

Change, Discontinuity and Re-architecture at an ODL Mega-university

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INTRODUCTION

The University of South Africa (Unisa), which celebrates its 140 years of existence this year, is a large and complex organization undergoing deep transformation on many dimensions: a redefined institutional identity, a renewed social mandate (that is responsive to relevant higher education policy prescripts and a strong social justice commitment that has driven institutional strategy for a decade), a reconceptualised business model, a new organizational architecture to support the transition to the new business model, new modes of delivery and learner support, and a shift in core pedagogies to take advantage of the potential of online teaching and learning.

Our institutional transformation takes place within the wider context of ambitious plans by the South African government to widen participation in higher education in the face of continuing widespread poverty, in spite of the developmental gains made during the past two decades of democracy. Youth unemployment is at perilous levels. In spite of strenuous reform efforts over the past two decades, schooling is not yielding the kind of outputs required for a developing society. This results in poor matriculation pass-rates (especially in maths and science), low throughput and retention rates at universities, and the non-employability or underemployment of graduates.

Much of the institutional change is driven by the conjuncture of national broadband infrastructure, a shrinking economy, massive investments in institutional technological architecture, and tried and tested teaching, learning and assessment technology and applications which impel a shift towards a fully digitized environment incorporating online teaching, online delivery and a transformed pedagogy.

In light of the swiftly developing environment, Unisa has also been impelled by concerns about the competencies and employability of graduates in the digital age. The shift online is intended to equip students, especially those from impoverished and technology-poor backgrounds, with skills and competencies for the digital age.

THE IMPETUS BEHIND THE NEW BUSINESS MODEL

Although it is clearly unwise and unsustainable to compare a university's business model with that of a corporation, and that we recognize that Unisa was not established with the intention of making a profit, a core aspect of its business model includes a need to be, literally, profitable (i.e. to generate revenue that exceeds its expenses). Understood in this way, the definition seems a suitable lens through which to analyse the effect of a new operational model on Unisa's business model. In this instance, the term 'customer' is again not intended to denote a reductionist notion of a consumer, but simply an individual, or agency that pays for a service.

A business model implies that there are customers who have expectations about what they are being offered. In the Unisa context, there are four primary customers (people/agencies who pay a fee for services delivered by the university). These are:

- 1) **Government:** Government's interest in Unisa is twofold, and is circumscribed by national policies and regulations on higher education. Firstly, government expects Unisa to deliver high-quality distance education programmes which deliver both economic and social value. Secondly, government expects Unisa to make a contribution to the development of knowledge through academic research activities of different kinds. The basis on which

government pays for these services is defined in national policies and regulations, and is not affected in any way by Unisa's move to a new operational model.

- 2) Students (and their families): Current demographics indicate strongly that the majority of Unisa students have a primary interest in securing a tertiary qualification that will enable them to advance their economic interests and social status. For many, a Unisa qualification is seen a route for entry into the marketplace for jobs. It seems reasonable to assume that, where parents or other family members are covering the fees for this study, their interest is similar. Regardless of interests, though, payment of fees by students will remain a core source of income at Unisa regardless of changes to the operational model. This is currently augmented significantly by funds coming from the National Student Financial Aid Scheme (NSFAS), which provides loans to qualifying prospective students.
- 3) Employers and other bursary holders: Identified as customers because they manage funds in a different way from students and their families, this customer base nevertheless has very similar interests to students and their families. This class of customer will place greater emphasis on funding specific fields of study, usually based on an assumption that supplying graduates from identified fields of study is of particular economic interest to the country or to a particular segment of the economy.
- 4) Special project funders and purchasers of other commercialised services of the university: 'Third stream income' in university business models are typically concerned with the generation, use, application, and exploitation of knowledge and other university capabilities outside academic environments. Third-stream income might, for example, come from contract or sponsored research, entrepreneurial or commercialization activities, provision of services, and from investments.

It is not anticipated that the requirements of Unisa's 'customers' will change, nor will the ways in which they pay for these services. How 'customers' want services and how Unisa organizes to best meet those needs are the two aspects of the Unisa business model that will be most significantly overhauled. This should be borne in mind as we examine Unisa's new business model.

The year 2012 saw the beginnings of significant change in the Higher Education sector as the affordances of mobile technologies and social media together with entrepreneurial academics willing to take risks sparked a radical shift in university teaching and learning strategies in the form of MOOCs and other open educational initiatives. These recent and technology-driven advances in higher education leading to consortia of mass online offerings at very low costs, the changing world of work that is rapidly transforming to paperless environments, and new student cohorts entering the university as digital natives (even while coming from diverse backgrounds) impel universities, especially those in the ODL mode) to rethink their business models in order to remain relevant and sustainable in the future and produce graduates equipped for the digital age.

