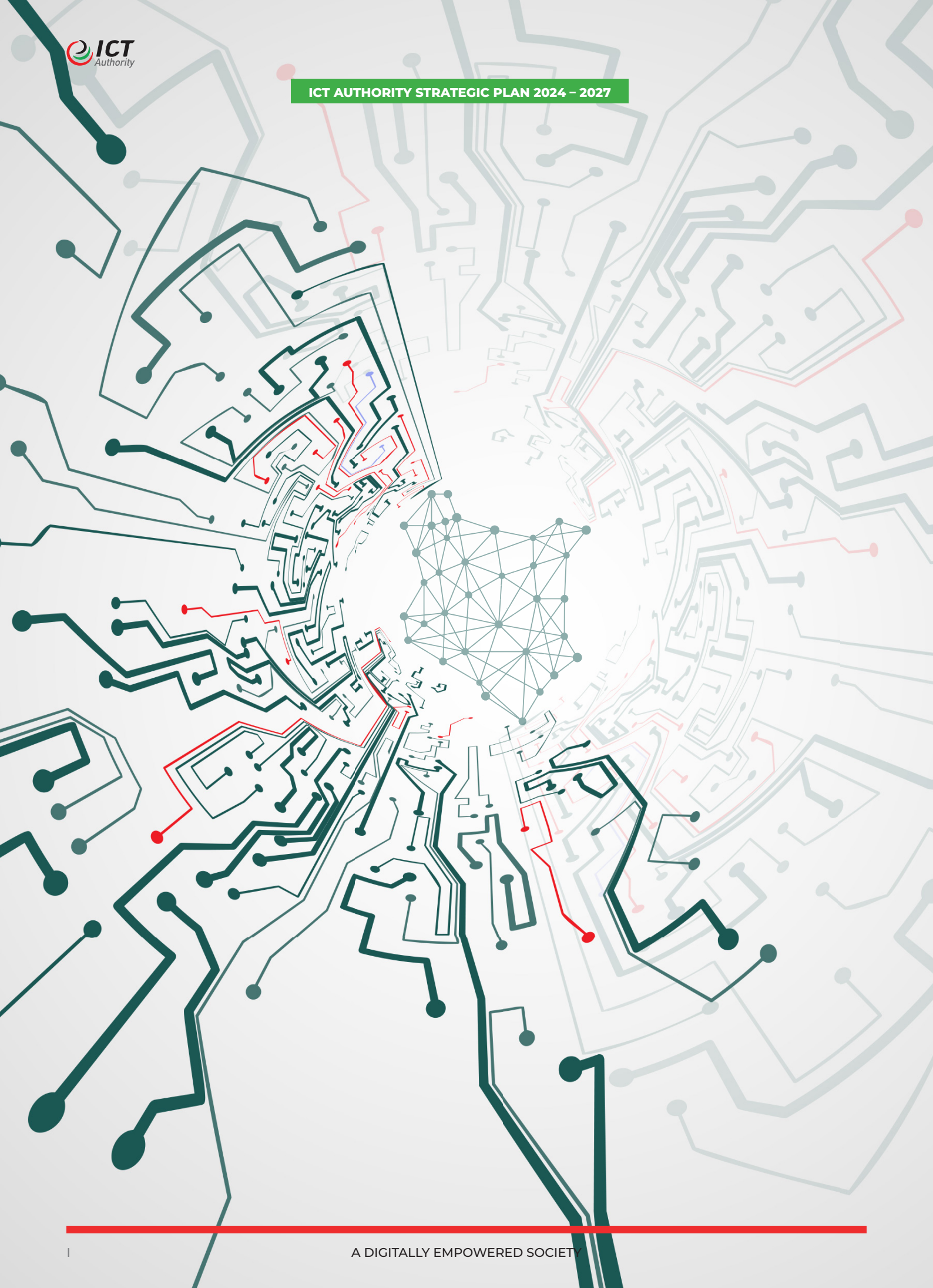
KENYA VISION 2030

ICT Authority

# STRATEGIC PLAN

## 2024 - 2027

A DIGITALLY EMPOWERED SOCIETY


ICT AUTHORITY STRATEGIC PLAN 2024 – 2027

**VISION**

*A digitally empowered society*

**MISSION**

*To digitally empower the society through provision of quality ICT services, application of best practices and harnessing digital technologies and capabilities to unlock limitless opportunities*

**CORE VALUES**

- *Innovation*
- *Citizen-focused*
- *Transparency*
- *Agility*

**GOAL**

*Sustainable Digital Transformation*

**TAGLINE**

*Limitless Opportunities*

# FOREWORD

It is with great pleasure that I present the ICT Authority Strategic Plan 2024-2027. The Authority recognises the critical role of ICT in creating new opportunities and optimizing productivity in modern economies. The future demands that we invest strategically in the digital economy while readily embracing technology's evolution as a tool to revolutionize business and service delivery models. We are setting the stage for doing this by harnessing these technologies and entering into meaningful partnerships and collaborations with government, industry, the public and global organizations. These joint efforts create sustainable ICT ecosystem that advances the attainment of accessible universal meaningful connectivity for sustainable digital transformation, ushering a future that will be more reliant on frontier technologies including:

*Emerging technologies are evolving at a rapid pace, enabling faster change and progress and necessitating constant learning, unlearning & relearning by ICT practitioners. Some of these major technologies include: Artificial Intelligence, Internet of Things, Blockchain, Edge Computing, Quantum Computing, 5 G expansion, Virtual Reality, Digital Twins, Nano-technology and Autonomous Vehicles.*

Harnessing these technologies and their applications promise to revolutionize economies and present immense opportunities for quality productive lives for our current and future generations. The dynamic changes in the ICT space demands a clear-headed strategy that enables valuable, resilient and secure digital assets as well as intelligent and trusted products, services and advice.

Thus this Strategic Plan is a results-based management tool for guiding the Authority's investment decisions, approaches and practices for creating impact and responding to the shifting circumstances with agility and within a complex and evolving digital environment. The Plan outlines our four key ICT leadership aspirations: Customer in focus; flexible, scalable and efficient ICT systems; secure, resilient, reliable and reusable digital assets; and confident digital capabilities.

By positioning ourselves to evolve and adapt, we will be well-positioned to serve the priorities of our stakeholders in public and private domains. The Authority commits to harness its influence in the ICT space to drive sustainable digital transformation. I call upon all stakeholders to commit to attaining the aspirations set forth in this plan.

***Hon. Sylvanus Maritim***
Chairman, Board of Directors

# PREFACE AND ACKNOWLEDGEMENT

In a rapidly changing technological world, where citizens demand for quality services from their governments, we must be at the forefront in accelerating sustainable digital transformation. This plan positions the Authority as a catalyst institution to strategically optimize digital value-chains, use innovation to improve human capital development through transformational digital culture. This will be attained through strategic digital investments as well as skilling, re-skilling and upskilling pathways for the public, businesses and government to ensure quality service delivery.

In the medium-term, key results, strategic objectives, strategies and relevant activities have been identified to guide implementation of the plan. While the achievement of the planned results would require adequate means - resources, decisions and actions - frequent monitoring, evaluation, learning and reporting will be essential to inform deviations and provide objective remedies.

The development of the plan was highly consultative and involved a wide variety of public and private sector stakeholders. Special appreciation goes to the Cabinet Secretary - Ministry of Information, Communications and The Digital Economy, and the respective Principal Secretaries for their visionary leadership in shaping the journey towards sustainable digital transformation. The superlative input of the Authority's Board of Directors led by the Chairman is highly appreciated. We thank the management and entire staff of the Authority for their dedication and invaluable inputs during the formulation process.

Our gratitude is extended in a special way to development partners and diverse industry stakeholders for their contribution towards the development of this Plan. We recognize the support accorded to us by officers from the State Department for Economic Planning led by Evans Lokabel and Mathews Tsuma for infusing medium-term planning methodologies into the plan.

We equally acknowledge all our stakeholders including Members of the public, National and County governments, development partners, ICT Organizations, industry players, communities of practice, academia and suppliers/ service providers for their continued support, collaboration and partnerships.

We are confident that this Strategic plan will serve as a road map to guide the Country towards sustainable digital transformation. In endorsing this plan, we signal our commitment to its full implementation.

***Stanley Kamanguya, OGW***
Chief Executive Officer

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| TERM | DESCRIPTION |
|---|---|
| **AI PC** | Integrating Artificial Intelligence into computing for fast response, high throughput and power efficiency |
| **Core values** | The fundamental rules by which we conduct business |
| **Digital divide** | A form of social inequality for demographics and regions that have access to modern ICT, and those that do not/face restrictions |
| **Digital dividend** | The amount of spectrum made available by transition from analogue to digital technologies |
| **Goal** | High-level statements of achievements of a strategic objective. |
| **ICT Development Index (IDI)** | Composite index based on dimensions of connectivity: meaningful and universal |
| **Meaningful connectivity** | High quality fast and reliable connectivity to the user based on high-quality functional infrastructure. It is enabled by infrastructure, affordability, devices, skills, safety & security. |
| **Mission** | The reason for our existence |
| **Outputs** | The product or service we deliver |
| **Performance Indicator** | A measure used to assess the performance of ICTA or our directorates/departments in service delivery. |
| **Service delivery targets** | Specific outputs needed to achieve the Strategic Priorities. |
| **Situational Analysis** | It is the assessment of our internal and external environment. It is from this analysis that strategic issues become apparent. |
| **Strategic Initiative** | Actions for achieving the Strategic Priorities |
| **Strategic Priorities** | Broad, long-term targets designed to achieve our mission |
| **Strategy Matrix** | Set out the parameters that lead to fulfilling our vision and goals. It contains Strategic Priorities, goals, strategic initiatives, and activities |
| **Ubiquitous connectivity** | Ability to connect to the internet from virtually anywhere, allowing devices to create, share and process data |
| **Universal connectivity** | Implies that people, households, communities, and businesses, are connected- in dwellings, places of work, learning institutions etc regardless of their urban or rural location, gender, level of education |
| **Vision** | A vibrant, compelling image of the desired future of ICTA or the impact we desire to create in the information communications technology sector |

# ACRONYMS AND ABBREVIATIONS

| | |
|---|---|
| **AI** | Artificial Intelligence |
| **AoT** | Artificial Intelligence of Things |
| **AUDS** | African Union Digital Strategy |
| **AIPC** | Artificial Intelligence Personal Computer |
| **API** | Application Programming Interface |
| **AR** | Augmented Reality |
| **BBSP** | Business to Business Support Platforms |
| **BCI** | Brain Computer Interface |
| **BETA** | Bottom- Up Economic Transformation Agenda |
| **BoDs** | Board of Directors |
| **BOT** | Bottom of the Pyramid |
| **CA** | Communication Authority |
| **CCP** | County Connectivity Project |
| **CEO** | Chief Executive Officer |
| **CHRR** | Cyber Hazard Risk Reduction |
| **CIH** | Constituency Innovation Hubs |
| **CII** | Critical Information Infrastructure |
| **CoB** | Controller of Budget |
| **DCS** | Directorate of Corporate Services |
| **DPIC** | Directorate of Partnership Innovation and Capacity |
| **DEI** | Diversity, Equity and Inclusion |
| **DevEX** | Developer Experience |
| **DevOps** | Development and Operations |
| **DLP** | Digital Literacy Program |
| **DPS** | Directorate of Programmes and Standards |
| **DSEAC** | Digital Strategy for East African Community |
| **DSS** | Directorate of Shared Services |
| **EARTTDFP** | East African Regional Trade Transport Development Facilitation Programme |
| **EDGE** | Enhanced Data rates for GSM Evolution |
| **ETE** | End-Term Evaluations |
| **GDC** | Geothermal Development Company |
| **GDP** | Gross Domestic Product |

| | |
|---|---|
| **GITS** | Government Information Technology Services |
| **GPRS** | General Packet Radio Service |
| **GOK** | Government Office Kenya |
| **GVCs** | Global Value Chains |
| **HCI** | Human-Computer Interaction |
| **HISP** | High Impact Service Providers |
| **HODs** | Heads of Departments |
| **ICT** | Information Communication and Technology |
| **ICTA** | Information Communication and Technology Authority |
| **ID** | Identification |
| **IDI** | ICT Development Index |
| **ILO** | International Labour Organization |
| **IoT** | Internet of Things |
| **IPv6** | Internet Protocol version 6 |
| **ITA** | Information Technology Agreement |
| **ITU** | International Telecommunication Union |
| **KAIST** | Kenya Advanced Institute of Science and Technology |
| **K3C** | Kenya Cyber Collaboration Centre |
| **KCSF** | Kenya Cyber Security Framework |
| **KENET** | Kenya Network Information Centre |
| **KENIC** | Kenya Network |
| **KRA** | Kenya Revenue Authority |
| **KRAs** | Key Results Areas |
| **LTE** | Long Term Evolution |
| **MCDAs** | Ministries, Counties, Departments, and Agencies |
| **MERL** | Monitoring, Evaluation, Reporting and Learning |
| **MICDE** | Ministry of Information, Communications and the Digital Economy |
| **MITI** | Ministry of Investments, Trade and Industry |
| **MLOps** | Machine Learning Operations |
| **MTER** | Mid Term Evaluation and Review |
| **MTP IV** | Fourth Medium Term Plan |
| **MTE** | Mid-Term Evaluation |
| **MTN** | Mobile Telephone Network |
| **MSME** | Micro, Small and Medium Enterprise |
| **ISP** | Internet Service Provider |
| **NC3** | National Cybercrime Coordination Centre |
| **NC4** | National Computer and Cybercrime Coordination Committee |
| **NDSP** | National Digital Superhighway Programme |
| **NOFBI** | National Optic Fibre Backbone Infrastructure |

| | |
|---|---|
| **NoOps** | No Operations |
| **NPKI** | National Public Key Infrastructure |
| **ODPC** | Office of the Data Protection Commissioner |
| **OGN** | One Government Network |
| **PCs** | Personal Computers |
| **PDTP** | Presidential Digital Talent Program |
| **PFMA** | Public Finance Management Act |
| **PVs** | Photovoltaic |
| **R&D** | Research and Development |
| **SCOT** | Strengths, Challenges, Opportunities and Threats |
| **SDG** | Sustainable Development Goals |
| **SDN** | Software Defined Networks |
| **SDICDE** | State Department of Information, Communication and Digital Economy |
| **SDP** | State Department for Planning |
| **SLAs** | Service Level Agreements |
| **SP** | Strategic Plan |
| **TEAMS** | The East African Marine System |
| **ToTs** | Trainer of Trainers |
| **TVET** | Technical Vocational Education and Training |
| **UHC** | Universal Health Coverage |
| **UMC** | Universal and Meaningful Connectivity |
| **VAS** | Value Added Services |
| **VDIs** | Virtual Desktop Infrastructure |
| **VOIP** | Voice over Internet Protocol |
| **VR** | Virtual Reality |
| **WCAG** | Web Content Accessibility Guidelines |
| **WIBA** | Work Injury Benefits Act |
| **5G** | 5th Generation |
| **3D** | 3 Dimension |

# EXECUTIVE SUMMARY

# EXECUTIVE SUMMARY

**Executive Order No 2 of November 2023 places ICTA under the State Department of ICT and Digital Economy, domiciled in the Ministry of Information, Communication and the Digital Economy. The Authority's broad mandate entails: enforcing ICT standards in Government; establishing, developing and maintaining secure ICT infrastructure systems; supervision of electronic communications; as well as promoting digital literacy, capacity, innovation and enterprise.**

The ICTA Strategic Plan 2024 - 2027 benefitted from lessons learnt from the previous plans and policy interventions. This Plan will steer ICTA in the next five years in the implementation of government priority policies, programmes and projects, especially the BeTA elevation of Digital superhighway and creative economy as a priority pillar. The Plan is aligned with the Constitution of Kenya 2010, the national development agenda and other key policies including the Bottom-up Economic Transformation Agenda, the Medium-Term Plan IV (2023 -27) of Vision 2030, Ministry of IC & Digital Economy Strategic Plan (2024 – 2027) and National Digital Master Plan 2020 – 2032. It is also aligned to the national digital strategy, African Union Agenda 2063 and the Sustainable Development Goals among other policies.

In developing this Strategic Plan, ICTA undertook a review of its Vision, Mission and Core Values. It also conducted a situational analysis, evaluated past performance and further assessed the internal and external operating environments against which the Plan will be implemented. Arising from the analyses, five Key Result Areas were identified as indicated in table 1.1.

***Table 1.1: ICTA Strategy Map***

| | | | | | |
|---|---|---|---|---|---|
| **Overarching Goal** | Sustainable Digital Transformation | | | | |
| **Vision** | A digitally empowered society | | | | |
| **Mission** | To digitally empower the society through provision of quality ICT services, application of best practices and harnessing digital technologies and capabilities to unlock limitless opportunities | | | | |
| **Strategic Issues** | Digital Inequality | Government and Business transformation | Digital culture | Digital Environment | Governance |
| **Goals** | Attain Universal and Meaningful Connectivity | Expanded access to digital products, solutions and services. | Sustained transformational digital culture. | Optimized and Seamless Digital Environment. | Enhanced organizational capacity, operational efficiency and effectiveness. |
| **Key Result Areas** | Universal, Secure and Reliable Connectivity | Customer-responsive digital solutions, products, channels, platforms and services | Transformational Digital Capabilities and Culture | Seamless, Secure and Adaptive Digital Ecosystem | Institutional Sustainability |

| | | | | | | |
|---|---|---|---|---|---|---|
| **Strategic Objectives** | 1 Harness emerging technologies for posterity | 2 Improve access to affordable, reliable, secure and sustainable digital infrastructure and connectivity. | 3 Optimize digital culture through citizen-driven practices and services | 4 Strengthen Policy, Legal & Regulatory Framework for resilient business-driven digital ecosystem | 5 Strengthen institutional capacity for operational excellence | 6 Promote better resource mobilization, allocation and planning practices |
| | 7 Promote the realization of Zero Trust Network Access environment | 8 Strengthen digital data management for sustainable digital transformation | 9 Improve processes, products and platforms for delivery of quality digital solutions and services | 10 Build sustainable networks and partnerships | | |
| **Core Values** | **Innovation** | **Citizen focus** | **Transparency** | | **Agility** | |

These Key Result Areas informed the setting of ICTA's strategic goals, objectives and strategies. The plan emphasizes a paradigm shift in utilizing, adoption and adapting to scarce digital resources. It identifies five Key Result Areas (KRAs) and ten strategic objectives for the next five years.

Some of the transformational programmes/projects/initiatives to be implemented in the medium term include:

**National Digital Solutions Export Framework**

**Develop a digital assest framework**

**A Digital Diplomacy guideline**

**Africa Connected Summit**

**AI and Games of the Future**

**Annual EAC ICT Authorities forum**

**National Cybersecurity Index**

# CHAPTER 1

A DIGITALLY EMPOWERED SOCIETY

# CHAPTER ONE

# INTRODUCTION

**This chapter gives a description of strategy as an imperative for Kenya ICT Authority's success. It highlights strategic planning within the context of national, regional and international policies relating to the mandate of ICT Authority. In addition, it provides a brief history of the Authority and the methodology applied in preparing the Plan.**

## 1.1 Strategy as an imperative for Organization Success

Strategic planning is an important process in ICTA's success and long-term transformation. Strategy is imperative for providing guidance on the optimal mix of ICTA's resources to attain desired outcomes. This Strategic Plan has been prepared to provide policy direction over the medium term. More importantly, it will keep the Authority focused on its mandate and ensure sustainable and quality service delivery. It has also been prepared to support the implementation of the fourth Medium-Term Plan (MTP IV) of Kenya Vision 2030, Bottom-Up Economic Transformation Agenda (BETA) and other national, regional and international priority policies and programmes.

This Strategic Plan lays out a framework of accountability for ICTA by prioritizing the activities to be undertaken through the resources availed from various sources, including the Exchequer and development partners. The Plan also seeks to drive high performance culture by setting targets, milestones and performance indicators against which it will be assessed. The Plan further lays a framework of collaboration in which government and partners will work towards the realization of ICTA's mandate for national development.

## 1.2 The Context of Strategic Planning

The Strategic Plan seeks to implement national, regional and international digital policies and laws Kenya subscribes to relative to the mandate of ICTA, for evidence-based priority setting. These include:

### 1.2.1 United Nations 2030 Agenda for Sustainable Development

ICT's contribution to the Sustainable Development Goals starts with SDG 9 on Building resilient infrastructure, promoting inclusive and sustainable industrialization and fostering innovation. International Telecommunication Union (ITU) plays a critical ICT governance role at international level, thus contributing to achieving SDG Target 9.c by enabling access to the Internet and other ICTs, in the following three ways:

Brokering international agreements to allocate and coordinate the use of the global radio-frequency spectrum and satellite orbits. This effort allows ICT devices anywhere in the world to be used on the same frequency bands, which in turn ensures that radio-communication services run smoothly, without interference from other radio communication services and users, and benefit from the resulting economies of scale.

Developing the international standards - the technical criteria, processes and practices - that ensure that key ICTs perform smoothly, efficiently and safely and provide further opportunities for economies of scale.

Assisting developing countries in making ICTs affordable, relevant and accessible to all. For example, ITU supports countries in developing programmes to build the necessary physical infrastructure, strengthen cybersecurity, develop digital skills for youth and indigent populations, improve digital inclusion for people with special needs, enhance the regulatory and market environment to increase access to ICTs, and promote ICT-centered innovation and entrepreneurship.

In the medium term, the focus of ICTA will be to catalyse digital value chains across the entire spectrum of global goals as spelt out in Table 1.2. The Authority will also tackle other emerging challenges such as pandemics, clean production, climate change, armed conflict and green energy.

***Table 1.2: SDGs and ICTA's Contribution***

| Sustainable Development Goals | ICTA Initiatives/Actions |
|---|---|
| **SDG 1: No poverty.** | Enhancing access to digital financial services-financial inclusion, policy dialogues, and technical advisory services on poverty reduction |
| **SDG 2: Zero hunger.** | Supporting data-driven food value-chains, incubating and scaling farmer solutions/ innovations, policy dialogues and technical advisory on food and nutrition security |
| **SDG 3: Good health and well-being.** | Enhancing access to secure and reliable connectivity for patient interaction, health informatics and telemedicine, scale digital health partnerships, policy dialogues and technical advisory services on universal health care |
| **SDG 4: Quality education.** | Enhancing access to digital education products, channels and platforms, Supporting provision of digital Skills, advocating for future digital skills strategy, policy dialogues and technical advisory services on Education system and performance |
| **SDG 5: Gender equality.** | Provision of gender empowerment information and tools through digital platforms, implementing initiatives to reduce the digital gender gap, eg International Girls in ICT Day, develop and implement national EQUALS strategy, policy dialogues and technical advisory services to various gender and organized groups |
| **SDG 6: Clean water and sanitation.** | Facilitate incubation and scaling of smart water and sanitation management, updating the public best practices/key trends in urban smart water/sanitation management, policy dialogues and technical advisory services on access and implications to improved water and sanitation |
| **SDG 7: Affordable and clean energy.** | Disseminate information on clean production, greener ICTs, smart grids, sustainable energy generation and utilization, policy dialogues and technical advisory services on energy transition |
| **SDG 8: Decent work and economic growth** | Support the implementation of the Digital Innovation Framework, incubate and scale digital-based enterprises, capacity building, policy dialogues and technical advisory services on employment creation and growth sources |
| **SDG 9: Industry, Innovation & Infrastructure** | Enhancing access to secure reliable connectivity for special economic zones, industries, businesses and communities, policy dialogues and technical advisory services on industrialisation, innovation and infrastructure services |
| **SDG 10: Reduced inequalities.** | Enabling access to technologies and knowledge to disadvantaged segments of society, narrowing information gap, highlighting key development issues for marginalized communities, capacity building, policy dialogues and technical advisory services on marginalised communities including ASALs |
| **SDG 11: Sustainable cities and communities.** | Facilitate implementation of "United for Smart Sustainable Cities", enhance access to information and tools for sustainable urbanization, capacity building, policy dialogues and technical advisory services on smart and sustainable cities/urban areas. |
| **SDG 12: Responsible consumption and production.** | Disseminate information on responsible production and consumption, encourage recycling, re-use and sharing of resources, support sustainable management of e-waste, develop and implement strategies, standards and policies for sustainable waste management, capacity building, policy dialogues and technical advisory services on sustainable growth and development |
| **SDG 13: Climate change action.** | Develop and implement standards on green data centres and green power feeding systems, capacity building, policy dialogues and technical advisory services on climate change |

| Sustainable Development Goals | ICTA Initiatives/Actions |
|---|---|
| **SDG 14: Life below water** | Support sustainable allocation and utilization of radio-frequency spectrum and satellite observations for monitoring oceans, marine ecosystems, capacity building, policy dialogues and technical advisory services on blue economy |
| **SDG 15: Life on Land** | Support sustainable allocation and utilization of radio-frequency spectrum and satellite observations for monitoring terrestrial ecosystems, capacity building, policy dialogues and technical advisory services on terrestrial fauna and flora |
| **SDG 16: Peace, justice and strong institutions.** | Deploying platforms and channels for enhancing peaceful co-existence and cohesion, capacity building, policy dialogues and technical advisory services on governance issues |
| **SDG 17: The power of partnerships** | Enhancing public-private partnerships in scaling access to ICTs, capacity building, policy dialogues and technical advisory services on partnerships, cooperation and collaboration in development |

African Countries utilise ITU SDG Mapping Tool for tracking attainment of SDGs indicators 4.4.1, 5.b.1, 9.c.1, 17.6.2 and 17.8.1. Differences in ICT indices persist across Sub-Saharan Africa based on ITU analysis of the Global SDG Indicator Framework of 7 ICT indicators covering 6 targets under Goals 4, 5, 9, and 17, as detailed by Table 1.3.

