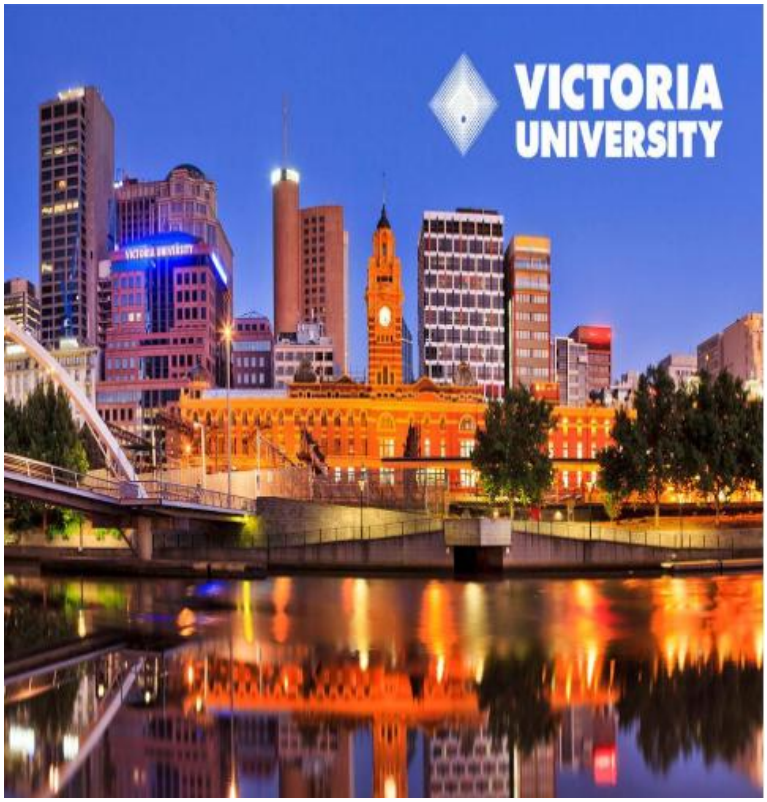

(NIT 2171)

INTRODUCTION TO ICT MANAGEMENT

GROUP - 08

THE IT STRATEGIC PLAN FOR VICTORIA UNIVERSITY

2025 - 2030

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INTRODUCTION

The multi-campus, multi-country Victoria University (VU) is an ever-evolving, burgeoning institution founded on academic excellence and innovation. With the university growing its international footprint, the modernization of the university's IT infrastructure to support international and technology-enabled educational requirements remains a challenge.

The IT Strategic Plan (2025–2030) has been devised to tackle these challenges and seize opportunities within eight key domains of IT, namely, Educational Transactions, Infrastructure (IaaS), Data Management, Mobile Device Management (MDM), IT Governance, Customer Relationship Management (CRM), Risk/Security/Privacy, and Social/Environmental Aspects.

The plan outlines the migration path for VU's IT landscape from a fractured AS-IS state with many disparate systems and archaic processes to a TO-BE state based on more complex but scalable, sustainable, and secure technologies. It describes actionable strategies, phased initiatives, and innovative solutions that will enable optimum digital transformation to improve operational efficiencies, enhance stakeholder experience, and support the university's mission and vision.

Background

Victoria University (VU) operates as a multi-campus, multi-country, and multi-disciplinary institution experiencing rapid growth. The proposed IT Strategic Plan addresses eight critical IT categories, focusing on transitioning from the current AS-IS situation to innovative TO-BE goals using advanced IT solutions, methodologies, and future trends.

VISSION

Victoria University aspires to be a global leader in transformative technology solutions, aligning IT infrastructure and innovation with its commitment to education excellence. By focusing on emerging technologies and scalable infrastructure, strategy fosters leadership and innovation. It aims to empower students, faculty and staff with secure, inclusive, and cutting-edge technology to enhance learning, collaboration, operational success.

MISSION

- **Enabling Digital Transformation** - Helping organizations adapt and thrive in the digital age.
- **Providing Secure, Scalable, and Intelligent IT Solutions** - Ensuring quality, innovation, and leadership in technology.
- **Driving Operational Excellence** - Enhancing efficiency and productivity for client growth.
- **Supporting Sustainable and Responsible Practices** - Demonstrating a commitment to environmental and social responsibility.
- **Creating Measurable Value** - Ensuring client satisfaction through tangible results and key performance indicators (KPIs).

