

Strong ICT Operating Model Based on 7 Strategic Themes

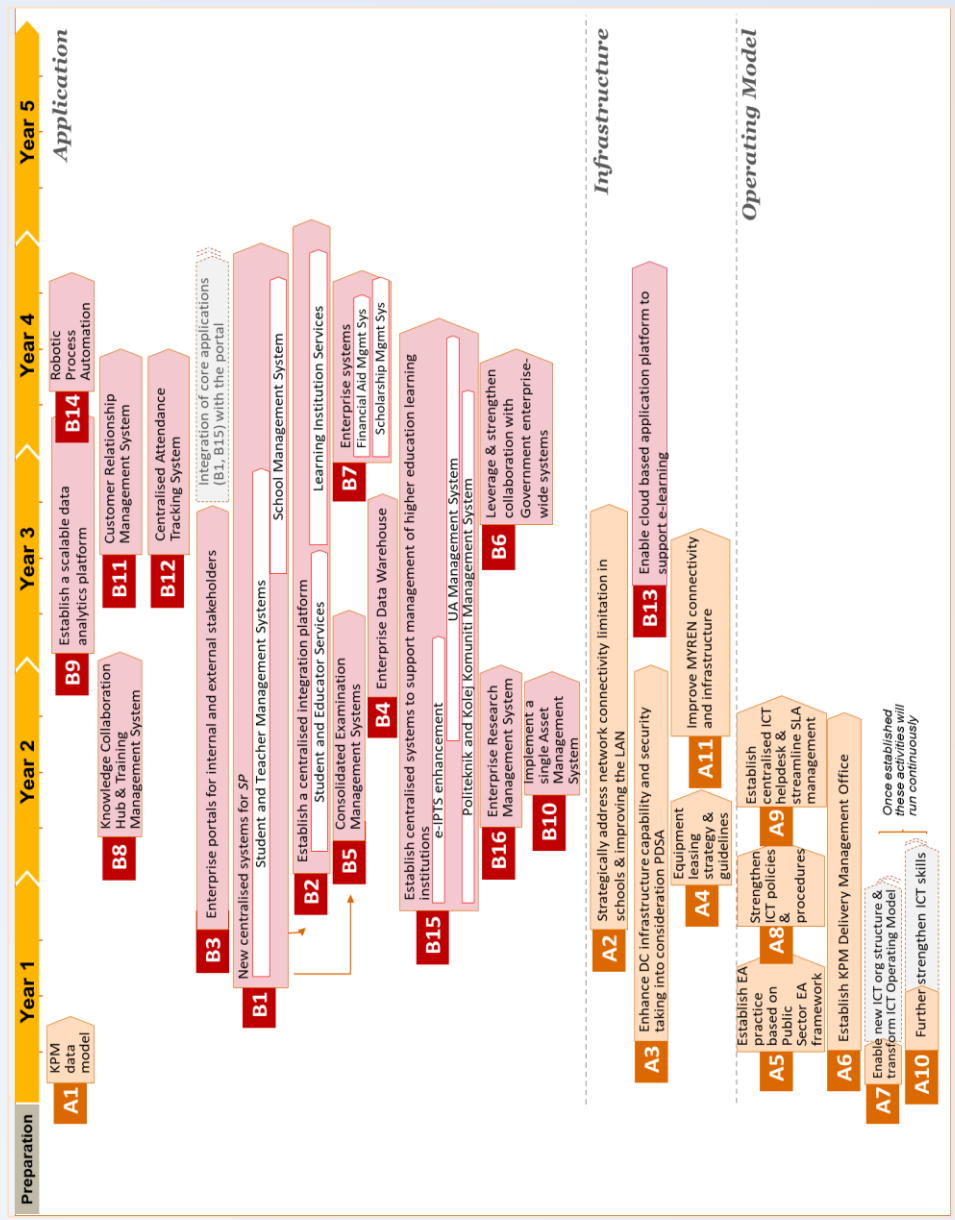
Improvement Initiatives and a 5-year ICT Transformation Journey



- Strong ICT strategy and planning capability** to align ICT with business
- Well established ICT organisation structure** to support future ICT agenda
- Efficient ICT governance structure** for Ministry-wide ICT service delivery
- Consolidated ICT support management** to establish more effective delivery of ICT support operations
- Standards to allow BPM to exert **more controls on ICT governance**
- Dedicated project delivery practice** to oversee the implementation of ITP initiatives
- Strong operational and technical skills** and capabilities

