# IT STRATEGY 2023-2025

NWU®

DREAM

To be a leading partner in positioning the NWU as a unitary institution of superior academic excellence through Digital Transformation

STRATEGY STATEMENT

Establish a holistic and integrated university technology platform to provide a solid foundation for a digital future by executing the following strategic elements:

IT STRATEGY Top 10 Priorities

1. Innovation
2. Close the gap between Business and IT
3. Enabler and business partner for the NWU-DBS
4. Optimisation and replacement of major systems
5. Cyber Security and Privacy
6. Infrastructure refresh
7. Integrated workplace
8. Integration Platform
9. Portfolio management
10. Global IT Talent Crisis

- INTEGRATED TECHNOLOGY ECOSYSTEM
- SECURE
- AGILE INTEGRATION PLATFORM
- RESPONSIVE OPERATING MODEL
- COMPOSABLE INFRASTRUCTURE

RISKS & ISSUES

1. Impact of digital transformation on IT
2. The culture of comfort zones will be challenged
3. Too many core system changes/renewals
4. Staff retention
5. IT-PPM
6. Bureaucratic practices
7. The digital divide
8. Dependence on scarce and critical staff
9. Compliance in general
10. Demand management (everything priority 1)
11. Uncontrollable shadow IT
12. Constant change leads to constant disruption
13. Constant change in IT skills requirements
14. Firefighting mode
15. Neglect of maintenance
16. Slow uptake of cloud
17. NGDE readiness
18. Balance between Freedom and Control as an Academic Institution
19. Digital skills of End-users
20. General uncertainty in the world
21. Global Supply-Chain crisis
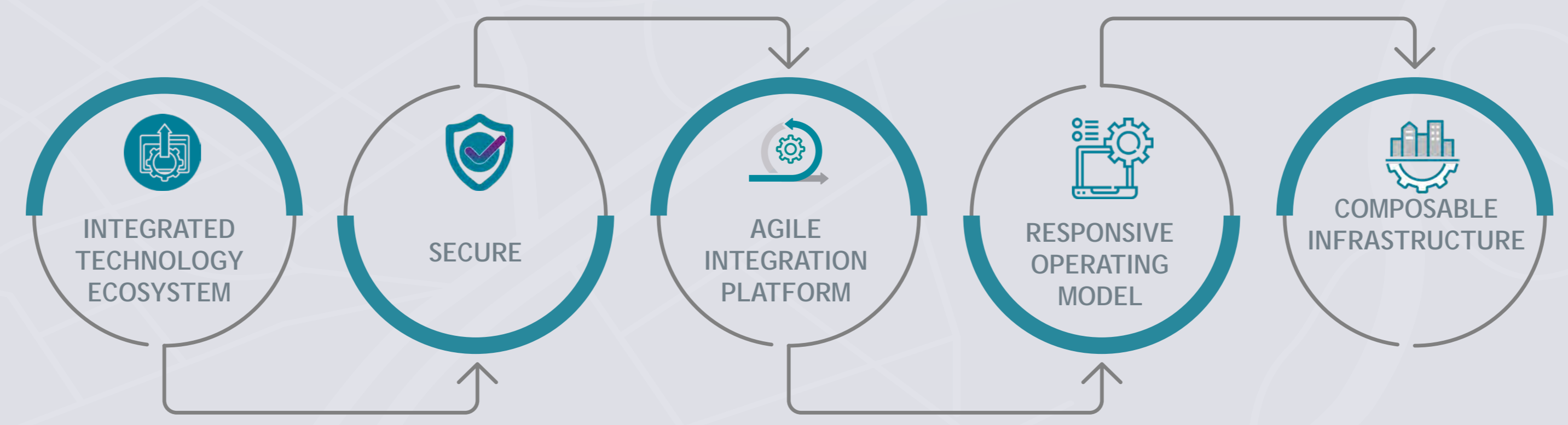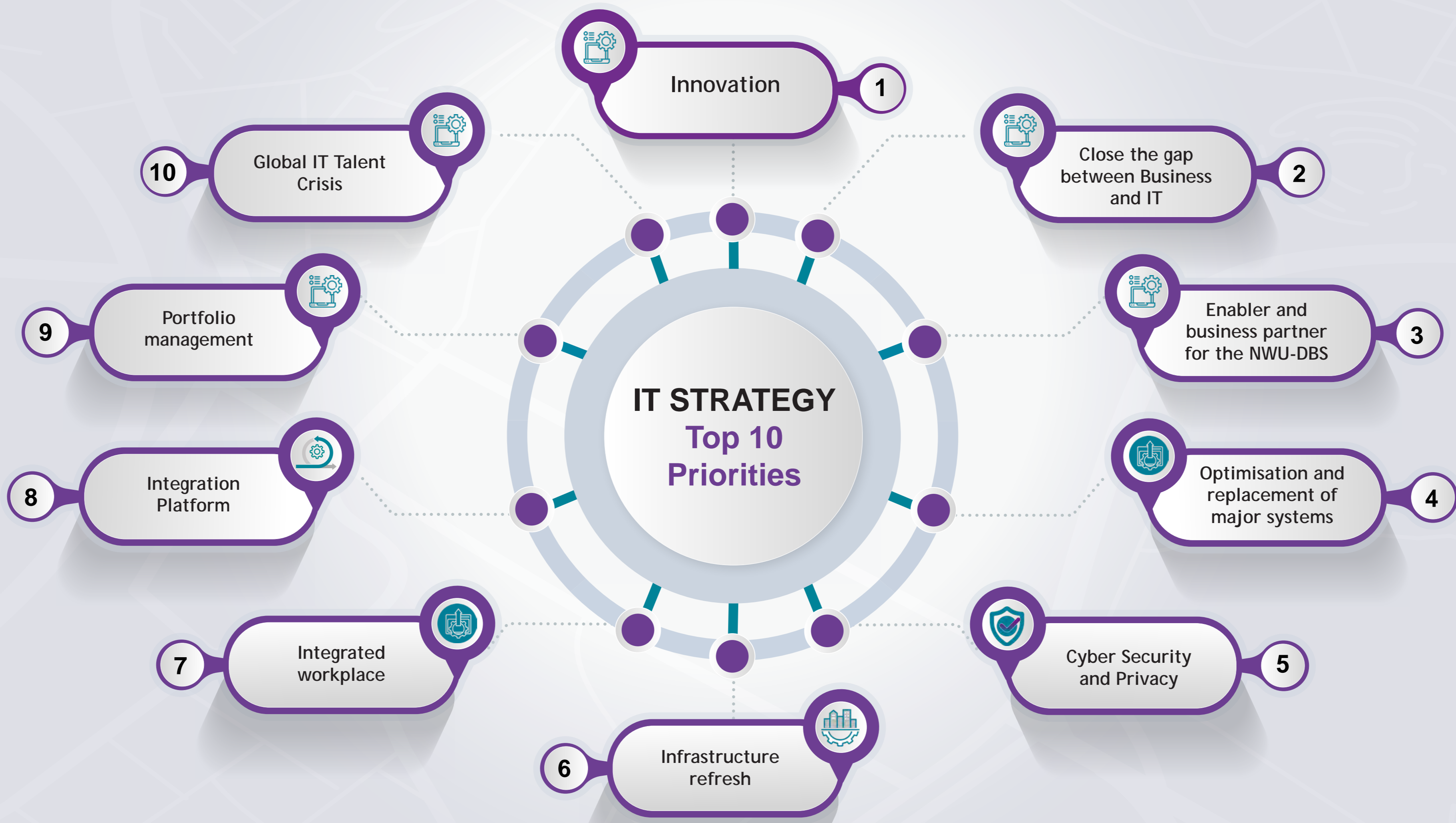
TOP 10 PRIORITIES WITH DETAIL