KEY STRENGTHS

- **Clear and Concise** - The mission and vision are simple and easy to understand without unnecessary complexity.
- **Logical Flow** - The mission outlines practical steps that directly contribute to the achievement of the aspirational vision.
- **Customer-Centric** - The focus on creating value for clients is at the heart of both the mission and vision.
- **Future-Oriented** - The emphasis on digital transformation, innovation, and sustainability positions the company for long-term success.

1. Educational Transactions

- **AS-IS State -**

Campuses largely offer in-person lectures, minimal online resources, are manual in ticketing, ticket automation, and lacked standardization. Minimal integration between campuses, and underutilization of digital tools.

- **TO-BE Goal -**

Enhance personalized, seamless, and collaborative learning experiences using advanced technologies by implementing a blended learning model

- **IT Solutions -**

o **Learning Management System (LMS) -** Unify course materials, assignments, and communication across campuses.

o AI for personalized and adaptive learning, course content recommendations, tutor dashboard automation.

o **Gripping AR/VR -** Implement virtual labs and immersive learning environments to induce hands-on experiences

Future Trends

- **Personalized Learning -**

By examining how students behave and perform, AI customizes learning experiences, providing personalized content to guide a student or adaptive lessons and even automated tutoring for improved engagement and results.

- **Seamless Remote Access with 5G Connectivity -**

With faster and more reliable Internet, 5G will enable the development of high-definition distance learning, real-time collaboration, as well as the integration of cutting-edge technologies, such as AR / VR, into education.

2. Infrastructure (IaaS)

- **AS-IS Situation -**

Our Solution Today, Decentralized server's large high maintenance costs fragmented systems leading inefficiencies security risks

- **TO-BE Goal -**

Building a scalable and secure, economic, cloud-based platform using IaaS

- **IT Solutions -**

Hybrid Cloud - A blend of private cloud and public cloud that allows more flexibility, scalability, and data security.

Virtualization - Virtualization techniques create physical server consolidation benefits while smoothing resource use and boosting agility unpredictable situations through failover systems. enhance resource efficiency, and increase agility.

Future Trends –

- **AI – enhanced security for proactive threat detection –**

Autonomous Threat Detection - AI will help in automatic detection of the threat along with a response to the action which would improve the security as well as the response time.

Zero Trust Models - AI will help ensures zero-trust security by continuously authenticating users and devices.

- **Research-intensive applications of quantum computing**

Accelerated Drug Development - Quantum computing will allow us to simulate drug interactions faster and lead to quicker medical breakthroughs.

Enhanced Optimization - It will aid in solving challenges in logistics, finance, and other fields, optimizing complex systems much faster than classical computers.

3. Data Management (DM)

- **AS-IS Situation -**

Lack of effective distributed data governance across campuses resulting in inefficiencies, siloed data quality, compliance concerns, etc.

- **TO-BE Goal -**

Establish a centralizes and secure data management system that supports real – time analytics and decision making.

- **IT Solutions –**

Data Governance Framework – Define clear policies for data lifecycle, security, and quality management.

Master Data Management (MDM) – Ensure consistency across database.

Advanced Analytics platforms – Deploy tools like Tableau or Power BI for data visualization and insights.

Future Trends -

- Blockchain for data integrity.

Secure and Transparent - The security features of blockchain enable reliable protection of sensitive information including financial or medical records because the system protects it from modification attempts.

Decentralized Verification - Distributed validation makes trust possible because there is no requirement for any central authority.

- AI-powered automated data management

Automatic Organization - AI automation enables unassisted data classification which creates better data accessibility and improved management capabilities.

Smart Data Handling - Through automation AI manages the data processes and tasks while delivering stronger results with higher operational speed.

4. Mobile Device Management (MDM)

- **AS-IS Situation** -

Organizations face significant security challenges because of varying mobile device security policies which puts data protection alongside IT support and compliance at risk.

- **TO-BE Goal -**

A single-positioned MDM solution will support greater efficiency and operation compliance and mobile device protection standards.

- **IT Solutions –**

Centralized MDM Platform - The system enables remote management of devices while allowing security policy deployments and activity tracking capabilities.

User Training - Scheduled training sessions will teach employees how to practice mobile security properly.