Secured and Optimised IT Infrastructure

- Optimised network infrastructure** of learning institutions, offices and Agencies under KPM
- Enhanced **MYREN Infrastructure** to better support IPTA, offices and Agencies
- Cloud service** as a model for **virtual computing labs** at schools and IPTA
- Well managed ICT assets and hardware** at learning institutions and KPM offices
- Centralised Data Centre** to PDSA
- High performance and reliable** servers, storage and backup systems



- A Get Your House In Order**
- A1** Define **KPM data model** and enhance usage of data dictionary to standardise implementation of applications
 - A2** Strategically address **network connectivity limitation** in learning institutions and improving the LAN in KPM and agencies under KPM
 - A3** Enhance **Data Centre infrastructure** capability and security to enable high availability and integrity taking into consideration Government's PDSA
 - A4** Establish **equipment leasing strategy** and guidelines
 - A5** Establish **Enterprise Architecture** practice based on Public Sector EA framework to enable better alignment between business and ICT
 - A6** Strengthen the implementation of ICT initiatives by leveraging on **KPM Delivery Management Office**
 - A7** Enable new **ICT organisation structure** and transform **ICT Operating Model** to facilitate optimal decision making and drive operations
 - A8** Strengthen **ICT policies and procedures** that address the needs of KPM ICT operations at all levels
 - A9** Establish a centralised **ICT helpdesk** and streamline SLA management across KPM
 - A10** Further strengthen the **ICT skills** and capabilities in promoting strong ICT practices
 - A11** Improve **MYREN** connectivity and infrastructure

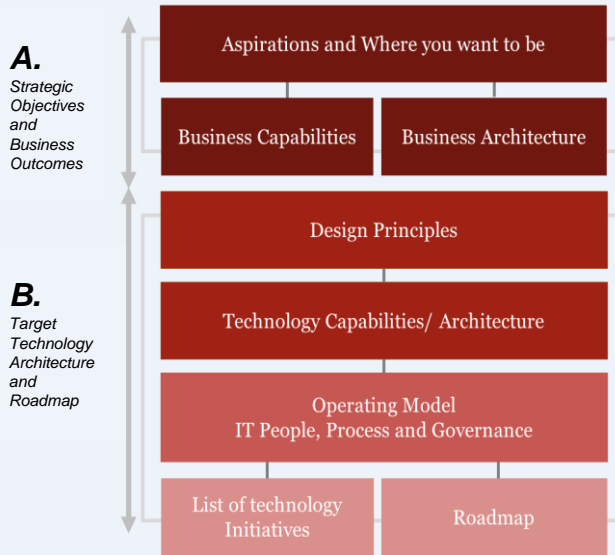
- B Create New Values**
- B1** Deploy new **centralised** to support education management in SP
 - B2** Establish a **centralised /common integration platform** to enable system integrations
 - B3** Enable **enterprise portals** for internal/external single entry point into KPM data and information systems
 - B4** **Warehouse** to support an efficient decision making process in KPM
 - B5** Deploy consolidated **Examination Management Systems** for schools and post-secondary learning institutions
 - B6** Leverage and strengthen collaboration with **Government enterprise-wide systems** to support KPM operations
 - B7** Deploy **enterprise systems** to manage scholarship and financial aid provision for entire KPM
 - B8** Establish **Knowledge Collaboration Hub** and enhance Training Management Systems to ensure continuous growth of KPM human capital development
 - B9** Establish a scalable **data analytics** platform to realise KPM as a data-driven Ministry
 - B10** Implement a **single Asset Management System** to track all KPM assets
 - B11** Establish **Customer Relationship Management System** to streamline communications to external parties
 - B12** Establish a centralised **Attendance Tracking System** based on digital technologies for use at various KPM offices and learning institutions
 - B13** Enable **cloud based application platform** to ease the establishment of e-learning for students and educators
 - B14** Adopt **Robotic Process Automation** to facilitate repetitive rule-based processing
 - B15** Establish **centralised systems** to support management of higher education learning institutions
 - B16** Implement an **enterprise Research Management System** to support management of research activities, research indexing and tracking, as well as researcher profiling



ICT Transformation Plan for the Ministry of Education, 2019-2023

Strengthening ICT delivery capability to support the education ecosystem

Building Blocks in Deriving the Future State ICT Environment



The ICT Transformation Plan (ITP) is a 5-year roadmap to transform KPM into a Ministry that accelerates the usage of ICT to support the overall education ecosystems.

It also creates opportunities for the Ministry to embed digital and innovation in operations which will impact students, educators, ICT technicians across learning institutions, administrators, officers and personnel at KPM.