***Table 1.3: Analysis of SDG indicator Framework of ICT indicators for Sub-Saharan Africa***

| SDG | ICT INDICATOR | FINDINGS FOR SUB-SAHARAN AFRICA |
|---|---|---|
| **4** Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all | Indicator 4.4.1: Proportion of youth and adults with ICT skills, by type of skills (five categories of digital skills: communication/ collaboration; problem solving; safety; content creation; and information/data literacy) | A gap exists between individuals using the Internet and those with digital skills, which demonstrates that many may be using the Internet without being able to fully benefit from it or avoid its dangers. |
| **5** Achieve gender equality and empower all women and girls | Indicator 5.b.1: Proportion of individuals who own a mobile telephone, by sex | Gender parity in mobile phone ownership still a distant progress in the poorer parts of the world-about six in ten people own a mobile telephone |
| **9** Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation | Indicator 9.c.1: Proportion of population covered by a mobile network, by technology | mobile broadband (3G or above) is the main way and often the only way to connect to the Internet the coverage gap constitutes 18%, predominantly affecting the population of central and western Africa.49% of population have access to 4G technology |
| **17** Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development | Indicator 17.6.1: Fixed Internet broadband subscriptions per 100 inhabitants, by speed | Penetration rates for fixed subscriptions are much lower (1 per 100 inhabitants) than for mobile subscriptions, due to high prices and a lack of infrastructure. |
| | Indicator 17.8.1: Proportion of individuals using the Internet | 39 per cent of the population use the internet |

### 1.2.2 Africa Agenda 2063

African countries under the guidance of the Digital Transformation Strategy for Africa have prioritised and embraced emerging technologies, with wider applications in healthcare, agriculture, education, and finance. Data has been

recognised as a strategic asset, integral to policy-making, private and public sector innovation, stimulating performance management and creating new entrepreneurial opportunities for businesses and individuals.

The African region has established and implemented key ICT policies and initiatives that leverage technology for socio-economic development, digital inclusion, innovation, and competitiveness in the global digital economy. The existence of robust legal frameworks related to ICT in the region encompasses laws, regulations, and policies that govern various aspects of information and communication technology.

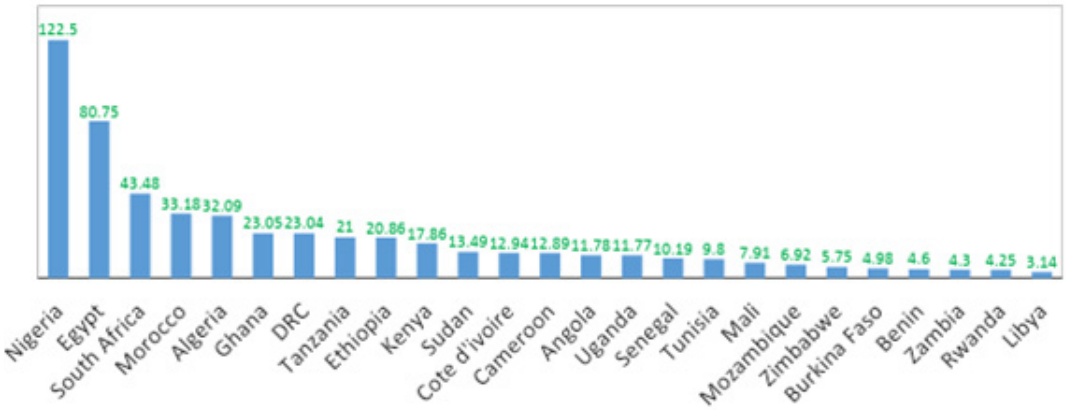
In Rwanda, the National ICT Strategy and Plan NICI – 2015 (NICI III) focuses on the development of services by leveraging ICTs to improve service delivery to citizens. The plan emphasizes developing a high-quality skills and knowledge base leveraging on ICT, developing a vibrant, competitive, and innovative ICT sector/ICT-enabled private sector, empowering and transforming communities through improved access to information and services, E-Government (e-GOV) to improve government operational efficiency and service delivery and Cyber Security.

South Africa has in place the National Integrated ICT Policy White Paper (2016). The main purpose of this White Paper is to unlock the potential of ICTs to eliminate poverty and reduce inequality in the country by 2030. The main objective is to have a people-centered, development-oriented, and inclusive digital society.

Nigeria seeks to provide an effective, unified, and comprehensive legal, regulatory, and institutional framework for the prohibition, prevention, detection, prosecution, and punishment of cybercrimes through the Nigeria - Cybercrimes (Prohibition, Prevention, Etc.) Act (2015).

Mobile devices continue to provide leadership in web traffic due to the affordability of mobile connections, eliminating the need for the infrastructure required by traditional desktop PCs with fixed-line internet connections. The continental focus is on the implementation of the AU Interoperability Framework for Digital ID, cyber security, on-line safety for children, Sectorial Digital Strategies (Education, Agriculture and Health), social, digital and financial inclusion. Figure 1.1 shows the number of internet users in Africa.

*Figure 1.1: Internet Users in Africa*




ITU reports that sub-Saharan Africa is the least ready to use, adopt or adapt to frontier technologies and risks of missing current technological opportunities.

### 1.2.3 East Africa Community Vision 2050

The East African Community Vision 2050 prioritises ICT as an enabler of economic transformation. It identifies seven broad strategic areas of engagement, aligning with the priorities of the 6th EAC Development Strategy, which seeks to expedite digital transformation in East Africa. These areas include connectivity, data governance, e-governance/ cybersecurity, e-commerce, information communication telecommunication regulations, digital innovation, and digital skills.

Based on these areas of engagement, the EAC has developed a joint plan of action with the purpose of guiding the cooperation between EAC member countries. Among the identified short-term actions are: a proposal to boost data economy across borders as well as benchmarking and project development of green and secure data centers (data

governance); establishing comprehensive electronic cross-border health services (e-governance/cybersecurity) and development of systems to facilitate a cross-border e-payment system (e-commerce).

### 1.2.4 Constitution of Kenya

The Constitution sets out broad standards and legal framework on access to information, protection of the integrity of government records and information as well as data protection, information security and modalities. It lays the foundation for the respect and protection of the fundamental rights and freedoms as stipulated in the Bill of Rights. These rights, including the right to privacy and right to access to information, must be respected, upheld and protected by all organs and agencies of the government. Article 10 of the Constitution further provides national values and principles of governance such as rule of law, democracy, participation of the people, integrity, transparency and accountability key in the implementation of access to information and privacy rights.

### 1.2.5 Kenya Vision 2030, Bottom – Up Economic Transformational Agenda and Fourth Medium Term Plan

Kenyan's Vision 2030 identifies Information Communication & Technology (ICT) as one of the core drivers of national growth and development strategy to becoming a middle-income country by the year 2030. The medium-term plans and National Policy Documents – The Fourth Medium Term Plan of Vision 2030 (MTP4), the Bottom-Up Economic Transformation Agenda (BETA) and The National Digital Master Plan 2022-2032 have prioritized investments in ICT as an enabler of digital transformation and a driving force for innovative, inclusive, and sustainable development.

The National Priorities are stipulated in the Bottom-Up Economic Transformation Agenda (BETA) whose 5 pillars are:

a. Agricultural Transformation;
b. Micro, Small and Medium Enterprise (MSME) Economy;
c. Healthcare;
d. Housing and Settlement; and
e. Digital Superhighway and Creative Industry

**The Kenya Digital Superhighway Project prioritizes two main areas:**

a. Expanding Kenya's fibre network coverage countrywide: entailing laying of 100,000 kilometres (62,000 miles) of fibre optic cable, targeting 25,000 public Wi-Fi hotspots and Digital Village Smart Hubs in each of Kenya's 1,450 wards.
b. Increasing e-Government Services: automation of government services - business process automation; digitization of manual records; enhanced data sharing across agencies; and use of a single unique identifier for access to digital services.

This Strategic Plan provides the means - resources, strategies and actions needed to implement the priorities under the digital superhighway project.

### 1.2.6 Sector Policies and Laws

#### *Access to Information Act No 31 of 2016*

The Act was enacted to give full effect to Articles 10 and 35 of COK, 2010 on national values and principles of governance and the right of access to information respectively. The Act seeks to promote good governance through efficient, effective, transparent and accountable government by providing full effect to the constitutional right to access information.

The Act gives effect to the right of access to information by citizens- provided under Article 35 of the Constitution; provide a framework for public entities and private bodies to proactively disclose information that they hold and to provide information on request in line with the constitutional principles; provide a framework to facilitate access to information held by private bodies in compliance with any right protected by the Constitution and by other law; promote routine and systematic information disclosure by public entities and private bodies on constitutional principles relating to accountability, transparency and public participation and access to information; provide for the protection of persons who disclose information of public interest in good faith; and provide a framework to facilitate public education on the right to access information

### *The Computer Misuse and Cybercrimes Act No. 5 of 2018*

The Act was enacted to provide for offences relating to computer systems, to enable timely and effective detection, prohibition, prevention, responsive investigation and prohibition of computer and cybercrimes and to facilitate international co-operation in dealing with computer and cybercrime matters. The law addresses offences such as cyber espionage, computer forgery, computer fraud, false publication, child pornography, cybersquatting, phishing, identify theft, cyber terrorism among others.

### *The Data Protection Act No. 24 of 2019*

Pursuant to the constitutional requirement of Article 31(c) and (d), the right to privacy is given detailed effect by The Data Protection Act No.24 of 2019. The Act establishes the Office of the Data Protection Commissioner appointed by the Public Service Commission responsible for regulation of the processing of personal data and providing for the rights of data subjects and obligations of data controllers and processors. Data Controllers are defined as the persons or entities that determine the purpose and means of processing of personal data, while data processors are the persons or entities that process data on behalf of the Data Controller.

The Act also provides for the rights of data subjects including rights of access to personal data and correction or deletion of misleading data. It also details the procedures for rectification and erasure of personal data. Lastly, the Act has an enforcement section which among other provisions provides for a procedure for complaints and offences for unlawful disclosure of data.

## 1.3 History Of Kenya ICT Authority

ICTA is a statutory body within the State Department for ICT and Digital Economy under the Ministry of Information Communication and the Digital Economy. The authority was established through the Gazette Supplement No. 118, Legal Notice No.183 of 16th August 2013. Before ICTA's establishment, the following entities were mandated to handle various aspects of Information, Communication & Technology:

a. The Kenya Information & Communication Technology (ICT) Board;
b. The Directorate of e-Government, and
c. The Government Information Technology Services (GITS)

### 1.3.1 Evolution of ICT

Throughout history, people sought to communicate and express themselves through various modalities. Globally, developments in ICT have progressed along four major stages as depicted in table 1.4;

***Table 1.4: Major stages of ICT development***

| Stage | Period | Description |
|---|---|---|
| **Pre-mechanical** | 1450 BCE – 1450 CE | Communication mainly in words and pictograms curved in rocks. Paper from papyrus plant was invented eventually leading to books and libraries as first data centres |
| **Mechanical** | 1450 - 1840 | Growing interest in automating and speeding up numerical calculations through machines driven by steam and gears. Pascaline calculator invented as well as the first programmable computer-the Analytical Engine by Charles Babbage |
| **Electromechanical** | 1840 - 1940 | Use of electricity for information handling and transfer. Telegraph invented in 1837 and patent for telephone granted to Alexander Graham Bell in 1876. Growth of electronic gadgets. |
| **Electronic** | 1940 - Present | Rapid advances in vacuum tubes, transistors, integrated circuits and computer processors |

Internet evolved from the US Defense programme for information sharing called ARPANET (Advanced Research Projects Agency Network), the network that ultimately evolved into what we now know as the Internet. January 1, 1983 is considered the official birthday of the Internet that saw a new communications protocol was established called Transfer Control

Protocol/Internetwork Protocol (TCP/IP). This allowed different kinds of computers on different networks to "talk" to each other.

Since then, the evolution of ICT applications has been driven by technological advancements, changing user needs, and the desire for greater efficiency and effectiveness in communication and information management. Table 1.5 details the evolution of ICT. Today, we are in the era of Artificial Intelligence hence the need for prudent planning and investment to optimize its value.

***Table 1.5: Evolution of ICT***

| TIME (Years) | t-175 | t-75 | t-50 | t-25 | t-10 | t | t+10 | t+n | t= ∞ |
|---|---|---|---|---|---|---|---|---|---|
| | First computer design | First digital computer | Mid-20th century | Late 20th century | Early 21st century | Today | Horizon next | Furthest stars | Endgame |
| Information | Store | Arithmetic calculation | Relational databases | Descriptive analytics | Predictive analytics | Cognitive automation | Exponential intelligence | General-purpose AI | Intelligence |

In light of these discoveries, the evolution of ICT shows a trajectory of ongoing innovation, growing connection, and profoundly changing society and impacting ways in which people live, work, and do business.

## 1.4 Rationale for the Strategic Plan

The strategic plan 2024-2027 is a successor to the 2020-2024 plan. This plan leverages on lessons learnt, best practices, emerging technologies, and prior ICT investments such as the National Optic Fibre Backbone Infrastructure (NOFBI) Program, Digital Literacy Program, Digitalization of government services and Presidential Digital Talent Program, as well as the restructuring of the Authority in terms of mandates and resourcing. In addition, the following justifies the development of a new cycle strategic plan: -

a. The need to optimise the impact of ICT investments for citizens, businesses and government;
b. To align ICT investments and programming to the national planning cycle and BETA priorities;
c. Compliance to section 32 (5) of the PFMA 2015 National government Regulations on strategic planning based on 5th generation guidelines provided by the State Department for Planning (SDP);
d. The need to incorporate lessons learnt and new strategies to achieve the ICT authority mandate;
e. To align the authority's strategic direction with the Kenya Digital Master Plan 2022– 2032 and ensure effective coordination with the whole of government approach.

## 1.5 Strategic Plan Guiding Principles

The plan is guided by the following five digital principles (Digital-Partnerships; Interaction first; Empowerment; Innovation and Security/Resilience.

### 1.5.1 Digital Partnerships

The Authority recognises the benefits of broadening meaningful partnerships and will invest progressively in identifying cross-organizational needs and developing strong and trusted internal partnerships among departments. Further, the Authority will maintain strong relationships with other public and private institutions.

### 1.5.2 Digital interaction first

In line with the National Digital blue-print objectives, digital channels are the Authority's preferred way to communicate internally and externally. The Authority aims to advance and offer seamless and user-centric experience through accessible digital solutions.

### 1.5.3 Digital empowerment

Digital transformation is an organisation-wide endeavour: it requires awareness and facilitation at corporate level, while delegated leadership in the Authority's directorates undertakes the technical implementation and reporting mandates. Through results-oriented governance approaches, all directorates will be empowered, and be supported by the central

IT department (e.g. via advisory services and related tools), to move forward with their own business-driven digital transformation in line with this strategic plan and corporate IT governance decisions.

#### 1.5.4 Digital Innovation

For a digital culture to flourish, the ICT ecosystem needs to innovate and experiment. We propose the development of a National ICT Innovation framework in collaboration with public and private sector players and taking into account EAC Member States and AU innovative practices. In addition, efforts to empower staff and developers to test emerging technologies; create inclusive IT solutions in new ways (e.g. low code/no code); focus on user experience and accessibility; exploit data, information and knowledge; and solve common challenges together are all prerequisites for sustainable digital innovation.

#### 1.5.5 Digital security and Resilience

As more work shifts to online platforms, so is the increase of more sophisticated cyberattacks and the shift to flexible working patterns. To address these threats, the Authority will move towards integrating a 'zero trust' architecture in its decision planning, ensuring security by design, stronger cybersecurity checks and better security services, including for its sensitive and classified activities. An integrated security approach and a strengthened cybersecurity culture and awareness programme will ensure appropriate resilience and protection of the national digital landscape.

## 1.6 Methodology of Developing the Strategic Plan

The process of developing this strategic plan utilized the future search methodology that is best suited for dynamic ICT environments, and helped stakeholders to map the latest and future trends in ICT as well as identifying opportunities that can be leveraged using the best mix of resources available. The process adopted a 3-phase sequential ecosystem approach that optimizes the requisite elements and foundations for digital transformation in Kenya.

### *Phase I*

The first phase involved an institutional assessment that included key informant interviews with ICTA Board, Leadership, Management, and Staff at all regional offices and a comprehensive desk review. The insights garnered from these activities underpinned the development of this strategic plan.

### *Phase II*

This phase conceptualized the plan over a five-day workshop in Mombasa. The process was informed by previous initiatives and documents, taking into account broad and diverse range of previous activities, initiatives, directions and mandates at the continental, regional and national level. The institutional assessment report and the environmental assessment were interrogated during the workshop. Key highlights and insights emanating from these reports were outlined in the situational assessment section of this strategic plan. At the workshop, the participants reviewed the corporate ideology including the Vision and Mission, in addition to reaching consensus on the Strategic Priorities for this planning period.

### *Phase III*

After the initial workshop, the Strategic Plan Technical Team workshop nominated by the ICTA management held a series of working engagements for technical drafting of the document. The drafting was guided by the fifth guidelines on preparation of strategic plans issued by the State Department for Economic Planning. This phase also focused on operationalizing the Strategic Priorities agreed upon during the workshop by coming up with programmes, projects, initiatives and activities that comprised the implementation plan. In addition, input and consultations with the private sector and civil society were sought. Industry stakeholders and the user MCDAs then validated the plan. Map – shows the Strategic Plan alignment and linkages to key international and national protocols and policies.

*Map 1.1: Strategic Plan alignment and linkages map*

# CHAPTER 2

# CHAPTER TWO

# STRATEGIC DIRECTION

**This chapter details the strategic direction that ICT Authority has charted for the next five years during which this plan will be implemented. It spells out the Vision, Mission, Strategic goals and Core Values. It further affirms the Authority's commitment to quality service delivery.**

## 2.1 Mandate

Executive Order No 2 of November 2023 places ICTA under the State Department of ICT and Digital Economy. The Authority's broad mandate entails enforcing ICT standards in Government, establishing, developing and maintaining secure ICT infrastructure systems, supervision of electronic communications, as well as promoting digital literacy, capacity, innovation and enterprise.

**Functions of the ICT Authority**

a. Set and enforce ICT standards and guidelines for the human resource, infrastructure, processes and system and technology for the public office and public service;
b. Facilitate and regulate the design, implementation and use of ICTs in the public service;
c. Promote e-Government services;
d. Promote ICT literacy and capacity;
e. Facilitate optimal electronic, electronic form, electronic record and equipment use in
f. public service;
g. Promote ICT Innovation and enterprise;
h. Establish develop and maintain secure ICT infrastructure and systems;
i. Supervise the design, development and implementation of critical ICT projects across the
j. public service and
k. Implement and manage the Kenya National Spatial Data Initiative

## 2.2 Vision Statement

***A DIGITALLY EMPOWERED SOCIETY***

## 2.3 Mission Statement

***To digitally empower the society through provision of quality ICT services, application of best practices and harnessing digital technologies and capabilities to unlock limitless opportunities***

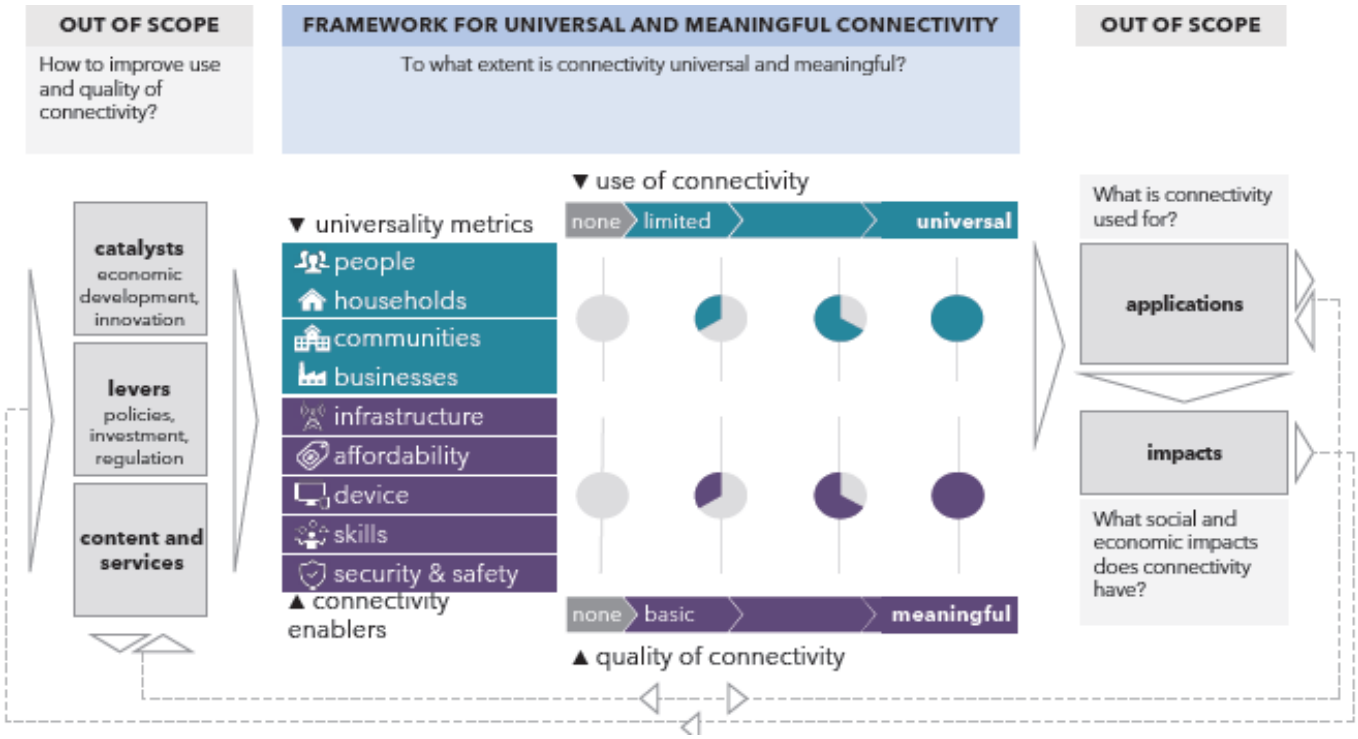
## 2.4 Strategic Goals

ICT Authority, upon reviewing its operating environment, its mandate and stakeholder expectations formulated the following strategic goals.

a. Enhanced access to Universal and Meaningful Connectivity
b. Expanded access to digital products, solutions and services.
c. Sustained transformational digital culture.
d. Optimized and Seamless Digital Environment.
e. Enhanced organizational capacity, operational efficiency and effectiveness.