1. **Innovation**
   a. Agility hub
   b. LCAP
   c. Student projects
2. **Close the gap between business and IT**
   a. Actionable visibility.
   b. Service desk transformation
   c. Communication
   d. Training solutions
   e. Democratised IT
3. **Enabler and business partner for the NWU-DBS**
   a. Establish low code / no code platform
   b. Expand T/L services
   c. Optimise research processes
   d. Optimise procurement/tender process
   e. Extend current robot (RPA)
   f. Smart safety and security
   g. Safety, Health and Environment optimisation
   h. Utility management
   i. Investigate digital credentials
   j. Timetable system replacement
   k. Primary health clinic system
   l. P&C development optimisation
   m. Disruptive technology initiatives
   n. DASOM
4. **Optimisation and replacement of major systems**
   a. Student Information System
   b. HR and payroll
   c. Assess FIN
   d. Assess Learning Management System
5. **Cyber Security and privacy**
   a. NWU enterprise security architecture
   b. Attend to High-Risk priorities: SOA, KFS, IDM and Novell, Drupal, intranet and Guest WiFi
   c. Improve the Protection Capabilities:
      i. Endpoint SaaS and IaaS Cloud
      ii. Disaster recovery virtual test.
      iii. Multi-factor Authentication (MFA)
   d. Patching change.
   e. Establish a security team
   f. National collaboration efforts
6. **Infrastructure refresh**
   a. Revamping and replacing tier 1 and 2 storage.
   b. Replace HP G7 and older blades.
   c. 100G/40G backbone upgrade.
   d. NAC upgrade.
   e. WiFi stabilisation
   f. Cooling upgrades
   g. Identity Management revamp.
   h. HPC upgrade
   i. DHET projects.
   j. Complete another 40-80 hybrid classrooms, depending on the priorities set by Academics.
   k. Smart-cloud networking
   l. Virtual disaster recovery test
   m. Computer lab upgrades
7. **Integrated workplace**
   a. Implement Digital Telephony
   b. Establish an integrated workplace
   c. Plan transition to phone for Teams
8. **Integration platform (NGDE)**
   a. Event-driven Enterprise Message Bus; Confluent Kafka Platform
   b. Automated continuous integration and continuous delivery/continuous deployment (CI/CD) pipelines
   c. Containerised service mesh for microservices
   d. Observability, Automated testing, and Documentation of micro services
9. **Portfolio management**
   a. Establish a new position in IT
   b. ITPPM and EPPM in VC's office collaboration
   c. Establish processes and dashboards
10. **Global IT talent crisis**
    a. IT talent pool strategy
    b. Protect the core IT staff
    c. Implement SFIA job descriptions
    d. Fill vacancies
    e. Outsourcing
    f. Interns
    g. Build our own timber
    h. Manage PDP's and growth