In the light of this intensive research and speculation, our business model would need to leverage the unprecedented opportunities provided in ICT-based teaching and learning tools, methods, and resources, including OER, in order to create an enabling environment for the realization of our teaching and learning [ODL] objectives.

Bearing the foregoing in mind then, the implications are significant: to overhaul the university's underlying operational model so as to transform all student experience for the better, ensuring that our students receive a consistently high-quality education comparable to the best anywhere, and responsive to the demands of the digital age.

THE NEW BUSINESS MODEL: ODeL

To help us find out what makes Unisa distinctive, we identified a set of characteristics that points to a preferred business model incorporating open, distance and eLearning. We believe that this business model is relevant to the University's positioning in the current higher education system locally, and forward-looking in how it positions the institution strategically and sustainably as a competitive global player. It will create an enabling environment for our

teaching and learning objectives to be fully consonant with technology architecture, re-engineering, capacity development and cultural change.

We considered three other business models, which I describe briefly as follows:

- 1) The Status Quo – this business model would see a continuation of Unisa’s predominantly print-based ODL model, with physical printing, warehousing, and distribution of materials
- 2) Dual Mode (Print plus online) – this model augments the status quo model by providing for a steady growth in online learning, through the university’s learning management system (LMS), myUnisa. However, in order to ensure equity of access, the institution continues offering print-based ODL courses.
- 3) The eUniversity – in this model, Unisa would shift rapidly to conducting all of its business via the internet, thus massively reducing the requirement for physical facilities (including regional centres) and full-time educational staff.

After intensive and sustained consultation, during which the four models were subjected to robust analysis, these three business models were discarded in favour of the preferred model – Open, Distance and eLearning (ODEL). In this model, the entire institution’s ‘transactional environment’ with students is transformed so that all aspects of the environment are fully digitized and thus underpinned by robust, effective, and integrated ICT applications.

The key implications of the ODeL model are as follows:

- All student application and registration data will be handled electronically in the first instance and thus captured directly into the Student System.
- Effective implementation of a fully electronic and online registration system requires a further streamlined and simplified Programme Qualification Mix (PQM), with limited and straightforward rules of combination, in order to ensure that application and registration processes can easily be completed online by prospective and current students.
- All teaching and learning materials will be provided to students in digital form. This does not mean that use of text will be phased out, but rather that it will be distributed in a wide range of digital formats to enable easy access on digital reading devices. It also does not mean that Unisa will move entirely to ‘online’ learning, as engagement with much of this material may take place when students are not connected to the Internet. This approach will also not exclude face-to-face tutorials wherever necessary.
- All students will have access to a personal e-tutor (to provide academic, affective, and administrative support) and, where applicable, a personal e-mentor (to provide counselling, affective support, coaching, and life and study skills) as their primary support system while studying at Unisa.
- All student assessment – except undergraduate examinations and practical assessments – will be managed electronically and online, with both student submissions and academic assessment being handled in this way.
- To streamline and track student support services, access to all student support services will be coordinated through MyUnisa (the learning management system), with a central coordinating Student Relationship Management System tracking all student requests for support.
- All students will require access to some form of digital device that enables them to read, view, listen to, or interact with Unisa’s teaching and learning material, as well as sufficiently good quality broadband Internet access to enable them to access and use myUnisa and associated online Unisa services regularly and frequently. To this end, Unisa will deploy a wide range of strategies to ensure that ICT and broadband Internet are accessible and affordable for all students.

That last bullet warrants further discussion as it is the hinge on which the success of our Business Model rests so I will elaborate as follows. During our discussions and analyses at the University, a consistent and loudly expressed concern was the burden of costs that might be imposed on students to pay for all of the planned technology in anticipation of a transition

to a fully digitized transactional environment. In acknowledging the validity of this concern, the Pro Vice Chancellor's office, which, in addition to taking responsibility for the Organizational Architecture and Business Model for Unisa also has direct line responsibility for ICT, took pains to explain that much of the investment in technology had already been made. There has been a massive injection of resources into the technological and solutions architecture upgrade at Unisa.

A milestone development was that negotiations that had been entered into with the major internet service providers to provide our students with cheap internet access at significantly below market rates [R100, about \$10 per month for 3gigs of data], bore fruit and has gone on stream. This has been coupled with a project to identify cost-effective tablet devices in the region of R1000 (\$100). A good quality device has been identified at R 1265 (\$125).

With the circumvention of the two biggest barriers to going online, i. e. cost effective internet access and affordable devices, the realization of the ideal to shift to the ODeL business model is well within reach. Importantly, during consultations with student groupings, with a few exceptions, it emerged that they were overwhelmingly aware of the implications of entering the world of work without the requisite digital literacy and were therefore supportive of the proposed shift.