The overarching goal is "Sustainable Digital Transformation" with a focus on attaining universal and meaningful connectivity for users. Figure 2.1 presents the Universal and Meaningful Connectivity Framework.

*Figure 2.1: Universal and Meaningful Connectivity Framework*




## 2.5 Core Values

The Core Values are derived from the Authority's acronyms as indicated in table 2.1, thus ICTA meaning (I-Innovation, C-Citizen focus, T-Transparency and A- Agility)

***Table 2.1: ICTA Core Values***

| | |
|---|---|
| **Innovation** | ICTA is committed to providing an environment favourable for creativity, continuous learning and innovation |
| **Citizen-Focus** | ICTA shall place its stakeholders at the center of service delivery and commits to remain responsive to their needs and expectation |
| **Transparency** | ICTA is committed to observing high levels of integrity and openness in conduct of its affairs |
| **Agility** | ICTA shall make adjustments to respond to the dynamic digital space without loosing its identity |

ICTA mantains this ideological setting through;

a. Connecting with MDACs, private sector, the public and pivoting them to thrive.
b. Making smarter, data driven decisions, and continuously improving governance.
c. Attracting and retaining top talent, inspiring teams, building their capacity, and keeping them focused.

Table 2.2 presents the ICTA Strategy Map.

***Table 2.2: ICTA Strategy Map***

| | |
|---|---|
| **OVERARCHING GOAL** | Sustainable Digital Transformation |
| **VISION** | A digitally empowered society |
| **MISSION** | To digitally empower the society through provision of quality ICT services, application of best practices and harnessing digital technologies and capabilities to unlock limitless opportunities |
| **STRATEGIC GOALS** | Enhanced access to Universal and Meaningful Connectivity |
| | Expanded access to digital products, solutions and services. |
| | Sustained transformational digital culture. |
| | Optimized and Seamless Digital Environment. |
| | Enhanced organizational capacity, operational efficiency and effectiveness. |
| **CORE VALUES** | Innovation |
| | Citizen-Focus |
| | Transparency |
| | Agility |
| **TAGLINE** | Limitless Opportunities |

## 2.6 Quality Policy Statement

ICTA is committed to applying all approved processes and procedures in making ICT investments and delivering quality services for sustainable digital transformation. In pursuit of this commitment, the Authority shall comply with all the applicable requirements and continually improve on its effectiveness by implementing a Quality Management System based on ISO 9001:2015. ICTA management shall on an annual basis review the established quality objectives of this policy to ensure sustainability of the organization.

# CHAPTER 3

# CHAPTER THREE

# SITUATIONAL AND STAKEHOLDER ANALYSIS

**This chapter analyses both internal and external environments under which this Plan will be implemented. The findings will inform and mitigate against any risks and more importantly to leverage on any emerging opportunities to support its implementation. The chapter reviews both micro and macro factors relative to their possible impacts on the implementation of the Plan. It assesses past performance of ICTA to identify useful lessons which can be replicated to improve the Authority's programming and execution of its mandate. The Chapter further outlines the Authority's stakeholders, their roles and their expectations.**

## 3.1 Situational Analysis

### 3.1.1 External Environmental Analysis

ICT Authority in the execution of its mandate during the Plan period remains exposed to factors from both within and without its operating environment which may impede or facilitate the implementation of the plan. Some of the major factors arising from the external environment are political, Economic, Social, Technological Ecological and Legal (PESTEL). Thus PESTEL analysis has been utilized and findings presented herein.

The external environment analysis was informed by a comprehensive assessment of macro and micro environment. The analysis identified the opportunities to leverage on to get a competitive advantage and optimise in resource allocation. Analysis of the external environment also helped in determining threats which would facilitate risk management, proactive planning, and adaptability. Identification of opportunities and threats was guided by an understating of frontier technologies and new energy forms as indicated by table 3.1.

***Table 3.1: Frontier Technologies and renewable energy mix***

| Industry 4.0 | Green & Renewable energy technologies | Other frontier technologies |
|---|---|---|
| ■ Artificial Intelligence (A.I)<br>■ Internet of Things (IoT)<br>■ Big Data<br>■ Block Chain<br>■ 5G<br>■ 3D Printing<br>■ Robotics<br>■ Drone Technologies | ■ Solar PVs<br>■ Concentrated Solar Power<br>■ Biofuels<br>■ Biogas & biomass<br>■ Wind Energy<br>■ Green Hydrogen<br>■ Electric vehicles | ■ Nanotechnologies<br>■ Gene editing |

As with previous waves of automation, frontier technologies are both destroying old jobs and creating new ones, through new products, tasks, professions, and economic activities. In summary, the global ICT context is dominated by frontier technologies divided into three broad categories as indicated by table 3.1.

#### *3.1.1.1 Macro-Environment*

ICT Authority conducted a PESTEL test on the organization and identified factors that may confer opportunity in the implementation of its mandate for leverage and also those threat likely to arise from them as follows.

**POLITICAL:** Kenya's Political environment can be described as stable. The new Kenya Kwanza Government has introduced ICT friendly policies and priorities. These may positively impact public ICT agencies' funding the attainment of their planned goals and objectives. The enhanced focus on ICT related sectors will incentivize the private sector to invest more in ICT and frontier technologies thus helping to develop a robust digital economy. Devolution has also provided an opportunity for county governments to expand the scope of coverage of ICT products, channels, platforms and services to Kenyans, however, this is depended on proper prioritization and budgeting. Kenya affiliation to world ICT bodies besides offering opportunity for expanded scope of adopting/adapting to best practices.

**ECONOMIC:** Good economic performance is positively related with increased budgetary allocation to public agencies facilitating discharge of their mandates. Increasing inflation may however, erode ICTAuthority's service delivery capacity due high cost of inputs required.

**SOCIAL:** Low digital literacy among the public impedes citizens ability to consume ICT products, channels, platforms and services which may derail their pursuit for sustainable digital economy. The technical digital language used in ICT policies, laws and treaties and conventions may also be beyond the understanding of the common citizen even as ICTA expands access to public digital information. This restricts usage of digital resources to few selected institutions such the Parliament, Judiciary, national and county governments, NGOs, Ministries/departments and corporates, among others. Further, emergence of pandemics such as COVID-19 may impede ICTA's ability to execute its mandate as expected and this may also impact the wider digital ecosystem thus undermining quest for digital transformation among citizens. This may require adoption of more innovative ways in delivery ICT mandates.

**TECHNOLOGICAL:** Fast changing technological advancements offer opportunity for fast, efficient and convenient service delivery by Kenya. It however comes with high cost of acquiring, deploying and updating the existing information communication and technology infrastructure. It also exposes the organization to the threat of cybercrimes and associated threats such as loss of information, disruption of operations which demand continuous mitigation. Advancement in technology also offers the opportunity of accessing public digital resources through social media and other platforms at the convenience of the public.

**ECOLOGICAL:** Climate change poses serious threats to ICT investments and services. It is likely to trigger resource-based conflicts thus threating peaceful coexistence among Kenyans. It also risks livelihoods of many especially in the arid areas as resources get depleted or over exploited causing floods, displacement and possible loss of lives and property. ICTA in response will prioritise, review, adopt and adapt to changing environmental conditions, including utilizing more resilient tools, technologies and methodologies. The organization will seek to reduce its carbon foot print in her processes by optimizing available resources, using innovative approaches to reduce wastage and polluting effects. Other critical aspects identified include the growth of awareness regarding the need for environmental conservation and climate change which is a cross cutting theme of SDGs, African Union Agenda 2063 and other protocols.

**LEGAL:** Kenya ICTA's founding legislation has since expired, leaving the organization in legal limbo. However, a draft ICTA Bill, 2022 has been formulated for Parliamentary approval. The review of the various ICT Policies and laws will be undertaken, informed by need to respond to emerging laws and technological advancement in service delivery. Some of the laws like the protection of data and intellectual property rights including the protection of Kenya Laws from copyright infringement and plagiarism need protection. The expanding legal system also expands the scope for ICTA in the collection and use of digital information for furthering digital rights of Kenyans.

**Global ICT Trends Analysis**

International Telecommunication Union (ITU) annual report 2022 identifies greater connectivity, digitisation, and globalised skills as three global drivers responsible for the increase in ICT-related jobs. Advances in artificial intelligence, virtual reality and green technology will continue to drive changes in ICT as evidenced by ICT research findings of the last decade. Table 3.2 shows global ICT research developments in the past decade.

***Table 3.2: ICT Research Developments***

| INTERACTION | INFORMATION | COMPUTATION | YEAR | BUSINESS OF TECHNOLOGY | CYBER AND TRUST | CORE MODERNIZATION |
|---|---|---|---|---|---|---|
| Inferences in new places | Open AI | AI PC<br>Smarter<br>Computing | 2024 | From DevOps to DevEX | Defending reality | Core workout |
| Through the glass | Opening up to AI | Above the clouds | 2023 | Flexibility, the best ability | In us we trust | Connect and extend |
| | Data-sharing made easy | Cloud goes vertical<br>Blockchain: Ready for business | 2022 | DEI tech: Tools for equity<br>The tech stack goes physical | Cyber AI | IT, disrupt thyself |
| Rebooting the digital workspace<br>Bespoke for billions | Machine data revolution<br>MLOps: Industrialized AI | | 2021 | Strategy, engineered<br>Supply unchained | Zero trust | Core revival |
| Human experience platforms | Digital twins | | 2020 | Finance and the future of IT<br>Architecture awakens | Ethical technology and trust | |
| Intelligent interfaces<br>Beyond marketing | AI-fueled organizations | NoOps in a serverless world | 2019 | Connectivity of tomorrow | DevSecOps and the cyber imperative | |
| Digital reality | Enterprise data sovereignty | API imperative<br>Blockchain to blockchains | 2018 | No-collar workforce<br>Reengineering technology | | The new core |
| Mixed reality | Dark analytics<br>Machine intelligence | Everything-as-a-service<br>Trust economy | 2017 | IT unbounded<br>Inevitable architecture | | |
| Internet of Things<br>AR and VR go to work | Industrialized analytics | Democratized trust | 2016 | Right-speed IT<br>Autonomic platforms | | Reimagining core systems |
| Ambient computing<br>Dimensional marketing | Amplified intelligence | API economy | 2015 | IT worker of the future<br>Software defined everything | | Core renaissance |

Overall, global trends in ICT are influenced by transition to lower carbon processes and application of frontier technologies. Figure 3.1 shows the global drivers of ICT growth.

*Figure 3.1: Global ICT Drivers*

| Global ICT Drivers | |
|---|---|
| **E-Mobility**<br>■ Advanced countries are moving towards zero carbon transport technologies eg electric vehicles, auto-driver systems, anti-collission, location applications etc<br>■ Artificial Intelligence Applications<br><br>**AIoT (Artificial Intelligence of Things)**<br>■ Intensive Research and Development in AIoT and its advanced or Future Applications<br><br>**Blockchain Technologies**<br>■ Application of Blockchain Technologies in life sciences and its security - Information Security Regarding to Novel Scenarios for Future Applications<br><br>**Smart Manufacturing**<br>■ Semiconductor Technology and Manufacturing Process based on Future Technological Development<br><br>**Increased Individualism**<br>■ People are requiring Personalised and Directed Content chosen by them and suited to their preferences and styles<br><br>**Increased Green consciousness**<br>■ Issues such as Climate Change and Energy, conversation are increasingly at the forefront of public consciousness | **Increased expenditure on Entertainment**<br>■ Increased consumer spend on Gaming, 3D Animation, Web- entertainment and other forms of digital entertainment<br><br>**Interaction on the move**<br>■ People expect continuous broadband connectivity<br><br>**Urbanisation**<br>■ Increased focus on development such as Smart Cities, Wireless Area Networks, Smart Grids<br><br>**Wealth Creation**<br>■ In developed countries there is a focus on wealth creation. This means that high-end markets are attracting most business focus<br><br>**Ageing Population**<br>■ Ageing population drives different needs in regards to medical requirements, labour divisions, entertainment, etc., that must be supported by latest technology development<br><br>**Data Networks**<br>■ Advanced countries are investing in next-generation technologies to enable virtual connectivity |

#### *3.1.1.2 Micro-Environment*

ICT Authority offers opportunities to various categories of staff members including permanent and pensionable employees, Internship and apprentices, mentorships, pupils and volunteers, Human Resource, among other professions. This enables it to develop unique products and services that meet the customer requirements. The challenge facing ICTA is the difficulty of retaining talent against high remuneration offered in the competitive market as well as highly classified public institutions. ICTA will thus continuously engage the relevant government agencies with a view to upgrading the status of the organization for purposes of attracting and retaining talented staff necessary for the discharge of its mandate.

The Authority commits to comply with set rules and regulations in the delivery of its services. It undertakes to adhere to the Public Procurement and Disposal Act 2015 and and the supporting regulations. It will maintain an inclusive list of prequalified suppliers of goods and services and reserve opportunities for youth, women and persons with living disabilities including prioritizing procurement locally sourced goods and services as guided by the Procurement policies and laws in force. ICTA also commits to pay its suppliers on a timely manner and eliminate pending bills.

#### *3.1.1.3 Market Analysis*

Just as the Global ICT market is Segmented by technology types (IoT, Big Data, Security, Cloud Computing) and Applications (Digital Education, Data Center Systems, Communication Services), market opportunities in ICT are discernible to those businesses and individuals ready to use, adopt or adapt to frontier technologies and applications. These opportunities are derived from the latest trends, consumer behaviour, market demands, and statistics empowering businesses to anticipate industry developments for growth and profitability. Critical sectors in the national economy to Drive Digital Transformation are shown in figure 3.2.

*Figure 3.2: Critical Sectors in ICT*

| Digital Industry | Digital Financial Services | Digital Governance | Digital Education | Digital Health | Digital Agriculture |
|---|---|---|---|---|---|

From the situational analysis, the ICT market presents a set of six clusters for investment. The clusters are: Broadband Infrastructure and services; ICT for Development; Sustainability Agenda & Environment; Grand Science; Industry Applications and the Service Economy. In addition to the 6 clusters of investment, enormous opportunities are presented by new energy mix to power the fourth industrial revolution. Figure 3.3 shows clusters of investment in the ICT space.

*Figure 3.3: ICT investment clusters*

**Broadband Infrastructure and Services**

- Research and innovation into future means of providing access. Design and development of technologies that respond to changes in demand for wireless broadband services and particularly related to enabling higher availability and quality of connectivity in rural areas (digital inclusion)
- Utilisation of public broadcast and wireless spectrums, freed-up through digital migration and new approaches to spectrum regulation

**ICT for Development**

- Enabling individuals to empower themselves: democratically, socially and economically. Applying for socio-economic transformation, using ICT to create new sectors and businesses; utilising ICT to support enhanced agricultural production, principally for the purpose of rendering support to emerging farmers to contribute towards increasing food security, export and in order to mitigate environmental impact

**Sustainability and the Environment**

- Using ICT to optimise management of resources, assets and environments. All means of using ICT to create a greener environment through: improvements in the efficiency and cost of consumption and reduction of the damaging effects associated with consumption.
- Leverage of technologies related to observation from space and in situ of large areas eg forest ecosystems, conservancies, water bodies etc and detection of related changes. Includes application for remote sensing, earth observation applications, positioning and location-based services, environmental and disaster management

**Grand Science**

- Leveraging the ICT component of Grand Science projects to create new industrial and service capability. The application of computer science and information technology to the field of biology and medicine

**Industry Applications**

- Facilitating growth and performance in existing and emerging sectors
- Optimisation of networked infrastructure such as electricity grid, water, roads, rail, pipes, etc
- ICT for mine safety and asset location, disaster response, modelling and simulation
- ICT systems, systems integration, management information systems, computer aided design, collaborative engineering and robotic management systems for enhanced and modernised manufacturing capacity in Kenya
- Utilising future Internet and pervasive ICT as platform/environment for the development of new applications
- Participation in and provision of support along the value chain for digital content – creation, production, distribution
- Supply chain optimisation and logistics management
- Asset Management condition monitoring and tracking of physical assets for optimal utilisation (including preventative maintenance) and disposition; protection, including against theft; and maintenance of asset registries

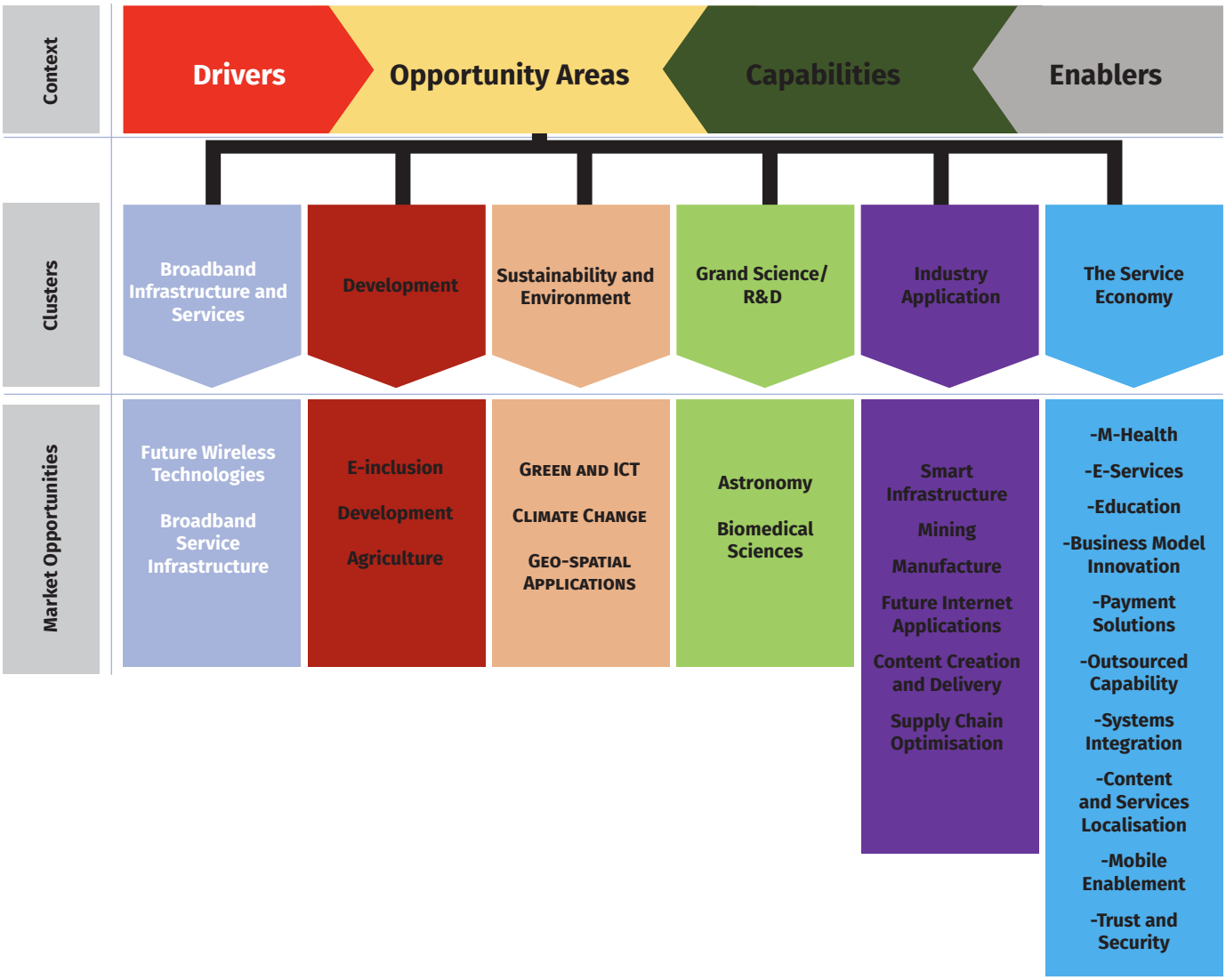
**The Service Economy**

- Enabling improved, lower cost and more convenient access and consumption of physical and digital services

**Drivers** include greater connectivity – more than 120 countries now have over 80 percent market penetration of mobile telephones; Digitization of more aspects of work – today, telecommuting and outsourcing have become standard business practices globally and More globalized skills

**Opportunities** can be classified into Clusters: these represent areas of significant and attractive market Need, in which we can feasibly, and with differentiation, respond by building on existing capability in order to deliver Impact; on the dimensions of wealth, society and national advantage. Figure 3.4 shows market opportunities that industry, government and other stakeholders can leverage on.

*Figure 3.4: Market Opportunities*




**Capability** exists in research organisations, academic institutions, industry and MDACs. It is the sum total of technological and human capacities that exist to optimize use of ICT systems for service delivery.

**Enablers** refer to corporate management, Industry Collaboration, Education and Training and Government Action (Policy, Legal and Regulatory Frameworks, Political goodwill, economic/social stability).

Understanding the particular drivers of the technology needs of customers is essential to inform customization at the individual, societal or Economic levels. Figure 3.5 shows the National drivers of ICT.

*Figure 3.5: National Drivers of ICT*

**NATIONAL DRIVERS**

**Penetration of Mobile Devices**
- Mobile penetration has reached 90% in Kenya.
- More people are relying on mobile phones for their livelihood, to access information and to connect with family and friends

**Increased expenditure on Entertainment**
- As globally, Kenya has witnessed increased spending on entertainment. However, the difference is that consumers are interested in Mobile Gaming, Ringtones, Images, and other products and services that can be utilised and accessed via a mobile device

**Government and Companies targeting Bottom of the Pyramid (BOP) Market**
- Currently BOP markets provide the most reliable source of growth in the ICT market. The Digital Super Highway Project targets inclusion of vulnerable and low income population into the digital space. This involves digitization of Government services and incentivising businesses through business-to-business platforms. Companies are increasingly looking towards Kenya as a doorway to access the African market

**Social Issues**
- Issues such as Poverty Reduction, Service Delivery Efficiency, Job Creation are much more important than wealth creation

**Affordability and Localisation**
- Technologies must be affordable and localised, as most consumers cannot afford to follow the latest trend in technology eg the recent launch of affordable SMART phones

**Younger Population**
- Kenya's young population influences technology needs and requirements

**ICT Governance**
- Kenya Government has recognised ICT as an enabler of socio-economic transformation

**Research, Development & Innovation**
- Increasing efforts at coordinating joint R&D initiatives with ICT industry actors.

**Digital Skills & Capacities**
- Kenya has a robust digital skilling programmes

**Digital Infrastructure**
- Substantial investments have been made in reducing the digital infrastructure-gap

### 3.1.2 Summary of Opportunities and Threats

Based on the analysis of the external environment, Table 3.3 presents a summary of ICTA's opportunities and threats

***Table 3.3: Summary of Opportunities & Threats***

| Environmental Factor | Opportunity | Threat |
|---|---|---|
| **Political** | ■ Global ICT governance<br>■ Expanded scope of digital economy leveraging on government digital superhighway project<br>■ Increased demand for ICT Products, platforms, channels and services among stakeholders in the region and internationally | ■ Changes of policy and priorities<br>■ Expanded scope of work without corresponding budget increase |
| **Economic** | ■ Addressing the growing digital divide (SDG 9)<br>■ Digital Dividend emerging from freed spectrum as a result of migration to digital technologies<br>■ Adoption of friendly ecosystem technologies<br>■ Significant internet population<br>■ Robust startup ecosystem,<br>■ Global tech-capital<br>■ Ease of doing business arising from review of laws<br>■ Faster settlement of commercial disputes<br>■ Improved investment climate | ■ High cost of adoption and adapting to new technologies<br>■ Loss of market share to competitors performing similar mandates in other countries.<br>■ Loss of revenue from infringement of institutional intellectual property |

| Environmental Factor | Opportunity | Threat |
|---|---|---|
| **Social** | ■ Changing customer needs leading to demand for innovative solutions.<br>■ Demand for varied products and services by critical stakeholders leading to the expansion of ICT market | ■ Digital coverage gap-due to limited digital infrastructure investments<br>■ Digital access gap-due to unaffordable broadband and devices<br>■ Digital illiteracy gap (Usage gap) |
| **Technological** | ■ Fast changing technology and it impact on operational efficiency<br>■ Provision of alternative avenues for reaching citizens | ■ Frontier technologies destroying old jobs<br>■ Complex FinTech, cyber security and crypto currencies<br>■ Information and data breaches<br>■ Disruption of service delivery owing to uneven internet service delivery<br>■ Loss of market relevance in case of quality private sector services.<br>■ Environmental pollution arising from mismanagement of e-waste |
| **Legal** | ■ Enactment of ICTA Bill<br>■ Devolution has increased demand for ICT services across all sectors<br>■ Roll-out of additional ICT regional offices | ■ Lack of legal framework for standardising county government ICT investments<br>■ Rapid changes in the tech-legal environment leading to legal uncertainities |
| **Ecological** | ■ The growth of awareness on the need for conserving the environment and mitigating climate change providing opportunity for specialized digital solutions on the thematic area.<br>■ Emergence and spread of Land and Environment Courts creating demand for environment related advice and services, including dedicated digital support platforms | ■ Improper disposal of ICT waste leading to environmental pollution<br>■ Increased emission of green House gas in delivery of services |

### 3.1.3 Internal Environmental Analysis

ICT Authority leverages technology in the delivery of its mandate and is continually striving to be at the front of the curve in adapting to changing circumstances with agility.