Zero Trust Model - Complete validation of all system interactions brings better security protection.

Future Trends -

- **AI-driven Education** – AI will personalize training by identifying gaps and tailoring content to employee needs.

- **5G integration -** Faster, more reliable mobile connectivity will support seamless remote management and enhance security responsiveness.

5. Governance (COBIT)

- **AS-IS Situation -**

The organization runs its IT management through decentralized governance structures that create inconsistent policies which lead to misaligned approaches and post multiple compliance failures around the organization.

- **TO-BE Goal -**

The COBIT framework should be deployed to maintain alignment between IT systems with business priorities and to handle security threats while enhancing resource effectiveness.

- **IT Solutions -**

COBIT Implementation - The organization must develop IT goals and controls and processes which connect with institutional objectives.

Risk Management Framework - The organization should perform routine evaluations that combine both predictive assessments with proactive sustainability strategies.

Compliance Audits - Automated systems should monitor enterprise policies while automating their enforcement procedures.

Future Trends -

- **Blockchain for governance transparency –** This technology can provide a decentralized and immutable ledger for governance records that ensure transparency, accountability, and trust in decision making processes by enabling stakeholders to verify compliance and governance actions in real time.

- **AI for decision-making support** AI driven tool can help organizations make informed decision faster, ensuring adaptive and efficient governance structures.

6. Customer Relationship Management (CRM)

- **AS-IS Situation –**

The present customer relationship management solutions span multiple sites yet maintain deficient communication features alongside lack of personalized customer approaches.

- **TO-BE Goal –**

Organizations must deploy a central Customer Relationship Management software solution which provides improved stakeholder communication through standardized channels while delivering personalized service.

- **IT Solutions:**

Centralized CRM - An integrated data platform will link all sources into one complete stakeholder view.

Automation - Workflow efficiency will improve through automation which includes follow-up automation and communication scheduling systems.

Mobile Access - Staff members should receive access to CRM features while working outside the office. A voice-activated CRM system represents their solution for improved usability.

Future Trends:

- **Voice-activated CRM –** Enable hands-free interactions, allowing staff to access data and manage tasks efferently.

- **Quantum-safe encryption –** Protects custom data using advanced encryption to guard against future quantum computing threats.

7. Risk/Security/Privacy

- **AS-IS Situation -**

Security measures across decentralized systems produce guidelines that vary between locations while exposing minimal threat visibility which allows security breaches.

- **TO-BE Goal -**

IT security operations require centralized management of risk through advance threat intelligence and state-of-the-art security platforms integrated with solid privacy protection protocols.

- **IT Solutions -**

Centralized Security Operations Center (SOC) - Real-time threat management solutions monitor every campus through a single operation center.

Encryption - Protect all forms of sensitive data when it stays inside storage systems or transmits between locations. The system utilizes Blockchain technology for ensuring secure data sharing operations.

Future Trends:

- **Homomorphic encryption** – Enable secure data processing by allowing computation on encrypted data without exposing sensitive information, enhancing privacy and security.

- **Blockchain for secure data sharing** – Provides a decentralized and tamper-proof way to share sensitive data, ensuring integrity and security across systems.

8. Social/Environmental Aspects

- **AS-IS Situation:**

IT operations lack of a structured approach to sustainability and social inclusivity. Limited adoption of eco – friendly practices, inefficient energy use, and insufficient focus on reducing environment impacts are evident. Social inclusivity is underrepresented in IT policies, leading to missed opportunities for promoting diversity and equable access to technology.

- **TO-BE Goal:**

An IT strategy should exist to advance sustainability targets along with inclusivity initiatives and environmental footprint reduction.

- **IT Solutions:**

Green IT Practices - IT operations must use energy-efficient systems implemented through ethical waste disposal processes.

Sustainable Procurement - Prioritize eco-friendly suppliers and materials.

Environmental Monitoring - Track energy use and emissions.

Future Trends:

- **AI for environmental analysis** – AI will analyze energy consumption and emissions data, helping organizations optimize operations and achieve sustainability targets.

- **VR for global collaboration –** Virtual reality will support remote collaboration on sustainability initiatives, reducing the need for travel and fostering innovative solution across regions.

