hopkins has been Director of Information Systems at the universities of Newcastle, Manchester, De Montfort, West London and the University for the Creative Arts. Before joining HE, he spent 20+ years in Procter & Gamble, Courtaulds, Coopers & Lybrand and Thorn Lighting and implemented shared service-type solutions across these multi-nationals.

He has been Chair of RUGIT (Russell Group of IT Directors) and was a member of the HEFCE Shared Services Advisory Board (2006-08). He has been Principal Investigator on many project developing active collaborations between universities.

In 2008, he founded a consultancy ([www.he-shareservices.co.uk](http://www.he-shareservices.co.uk)) to help institutions and commercial IT vendors to work better together.

He has a Masters in Operational Research from Lancaster University.



### **Mark Clark**

Professor Clark has held most academic roles in his career - research and teaching in the areas of software engineering and network protocols. He has been Director of IS/IT at Manchester, Salford and Essex universities.

He has lectured widely on issues of governance and change models and has had extensive experience of institutional reviews.

At Manchester, he led delivery of local, national and international services including SuperComputing (CSAR) for the Research Councils and MIMAS for JISC. He has been Director and Chair of numerous academic and community companies and services including Net NorthWest MAN. He was Chair of Chair of MANs and a Board member of JANET(UK). He has a PhD in Electrical Engineering at Portsmouth University.