#### *3.1.3.1 Governance and Administrative Structures*

ICTA has a defined organizational structure geared towards enhancing organizational efficiency and effectiveness and enhancing feedback including accountability for delivery of its functions. The structure provides strong governance and leadership mechanisms with the ICTA Board of Directors as the highest governance organ. The Board is led by a Chairperson and has delegated its functions to four committees to perform on its behalf. These are Technical, Finance & General Purposes, Human Resource and Administration, and the Audit and Risk Management Committees. The Board oversees the performance of these Committees including the management of ICTA in the execution of their duties and holds them accountable. This ensures integrity among those entrusted in managing ICTA.

At the operational level, ICTA is headed by the Chief Executive Officer (CEO) who oversees the day to day management of the organisation. The CEO is supported by a team of technical heads and operational units in the performance of the functions assigned by law. ICTA will leverage on these well-structured service units to implement this strategic plan under the guidance of the Board.

To deliver on its mandate, the Authority has 5 Directorates namely: (a) Directorate of Programs and Standards (b) Directorate of Digital Infrastructure and service development (c) Directorate of Capacity development, Innovations & Partnerships (d) Directorate of Strategy and Risk management (e) Directorate of Corporate Services as provided in Annex 1.

ICTA also maintains a robust stakeholder engagement framework anchored on policy which will be re-engineered to create synergy with partners for the attainment of the goals and objectives of this plan.

#### *3.1.3.2 Internal Business Processes*

ICTA operates based on the prescribed internal business processes designed to streamline and optimise workflows, enhance efficiency and ensure effective utilisation of resources within the organisation. These processes are integral in the management of the organization and its value chain and provide value to ICTA customers and stakeholders. ICTA continues to lead the government digitalization efforts and management of the same through an online repository for access by the public. The organization has greatly embraced ICT which it has embedded in its processes resulting in increased efficiency, productivity and convenience for the public. Use of modern technology has however brought new challenges such as increased operating costs, need for updating existing ICT infrastructure and software regularly which may impede service delivery.

#### *3.1.3.3 Resources and Capabilities*

ICTA possesses resources and capabilities considered as its strengths. Government support for digital transformation through the Kenya digital superhighway project stands out as a cornerstone. In addition, the organization operates in a space with robust ICT policy framework. Whilst embracing emerging technologies, Kenya has continued to up-scale its ICT capabilities by speeding up the development of new generation mobile, high-speed, secure and ubiquitous ICT infrastructure, developing a modern technology-enabled industrial system, implementing the national big data strategy and enhancing national cyber-security.

To advance the digital training, skilling, re-skilling and up-skilling of the public and professionals, Kenya has a ready pool of research organisations, academic institutions and industry. Nationally, there is a total of 2,396 TVET institutions as well as 65 Universities (32 publics and 33 private). Nearly all these institutions possess the capacity to embrace technology and provide modern ICT training to the public and industry. Partners like African Advanced Level Telecommunication Institute (AFRALTI) can provide training, mentorship and induct technical expertise who will actualise the strategies.

### 3.1.4 Summary of Strengths and Challenges

Based on the analysis of the internal environment, ICTA's summary of strengths and challenges are as shown in Table 3.4.

***Table 3.4: Summary of Strengths and Challenges***

| Factor | Strengths | Challenges |
|---|---|---|
| **Governance & Administrative structures** | ■ Robust ICT Policy Framework<br>■ Strong institution, governance and leadership practices<br>■ Strong stakeholder relationships | ■ Lack of clarity on brand identity<br>■ Low cohesion, cooperation, coordination and harmonization of efforts and policies among ICT institutions |
| **Internal business processes** | ■ Strong leverage on technology for service delivery | ■ Weak framework and mechanisms for Monitoring and evaluation of previous and future ICT investments<br>■ High operational costs<br>■ Inadequate ICT infrastructure<br>■ Complexity of the ICT hardware and softwares, including application of frontier technologies |

| | | |
|---|---|---|
| **Resources and capabilities** | ■ Strong linkages with ICT industry<br>■ Only institution for managing government ICT in Kenya<br>■ A talented, vibrant and competent workforce<br>■ Accreditation as ICT Centre of excellence<br>■ High customer satisfaction of ICTA products and services<br>■ ICTA unique products and services<br>■ Robust innovation and innovators ecosystem | ■ Inadequate financial and human resources<br>■ Insufficient work infrastructure<br>■ Inadequate bandwidth<br>■ Lengthy internal processes<br>■ Low level of generation of A-in-A<br>■ Shortage of finance, mentoring & training available for high potential digital entrepreneurs |

### 3.1.5 Analysis of Past Performance

This section analyses ICTA's past performance by Key Results Area including challenges and lessons learnt.

#### *3.1.5.1 Key achievements*

A review of ICTAs performance for the 2018-22 strategic plan period was undertaken and the following are the achievements by Key Results Areas (KRA).

**KRA/Pillar 1: Digital Infrastrucutre**

In the last ten years, Kenya has built 22,959 Km of Terrestrial Fibre providing coverage to all sub-counties. The private sector over the years has installed 13,819 Km of terrestrial fiber cumulatively contributing to the utilization. During the last plan period (2020-2024), 12,000 Kms of Fibre Optic cable was laid across the country.

**KRA/Pillar 2: Digital Services**

Kenya is currently served by six submarine fibre cables connecting it to the world (SEACOM, TEAMS, EASSy, LION2, DARE1, PEACE), with most internet users concentrated in urban areas. With the continued roll-out of technology, the total number of mobile phone devices connected to mobile networks stood at 62.9 million in the fourth quarter and Financial Year 2022/23, with a penetration rate of 124.4 percent.

In the period under review, 12,845 government services were on-boarded onto the e-citizen portal to enhance user convenience. Over1800 Government institutions were connected and maintained, 35 public primary schools, 46 hospitals for Universal Health Coverage (UHC) were connected. 1262 Public WiFi Hotspots have been Installed in strategic service points across the country. Additionally, 48 MDAs and 47 Counties was connected to Unified Communication, 40 agencies and 18 ministries implemented the content Management System. 280 Constituency Innovation Hubs established and 40 fully operationalized, one National Network Operation Center (NOC) established with partial process complete. Over 700 government-registered domains.

The Authority initiated the process compliance to ISO27001(information security management system) as a framework for management of information security to be cascaded to the rest of the government. The use of digital signatures to perform electronic transactions to boost online trust between parties through the National Public Key infrastructure Project was actualized.

**KRA/Pillar 3: Digital Skills, Values & Culture**

The Smart academy continues to offer customized digital skills training to both private and public officers. The digital skills programme was able to train and link 224,520 youths to online jobs in Ajira digital programme and 1,200 ICT graduates on high end skills under the Presidential Digital Talent Programme (PDTP).

**KRA/Pillar 4: Applied Research, Innovation & Enterprise**

In promotion of collaboration and partnership in the industry, 2 Connected Summit events were successfully conducted and attracted 1,464 local, regional and global industry leaders. To improve proper disposal of E-waste material, a national E-waste collection centre was established with 13, 709 devices collected and tested for refurbishment.

## Foundation: Governance and Leadership

In the period under review, the ICT Authority strengthened its internal institutional capacity through the establishment of 8 Regional and 47 ICT offices for coordinating the implementation of projects in the counties. The Authority also implemented a commercialisation plan, reviewed the ICT Authority organisation structure and implemented an Enterprise Resource Planning system to management the internal processes. During this period, the authority also developed, launched and implemented the Digital Masterplan 2022-2032.

In an effort to enhance staff skills and productivity ICTA organized training for staff in various skills and recruited new staff in the plan period. In addition, and to promote work-life balance for staff, four annual team building retreats were held while monthly engagement with staff were conducted through departmental meetings including talks and seminars relating to staff welfare. Annual safety and health audits were conducted on the recommendations of Ministry of Health and in compliance with COVID-19 guidelines and mitigation protocols. ICTA also developed and received approval for new human resource instruments. The Institution also engaged and discussed Job Evaluation with the Salaries and Remuneration Commission culminating in an upward revision of basic salary structure.

Overall, Kenya as the Silicon Savannah in Africa, has firmly established itself as Africa's digital trendsetter. Table 3.5 shows Kenyas ICT Journey - some noteworthy developments and partnerships that have been implemented since 2003, and how they may define Kenya's digital environment in the future.

***Table 3.5: Kenya ICT Journey***

| YEAR | INFRASTRUCTURE | DATA | TECHNOLOGY WORKFORCE | CYBER SECURITY | NEW BUSINESS CAPABILITIES | CUSTOMER CENTRIC SERVICE |
|---|---|---|---|---|---|---|
| 2003 | ■ Telkom Kenya Mobile network<br>■ GPRS/EDGE connections. | ■ Public Data Network Operators<br>■ GDC | ■ E government secretary<br>■ GITs | | | ■ KENET<br>■ KENIC |
| 2007 | ■ 3G<br>■ VOIP<br>■ Mobile money<br>■ ICT institutions<br>■ NOFBI I<br>■ GCCN<br>■ CCP<br>■ TEAMS | ■ Cloud computing | ■ ICT board | | ■ e-commerce | ■ Connected summit |
| 2012 | ■ SEACOM<br>■ 4G | ■ -Fintech<br>■ Digital currency<br>■ Big data | ■ DLP | ■ NC3<br>■ National cybersecurity strategy | ■ e-government<br>■ Smart cities | ■ Ecitizen<br>■ CIH<br>■ Open data |
| 2017 | ■ 5G<br>■ NOFBI II<br>■ Connectivity to rural | ■ ODPC | ■ PDPT<br>■ Ajira | ■ Ipv6<br>■ NC4<br>■ Computer Misuse and Cybercrimes Act 2018 | ■ E-hubs | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 2022 | ■ 6G<br>■ Public Wifi<br>■ Star link<br>■ Space x<br>■ Metaverse<br>■ LEO satellites | ■ Green data centres | ■ Virtual learning<br>■ Data analysts<br>■ AI & ML Experts | ■ NPKI | ■ Bitcoin<br>■ BI<br>■ Smart spaces | ■ Digital hubs<br>■ EWaste |

Kenya is the regional ICT hub of East Africa, with the country being a leader in broadband connectivity, general ICT infrastructure, value added services (VAS), mobile money, mobile banking, and FinTech services. These developments represent the ICT sector readiness to adopt, adapt and benefit from the digital transformation opportunities.

#### *3.1.5.2 Challenges*

During the implementation of the Strategic Plan 2020 – 2024 ICTA faced the following challenges.

a. The implementation of the planned programmes and projects during the plan period were faced with resource inadequacy - inadequate financial resource allocation and inadequate technical specialized resourcing;
b. The dynamic nature of technology renders the continuous high capital-intensive investments into obsoleteness & fast rate of convergence impact on optimal usage of ICT systems;
c. Insufficient funding restricts new staff recruitment, acquisition of office space, and staff training;
d. Intermittent access to public ICT services and delays in processing and development of public portals and websites due to migration of data from old to new systems;
e. The existence of undocumented processes hampers business process re-engineering which ultimately slows down the process of adoption of the transition to paperless office concept;
f. Some of the programmes and projects identified for the plan period required a Multidisciplinary approach which makes it complex in financial and coordination during implementation;
g. Further, there is a mismatch in supply of ICT infrastructure and demand. The government has rolled out an elaborate network of fibre optics but there is no corresponding evidence of businesses and individuals converting the investment into valuable opportunities. Also, the County Governments have not prioritized ICT investments in their development planning and have continued to rely on national government initiatives to support their connectivity.
h. Emergence of COVID–19 pandemic which impacted negatively on service delivery and staff health causing exhaustion of medical cover.

#### *3.1.5.3 Lessons Learnt*

The following key lessons were learnt and will be leveraged on to enhance the implementation of this Strategic Plan.

a. Harmonization of ICT mandates to address digital economy issues, including data governance; cyber security; consumer protection and competition rules and access/inclusion policies.
b. Conduct due diligence before project implementation, especially for large development partner funded initiatives;
c. The traditional programme-based funding model to the Sub-sector overlooks the dynamic nature of the industry, thus the need for resource based models;
d. Enhanced use of appropriate technologies can greatly improve organisational efficiency and productivity;
e. Building capacity of staff in core and technical functions improves coordination of workflow processes and reduces operational costs;
f. Maintenance of a clear framework of engagement with critical stakeholders facilitates timely access required support-resources, technical, facilities, hardware and software etc and gives legal impetus to the Authority processes;
g. A clear and robust legal and policy framework for engagement with government and other stakeholders facilitates timely access and customer-responsive ICT services;
h. Base project plans and designs on approved long-term plans and policies;
i. Standardize processes, workflows and data sets to allow e-government application to be shareable and scalable across the public sector;
j. Facilitate greater ICT industry input into agency funding priorities, so that there can be better coordination and

linkages between research efforts and commercialization.

k. ICT Investment decisions to be guided by demand and higher impact;
l. A comprehensive organisational change management framework is necessary for ICTA to address data migration and other changes in the organisation's internal environment; and,
m. A robust framework for resource mobilization to supplement Government funding is critical for sustained service delivery.

## 3.2 Stakeholders analysis

The Authority has strong linkages with various stakeholders who have an interest in what the Authority does as it impacts on them in one way or the other. It recognizes that the stakeholders can either facilitate or impede its work and therefore, there is need to build good working relationships. A stakeholder analysis was conducted to understand the nature and extent of the functional relationships. A summary of the analysis is as shown below:

***Table 3.6: Stakeholders Analysis***

| S/No | Stakeholder | Role | Expectation of the Stakeholder | Expectation of the organization |
|---|---|---|---|---|
| 1 | Development partners | ■ Provision of resource and technical support | ■ Prudent use of loans/ grants<br>■ Value for money<br>■ Timely procurement of ICT works | ■ Continued funding<br>■ Lower financing cost<br>■ Less bureaucracy<br>■ Flexibility on funding conditions |
| 2 | Ministry responsible for ICT | ■ Formulation and review of ICT Policy | ■ Timely implementation and reporting of projects<br>■ Prudent management of Resources<br>■ Absorption of approved budgets | ■ Timely release of funds<br>■ Policy formulation and dissemination |
| 5 | National Assembly & Senate | ■ Enactment of laws, representation of the people and counties, oversight over the National Executive, and approval of the national budget | ■ Compliance to budgets, procedures and work plans<br>■ Consultative in project implementation. | ■ Funding through appropriation bill<br>■ Effective and efficient legislation. |
| 6 | County Governments | ■ Policy formulation, Planning, budgeting for ICT investment<br>■ Implementation of devolved functions Legislation on devolved functions | ■ Collaboration in technical capacity building | ■ Harmonization of work plans<br>■ Balancing political and stakeholder interests |
| 7 | Suppliers and Contractors | ■ Supply of works, goods and services as per contracted terms | ■ Fairness in award of tenders<br>■ Timely payments | ■ Quality workmanship<br>■ Timely delivery of contracts |
| 8 | General public / ICT Users | ■ Utilization of ICT products, channels, platforms and services | ■ Efficient service delivery<br>■ Adequate, safe, reliable and quality digital infrastructure network | ■ Responsible use of digital assets |

| S/No | Stakeholder | Role | Expectation of the Stakeholder | Expectation of the organization |
|---|---|---|---|---|
| 9 | National Treasury | ■ Allocation of resources, planning and budgeting support | ■ Compliance with financial regulations, guidelines and budgets<br>■ Value for money | ■ Timely and adequate disbursement |
| 10 | Other Agencies | ■ Trend setting for products and services-standards, market analysis, research support | ■ Compliance to applicable laws and regulations<br>■ Constructive and collaborative engagements | ■ Constructive and collaborative engagements |
| 11 | Staff | ■ Delivery of ICTA mandate | ■ Conducive working environment<br>■ Fair remuneration | ■ Effective and efficient service delivery |
| 12 | Board of Directors | ■ Oversight and accountability | ■ High staff performance<br>■ Sound corporate governance<br>■ Commitment | ■ Appropriate decision making<br>■ Commitment<br>■ Strategic Leadership |

# CHAPTER 4

# CHAPTER FOUR

# STRATEGIC ISSUES, GOALS AND KEY RESULT AREAS

Arising from the situational and stakeholders' analyses, ICTA identified strategic issues, goals and Key Result Areas which will be addressed in the Strategic Plan period 2024 - 2027.

## 4.1 Strategic Issues

The following are the strategic issues ICTA has identified for focus during the implementation of Strategic Plan 2024 - 2027.

a. **Digital inequality:** Barriers to access-costs, ease of use digital solutions, lack of appropriate devices; low entrepreneurship orientation, Data dynamics-availability, accuracy, uniformity, collection, analysis, access to data information in user friendly formats, scarcity of data management experts;
b. **Government and Business Transformation** – Redesigning of business processes, adaptability and reusability of ICT solutions, inadequate digital solutions and services;
c. **Digital Culture** – Inadequate digital skills, low entrepreneurial orientation, dynamic digital literacy and life-long learning (Upskilling and reskilling).
d. **Digital Environment**– Untapped digital investments and opportunities, gaps in digital legal framework, cyber security threats and emergence of new technologies.
e. **Governance-** Limited resources, gaps in corporate architecture and awareness among the stakeholders on ICT mandates and investments.

## 4.2 Strategic Goals

a. Attain Universal and Meaningful Connectivity
b. Expanded access to digital products, solutions and services.
c. Sustained transformational digital culture.
d. Optimized and Seamless Digital Environment.
e. Enhanced organizational capacity, operational efficiency and effectiveness.

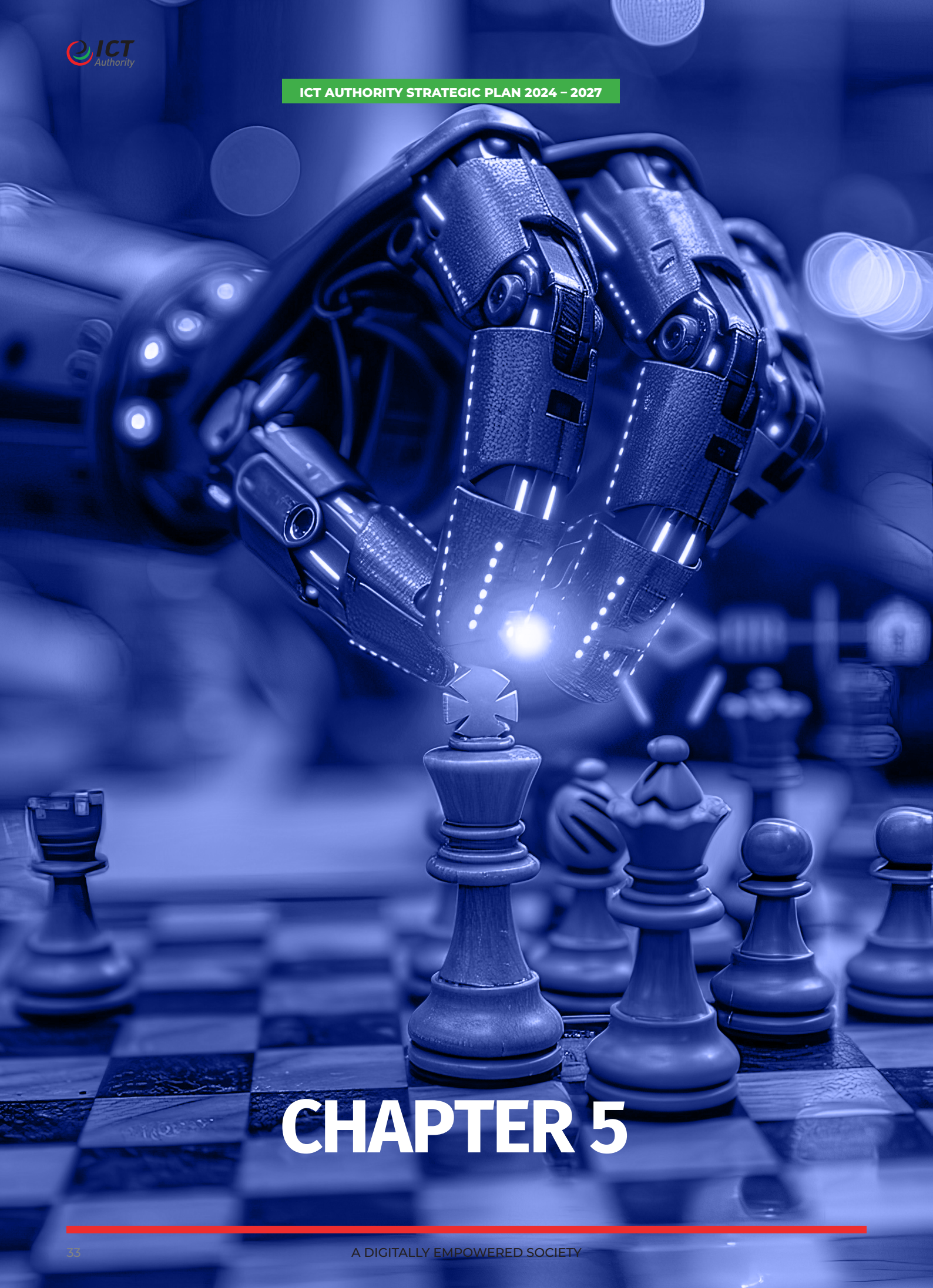
## 4.3 Key Results Areas

The following Key Result Areas (KRAs) have been identified for the plan period:

- KRA 1:. Universal, Secure and Reliable Connectivity
- KRA 2: Customer-responsive digital products, solutions and services.
- KRA 3: Transformational digital capabilities and culture
- KRA 4: Sustainable and adaptive digital ecosystem
- KRA 5: Institutional sustainability

***Table 4.1: Strategic issues, goals and Key Result Areas***

| Strategic Issue | Goal | KRAs |
|---|---|---|
| **Digital Inequality** | Attain Universal and Meaningful Connectivity | **KRA 1:** Universal, Secure and Reliable Connectivity |
| **Government and Business Transformation** | Expanded access to digital products, solutions and services | **KRA 2:** Customer-Responsive Digital Products, Solutions And Services. |
| **Digital Culture** | Sustained transformational digital culture | **KRA 3:** Transformational Digital Capabilities and Culture. |
| **Digital Environment** | Optimized and Seamless Digital Environment | **KRA 4:** Sustainable and Adaptive Digital Ecosystem |
| **Governance** | Enhanced organizational capacity, operational efficiency and effectiveness. | **KRA 5:** Institutional Sustainability |



# CHAPTER 5

# CHAPTER FIVE

# STRATEGIC OBJECTIVES AND STRATEGIES

**This chapter sets out ICTA's strategic objectives which meet the SMART criteria and the Balanced Sustainable Score Card**

