



ICT CENTRE

Role and Importance of ICT in a University

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Strategic Landscape ¹



University	Keys Issues
UCT	<ul style="list-style-type: none">• Develop advanced high-performance computing infrastructure to enable the storage and analysis of big data and eResearch• Maximize use of ICT tools to widely avail UCT's research output and educational resources• Strengthen capacity to support online delivery of courses, programmes and library content, and the use of technology-enhanced teaching and learning• Goal of every student having their own laptop (requires funding for financial aid students)• Administrative systems: HR, Procurement, Advanced Electronic Research Administration, undergraduate and postgraduate student application, registration, curriculum eligibility, housing, financial aid, payment, graduation, processes online• ☑ Strengthen the use of data analytics capacity to inform planning and effect efficiencies• Engagement - highly engaged workforce• Innovation – creation and implementation of new ideas and inventions that make a real difference through the generation of tangible outcomes• Transformation – forge a common ownership of ICT• Shift to cloud computing – All key ICT components to the cloud by 2020



Strategic Landscape ¹



University

Keys Issues

Oxford

- Research – enhance the IT infrastructure to support research
- Teaching and Learning – Technology to support T & L
- Widening Engagement – a stronger digital presence, collaborative working with various partners, sharing the research output and open educational resources as widely as possible
- Enterprise Info Systems – provide secure, effective information systems that support efficient, streamlined and consistent business processes and provide high-quality information
- Infrastructure – provide resilient end-to-end, high-performing network infrastructure and to create an efficient, shared and consolidated IST estate
- Cybersecurity – managing the risks related to IST
- IST Service Excellence – IST systems which are reliable, efficient, robust, secure and fit for purpose
- IST Staff and Skills – IST services and support are as good as the people providing them; develop an IST organization fit to deliver IST service excellence



Strategic Landscape ¹



University	Keys Issues
<p>MIT</p> <p>MIT's 2020 IT Vision</p>	<p>Excellence through modernization and a strategic focus on enabling innovation</p> <p>Key themes:</p> <ul style="list-style-type: none">• supporting the work of innovation teams• enabling rapid deployment of new services• driving operational excellence across all systems and services <p>Flagship Projects to facilitate the transition to platform-based IT service models designed to meet the needs of complex ecosystem of IT service providers and consumers e.g Creation of APIs for mobile and Self-service private cloud</p> <p>New Infrastructure e.g. High velocity innovations Open & extendable architecture to meet differentiated needs, APIs, cloud & integration platforms</p> <p>New Processes e.g. Engaging user experiences, Lifecycle portfolio models</p> <p>Up-Skilled People - New software development and deployment methodologies e.g. Agile methodologies, and Social coding methodologies</p>



Top 5 Challenges



UCT

1. Reducing enterprise cost
2. Improving business continuity, security and risk
3. Executing enterprise strategy
4. Creating new products, services and innovation
5. Consolidating business operation



IS&T Structure



MIT

- IS&T organization streamlined from seven groups with 37 teams to three capability groupings with 14 teams:
 - **Emerging Solutions** – develop new systems solutions, employing holistic and integrated approaches to transform business outcomes for administrative and student systems
 - **Enabling Services** – Rapid deployment of new services, operational excellence, and enabling ICT ecosystem
 - **Administration and Planning** – Project & portfolio management support, vendor management, workforce and financial planning



HR



UCT	Loss of experienced human resources remains a big challenge (in 2016 there was 12% reduction in staffing)
Oxford	<ul style="list-style-type: none">• Continuous focus on recruitment, development and retention of high-calibre IT staff• IT staff development to enhance skills including IT leadership, IT service management, project management, system integration and software skills
MIT	<ul style="list-style-type: none">• Continuous to support growth, development, and engagement of IS&T employees• Award Schemes e.g. in 2015 there were 200 Spotlight Awards, 3 Infinite Mile Awards, 1 MIT Excellence Unsung Hero award, and 1 recipient of the MIT Excellence Serving the Client award• Bonuses – to retain top performers• Staff required to contribute to professional and industry organizations e.g. Association of American Universities Data Exchange, Internet2 and Boston Consortium



Funding (2016)



University	Funding	Funding (KES)
UCT	R 142,143,412	852M
Oxford	£21.8M	2,877M
MIT	US\$ 70M	7,000M
UoN		270M



References



- UCT ICT Annual Report 2016
- UCT Strategic Planning Framework 2016 – 2020
- MIT Annual Report 2014–2015
- University of Oxford IT Strategic Plan 2013-2018