Roadmap and ICT Initiative

1. Background

Victoria University (VU) is a multi-campus, multi-national, multi-discipline institution in a phase of rapid growth. But the existing IT landscape deals with issues like -

- Silos Systems: Decentralized IT infrastructure, independent databases, and gullible learning process management systems.
- Poor Scalability: On-premises data centers and outdated security frameworks have a huge reliance on.
- Operational Inefficiencies: Disintegrated processes, little mobile device management and no integration.
- Sustainability Absences: Inclusivity in IT operations and Green Practices was given less attention.

2. Steps to Achieve the Future State

Phase 1: Foundational Improvements (0–12 Months)

I. Educational Transactions -
- Use Learning management system to centralize your Content delivery.
- Begin weaving AI-led personalization with AR/VR technologies

II. Infrastructure (IaaS) -
- Hybrid cloud models can be used to move Critical systems in.
- To lessen the on-premises reliance, begin the Virtualization servers.

III. Data Management -
- This will lead to a central Data Governance Framework
- Implement Master Data Management (MDM)

IV. Governance (COBIT Framework) -
- Resource management, Policies for risk and compliance should be governed.
- Form an IT steering group for strategic alignment.

V. Risk and Security -
- Deployment of Centralized Security operations (SOC) setup and tools for base level Threat detection.

VI. Training and Awareness -
- Make basic training on data governance, cybersecurity and cloud tools to be carried out.

Phase 2: Enhancing Strategically (12-24 months)

I. Mobile Device Management (MDM) -

- With a Complete Zero trust policies and monitoring Remotely, Execute a Centralized Mobile Device Management (MDM).
- Threat detection with Enabled-AI to maintain the security of Mobile devices.

II. Customer Relationship Management (CRM) -

- For stakeholders and Students carry out a customized interaction with a unified CRM system.
- With Connection that is improved and refreshing of data, Consolidate the Workflow.

III. Data Analytics -

- Use Business intelligence (BI) tools for advanced data analytics.
- To make accurate decisions use AI tools which have Predictive analytics.

IV. Sustainability -

- Procurement of sustainability and Energy-saving hardware can be used to initiate green practices of IT.

Phase 3: Optimization and Innovation (24–60 Months)

I. Educational Transactions -

- Creating an immersive learning environment increases the AR\VR capabilities.
- Initiate robotics in STEM disciplines for learning hands-on.
- To have immersive learning with hands-on, launch robotics in STEM disciplines.

II. Infrastructure and Data Management -

- Enhancing the functioning of the hybrid cloud.
- For any complex Research or analyzing of data, use Quantum computing.

III. Risk and Security -

- For the Processing of any sensitive data Initiate homomorphic encryption.
- Building a blockchain can secure administrative and academic records.

IV. Social and Environmental Aspects -

- By using AI improve the metrics in sustainability an regularly assess the environmental impact caused by IT operations.
- Reduce carbon emission and travel by promoting virtual fraternization.

3. Governance Strategy

Processes

Strategic Alignment - Use the COBIT Framework to ensure IT Strategic Align with institutional goals.

Management of Risks - To address any IT risk, assess or recognize, evolve all-inclusive guidelines.

Management of Resources - For and effective and efficient workflow, resources of the sector such hardware, software and staff should be optimally assigned.

Control Metrics

Performance Metrics -

- Educational Transactions (LMS usage rates and student satisfaction).
- Infrastructure: Cloud system uptime and cost savings
- Risk/Security, Security incident response times
- Sustainability Energy Consumption / Waste Management

Measurement and Control Systems

- Monitoring the Progress and issue real-time insights into KPIs by using dashboards that are automated.
- Keep the stakeholders constantly updated through the reports of progress with complete details.

Broad Timeline Overview

PHASE	KEY ACTIVITIES	TIMELINE
Phase 1 (0-12 months)	Cloud migration, LMS implementation, data governance, basic SOC setup.	2025
Phase 2 (12-24 months)	MDM platform rollout, CRM centralization, advanced analytics, Green IT adoption.	2026–2027
Phase 3 (24-60 months)	AR/VR expansion, robotics in education, blockchain, quantum computing	2028-2030

SUMMARY

Victoria University's IT strategy plan (2025-2030) focus on transforming IT infrastructure to meet global educational needs, covering key areas like data management, mobile devices, governance, and sustainability. The plan leverages emerging technologies to improve scalability, efficiency, and stakeholder satisfaction.