## 5.1 Strategic Objectives

During the plan period, guided by the strategic goals and KRAs, the Authority will implement the following 10 strategic objectives that meet the Specific, Measurable, Attainable, Realistic and Time-bound (SMART) criteria:

a. Improve access to affordable, reliable, secure and sustainable digital infrastructure and connectivity.
b. Promote the realization of Zero Trust Network Access environment
c. Improve processes, products and platforms for delivery of quality digital solutions and services
d. Strengthen digital data management for sustainable digital transformation
e. Optimize digital culture through citizen-driven practices
f. Strengthen Policy, Legal & Regulatory Framework for resilient business-driven digital ecosystem
g. Harness emerging technologies for posterity
h. Build sustainable networks and partnerships
i. strengthen institutional capacity for operational excellence
j. Promote optimal resource mobilization, allocation and planning practices

Table 5.1 highlights outcome annual projections for the Strategic objectives

***Table 5.1: Outcomes Annual Projections***

| Strategic Objectives | Outcome | Outcome Indicator | PROJECTIONS | | | | |
|---|---|---|---|---|---|---|---|
| | | | Yr1 | Yr2 | Yr3 | Yr4 | Yr5 |
| **Key Result Area 1: Universal, Secure and Reliable Connectivity.** | | | | | | | |
| Improve access to affordable, reliable, secure and sustainable digital infrastructure and connectivity. | Improved access to reliable connectivity. | % uptime | 85 | 90 | 93 | 95 | 98 |
| | Improved user experience | % user satisfaction | 95 | 96 | 97 | 98 | 99 |
| Promote the realization of Zero Trust Network Access environment | Secure and prosperous online community | % zero trust network | 95 | 98 | 99 | 99 | 100 |

| Strategic Objectives | Outcome | Outcome Indicator | PROJECTIONS | | | | |
|---|---|---|---|---|---|---|---|
| | | | Yr1 | Yr2 | Yr3 | Yr4 | Yr5 |
| **Key Result Area 2: Customer-responsive digital products, solutions and services.** | | | | | | | |
| Improve processes, products and platforms for delivery of quality digital solutions and services | Ease of doing business | % new digital businesses | 20 | 30 | 30 | 40 | 45 |
| | Improved user-experiences-(confidence & trust | % user satisfaction | 95 | 98 | 99 | 99 | 99 |
| | Increased contribution of ICT to the economy (GDP | % ICT value in economy | 20 | 25 | 30 | 35 | 40 |
| | Improved employment opportunities | Proportion of new opportunities | 15 | 20 | 25 | 35 | 40 |
| | Enhanced digital inclusion | Digital gap index | 1.5 | 1.2 | 0.8 | 0.7 | 0.4 |
| Strengthen digital data management for sustainable digital transformation | Viable data management solutions | Proportion of solutions upscaled | 18 | 25 | 29 | 34 | 40 |
| | Enhanced earnings from data | Proportion of earnings from data | 15 | 20 | 25 | 30 | 33 |
| | Embedded data protection protocols | % data protection protocols implemented | 20 | 30 | 35 | 40 | 50 |
| | Fair data markets | Fair market share | 20 | 30 | 40 | 50 | 70 |
| **Key Result Area 3: Transformational Digital Capabilities and Culture** | | | | | | | |
| Optimize digital culture through citizen-driven practices | Vibrant on-line opportunities | Proportion of new opportunities | 25 | 30 | 35 | 40 | 45 |
| | Enhanced national advantages | % national ICT value | 20 | 25 | 30 | 33 | 40 |
| | Increased value addition in the creative economy | % Contribution of ICT to economy | 30 | 35 | 37 | 40 | 45 |
| **Key Result Area 4: Sustainable and adaptive digital ecosystem** | | | | | | | |
| Strengthen Policy, Legal & Regulatory Framework for resilient business-driven digital ecosystem | Valuable digital investments and returns | % increase in returns | 15 | 19 | 28 | 32 | 35 |
| | Active Communities of practice | Proportion of active ICT entities | 70 | 78 | 82 | 85 | 90 |
| | Digitally Inclusive Societies | Digital inclusion index | 0.3 | 0.42 | 0.52 | 0.57 | 0.6 |
| | Increased ICT innovation ecosystems | Innovation index | 0.4 | 0.5 | 0.57 | 0.67 | 0.69 |
| | Resilient digital transformation | Digital investment index | 0.5 | 0.6 | 0.7 | 0.8 | 0.95 |
| | Harmonised Digital Markets | Digital market share | 15 | 20 | 25 | 30 | 35 |
| | Reduced barriers to ICT investments | Proportion of newly registered businesses | 35 | 40 | 48 | 50 | 55 |

| Strategic Objectives | Outcome | Outcome Indicator | PROJECTIONS | | | | |
|---|---|---|---|---|---|---|---|
| | | | Yr1 | Yr2 | Yr3 | Yr4 | Yr5 |
| Harness emerging technologies for posterity | Sustainable new digital investments | Proportion of budgets on new technologies | 30 | 35 | 38 | 40 | 43 |
| | Fair digital markets | Market share | 10 | 12 | 15 | 18 | 22 |
| | Thriving 4th industrial revolution | % Participation in 4th industrial revolution | 20 | 30 | 40 | 50 | 55 |
| | Robust digital businesses | Proportion of digital businesses | 30 | 33 | 35 | 39 | 45 |
| Build sustainable networks and partnerships | Effective and proactive engagement through advisory and technical services | Annual engagement sessions | 4 | 4 | 4 | 4 | 4 |
| | Effective partnerships | Signed partnership deeds | 10 | 15 | 20 | 20 | 25 |
| | Partnership Strategy | Validated strategy | - | - | 1 | - | - |
| | Increased expertise and learning forICTA staff | Proportion of staff on specialized learning | 10 | 10 | 15 | 20 | 25 |
| **Key Result Area 5: Institutional Sustainability** | | | | | | | |
| Strengthen institutional capacity for operational excellence | Strengthened corporate image and identity. | Corporate board performance score (%) | 95 | 96 | 96 | 97 | 99 |
| | | Customer satisfaction index. | 85 | 90 | 95 | 98 | 99 |
| | Enhanced revenue generation. | Revenue generated (kshs) in Millions | 650 | 780 | 936 | 1,123.2 | 1,347.84 |
| | High performance culture. | Staff productivity index. (%) | x | X+5 | X+10 | 90 | 95 |
| | Optimal resource utilization. | % of resources absorbed. | 90 | 93 | 95 | 95 | 97 |
| | Improved Corporate Brand | | | | | | |
| | Optimized staffing levels | % Corporate architecture operational | 90 | 95 | 95 | 97 | 99 |
| | Institutionalized talent management and innovation awards | Proportion of staff awarded | 20 | 25 | 28 | 30 | 32 |
| | Spacious, conducive office space in serene environment | Staff satisfaction index | 92 | 94 | 95 | 95 | 98 |
| | Satisfied customers with higher demand | Customer satisfaction index | 95 | 98 | 99 | 99 | 99 |
| | Zero fault audits | % zero fault audit reports | 100 | 100 | 100 | 100 | 100 |
| | Improved financial reporting | % compliance to reporting | 100 | 100 | 100 | 100 | 100 |
| | Secure and efficient storage and access to data | Proportion of safe secure data | 95 | 96 | 98 | 99 | 99 |

| Strategic Objectives | Outcome | Outcome Indicator | PROJECTIONS | | | | |
|---|---|---|---|---|---|---|---|
| | | | Yr1 | Yr2 | Yr3 | Yr4 | Yr5 |
| Promote optimal resource mobilization, allocation and planning practices | Effective resource planning and mobilization strategies | Validated resource mobilization strategy | - | - | 1 | - | - |
| | Effective and efficient ERP System | % ERP uptime | 95 | 99 | 99 | 100 | 100 |
| | Internal control system strategy operationalized | Proportion of internal controls functional | 80 | 85 | 93 | 95 | 99 |
| | Digital Development Fund operationalized | Validated Digital Fund Regulations | - | - | 1 | -- | |

## 5.2 Strategic Choices

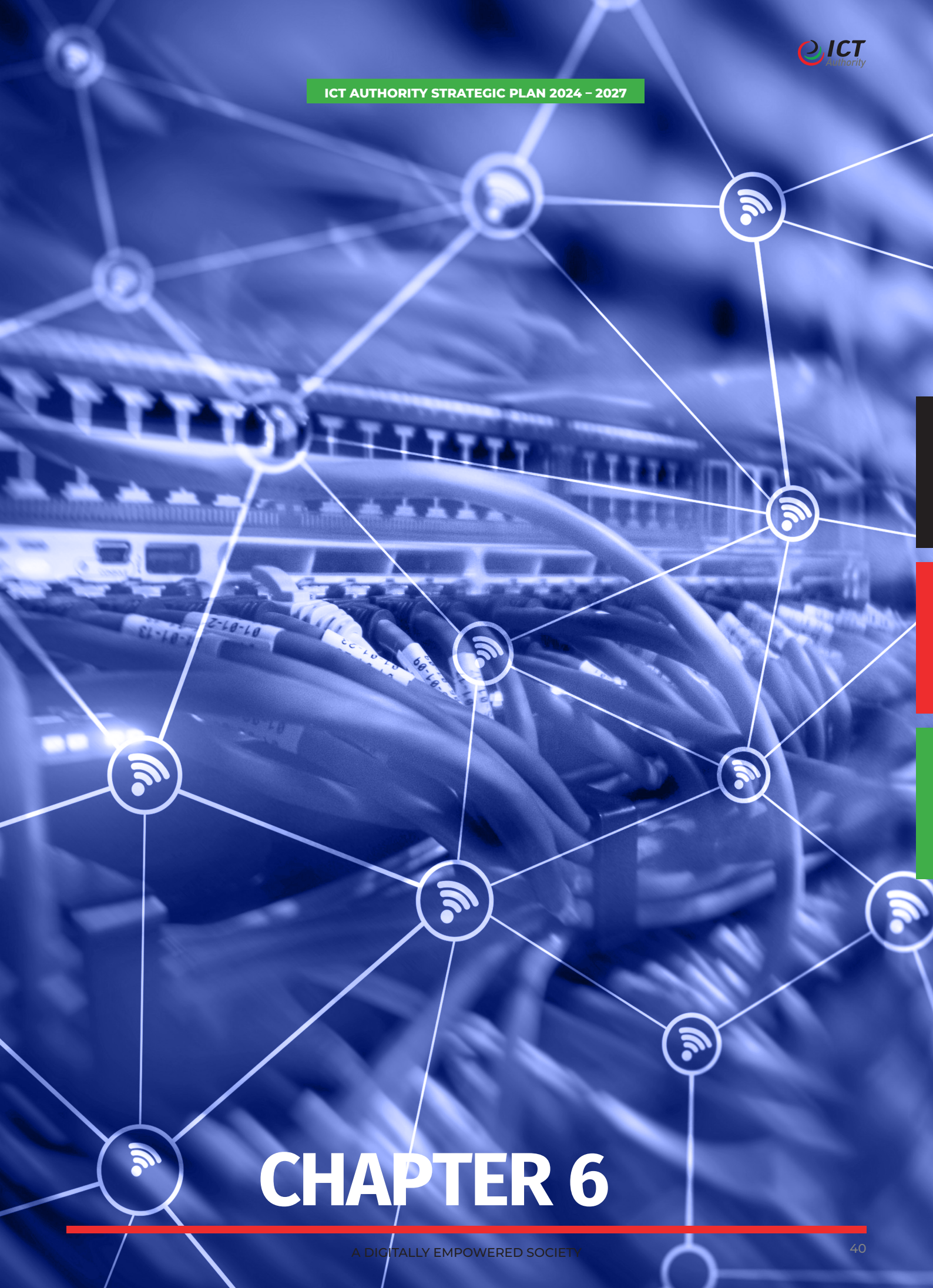
In order to deliver on its mandate and priorities contained in this plan, the Authority will embed Efficiency, effectiveness, economy, impact and sustainability in its business model. The implementation of the strategic plan coincides with the implementation of the Fourth Medium-Term Plan of the Kenya Vision 2030 development blueprint, whose development priorities are guided by the Bottom-Up Economic Transformation Agenda (BETA). Therefore, the strategic plan is geared towards supporting the implementation of government development agenda. The Authority envisages to implement the five (5) Key Result Areas identified in section 4.3 through the following ten (10) Strategic Objectives and - strategies:

***Table 5.2: Strategic objectives and strategies***

| Key Result Areas (KRA) | Strategic Objectives (SO) | Strategies (S) |
|---|---|---|
| **KRA 1:** Universal, Secure and Reliable Connectivity | **SO1.** Improve access to affordable, reliable, secure and sustainable digital infrastructure and connectivity. | ■ **S1.1:** Promote investments in resilient digital Infrastructure with appropriate regional interconnectivity, for Government and Private Sector<br>■ **S1.2:** Map-out and document digital infrastructure gaps<br>■ **S1.3:**Promote digital infrastructure sharing<br>■ **S1.4:**Promote measures that increase affordability of broadband technologies, devices, products and services<br>■ **S1.5:** Develop a Green ICT guideline |
| | **SO2.**Promote the realization of Zero Trust Network Access environment | ■ **S2.1:** Strengthen the Security and resilience of Digital Infrastructure and Services.<br>■ **S2.2:**Work with Industry to implement layered cyber security measures<br>■ **S2.3:** Strengthen cyber-security skills and capabilities and capacities |
| **KRA 2:** Customer-responsive digital products, solutions and services. | **SO3.** Improve processes, products and platforms for delivery of quality digital solutions and services | ■ **S3.1:** Develop Government Digitization and Automation strategy<br>■ **S3.2:** Implement Government Paperless Strategy<br>■ **S3.3:** Develop a Data Commercializaton Guideline.<br>■ **S3.4:** Roll out whole of government national data resource platform<br>■ **S3.5:** Promote development of customised digital solutions for different customer segments<br>■ **S3.6:** Develop a Digital Innovation Framework |

| Key Result Areas (KRA) | Strategic Objectives (SO) | Strategies (S) |
|---|---|---|
| (Continued)<br><br>**KRA 2:** Customer-responsive digital products, solutions and services. | **SO4.** Strengthen digital data management for sustainable digital transformation | ■ **S4.1:**Promote human and institutional capacity building (public awareness campaign, professional training, R&D, Computer Emergency Response Teams, CERTs, etc.) data management.<br>■ **S4.2:**Develop national resource platform for sharing public data<br>■ **S4.3:**Support the development and implementation of strong encryption to help keep Internet users safe online by protecting the integrity and confidentiality of their data and communications<br>■ **S4.4:**Strengthen legislation on personal data for better control of personal data by their owner; |
| **KRA3:** Transformational Digital Capabilities and Culture | **SO5.** Optimize digital culture through citizen-driven practices | ■ **S5.1:**Enhance and review the digital skills curricula in line with evolving needs and trends in the digital economy<br>■ **S5.2:**Promote partnerships and collaborations in digital skills programme<br>■ **S5.3:** Coordinate the implementation of ICT e-learning initiative<br>■ **S5.4:** Develop a Community ICT Skills Manual.<br>■ **S5.5:** Develop a Future Digital Skills Strategy |
| **KRA 4:** Sustainable and adaptive digital ecosystem | **SO6.** Strengthen Policy, Legal & Regulatory Framework for resilient business-driven digital ecosystem | ■ **S6.1:**Establish strategic partnership & collaboration between private sector and government to commercialize and scale up innovations<br>■ **S6.2:**Streamline Applied Research, Innovation and Enterprise Policies to support and accelerate creation of new products and services that are scalable locally and international<br>■ **S6.3:**Promote development of frameworks and policies on funding of start-ups that would attract Venture capitalist and Angel Investors.<br>■ **S6.4:**Spearhead private sector- led initiatives for adoption, utilization and scaling of new technologies and capabilities |
| | **SO7.** Harness emerging technologies for posterity | ■ **S7.1:**Formulate legal framework on adoption and utilization of emerging techs;<br>■ **S7.2:**Establish coordination mechanisms among relevant sectors in relation to emerging technologies;<br>■ **S7.3:** Develop a Future Digital Opportunities Strategy. |
| | **SO8.** Build sustainable networks and partnerships | ■ **S8.1:**Create an enabling partnerships and networking legal framework<br>■ **S8.2:**Promote joint investments in resilient, sustainable and integrated economies<br>■ **S8.3**:Promote PPP investments that are environmentally and climate resilience |

| Key Result Areas (KRA) | Strategic Objectives (SO) | Strategies (S) |
|---|---|---|
| **KRA 5**<br><br>Institutional Sustainability | **SO9.** Strengthen institutional capacity for operational excellence | ■ **S9.1:** Good Corporate Governance<br>■ **S9.2:** Maintain optimal organisational performance<br>■ **S9.3:** Commercialization and Resource Mobilization<br>■ **S9.4:** Financial management and Accountability<br>■ **S9.5:** Infrastructure Optimization<br>■ **S9.6:** Data Management Improvement |
| | **SO10.** Promote optimal resource mobilization, allocation and planning practices | ■ **S10.1:** Re-engineering of Enterprise Resource Planning (ERP)<br>■ **S10.2:** Mobilize both financial and non-financial resources<br>■ **S10.3:** Optimize available resources<br>■ **S10.4:**Support government priority programmes eg Ecosystem Restoration Programme |



# CHAPTER 6

# CHAPTER SIX

# IMPLEMENTATION AND COORDINATION FRAMEWORK

**This chapter provides information on implementation plan including the action plan, annual Workplan and budget and performance contracting. In addition, the chapter highlights the coordination framework for the strategic plan, including the organizational structure, staff establishment, skills set as well as core competencies. The Chapter also presents the risk management framework with identified risks and mitigation measures.**

## 6.1 Implementation Plan

The section provides an implementation plan to guide the implementation of the Strategic Plan. It includes an action plan, Annual work plan and Budget and performance contracting as part of result-based management instruments.

### 6.1.1 Action Plan

The purpose of an action plan is to provide a structured and organized approach for achieving set goals and addressing identified strategic issues. An action plan encompasses strategic issues, strategic goals, outcomes, strategic objectives, strategies, key activities, expected outputs, output indicators, annual targets, annual budgets, and the responsibility for executing the activities. Action plans assign specific responsibilities to designated directorates/departments, clarifying who is accountable for each task. This clear allocation of accountability ensures that progress is monitored, and tasks are completed on schedule. The Action Plan is presented in the form of an Implementation Matrix, which includes output indicators. These indicators facilitate the monitoring of progress and the evaluation of the planned activities, as illustrated in annex 2.

The annual work plan outlines what needs to be achieved within a financial year. It aids in prioritizing and sequencing tasks and projects. By detailing what needs to be accomplished over the year, it becomes easier to allocate resources and identify which tasks are most critical. The Board will align the annual budget with the annual work plan, ensuring that all strategic plan activities are adequately and optimally resourced.

### 6.1.2 Performance Contracting

In order to enhance service delivery, ICTA will employ performance contracting as a crucial tool for accountability. The Performance Contracts- with clear targets for each staff, to be monitored quarterly and evaluated at the end of the financial year, will be used to improve efficiency and effectiveness in service provision.

## 6.2 Coordination Framework

This section provides a highlight of ICTAs institutional framework, the staff establishment, skill set and competence development framework. It also describes the leadership structure, systems and procedures to support the implementation of the strategic plan.

### 6.2.1 Institutional Framework

To effectively implement the Strategic Plan, ICTA has adopted a functional organizational structure, as outlined in Annex

I. This structure consists of four hierarchical tiers, each with distinct roles and responsibilities. At the top tier is the Board of Directors, providing strategic direction and governance oversight. The Board sets ICTA's overall vision, goals, and policies, ensuring they align with the Strategic Plan. It guides and makes key decisions impacting strategic initiatives.

The top management, found in the second and third tiers of the structure, includes the CEO, who oversees ICTA's day-to-day operations and Directors/Managers heading 5 Directorates namely: (a) Directorate of Programs and Standards (b) Directorate of Digital Infrastructure and service development (c) Directorate of Capacity development, Innovations & Partnerships (d) Directorate of Strategy and Risk management (e) Directorate of Corporate Services as provided in Annex 1. Both Managers and Assistant Managers are responsible for translating the Board's directives into actionable strategies and objectives. They develop specific plans, allocate resources, and oversee the Strategic Plan's implementation, providing leadership to Middle Management and technical/support personnel to ensure efficient execution of strategic initiatives.

Middle Management is pivotal in coordinating and executing ICTA's daily operations. They supervise and support technical and support staff, ensuring smooth coordination and efficient implementation of the Strategic Plan. The lowest level of the organization comprises clerical and support personnel who provide specialized assistance to Middle and Senior Management, aiding in the successful execution of the Strategic Plan. Support staff offer administrative, financial, human resources, and IT assistance, while technical staff contribute industry-specific knowledge and skills, particularly in editorial and production functions.

The structure is designed with an appropriate span of control, allowing each management level to effectively oversee and direct operations under their responsibility. This design enhances efficiency, clarity, and accountability throughout the implementation phase.

### 6.2.2 Staff Establishment, Skills Set and Competence Development

ICTA is committed to maintaining an optimal staff establishment that aligns with its operational needs and the requirements of the Strategic Plan. Regular reviews will be conducted to assess staffing levels and make necessary adjustments. Table 6.1 illustrates ICTA's current staffing status, distributed by grade and cadre. Table 6.1 outlines the optimal staffing needs of ICTA's, necessary to achieve the commitments made in the strategic plan. Table 6.1 details the skill set gaps and the competence development plan.

Additionally, ICTA will make efforts to recruit staff to fill these gaps or request the secondment of employees from the Ministry of ICT and Digital Economy to address these needs. Employees who are already in post and have some skills gaps will receive training based on the identified skill gaps.

***Table 6.1: Staff Establishment***

| Cadre | Approved Establishment | Optimal | In-Post | Variance |
|---|---|---|---|---|
| **A. Board/Oversight** | | | | |
| Chairperson | 1 | | 1 | 0 |
| Vice Chair | 0 | | | |
| Members | 9 | | 9 | 0 |
| | | | | |
| **B. Management/Policy** | | | | |
| CEO | 1 | | 1 | 0 |
| Directors | 7 | | 4 | 3 |
| **Technical Staff** | 105 | | 139 | -34 |
| Deputy Directors | 17 | | 11 | 6 |
| Assistant directors | 25 | | 3 | 22 |
| **Operational and Middle cadre** | **121** | | **71** | **50** |

| Cadre | Approved Establishment | Optimal | In-Post | Variance |
|---|---|---|---|---|
| Support Staff | 23 | | 23 | 0 |
| **Total** | **309** | | **262** | |

ICTA evaluated the approved staff establishment and recognized existing gaps, particularly in technical capacity. Consequently, there was a perceived need to review the staff establishment to enable ICTA to bring in employees with the necessary technical skills for the entire process of its publications. Therefore, a proposed structure was developed to accommodate the staffing requirements for the next five years (2023-2027). The proposed staff establishment, including the required number of technical officers, is detailed in the Table 6.2:

***Table 6.2: Proposed Staff Establishment***

| No. | CADRE | LEVEL | Approved Establishment (A) | Optimal Staffing Levels (B) | In post (C) | Variance (D) = B - C |
|---|---|---|---|---|---|---|
| 1. | Chief Executive Officer | 1 | 1 | 1 | 1 | 0 |
| 2. | Directors | 2 | 7 | 7 | 5 | 2 |
| 3. | Deputy Directors | 3 | 16 | 16 | 11 | 5 |
| 4. | Assistant Directors | 4 | 27 | 27 | 3 | 24 |
| 5. | Middle Level officers | 5-8 | 229 | 229 | 209 | 20 |
| 6. | Support staff | 9-10 | 19 | 19 | 17 | 2 |
| | **Total** | | **299** | **299** | **246** | **53** |

ICTA conducted a skills gap analysis in 2020 to determine the available skills against the required skill set as outlined in the career guidelines. This analysis was essential for ICTA to fulfil its mandate within the expected timelines. The skills gap analysis report identified existing gaps and helped develop mechanisms to address these gaps. The analysis revealed that ICTA lacks key technical skills necessary for effectively delivering their mandate, especially on frontier and emerging technologies. These skills are crucial for ICTA to be agile, adopt and adapt to rapid technological and digital solutions base. The main skills identified as lacking or insufficient were Data analytics & Science, Data Visualization Machine Learning, Artificial Intelligence, Cloud Computing, Cybersecurity.