ANTICIPATED BENEFITS

Having concluded its assessment and consultations across the University, Unisa has been convinced that the ODeL business model will bring tangible benefits and advantages. The following are a distillation of the most important ones:

- Equip students with skills and capabilities required for the digital age
- Create a comprehensive curriculum with a manageable number of electives linked to staff capacity for quality delivery
- Integrate support and assessment into curriculum design via e-tutors, rapid turnaround in assignment marking and return, and other online support systems
- Allow for more frequent and interactive assessment, which can help to reduce the drop-out rate
- Reach large numbers of learners at lower cost
- Support both informal and formal learning, enabling cost-effective competition against emerging models of delivery such as Massive Open Online Courses (MOOCs)
- Design curriculum resources for use in different formats (for example, screen magnifiers and audio conversion for the visually impaired)
- Identify students at risk and automate intervention through a student tracking system
- Allow full integration of openly licensed materials into courses to supplement or replace materials produced by Unisa
- Allow for continuous enrolment, thus reducing time-based bottlenecks in the current process

INTO THE FUTURE WITH ODeL

Unisa is hopeful that with the proliferation of broadband capacity at the national level, declining costs of internet access in the short to medium term and Unisa's interventions with external providers, our students will find it easier to access the affordances of the institution's digitized materials. Moreover, as has already been mentioned, Unisa has made a sound investment into its ICT infrastructure to supply seamless delivery of technology to staff and students, particularly in its aim to provide 24/7 support for its users.

A full shift to the ODeL mode will create opportunities to reduce other operational costs very significantly, thus making the provision of ICT infrastructure and connectivity economically feasible. Moreover, curriculum resources can potentially reach large numbers of learners for negligible cost as the benefits of economies of scale are fully realized.

We anticipate a structured – but phased – shift towards an ODeL business model between

2013 and 2018 with an annual report on progress. This will commence with complete migration of all postgraduate programmes and subsequent phasing in of an ODeL model on a programme-by-programme basis across all undergraduate programmes.

The institution will plan for a gradual reduction in printing and warehousing requirements, as well as the need for physical handling of assignments, while ensuring that sufficient capacity is retained to enable these departments to meet institutional needs during the transition. This, of course, has massive implications, given the numbers I have already referred to in footnote 1, but with sound planning, we are confident that the shift can be achieved with the minimum disruption of services and staff.

The re-design of Unisa's core primary systems (Student System, Student Relationship Management System, Enterprise Content Management System and the Academic Management Information System) will be prioritized. This will be a considerable challenge given Unisa's deeply embedded and organically developed legacy systems, which must be phased out, jettisoned or upgraded, all the while taking due care to avoid potentially catastrophic disruption and breakdown, and bearing in mind Unisa's size and complexity.

The shift to the new business model will be underpinned by a detailed change-management strategy to underpin and support implementation of the recommended activities. This will include wide-ranging engagement to build consensus on the key tenets of Unisa's new operational model.

Accompanying this, a comprehensive and system-wide programme of professional development will be rolled out, which identifies suitable professional development pathways for all affected staff in order both to prepare for new job requirements and to ensure career pathways for all staff while preventing insecurity, anxiety and job losses. This applies particularly to academic staff, who will be encouraged to rethink the nature of their activities and re-imagine their roles not as teachers but as designers of excellent learning materials and as co-ordinators of tutor/mentor and student interaction on a scale not hitherto experienced. This will be an important shift for our teaching and learning strategies as online learning differs significantly from conventional learning experience in a distance mode having a strongly interactive focus and more frequent (preferable weekly) assessment opportunities.

Finally, and to prepare adequately for the digitization of teaching and learning materials, an appropriate new copyright regime and suitable licensing options will be developed for Unisa given the new model. This will be accompanied by a detailed review of Unisa's current materials to determine their current copyright status and with the intention to make sensible and appropriate use of OER where applicable.

CONCLUSION

In shifting to a new business model Unisa's aims are larger than simply inserting an "e" into our teaching and learning. We aim to be a high performance institution with an ethos of servant leadership, striving for excellence with integrity and social justice, while seeking to be an African university that reflects the cultural and ideological diversity and complexity of our continent and its marginalized epistemologies.

If we are to keep our place amongst the leading open distance universities of the world, we need to be able to read the future with perspicacity and be sufficiently flexible to be able to respond to the unexpected and to new opportunities with agility and speed.

In a globalised and technology-driven world, higher education is the engine driving sustainable development, economic prosperity, the development and preservation of our nation's culture, and the promotion and advancement of democratic values, institutions and practices. Higher education institutions must therefore be alert to the shifting and changing needs of the societies they serve, be these local, national, continental or global. In the South African context, any institution remaining aloof from the central transformation challenges of a post-apartheid and developmental state does so at the peril of irrelevance.