The skill set currently available in ICTA, the identified gaps, and the proposed mitigation measures are outlined in the table 6.3.

***Table 6.3: Skills Set and Competence Development***

| Cadre | Skills set | Skills Gap | Competence Development |
|---|---|---|---|
| **ICTA 1** | i. Communicating with impact;<br>ii. Leading and managing people;<br>iii. Planning and organizing;<br>iv. Leading and managing performance;<br>v. Financial and resource management;<br>vi. Customer and stakeholder orientation;<br>vii. Formulating policy, strategies and concepts;<br>viii. Leading change programmes and projects;<br>ix. Decision making;<br>x. Strategic visioning and entrepreneurial thinking; | ■ Ability to set the strategic vision for the Authority by providing leadership<br>■ Strategic Planning that aligns with the regional digital agenda<br>■ Policy development and analysis<br>■ Better understanding of Financial Management to ensure fiscal responsibility.<br>■ Communication skills to create lasting synergies amongst the industry Stakeholders | i. Leadership and strategic vision<br>ii. Project Management<br>iii. Governance and stakeholder<br>iv. management<br>v. Deep understanding of financial management, budgeting, and investment.<br>vi. Research & innovation<br>vii. Team building and staff management<br>viii. Leading innovation and managing organizational change |

| Cadre | Skills set | Skills Gap | Competence Development |
|---|---|---|---|
| | ix. Political astuteness and diplomacy;<br>x. Collaboration and partnerships;<br>xi. Coaching and mentoring;<br>xii. Persuading and influencing;<br>xiii. Relating and networking; and<br>xiv. Technological Savviness | ■ Ability to resonate with and Build strong teams that the deliver the Authority's mandate and management.<br>■ Effective Change and transition Management | xv. Identifying, assessing, and mitigating risks<br>xvi. Corporate governance and ethical behavior<br>xvii. Integrity and ethical conduct |
| **ICTA 2** | i. Leadership skills<br>ii. Negotiation skills<br>iii. People management skills<br>iv. Communication skills<br>v. Problem-solving skills<br>vi. Presentation skills<br>vii. Adaptability<br>viii. Innovative<br>ix. Critical thinking<br>x. Strategic thinking | ■ Policy development and implementation for the Authority and industry<br>■ Provision of strategic Leadership for the Directorates<br>■ Ability to make key decisions and provide solutions to challenges arising from project implementation<br>■ Effective Communication to staff, the citizenry and stakeholders<br>■ Ability to build, motivate and manage teams<br>■ Prudent Financial management and budgeting skills<br>■ Ability to steer organizational change for posterity | i. Strategic guidance<br>ii. Corporate governance standards and regulatory compliance.<br>iii. Leadership<br>iv. Strategic planning<br>v. Stakeholder engagement<br>vi. Financial management<br>vii. Change management<br>viii. Collaboration and teamwork<br>ix. Integrity and ethical conduct |
| **ICTA 3** | i. Leadership skills<br>ii. Negotiation skills<br>iii. People management skills<br>iv. Communication skills<br>v. Problem-solving skills<br>vi. Presentation skills<br>vii. Adaptability<br>viii. Innovative<br>ix. Critical thinking<br>x. Strategic thinking | ■ Ensuring achievement of departmental objectives through effective leadership, motivation, and management of the teams.<br>■ Overseeing successful projects implementation by proper Planning, executing, monitoring and evaluation.<br>■ Strong analytical skills to identify challenges and creating solutions for the same.<br>■ effective clear communication to facilitate information flow across the organization.<br>■ Skill in setting performance expectations, conducting evaluations, and providing feedback to team members | i. Strategic guidance<br>ii. Corporate governance standards and regulatory compliance.<br>iii. Leadership<br>iv. Strategic planning<br>v. Stakeholder engagement<br>vi. Financial management<br>vii. Change management<br>viii. Collaboration and teamwork<br>ix. Integrity and ethical conduct |

| Cadre | Skills set | Skills Gap | Competence Development |
|---|---|---|---|
| **ICTA 4** | i. Leadership skills<br>ii. Strategic management skills<br>iii. Problem-solving skills<br>iv. Conflict management<br>v. Supervisory skills<br>vi. Communication skills<br>vii. Interpersonal skills<br>viii. Organizational skills<br>ix. Team building; and Analytical<br>x. skills<br>xi. Critical thinking<br>xii. Strategic thinking<br>xiii. Ability to work under pressure | ■ implementation of organization mandate<br>■ Providing proper leadership for the divisions in the Authority<br>■ Creating strategic interventions for the problems in project implementation<br>■ Enriching policy formulation, development, implementation and analysis<br>■ Creating collaborations and partnerships to assist the Authority by continual stakeholder engagement<br>■ Overseeing and supervising Projects in the Authority<br>■ Building effective teams<br>■ Being change champions in the divisions<br>■ Ensuring institutionalization of ICTA's knowledge | i. Leadership and strategic<br>ii. vision<br>iii. Policy analysis and research<br>iv. Financial management<br>v. Stakeholder engagement<br>vi. Team building and<br>vii. management.<br>viii. Advocacy and public relations<br>ix. Planning and project management<br>x. Change management |
| **ICTA 5- 7** | i. Communication skills<br>ii. Strategic management skills<br>iii. Problem-solving skills<br>iv. Interpersonal skills<br>v. Organizational skills<br>vi. Analytical skills<br>vii. Presentation skills<br>viii. Computing skills<br>ix. Negotiation skills<br>x. Functional skills<br>xi. Supervisory skills<br>xii. Professional Ethics and Values.<br>xiii. Creativity<br>xiv. Innovativeness | ■ Relevant professional skills and expertise in the specific technical area.<br>■ facilitate diagnosis of technical issues and provide timely solutions.<br>■ Skills to develop innovative solutions and adapt to evolving technologies.<br>■ Proficiency in creating clear and comprehensive technical documentation.<br>■ Ability to collaborate with cross-functional teams and stakeholders on technical projects. | i. Financial acumen<br>ii. Change management<br>iii. Collaboration<br>iv. Strategic visioning and<br>v. Planning<br>vi. Integrity and ethical conduct<br>vii. Stakeholder engagement<br>viii. and networking<br>ix. Building and maintaining relationships with key stakeholders<br>x. Financial planning and budgeting<br>xi. Collaboration and team<br>xii. Building<br>xiii. Integrity and ethical conduct |
| **ICTA 9-10** | i. Communication;<br>ii. Interpersonal Skills;<br>iii. Time management;<br>iv. Focus on Service delivery;<br>v. Professional Skills;<br>vi. Planning and Organizing;<br>vii. Team work; and<br>viii. Ability to work under pressure<br>ix. Conflict management skills<br>x. Team work;<br>xi. Decision-making skills<br>xii. Stress tolerance<br>xiii. Problem-solving skills. | ■ Administrative skills<br>■ Technology proficiency<br>■ Communication skills<br>■ Problem solving abilities<br>■ Teamwork and collaboration<br>■ Flexibility and adaptability | i. Communications Skills<br>ii. Organization skills<br>iii. Attention to details<br>iv. Driving skills<br>v. Safety awareness<br>vi. Customer service<br>vii. Navigation and route<br>viii. Planning Skills<br>ix. Vehicle maintenance<br>x. Ethical conduct |

### 6.2.3 Leadership

#### ICTA Board of Directors

The ICTA Board of directors shall exercise their overall responsibility of enforcing ICT standards and enhancing the supervision of its electronic communication to ensure the implementation of the strategic plan in line with the set objectives of the Kenya National ICT Masterplan 2017 and ICTA Mandate. The board shall bear the overall authority of approving this Strategic Plan (2024-2027).

### Chief Executive Officer

Chief Executive Officer (CEO) shall be responsible for providing overall leadership and direction on the implementation of the strategic plan. The CEO shall lead and oversee the implementation of the Authority's strategic programmes/ projects in accordance with its approved Strategic Plan.

### Director/Directorate

Directors shall be responsible for overseeing the cascading and implementation of the strategic plan through the approved strategic activities. The Directors shall supervise the line HODs involved in project execution as approved and are accountable to the CEO

### 6.2.4 Systems and Procedures

Kenya ICT Authority has put in place a Quality Management System (QMS) implemented through the Standards and Processes Department. The QMS seeks to drive the achievement of the highest standards of quality and to continually improve service and process effectiveness. The Authority has developed and documented interlinked processes which are implemented, monitored and reviewed annually through data analysis and verified through internal and external audits.

The audits are undertaken to assess the effectiveness and efficiency of the Authority's QMS and its compliance to the ISO 9001:2015 International Standard against which the Authority is certified through the national certification body, Kenya Bureau of Standards (KEBS). To enhance efficiency and improve its business processes, the Authority will continually enhance the digitalisation of its processes to improve the value chain execution framework through the integrated management of main business processes, including developing agile Business Turn-Around Strategy.

## 6.3 Risk Management Framework

The ICT Authority shall pursue a strategy of continuous review potential risk and instituting corrective mitigation measures. In so doing, the Authority will explore ways of achieving an explicit and balanced risk profile in the strategic programmes/projects it will undertake, including high- risk programming with the potential for transformative impact. The internal processes shall focus on the key outputs and impacts relevant to the needs of the clients it serves. In pursuing this strategy, the Authority will ensure that internal processes are re-engineered and streamlined to facilitate quality service delivery. Some of the potential risks and mitigation plans to be instituted by ICTA are outlined in Table 6.4..

***Table 6.4 Risk Management Framework***

| S/ No. | Risk | Risk Likelihood (L/M/H) | Severity (L/M/H) | Overall Risk Level (L/M/H) | Mitigation Measure (s) |
|---|---|---|---|---|---|
| 1 | **Technological risk - Cybersecurity Threats:** Hacking, malware, data breaches, and other cyber-attacks. | H | H | H | 1. Implement robust cybersecurity measures and protocols.<br>2. Conduct regular security audits and vulnerability assessments.<br>3. Provide continuous training for staff on cybersecurity best practices |
| 2 | **Technological risk - System Failures:** Downtime or failures in critical systems and infrastructure. | H | H | H | 1. Establish redundant systems and backup solutions.<br>2. Implement proactive maintenance and monitoring programs.<br>3. Develop a comprehensive disaster recovery plan |

| S/ No. | Risk | Risk Likelihood (L/M/H) | Severity (L/M/H) | Overall Risk Level (L/M/H) | Mitigation Measure (s) |
|---|---|---|---|---|---|
| 3 | **Operational risk - Infrastructure Challenges:** failures resulting from deployment and maintenance of physical infrastructure | H | H | H | 1. Invest in scalable and flexible technologies.<br>2. Regularly review and update technology infrastructure.<br>3. Stay informed about technological advancements and trends |
| 4 | **Financial Risk - Budget Constraints:** Insufficient funding to meet objectives or unexpected cost increases | H | H | H | 1. Prioritize projects based on strategic importance and impact.<br>2. Seek alternative funding sources, such as grants and PP partnerships.<br>3. Implement cost cutting and regular financial reviews |
| 5 | **Regulatory and compliance risk - Privacy and Data Protection:** Risks associated with failing to protect user data and privacy | H | H | H | 1. Adopt stringent data protection policies and practices.<br>2. Regularly review and update privacy policies.<br>3. Educate staff and users on data protection and privacy issues |
| 6 | **Regulatory and compliance risk - Non-Compliance with laws and regulations:** Fines or penalties for failing to comply with existing regulations | H | H | H | 1. Implement robust compliance programs and training.<br>2. Conduct regular compliance audits.<br>3. Foster a culture of compliance within the organization |
| 7 | **Strategic risk - Stakeholder Management:** Risks arising from managing relationships with key stakeholders, including the government, private sector partners, and the public | H | H | H | 1. Engage with stakeholders regularly and transparently.<br>2. Address stakeholder concerns promptly and effectively.<br>3. Build strong relationships with key stakeholders |
| 8 | **Social and cultural risk - Digital Divide:** Inequities in access to digital infrastructure across different regions or demographics | H | H | H | 1. Develop programs to improve digital literacy and access in underserved areas.<br>2. Partner with community organizations to bridge the digital divide.<br>3. Invest in affordable and accessible digital infrastructure. |
| 9 | **Political risk - Government Support:** Dependence on continuous government support and alignment with political priorities | M | H | H | 1. Foster strong relationships with government officials and agencies.<br>2. Demonstrate the value and impact of initiatives to secure support.<br>3. Advocate for consistent and sustained government backing |

| S/ No. | Risk | Risk Likelihood (L/M/H) | Severity (L/M/H) | Overall Risk Level (L/M/H) | Mitigation Measure (s) |
|---|---|---|---|---|---|
| 10 | **Technological risk - Technological Obsolescence:** Rapid changes in technology making existing infrastructure outdated. | M | M | M | 1. Invest in scalable and flexible technologies.<br>2. Regularly review and update technology infrastructure.<br>3. Stay informed about technological advancements and trends |
| 11 | **Operational risks - Project Management Risks:** Rapid changes in technology making existing infrastructure outdated | M | M | M | 1. Use project management tools and methodologies.<br>2. Ensure clear communication and coordination among project teams.<br>3. Monitor progress regularly and adjust plans as necessary |
| 12 | **Operational risks - Supply Chain Risks:** Disruptions in the supply of essential components or services | M | M | M | 1. Diversify suppliers to reduce dependency on a single source.<br>2. Establish strong relationships with key suppliers.<br>3. Monitor supply chain risks and develop contingency plans |
| 13 | **Financial Risk – Fraud and corruption**: Financial losses due to fraudulent activities or corrupt practices | M | M | M | 1. Establish and enforce strict anti-fraud and anti-corruption policies.<br>2. Conduct regular audits and inspections.<br>3. Foster a culture of transparency and accountability |
| 14 | **Financial risk – Economic fluctuation**: Impact of economic downturns on funding and investment | M | M | M | 1. Develop flexible financial plans that can adapt to economic changes.<br>2. Maintain a reserve fund to cushion against economic downturns.<br>3. Monitor economic indicators and adjust strategies accordingly |
| 15 | **Regulatory risk - Legal and Regulatory Changes:** New laws or regulations that impact operations | M | M | M | 1. Stay updated on relevant laws and regulations.<br>2. Engage with policymakers and industry groups.<br>3. Ensure legal and compliance teams are well-resourced |
| 16 | **Strategic risk – market dynamics**: Changes in the market that affect demand or the competitive landscape | M | M | M | 1. Conduct regular market research and analysis.<br>2. Stay flexible and adaptable to market changes.<br>3. Diversify services to mitigate risks from market shifts |

| S/ No. | Risk | Risk Likelihood (L/M/H) | Severity (L/M/H) | Overall Risk Level (L/M/H) | Mitigation Measure (s) |
|---|---|---|---|---|---|
| 17 | **Strategic risk – policy changes**: Shifts in government policy that could impact strategic direction. | M | M | M | 1. Monitor policy developments and anticipate changes.<br>2. Engage in advocacy and lobbying efforts.<br>3. Adjust strategies to align with policy changes |
| 18 | **Environmental risk – climate change:** Long-term impacts of climate change on infrastructure and service delivery | M | M | M | 1. Incorporate sustainability practices into infrastructure projects.<br>2. Monitor and mitigate the environmental impact of operations.<br>3. Support and participate in climate change adaptation initiatives |
| 19 | Environmental risk – Sustainability challenges: Ensuring that infrastructure and services are sustainable over the long term | M | M | M | 1. Promote and implement green technologies and practices.<br>2. Engage with stakeholders on sustainability goals and initiatives.<br>3. Regularly assess and report on sustainability performance |
| 20 | Social and cultural risk - **Public Perception and Trust:** Loss of public trust due to service failures or data breaches | M | M | M | 1. Maintain transparency and open communication with the public.<br>2. Address public concerns and feedback proactively.<br>3. Build a reputation for reliability and integrity |
| 21 | **Environmental risk - Natural Disasters:** Earthquakes, floods, and other natural events that can damage infrastructure | H | M | M | 1. Develop and implement disaster preparedness and response plans.<br>2. Ensure infrastructure is resilient to natural disasters.<br>3. Maintain insurance coverage for natural disaster-related damages |
| 22 | **Social and Cultural Risk – Cultural resistance:** Resistance to adoption of new technologies in certain communities | H | M | M | 1. Conduct community outreach and education programs.<br>2. Engage with cultural leaders and influencers.<br>3. initiatives to respect and accommodate cultural values |

# CHAPTER 7

# CHAPTER SEVEN

# RESOURCE REQUIREMENTS AND RESOURCE MOBILIZATION

This chapter presents ICTA's financial and non-financial resource requirements for the Plan and outlines proposed resource mobilisation strategies.

## 7.1 Financial Requirements

This strategic plan has been developed with cost component in mind. Its success is hinged on ICTA's networking abilities to mobilize resources to implement the strategic programmes /initiatives defined herein. Strict and prudent financial management practices will be espoused during the implementation period. The Authority will observe prudency in the management of resources- both from exchequer and partners. The Authority shall be transparent and accountable in all its transactions to enhance credibility to the society they serve and in the eyes of the funding organizations. The financing options for the activities defined in this Strategic Plan will include but not limited to:

a. Government of Kenya
b. Internally generated resources
c. Dedicated digital development fund
d. Non-financial resources such as structured trainings, ICT tools and equipment and facilities such as ICT innovation hubs and labs
e. Innovative funding models including:
   - Resource mobilization through Partnerships
   - Strategic Alliances with Key Sector Players
   - Support from Social Corporate Responsibility
   - Support from Development Partners

Approximately 304.37B Investments will be required to implement the strategic plan as shown in the table 7.1:

***Table 7.1: Financial Requirements for Implementing the Strategic Plan***

| Cost Item | Projected Resource Requirement (Ksh. Mn) | | | | |
|---|---|---|---|---|---|
| | Y1 | Y2 | Y3 | Y4 | Y5 |
| KRA1: Universal, Secure and Reliable Connectivity | 21B | 35B | 46B | 69B | 64B |
| KRA2: Customer-responsive digital products, solutions and services. | 2.5B | 2B | 2B | 2B | 1B |
| KRA3: Transformational digital capabilities and culture | 6.5B | 6.5B | 6.5B | 6.5B | 6.5B |

| | | | | | |
|---|---|---|---|---|---|
| KRA 4: Sustainable and adaptive digital ecosystem | 1.8B | 5.3B | 5.4B | 5.8B | 5.5B |
| KRA 5: Institutional sustainability. | 190 M | 927M | 326M | 314M | 2B |

***Table 7.2: Resource requirements by Key Result Areas***

| Financial Year | Estimated Financial Requirement (Ksh. Mn) | Estimated Allocations (Kshs) | Variance Ksh. Mn |
|---|---|---|---|
| **Year 1** | 32.00B | 5.1B | 26.9B |
| **Year 2** | 49.727B | 6.24B | 43.49B |
| **Year 3** | 60.326B | 7.488B | 52.8 B |
| **Year 4** | 83.314B | 8.9856B | 74.33B |
| **Year 5** | 79.0B | 10.78 | 68.22B |
| **Total** | **304.37B** | **38.59** | **265.41 B** |

## 7.2 Resource Mobilization Strategies

To supplement the available resources for the implementation of the Strategic Plan, ICTA has developed resource mobilization strategies that aim to increase the Board's resource base, reduce its reliance on traditional sources of funding, and improve its capacity to implement the Strategic Plan effectively.

### i. Diversification of revenue streams

In the medium term, the following additional revenue streams will considered.

| |
|---|
| **Revenue from e-citizen platform** |
| **Revenue from specialized/dedicated ICT platforms and solutions** |
| **Subscriptions to ICTA platforms and solutions** |
| **Digital Resource Centres** |
| **Advertisements through ICTA publications** |
| **Mobile applications, websites, audio-visual services** |

### ii. Resource mobilization initiatives:

ICTA will actively pursue initiatives to mobilize financial and non-financial resources from various sources including PPPs arrangements, grants, sponsorships and donations. This will involve engaging with donors, exploring innovative and sustainable financing models and leveraging government funding programs. Effective funds mobilization will provide the necessary resources to implement initiatives and activities outlined in the Strategic Plan.

### iii. Online platforms and digital subscriptions

The development of a mobile applications and a mobile alert system will improve ICTA resource generation. This will enable the public to access critical services on dedicated digital platforms eg National Data Platform to aid researchers and policy makers.

### iv. Marketing of ICTA Products and Services

ICTA will continuously participate in promotional activities e.g. Academic days, Book fairs, agricultural shows, conferences, national/county government events and other related activities to offer the public an opportunity to interact and purchase its products and services. Marketing will entail:

- News update flush on state events
- Updating the public on available ICT services and solutions profile
- Positioning ICTA as ICT service provider of choice for government partners like UN agencies and other organizations that support the government.
- Availing ICT publications and products at strategic places such as airports, embassies, on KQ flights, on SGR trains etc
- Scheduling quarterly ICT events(ICT week) targeting eg Cabinet Secretaries with huge campaigns for state to pass certain messages.
- Leverage on private sector marketing methodologies
- Seek and share exchange programs for staff to gain exposure and experience in other great jurisdictions beyond Kenya such as technology giants-Amazon, Microsoft, Sumsung, Apple, Google etc

## 7.3 Non-Traditional Fundraising Sources

**Private Sources**

- Individual Gifts
- Planned Giving
- Building an Endowment
- Capital Campaigns
- Special Events
- Foundation and Corporate Grants
- Funding from Religious Institutions
- Fee for Service Projects
- Direct Mail
- E-mail Marketing
- Text-to-Give
- Crowdfunding
- Partnerships/Sponsorships/Grants
- Peer-to-Peer Fundraising

## 7.4 Resource Management

ICTA will put in place the necessary measures to ensure efficient and effective utilization of its resources to facilitate the achievement of the strategic objectives. The Board will also strive for efficient and optimal resource utilization by ensuring that policy guidelines on expenditure control are adhered to. The following measures will be implemented:

i. **Prudent Financial management:** This is essential in ensuring value for money through budgeting, debt management, financial planning, cost-cutting measures and risk management.

ii. **Embracing/Adoption ICT:** ICTA will harness the power of technology to streamline and automate its systems and processes leading to improved efficiency and effectiveness in service delivery.

iii. **Diversifying revenue sources:** ICTA will explore opportunities to diversify its revenue streams to reduce dependence on traditional sources of income.

iv. **Effective planning:** ICTA will develop corporate annual work plan & budget to facilitate prioritization of programmes and projects to be undertaken.

v. **Implementation of austerity measures:** ICTA will adopt austerity measures to optimize resource allocation, minimize unnecessary expenditures, and ensure efficient use of available resources. Additional measures will be implemented as guided by the National Treasury.

vi. **Reporting:** ICTA will uphold a commitment to providing timely statutory reporting and conducting regular audits, to promote transparency, accountability, and informed decision-making.

vii. **Audit and financial risk management:** ICTA will implement a risk management framework. It will also avail its books of accounts for statutory Audit by the Office of the Auditor General. The regular compliance and systems audit will strengthen ICTAs internal controls.

viii. **Productivity Mainstreaming: I**CTA will appoint and train champions on productivity mainstreaming. This will entail the development, implementation, and adoption of strategies and interventions that will enable ICTA to measure, manage, and improve productivity.

# CHAPTER 8

# CHAPTER EIGHT

# MONITORING, EVALUATION AND REPORTING FRAMEWORK

This chapter details ICTA's monitoring framework and performance standards. The chapter also provides frameworks for midterm and end-term evaluations. Monitoring and Evaluation, Reporting and Learning (MERL) is a central feature of the Strategic Plan implementation. MERL is vital in ensuring that targets are achieved within the time allocated. The Authority will monitor and evaluate the activities and outputs to ensure that the objectives of the Plan are attained.

## 8.1 Monitoring Framework

The frequency of monitoring strategic goals will be done on a quarterly basis with the operational objectives being reviewed monthly. The overall Strategic Plan review will be on an annual basis.

## 8.2 Performance Standards

Reporting of implementation will be critical in adjusting strategic directions and measuring performance. The Heads of functional levels shall submit the following reports to the Management and the Board on the progress made in implementation of the Plan:

a. Monthly progress report – Functional levels to the CEO
b. Quarterly report – Management and the Board;
c. Annual report – Management, the Board and relevant stakeholders

## 8.3 Evaluation Framework

Mid-Term (MTE) and End-Term Evaluations (ETE) will be structured around a series of initiatives or "project-streams" that are different in scope, scale, timing and objectives. Table 8.1 presents Outcome Performance Matrix that will guide performance assessment during the Plan period. In order to ensure rigorous assessment of programmes, projects and initiatives, the following approach with contextual considerations will be adopted:

a. Individual evaluations of projects, or groups of project components will be conducted using appropriate methodologies, and exploiting potential synergies and complementarities between initiatives;
b. A quality assurance of the evidence collected will be undertaken centrally by the Authority's Evaluation Team to ensure that evidence is of a sufficient standard to assess the overall performance; and
c. A synthesis of the various individual project reports, complemented by a qualitative analysis of field, photographic and participant observation will be conducted in order to inform conclusions and answer the key evaluation questions.

*Table 8.1: Outcome Performance Matrix*

| Strategic Objectives | Outcome | Outcome Indicator | Baseline | | Target | |
|---|---|---|---|---|---|---|
| | | | Value | Year | Mid-Term Period | End-Term Period |
| **Key Result Area 1: Universal, Secure and Reliable Connectivity.** | Improved access to reliable connectivity. | % uptime | 75 | 2022 | 95 | 98 |
| | Improved user experience | % user satisfaction | 95 | 2023 | 98 | 99 |
| | Secure and prosperous online community | % zero trust network | 95 | 2022 | 99 | 100 |
| **Key Result Area 2: Customer-responsive digital products, solutions and services.** | Ease of doing business | % new digital businesses | 20 | 2023 | 40 | 45 |
| | Improved user-experiences-(confidence & trust | % user satisfaction | 95 | 2023 | 99 | 99 |
| | Increased contribution of ICT to the economy (GDP | % ICT value in economy | 20 | 2022 | 35 | 40 |
| | Improved employment opportunities | Proportion of new opportunities | 15 | 2023 | 35 | 40 |
| | Enhanced digital inclusion | Digital gap index | 1.5 | 2022 | 0.7 | 0.4 |
| | Viable data management solutions | Proportion of solutions upscaled | 18 | 2023 | 34 | 40 |
| | Enhanced earnings from data | Proportion of earnings from data | 15 | 2022 | 30 | 33 |
| | Embedded data protection protocols | % data protection protocols implemented | 20 | 2023 | 40 | 50 |
| | Fair data markets | Fair market share | 20 | 2023 | 50 | 70 |
| **Key Result Area 3: Transformational Digital Capabilities and Culture** | Vibrant on-line opportunities | Proportion of new opportunities | 25 | 2022 | 40 | 45 |
| | Enhanced national advantages | % national ICT value | 20 | 2023 | 33 | 40 |
| | Increased value addition in the creative economy | % Contribution of ICT to economy | 30 | 2022 | 40 | 45 |
| **Key Result Area 4: Sustainable and adaptive digital ecosystem** | Valuable digital investments and returns | % increase in returns | 15 | 2023 | 32 | 35 |
| | Active Communities of practice | Proportion of active ICT entities | 70 | 2023 | 85 | 90 |
| | Digitally Inclusive Societies | Digital inclusion index | 0.3 | 2022 | 0.57 | 0.6 |
| | Increased ICT innovation ecosystems | Innovation index | 0.4 | 2023 | 0.67 | 0.69 |
| | Resilient digital transformation | Digital investment index | 0.5 | 2023 | 0.8 | 0.95 |
| | Harmonised Digital Markets | Digital market share | 15 | 2023 | 30 | 35 |
| | Reduced barriers to ICT investments | Proportion of newly registered businesses | 35 | 2022 | 50 | 55 |
| | Sustainable new digital investments | Proportion of budgets on new technologies | 30 | 2023 | 40 | 43 |
| | Fair digital markets | Market share | 10 | 2020 | 18 | 22 |
| | Thriving 4th industrial revolution | % Participation in 4th industrial revolution | 20 | 2023 | 50 | 55 |
| | Robust digital businesses | Proportion of digital businesses | 30 | 2023 | 39 | 45 |
| | Effective and proactive engagement through advisory and technical services | Annual engagement sessions | 4 | 2022 | 4 | 4 |
| | Effective partnerships | Signed partnership deeds | 10 | 2023 | 20 | 25 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Partnership Strategy | Validated strategy | - | 2023 | - | - |
| | Increased expertise and learning forICTA staff | Proportion of staff on specialized learning | 10 | 2022 | 20 | 25 |
| **Key Result Area 5: Institutional Sustainability** | Strengthened corporate image and identity. | Corporate board performance score (%) | 95 | 2023 | 97 | 99 |
| | | Customer satisfaction index. | 85 | 2022 | 98 | 99 |
| | Enhanced revenue generation. | Revenue generated (kshs)in Millions | 650 | 2023 | 1,123.2 | 1,347.84 |
| | High performance culture. | Staff productivity index. (%) | x | 2022 | 90 | 95 |
| | Optimal resource utilization. | % of resources absorbed. | 90 | 2023 | 95 | 97 |
| | Optimized staffing levels | % Corporate architecture operational | 90 | 2023 | 97 | 99 |
| | Institutionalized talent management and innovation awards | Proportion of staff awarded | 20 | 2022 | 30 | 32 |
| | Spacious, conducive office space in serene environment | Staff satisfaction index | 92 | 2023 | 95 | 98 |
| | Satisfied customers with higher demand | Customer satisfaction index | 95 | 2022 | 99 | 99 |
| | Zero fault audits | % zero fault audit reports | 100 | 2020 | 100 | 100 |
| | Improved financial reporting | % compliance to reporting | 100 | 2023 | 100 | 100 |
| | Secure and efficient storage and access to data | Proportion of safe secure data | 95 | 2022 | 99 | 99 |
| | Effective resource planning and mobilization strategies | Validated resource mobilization strategy | - | 2023 | - | - |
| | Effective and efficient ERP System | % ERP uptime | 95 | 2022 | 100 | 100 |
| | Internal control system strategy operationalized | Proportion of internal controls functional | 80 | 2020 | 95 | 99 |
| | Digital Development Fund operationalized | Validated Digital Fund Regulations | - | - | -- | |

### 8.3.1 Mid-Term Evaluation

The purpose of MTER shall be to assess the extent to which the objectives of the Authority are achieved. The MTER shall be carried out in December 2026. This will provide an opportunity to give recommendations for the remaining phase of the Plan. The MTER will be done by the Management in liaison with external consultants to ensure objectivity.

### 8.3.2 End – Term Evaluation

The final evaluation for the Plan shall be carried out at least six months before the end of the Strategic Plan period (2027). The review shall determine:

a. The extent to which the activities undertaken achieved the objectives;
b. Sustainability of the achievements made;
c. Challenges faced;
d. Lessons learnt;
e. Mitigation measures; and
f. Terms of Reference for the subsequent plan.

## 8.4 Reporting Framework and Feedback Mechanism

In accordance with Section 83 of the PFM Act, 2012, an Accounting Officer for a National Government entity, shall prepare a report for each quarter of the financial year in respect of the entity. The report shall contain:

a. Information on the financial and non-financial performance of the entity
b. In a form that complies with the standards prescribed & published by the Public Sector Accounting Standards Board

The Accounting Officer shall submit the report not later than fifteen (15) days after the end of each quarter to the Cabinet Secretary responsible for the entity and the National Treasury and a copy to the Controller of Budget. There shall be monthly status reports emanating from each Directorate to the CEO on progress (or lack thereof) towards achievement of the specified objectives with recommendations as well as exception reports. The monthly status reports will be collated to quarterly status reports for the Board's review and action. This will be done in conjunction with other reports/recommendations due to the CS-ICT, National Treasury and Controller of Budget. The MERL framework for this Plan will be based on the various Key Result Areas, strategic objectives and specific outputs that the Authority envisages to achieve. Specifically, the MERL will consider the objectives of various functional areas to ensure corrective actions are taken to avoid any deviations from the targets.

# ANNEX

# ANNEX 1: IMPLEMENTATION MATRIX

| Strategy | Key Activities | Output Indicators | Expected Output | Target for 5 Years | Target | | | | | Budget (Kshs. Mn) | | | | | Responsibility |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Y1 | Y2 | Y3 | Y4 | Y5 | Y1 | Y2 | Y3 | Y4 | Y5 | Lead |
| KRA: 1 | Universal, Secure and reliable connectivity | | | | | | | | | | | | | | |
| Outcome: | Improved Access to reliable connectivity | | | | | | | | | | | | | | |
| Strategic Objective: 1 | Improve access to affordable, relaible, secure and sustainable digital Infrastructure and connectivity | | | | | | | | | | | | | | |
| S1.1: Promote investments in resilient digital Infrastructure with appropriate regional interconnectivity, for Government and Private Sector | Installation of 52,000 Km of Fibre Optic cable across the Country | No. of Km | 52000 Km of Fibre Optic Cable Installed. | 52000 Km | 5141 | 8240 | 11475 | 16475 | 14747 | 10282 | 16480 | 22950 | 32950 | 29494 | CEO/ Directorate of Programmes and Standards |
| | Collaborate with private sector and other partners in the Installation of 48,000 Km of Fibre Optic cable across the Country | No. of Km | 48000 Km of Fibre Optic Cable Installed. | 48000 Km | 0 | 9000 | 13000 | 13000 | 1100 | 0 | 180 | 260 | 260 | 22 | CEO/ Directorate of Programmes and Standards |
| | Establish 1450 Innovation hubs for citizen digital literacy training,online jobs, and access to government services | No of innovation hubs | 1450 digital hubs | 1450 | 100 | 490 | 300 | 300 | 260 | 100 | 490 | 300 | 300 | 260 | CEO/ Directorate of Programmes and Standards |
| | Roll-out of 25,000 wifis in public locations across the country | No of the public places connected | 25,000 public wifis installed | 25,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5000 | CEO/ Directorate of Programmes and Standards |
| | Provide connectivity to 34,000 Government offices/institutions | No of offices/institutions connected | 34,000 offices/ institutions | 34,000 | 3,500 | 8,000 | 8,000 | 9,000 | 5,500 | 3,500 | 8,000 | 8,000 | 9,000 | 5,500 | CEO/ Directorate of Programmes and Standards |
| | Provide connectivity to 40,000 learning institutions | No of learning institutions connected | 40,0000 schools | 24,000 | 1,000 | 3,000 | 5,000 | 12,000 | 19,000 | 1,000 | 3,000 | 5,000 | 12,000 | 19,000 | CEO/ Directorate of Programmes and Standards |
| | Establishment of three data centre and Cloud Services for government and private sector | No of Data centre | 3 Data centre established | 3 | | | 1 | 1 | 1 | | | 3,000 | 3,000 | 3,000 | CEO/ Directorate of Programmes and Standards |
| | Establish Regional Smart ICT Hub to provide faster IP exchange and data storage for the Africa Region | No of hub | 1 hub | 1 | | | | 1 | | | | | 5,000 | | CEO/ Directorate of Programmes and Standards |
| | Develop policies and legislation on Integrated Infrastructure development with energy,, transport and water agencies | No of policies | No of infrastructure centric policies/ laws adopted | 5 | 1 | 1 | 1 | 1 | 1 | 133 | 133 | 133 | 133 | 133 | CEO/ Directorate of Programmes and Standards |
| | Establish an integrated NOC for OGN | No. of NOCs | Integrated modern NOC | Network Operation Centre | | 1 | | | | | 350 | | | | CEO/ Directorate of Programmes and Standards |
| | Establish and equip digital county network surveillance centres | No. of centres | Digital county network surveillance centres | Countrywide Digital network surveillance centres | | 11 | 12 | 12 | 12 | | 220 | 240 | 240 | 240 | CEO/ Directorate of Programmes and Standards |
| | Upgrade of internet capacity | Improved service | Upgrade of capacity to 200G | 100G of capacity for Primary and 100G rendandancy | 20G | 50G | 100G | 100G | 200G | 100 | 200 | 200 | 250 | 300 | CEO/ Directorate of Programmes and Standards |
| | Commercialize the One Government Network (OGN) | Amount of AIA collected | Revenue as AIA | KES 5 Billion | 650 | 850 | 1050 | 1300 | 1500 | 800 | 900 | 1000 | 1100 | 1200 | CEO/ Directorate of Programmes and Standards |
| S1.2: Map- out and document digital infrastructure gaps. | Conduct digital infrastructure gaps survey. | No. of digital infrastructure survey reports. | Validated digital infrastructure gaps survey report | 2 | | 1 | | | 1 | | 20 | | | 30 | CEO/ Directorate of Programmes and Standards/ Planning Department. |
| S1.3: Promote digital infrastructure sharing. | Develop guidelines on digital infrastructure sharing | No. of guidelines | Validated digitals document. | 2 | | 1 | | | 1 | | 10 | | | 15 | CEO/ Directorate of Programmes and Standards |
| S1.4:Promote measures that increase affordability of broadband technologies, devices, products and services | Establish a digital device manufacturing facility | No. of local manufacture/assembly facilities, digital devices produced | Integrated modern NOC | Network Operation Centre | | 1 | | | | | 350 | | | | CEO/ Directorate of Programmes and Standards |
| S1.5: Develop a green ICT guideline | Formulate the Kenya Green ICT Guideline | The Kenya Green ICT Guideline formulated | No of The Kenya Green ICT Guideline formulated | 1 | | | 1 | | | | | 3 | | | CEO/ Directorate of Programmes and Standards |

| Strategy | Key Activities | Output Indicators | Expected Output | Target for 5 Years | Target | | | | | Budget (Kshs. Mn) | | | | | Responsibility |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Y1 | Y2 | Y3 | Y4 | Y5 | Y1 | Y2 | Y3 | Y4 | Y5 | Lead |
| Strategic Issue: | Digital Inequality | | | | | | | | | | | | | | |
| Strategic Goal: | Enhance Access to Universal and Meaningful Connectivity | | | | | | | | | | | | | | |
| KRA: 1 | Universal, Secure and reliable connectivity | | | | | | | | | | | | | | |
| Outcome: | Improved Access to reliable connectivity | | | | | | | | | | | | | | |
| Strategic Objective: 2 | Promote the realization of Zero Trust Network Access environment | | | | | | | | | | | | | | |
| S2.1: Strengthen the Security and resilience of Digital Infrastructure and Services. | Conduct an annual National Cyber Risk Assessment (NCRA) to Identify and classify Critical Information Infrastructure Services (CIIs) and inherant risk. | An Annual National Cyber Risk Assessment (NCRA) Report with the National Cyber Risk Posture and Critial Information Infrastructures Cyber Risk Ranking. | No. of National Cyber Risk Assessment (NCRA) Report | 70% of Identified Government Defined CII Systems being below High Risk. | 14% of Identified Government Defined CII Systems being below High Risk. | 14% of Identified Government Defined CII Systems being below High Risk. | 14% of Identified Government Defined CII Systems being below High Risk. | 14% of Identified Government Defined CII Systems being below High Risk. | 14% of Identified Government Defined CII Systems being below High Risk. | 26M | 26M | 26M | 26M | 26M | "MOICTE/ICTA/DSS |

| Strategy | Key Activities | Output Indicators | Expected Output | Target for 5 Years | Target | | | | | Budget (Kshs. Mn) | | | | | Responsibility |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Y1 | Y2 | Y3 | Y4 | Y5 | Y1 | Y2 | Y3 | Y4 | Y5 | Lead |
| | Design, Develop, Establish and Promote for Adoption a National Cybersecurity Enterprise Architecture | A coherent and effective up-to-date cybersecurity policies, laws, regulations and standards across MCDA's | % Adoption of the Developed Cyber Architecture, Regulations and Standards by MCDA's | 70% adoption of Identified Government Defined CII Systems from the MCDA' Based on the NCRA. | 14% Annual Adoption of the Developed Cyber Architecture, Regulations and Standards by MCDA's. | 14% Annual Adoption of the Developed Cyber Architecture, Regulations and Standards by MCDA's. | 14% Annual Adoption of the Developed Cyber Architecture, Regulations and Standards by MCDA's. | 14% Annual Adoption of the Developed Cyber Architecture, Regulations and Standards by MCDA's. | 14% Annual Adoption of the Developed Cyber Architecture, Regulations and Standards by MCDA's. | 78M | 78M | 78M | 78M | 78M | "MOICTE/ICTA/DSS |
| S2.2: Collaborate with Industry to implement layered cyber security measures | Acquire & Implement and Operationalize a fully functional Government Security Operation Centre (GOVSOC) and IGW/ Perimeter Security layer. | A fully functional ICTA GOVSOC | No. of Critical Information Infrastructure Services (CIIs) mapped to the GOVSOC | 100% of Identified Government Defined CII Systems from the MCDA' Based on the NCRA. | 20% of Identified Government Defined CII Systems from the MCDA' Based on the NCRA mapped to the GOVSOC. | 20% of Identified Government Defined CII Systems from the MCDA' Based on the NCRA mapped to the GOVSOC. | 20% of Identified Government Defined CII Systems from the MCDA' Based on the NCRA mapped to the GOVSOC. | 20% of Identified Government Defined CII Systems from the MCDA' Based on the NCRA mapped to the GOVSOC. | 20% of Identified Government Defined CII Systems from the MCDA' Based on the NCRA mapped to the GOVSOC. | 300M | 300M | 300M | 300M | 300M | "MOICTE/ICTA/DSS/ DD-IS |
| | Ehnance, Optimise and scale the functionality, services and Adoption of the National Public Key Infrastucture (NPKI) and Digital Signatures usage. | 100% Adoption and use of Digital Signatures for Government CII Systems for Digital Trust Ecosystem. | Activation and funtionality of the NPKI Services & No. Of MCDA's whom we have On-Boarded; | 100% Activation and funtionality of the NPKI Services & 30 No. Of MCDA's whom we have On-Boardedand 500,000 Digital Signatures; | 80% Activation and funtionality of the NPKI Services & 10 No. Of MCDA's whom we have On-Boarded and 100,000 Digital Signatures; | 80% Activation and funtionality of the NPKI Services & 5 No. Of MCDA's whom we have On-Boarded and 100,000 Digital Signatures; | 80% Activation and funtionality of the NPKI Services & 5 No. Of MCDA's whom we have On-Boardedand 100,000 Digital Signatures; | 80% Activation and funtionality of the NPKI Services & 5 No. Of MCDA's whom we have On-Boardedand 100,000 Digital Signatures; | 80% Activation and funtionality of the NPKI Services & 5 No. Of MCDA's whom we have On-Boardedand 100,000 Digital Signatures; | 300M | 300M | 300M | 300M | 300M | MOICTE/ICTA/DSS/ DD-IS |
| S1.3: Strengthen cyber-security skills and capabilities and capacitie. | Design, Acquire, Deploy & Implement Interntional Internet Gateway/Perimeter Security for OGN, Public WI-FI and related Digital Assets. | A fully depoyed layered Security for all International Internet Gateways /Breakout Points Fully operational and Monitered. | No of Breakout Points fully secured with integrtated Visibility and signed /Commisioned | 100% Security of IGW/ OGN Breakout Points AND 100% Security for all Public WI-FI Access Points | 20% Security of IGW/OGN Breakout Points AND 100% Security for all Public WI-FI Access Points | 20% Security of IGW/OGN Breakout Points AND 100% Security for all Public WI-FI Access Points | 20% Security of IGW/OGN Breakout Points AND 100% Security for all Public WI-FI Access Points | 20% Security of IGW/OGN Breakout Points AND 100% Security for all Public WI-FI Access Points | 20% Security of IGW/OGN Breakout Points AND 100% Security for all Public WI-FI Access Points | 120M | 120M | 120M | 120M | 120M | "MOICTE/ICTA/DSS |

| Strategy | Key Activities | Output Indicators | Expected Output | Target for 5 Years | Target | | | | | Budget (Kshs. Mn) | | | | | Responsibility |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Y1 | Y2 | Y3 | Y4 | Y5 | Y1 | Y2 | Y3 | Y4 | Y5 | Lead |
| Strategic Goal: | Universal access to government services & products | | | | | | | | | | | | | | |
| KRA: 2 | Customer-responsive digital products, solutions and services. | | | | | | | | | | | | | | |
| Outcome: | Enhanced access to government services and products | | | | | | | | | | | | | | |
| Strategic Objective: 3 | Improve processes, products and platforms for delivery of quality digital solutions and services, | | | | | | | | | | | | | | |
| S3.1: Develop Government Digitization and Automation strategy | Digitalization GAP analysis | Approved digitalization framework | Digitalization Gap analysis report | Approved digitalization framework | Approved digitalization framework | | | | | 50M | | | | | Directorate of Shared Services |
| S3.2: Implement Government Paperless Strategy | Support and assist MCDAs through annual ICT Standards conformance assessments, System audits, development of IT strategic plans and policies | Reports on conformance assessments, IS Audit reports, digital strategies and policies | No. of MCDAs assisted | 250 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 5M | 5M | 5M | 5M | 5M | "Director |
| | Onboarding of government services on the E-Citizen portal | Government services accessible online | Number of services accessible | 25,000 | 15,000 | 17,000 | 19,000 | 21,000 | | 2B | 1.5B | 1.5B | 1.5B | 0.5B | CEO/Directorate of Shared Services/ MDAs |
| S3.3: Develop a Data Commercialization strategy and Guideline | Partner with stakeholders to develop a data commercialization guideline | Developed data commercialization guideline | No of developed data commercialization guideline | 1 | | 1 | | | | | 3 | | | | CEO/Directorate of Shared Services/ MDAs |
| S3.4: Roll out whole of government national data resource platform | Re-engineering of business processes and automation of the same | Reengineered business processes and Automation of critical services | Number of of backend processes automated | 21 | | 6 | 5 | 5 | 5 | 55M | 55M | 70M | 70M | 70M | CEO/Directorate of Shared Services/ MDAs |
| S3.5: Promote development of customised digital solutions for different customer segments | Implement Government Middleware to Promote data/information sharing and reuse | Data sharing platform to serves as the single point of integration for GoK systems | No. of Systems integrated | Middleware Deployed and in use across government | | 150 MDAs | 300 MDAs | 30 MDAs | | | 100M | 70M | 40M | 40M | CEO/Directorate of Shared Services/ MDAs |
| | Acquire and implement an EDRMS System complete with a workflow engine and digitalization of government records | Functional EDRMS | EDRMS Acquired, No of MCDAs utilising the EDRMS, No of digitized records | 1,71,750M | | 1,11, 50M | 20, 200M | 20, 200M | 20,250M | 122M, 180M | 84M, 155M | 84M, 155M | 84M, 155M | 84M, 155M | CEO/Directorate of Shared Services/ MDAs |
| S3.6 Develop a Digital Innovation Framework | Develop and enforce the Government Interoperability Framework and Government Enterprise Architecture with associated standards and guidelines for Shared Government services | GEA and GIF guideline documents available to guide MDAs in digitization and automation | Number of MDAs cascaded to and implementing the framework | GEA & GIF documents availed to Govt ICT stakeholders | GEA & GIF draft | GEA & GIF complete | Cascaded to 200 MCDAs | Cascaded to 350MCDAs | Cascaded to all MCDAs | 50M | 50M | 70M | 70M | 60M | CEO/Directorate of Shared Services/ MDAs |

| Strategy | Key Activities | Output Indicators | Expected Output | Target for 5 Years | Target | | | | | Budget (Kshs. Mn) | | | | | Responsibility |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Y1 | Y2 | Y3 | Y4 | Y5 | Y1 | Y2 | Y3 | Y4 | Y5 | Lead |
| Strategic Goal: | Universal access to government services & products | | | | | | | | | | | | | | |
| KRA: 2 | Customer-responsive digital products, solutions and services. | | | | | | | | | | | | | | |
| Outcome: | Enhanced access to government services and products | | | | | | | | | | | | | | |
| Strategic Objective: 4 | Improve processes, products and platforms for delivery of quality digital solutions and services, | | | | | | | | | | | | | | |
| S4.1: Promote human and institutional capacity building (public awareness campaign, professional training, R&D, Computer Emergency Response Teams, CERTs, etc.) data management. | Undertake capacity building, awareness, dissemination and sensitization of ICTA, MCDAs, accredited service providers on ICT Standards and best practices | 20 forums | No. of fora | | 4 | 4 | 4 | 4 | 4 | 4M | 4M | 4M | 4M | 4M | Director Standards and programs/ Deputy Director Standards and processes/ Deputy Director Capacity |
| S4.2: Develop national resource platform for sharing public data | Partner with government and non-government stakeholders to Develop national resource platform for sharing public data | Developed national resource platform for sharing public data | No of Developed national resource platform for sharing public data | 1 | | 1 | | | | | 10 | | | | Director Standards and programs/ Deputy Director Standards and processes/ Deputy Director Capacity |
| S4.3: Support the development and implementation of strong encryption to help keep Internet users safe online by protecting the integrity and confidentiality of their data and communications | Develop data encryption strategies | Data Encryption Strategies Developed | No of Data Encryption Strategies Developed | 5 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | Director Standards and programs/ Deputy Director Standards and processes/ Deputy Director Capacity |
| S4.4: Promote growth in digital innovation and enterprise. | Develop a Digital Innovation Framework; | framework | No. of framework developed | 1 | 1 | | | | | | 5 | | | | Directorate of Capacity Development. |

| Strategy | Key Activities | Output Indicators | Expected Output | Target for 5 Years | Target | | | | | Budget (Kshs. Mn) | | | | | Responsibility |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Y1 | Y2 | Y3 | Y4 | Y5 | Y1 | Y2 | Y3 | Y4 | Y5 | Lead |
| Strategic Issue: | Digital skills divide | | | | | | | | | | | | | | |
| Strategic Goal: | Bridge the Digital Skills | | | | | | | | | | | | | | |
| KRA: 3 | Transformational digital capabilities and culture. | | | | | | | | | | | | | | |
| Outcome: | Digitally empowered citizenry and competent workforce | | | | | | | | | | | | | | |
| Strategic Objective: 5 | Optimize digital culture through citizen-driven practices | | | | | | | | | | | | | | |
| S5.1:Enhance and review the digital skills curricula in line with evolving needs and trends in the digital economy | Conduct the assessment of nationwide digital skills gap: strategy and roadmap development | Number of reports | 2 Digital Skills survey Report | 2 Digital Skills Gap survey | 1 | - | - | - | - | 50 | - | - | - | - | DPIC, DPS |
| | Review the digital skills curricula | Validated digital skills curricula | 1 Validated Curricula | 1 Curricula | - | - | 1 | - | - | - | - | 30 | | | DPIC, DPS |
| | Initiate the policy change on the validated digital skills curricula to the national curriculum recommendation. | Incorporated validated curricula | Digital skills curricula incorporated in the education system | Incorporated curricula | - | - | 1 | - | - | - | - | 50 | | | DPIC |
| S5.2:Promote partnerships and collaborations in digital skills programme | Collaborate and carry out training on digital skills to the citizens | Citizens trained | Number of citizens trained | 10,000,000 | 2,000,000 | 2,000,000 | 2,000,000 | 2,000,000 | 2,000,000 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | DPIC, DPS |
| | Collaborate and carry out training on the the public sector workforce | Public Sector workforce trained | Number of public servants trained | 166,667 | 33,334 | 33,334 | 33,334 | 33,334 | 33,334 | 667 | 667 | 667 | 667 | 667 | DPIC/MICDE/ MCDAS |
| | Collaboration, linkages and partnerships with key stakeholders and partners/ donors locally and globally in digital skills programmes | Stakeholders and partnership developed | 5 stakeholders and partners | 5 | 1 | 1 | 1 | 1 | 1 | 15 | 15 | 15 | 15 | 15 | DPIC |
| | Collaborate with accredited training institutions to conduct training for the ICT profesionals, workforce and citizens to improve productivity and enhance digital inclusion | Profesionals trained | Number of professionals trained | 20,000 | 4,000 | 4,000 | 4,000 | 4,000 | 4,000 | 800 | 800 | 800 | 800 | 800 | DPIC |
| | Develop e-learning portal and multi media interactive content and to promote online and continous self learning | E-Learning Platform | 1 e-learning platform | 1 Elearning platform | 1 | 1 | 1 | 1 | 1 | 50 | 50 | 50 | 50 | 50 | DPIC |
| S5.3: Coordinate the implementation of ICT e-learning initiative | Partner with existing platforms to upscale digital literacy training | Platforms utilized | 3 Platforms | 3 | 1 | 1 | 1 | 1 | 10 | 10 | 10 | 10 | 10 | | DPIC |
| S5.4: Develop a Community ICT Skills Manual. | Partner with stakeholders to develop the Community ICT Skills Manual | The Community ICT Skills Manual developed | No of The Community ICT Skills Manual developed | 1 | | | 1 | | | | 5 | | | | DPIC |
| S5.5: Develop a Digital Skills Strategy | Partner with stakeholders to develop a Future Digital Skills Strategy | Future Digital Skills Strategy developed | No of Future Digital Skills Strategy developed | 1 | | | | 1 | | | | | 5 | | DPIC |

| Strategy | Key Activities | Output Indicators | Expected Output | Target for 5 Years | Target | | | | | Budget (Kshs. Mn) | | | | | Responsibility |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Y1 | Y2 | Y3 | Y4 | Y5 | Y1 | Y2 | Y3 | Y4 | Y5 | Lead |
| Strategic Issue: | Unexploited Digital environment | | | | | | | | | | | | | | |
| Strategic Goal: | Vibrant Digital Ecosystem | | | | | | | | | | | | | | |
| KRA: 4 | Sustainable and adaptive digital ecosystem | | | | | | | | | | | | | | |
| Outcome: | Increased adoption of Digital Solutions and Innovations | | | | | | | | | | | | | | |
| Strategic Objective: 6 | Strengthen Policy, Legal & Regulatory Framework for resilient business-driven digital ecosystem | | | | | | | | | | | | | | |
| S6.1: Establish strategic partnership & collaboration between private sector and government to commercialize and scale up innovations. | Conduct local and International Innovation Expos to showcase and sensitize on viable Kenyan innovations | Accelerated commercialization of innovations | No. of innovations/ startups scaled to digital enterprises | 500 | 100 | 100 | 100 | 100 | 100 | 80 | 110 | 120 | 100 | 100 | Directorate of Partnership Innovation & Capacity, MICDE,Innovation Ecosystem Players |
| | Conduct strategic hackathons and boot camps | New innovative products/services | No. of new innovative products/services | 200 | 20 | 40 | 40 | 50 | 50 | 30 | 60 | 60 | 70 | 70 | Directorate of Partnership Innovation & Capacity, Development Partners, Innovation Ecosystem Players |

| Strategy | Key Activities | Output Indicators | Expected Output | Target for 5 Years | Target | | | | | Budget (Kshs. Mn) | | | | | Responsibility |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Y1 | Y2 | Y3 | Y4 | Y5 | Y1 | Y2 | Y3 | Y4 | Y5 | Lead |
| | Formation of a special purpose vehicle(SPV) for government ICT innovations commercialization. | Increase in number of startups scaled to digital enterprises | No. of new innovative products/services | | | | | | | | | | | | |
| | Establish programmes to support start-ups in research, development and Innovation to grow from small enterprises to scalable entities nationally and globally | Increase in number of highly digital innovators in the country | % of Implementation of the Whitebox project | 100% | 100% | 100% | 100% | 100% | 100% | 12 | 14 | 11 | 11 | 12 | Directorate of Partnership Innovation & Capacity, Institutions of Higher Education, Development partners |
| | Develop strategic partnerships and collaborations with ecosystem players based on their competencies and capacity to support Innovation skills development at all levels | Skilled innovators in digital entreprenure-ship and innovation scalling | No. of Innovators trained | 38,000 | 4,000 | 6,000 | 8,000 | 10,000 | 10,000 | 28 | 30 | 27 | 27 | 28 | Directorate of Partnership Innovation & Capacity, Institutions of Higher Education, Development partners |
| | Operationalization of Digital hubs | Equiped and operation-alized digital hubs | 1450 digital hubs oper-ationalised:- Provision of digital devices, innovation incubation and ecommerce | 1,450 | 100 | 330 | 330 | 345 | 345 | 1,500 | 4,950 | 4,950 | 5,175 | 5,175 | Directorate of Partnership Inno-vation & Capacity, Directorates of Shared Services, Directorate of Programes, MICDE, KONZA, NGCDF Board, Communications Authority |
| S6.2: Streamline Applied Research, Innovation and Enterprise Policies to support and accelerate creation of new products and services that are scalable locally and international. | Develop, institutionalize and monitor the implementation of the Research & Development Strategy | No. of Research reports generated. | 4 reports | 4 reports | 1 | 1 | 1 | 1 | 1 | 5 | 5 | 5 | 5 | 5 | CEO/Department of Planning, Research, Monitoring and Evaluation/ Knowledge Management Unit |
| | Review and operationalize the Kenya Open Data Initiative (KODI) to have a robust system | % data on-boarded | 1 | 1 | - | 10% | 30% | 40% | 50% | - | 20M | 20M | 20M | 20M | CEO/Department of Plan-ning, Research, Monitoring and Evaluation/ Knowledge Management Unit |
| | Conduct training of ICTA Open Data Initiative(KODI) champions<br><br>Initiate partnership with KNBS on operationalization of Open Data Initiative(KODI) | No. of trainings conducted. | 4 training conducted. | 4 | - | 1 | 1 | 1 | 1 | - | 5 | 5 | 5 | 5 | CEO/Department of Planning, Research, Monitoring and Evaluation/ Knowledge Management Unit |
| | Undertake annual ICTA programme/ project knowledge Survey and implement the recommendations | No. of reports devel-oped and shared. | 4 reports | 4 reports | - | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | CEO/Department of Planning, Research, Monitoring and Evaluation/ Knowledge Management Unit |
| S6.3: Promote development of frameworks and policies on funding of start-ups that would attract Venture capitalist and Angel Investors. | Promote establishment of policy guidelines to promote incentives to investors in start-ups such as tax holidays, subsidies, waivers etc | Increase in start-ups | % of establishment of Startup regulations/ Act | 100% | 80% | 100% | 100% | 100% | 100% | 30 | 20 | 15 | 15 | 20 | CEO/Directorate of Partnership Innovation & Capacity, Legal Dept., MICDE, National Treasury,KRA,Parliament |
| | Establish regulator accelerator and sandboxes to enable innovators to conduct live test of their products | Increase in start-ups<br><br>Increase in ICT enterprises | Number of accelera-tors and sandboxes | 32 | 3 | 5 | 8 | 8 | 8 | 15 | 20 | 55 | 55 | 55 | CEO/Directorate of Partnership Innovation & Capacity, MICDE, Universities, Industry Regulatory bodies |
| | Facilitate access to direct funding and funding mechanisms to commercially viable digital enterprises | Increase in investment in innovation<br><br>Increased revenues/ income | Amount of direct funding to startups and digital enterprises | 3334.96 Million (USD) | 603.54 Million (USD) | 633.72 Million (USD) | 665.41 Million (USD) | 698.68 Million (USD) | 733.61 Million (USD) | 100 | 80 | 80 | 80 | 80 | CEO/Directorate of Partnership Innovation & Capacity, MICDE, National Treasury, Development partners |
| S6.4: Spearhead private sector- led initiatives for adoption, utilization and scaling of new technologies and capabilities | Develop a platform though which innovators can plug in their solutions that will then be available to the public for consumption-GovApps | Improved provision and consumption of<br><br>digital services (both private sector and government | % Of development | 100 | 60 | 80 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | Directorate of Partnership Inno-vation & Capacity, Directorates of Shared Services, MICDE, Development partners |
| | | number of digital innovators and digital products | No of digital services integrated. | 370 | 20 | 50 | 100 | 100 | 100 | 10 | 25 | 50 | 50 | 50 | Directorate of Partnership Inno-vation & Capacity, Directorates of Shared Services, MICDE, Development partners |

| Strategy | Key Activities | Output Indicators | Expected Output | Target for 5 Years | Target | | | | | Budget (Kshs. Mn) | | | | | Responsibility |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Y1 | Y2 | Y3 | Y4 | Y5 | Y1 | Y2 | Y3 | Y4 | Y5 | Lead |
| Strategic Issue: | Governance | | | | | | | | | | | | | | |
| Strategic Goal: | Enhanced operational efficiency and effectiveness | | | | | | | | | | | | | | |
| KRA: 4 | Sustainable and adaptive digital ecosystem | | | | | | | | | | | | | | |
| Strategic Objective: | Harness emerging technologies for posterity | | | | | | | | | | | | | | |
| Outcome: | High performance culture | | | | | | | | | | | | | | |
| S7.1: Formulate legal framework on adoption and utilization of emerging techs | Build Board Capacity | Board trainings undertaken | Number of trainings undertaken | 20 | 4 | 4 | 4 | 4 | 100 | 5 | 5 | 5 | 5 | 5 | CEO/Corporation Secretary |
| | Review and implement Organization Structure and other HR Instruments | Reviewed Organisation Structure and HR instruments | % of Organisation Structure and Instruments Reviewed | 100% | - | 70% | 10% | 10% | 10% | 0 | 5 | 10 | 10 | 10 | CEO/Director Corporate Services |
| | Formulate and Implement Corporate Strategy | Corporate Strategy formulated | Corporate Strategy approved/implemented | 1 No. Corporate Strategy | 1 | 20% | 20% | 20% | 20% | 2 | 1 | 1 | 1 | 1 | CEO/Director Corporate Services |
| | Formulate/review and implement Policies/ Manuals | 15 Policies formulated/ reviewed | No of policies formulated/ reviewed | 15 ICTA Policies | 0 | 5 | 5 | 3 | 2 | 0 | 3 | 3 | 2 | 1 | CEO/Director Corporate Services |
| | Institutionalise Performance Management systems | 100% Performance Management system institutionalized | % PMS institutionalized | 100% PMS | 50% | 100% | 100% | 100% | 100% | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | Director Corporate Services |

| Strategy | Key Activities | Output Indicators | Expected Output | Target for 5 Years | Target | | | | | Budget (Kshs. Mn) | | | | | Responsibility |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Y1 | Y2 | Y3 | Y4 | Y5 | Y1 | Y2 | Y3 | Y4 | Y5 | Lead |
| | Formulate and implement Institutional Culture and Code of Conduct | Positive Institutional Culture | Code of Conduct formulated, % implementation | 1No. Code of Conduct | 1 | 30% | 40% | 20% | 10% | 2 | 0 | 0 | 0 | 0 | DCS |
| | Provide executive training for Senior Management | 20 Senior managers trained on management/ executive courses | No of senior managers trained in executive courses | 20 | - | 5 | 5 | 5 | 5 | 0 | 2 | 2 | 2 | 2 | CEO/DCS |
| S7.2: Establish coordination mechanisms among relevant sectors in relation to emerging technologies | Commercialize the One Government Network (OGN) | Amount of AIA collected | Revenue as AIA | KES 5 Billion | -1000 | -1000 | -1000 | -1000 | -1000 | 800 | 900 | 1000 | 1100 | 1200 | CEO/ Directorate of Programmes and Standards |
| S7.3: Develop a Digital Opportunities Strategy | Partner with stakeholders to develop a Future Digital Opportunities Strategy | Future Digital Opportunities Strategy developed | No of Future Digital Opportunities Strategy developed | 1 | | | | 1 | | | | | 5 | | DPIC |
| S7.4: Enhance standardization of the ICT ecosystem | Develop new ICT Standards to guide digitalization and emerging technology | Data management Standard. Emerging Tech. and Semi-conductor Standard, Public Wifi Standard | No. of GoK ICT Standard s developed | 4 | | 1 | 1 | 1 | 1 | | 3M | 3M | 3M | 3M | Director Standards and programs, Director Shared Services, DPICo |
| | Review and update existing ICT Standards to guide digitalization | Revised 12 ICT Standards (ICT Networks, Data Center, End user computing devices, Optic fiber backbone, metro and last mile, Systems and applications, IT Governance, Information security, Cloud, Accessibility by persons with disability, Erecords management) | No. of GoK ICT Standard s reviewed and updated | 12 | | | 12 | | | | 10M | 10M | | | Director Standards and programs, Director Shared Services, DPICo |
| | Adopt National and International ICT Standards | E-waste Standard, Accessibility Standard for ICT Products and Services, Semi Conductor Standards | No. of Standards adopted | 3 | 1 | | 1 | | 3M | 3M | | 3M | | 3M | Director Standards and programs, Director Shared Services, DPIC,DD Standards |
| | Upgrade tools to aid conformance to ICT Standards | Tools for accreditation of ICT firms, elearning platform, accreditation of ICT professionals and practitioners, self assessment tool for conformance to standards | No. of tools upgraded | 4 | 2 | | 2 | | | 3M | | 3M | | | Director Standards and programs/ Deputy Director Standards and processes |
| | Develop and implement tools to aid cornformance to ICT Standards | Quality assurance framework and platform for digital investments | No. of tools developed and implemented | 1 | 1 | | | | | 3M | | | | | Director Standards and programs/ Deputy Director Standards and processes |

| Strategy | Key Activities | Output Indicators | Expected Output | Target for 5 Years | Target | | | | | Budget (Kshs. Mn) | | | | | Responsibility |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Y1 | Y2 | Y3 | Y4 | Y5 | Y1 | Y2 | Y3 | Y4 | Y5 | Lead |
| Strategic Issue: | Governance | | | | | | | | | | | | | | |
| Strategic Goal: | Enhanced operational efficiency and effectiveness | | | | | | | | | | | | | | |
| KRA: 4 | Sustainable and adaptive digital ecosystem | | | | | | | | | | | | | | |
| Strategic Objective: 8 | Build sustainable networks and partnerships | | | | | | | | | | | | | | |
| Outcome: | High performance culture | | | | | | | | | | | | | | |
| S8.1: Create an enabling partnerships and networking legal framework | Develop a stakeholder engagement policy | Developed stakeholder engagement policy | No of policies developed | 1 | | | | | 1 | | | | | 5 | CEO/Corporation Secretary |
| | Engage partners | Engagements with partners | No of engagements | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | Quarterly | 2 | 2 | 2 | 2 | 2 | CEO/Corporation Secretary |
| S8.2: Promote joint investments in resilient, sustainable and integrated economies | Initiate joint venture and programs | Initiated joint venture and programs | No of initiated joint venture and programs | 5 | 1 | 1 | 1 | 1 | 1 | 5 | 5 | 5 | 5 | 5 | CEO/Corporation Secretary |
| S8.3: Promote PPP investments that are environmentally and climate resilience | Identify projects to be implemented under PPP | Identified projects to be implemented under PPP | No of projects to be implemented under PPP identified | 5 | 1 | 1 | 1 | 1 | 1 | 4 | 4 | 4 | 4 | 4 | CEO/Corporation Secretary |

| Strategy | Key Activities | Output Indicators | Expected Output | Target for 5 Years | Target | | | | | Budget (Kshs. Mn) | | | | | Responsibility |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Y1 | Y2 | Y3 | Y4 | Y5 | Y1 | Y2 | Y3 | Y4 | Y5 | Lead |
| Strategic Issue: | Governance | | | | | | | | | | | | | | |
| Strategic Goal: | Enhanced operational efficiency and effectiveness | | | | | | | | | | | | | | |
| KRA: 5 | Institutional sustainability | | | | | | | | | | | | | | |
| Strategic Objective: 9 | Strengthen institutional capacity for operational excellence | | | | | | | | | | | | | | |
| Outcome: | Adequate, conducive office space with requisite facilities | | | | | | | | | | | | | | |
| S9.1: Good Corporate Governance | Recruit for the Department | Opreational Dept | Number of Recruited staff | 20 | 4 | 4 | 4 | 4 | 4 | 8 | 16 | 24 | 32 | 40 | Deputy Director - HR |
| | Formulate and Implement Policy and Strategy | Policy based decision making | Approved and Implenented Policy and Strategy | 1No., 100% implementation | 1 | 60% | 30% | 10% | | 10 | | | | | Deputy Director - Strategy |
| | Policy research reports submitted | No. of research reports | | 1 ( protection of critical infrastructure, shared infrastructure framework, cyber security, digital skills, innovation, enterprise RGD) | | | 1 (Emerging technologies and trends) | | 10M | | | | 3M | DD Planning, research, (Ag. Director Legal, DD Innovation, DD standards) | Policy research reports submitted |
| | Review/Approve and Implement Products/Services Price Catalogue | Expanded revenue base | Consolidated product/service catalogue | 1 Catalogue; 100% Implementation | 1 Catalogue; 50% | 30% | 20% | 80% | 20% | 10 | | | | | Assistant Director - Presales |

| Strategy | Key Activities | Output Indicators | Expected Output | Target for 5 Years | Target | | | | | Budget (Kshs. Mn) | | | | | Responsibility |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Y1 | Y2 | Y3 | Y4 | Y5 | Y1 | Y2 | Y3 | Y4 | Y5 | Lead |
| | Acquisition of additional Lit Capacity (10G to 30G) | More clients connected with sufficient bandwidth | Additional Bandwidth acquired | 50Gbps | 10G | 10G | 10G | 10G | 10G | 20 | 25 | 30 | 35 | 40 | Assistant Director - Business Development |
| | Review and implement the organizaional branding guideline | Organizational branding guideline reviewed | No of operational branding guideline | 1 | - | 1 | - | - | - | 5 | 0 | 0 | 0 | 0 | CEO/Communications |
| | Develop and implement strategic forums engagement plan geared toward establishing networks, markets to promote research, innovation and enterprise. | strategic forums engagement plan | No. of strategic forums conducted | 4 | 0 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | CEO/Communications |
| | Participate in Strategic pitching events both locally and internationally to create market awareness for new products/innovations | Strategic spitching events | No. of strategic pitching events | 2 | - | 2 | 2 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | CEO/Communications |
| | Promote commercialization products/services and initiatives | Increase in product/service uptake/demand | Product awareness and demand | 20 Initiatives | 6 | 4 | 4 | 3 | 3 | 20 | 20 | 20 | 20 | 20 | Assistant Director - Marketing |
| | Conduct Skills gap and workload analysis, Implement recommendations | Skills Gap and Workload analysis report | Number of Reports, % implementation | 1 No. | 1 | 50% | 30% | 20% | | 3 | 0 | 0 | 0 | 0 | CEO/DCS |
| | Recruit for key positions | Staff recruited | Number of Positions filled | 45 | 9 | 9 | 9 | 9 | 9 | 10 | 10 | 10 | 10 | 10 | DCS |
| S9.2: Maintain Optimal Organizational Performance | Acquire and relocate to new office space | New office space acquired | Office space | 1 No. | - | 1 | - | - | - | 0 | 380 | 80 | 80 | 80 | CEO/DCS |
| | Study on the Institutional Visibility | Report on the institutional Visibility | No. of Reports on the Institutional Visibility | 1 | 1 | 0 | 0 | 0 | 0 | 5 | 1 | 1 | 1 | 1 | CEO/Communications |
| | Review and implement the Communication Policy | Communication Policy reviewed and Implemented | No. of Communication Policy reviewed and implemented | 1 | - | 1 | - | - | - | 0 | 5 | 0 | 0 | 0 | CEO/Communications |
| | Develop and implement the Communications Strategy | Communications Strategy developed and Implemented | No. of Communication Strategy develoed and implemented | 1 | - | 1 | | - | - | 5 | 5 | 5 | 5 | 5 | CEO/Communications |
| | Media information pack and publicity | Media information Pack Distributed | No of Media Information Packs | 5 | 1 | 1 | 1 | 1 | 1 | 5 | 5 | 5 | 5 | 5 | CEO/Communications/ Media |
| | Meetings with editors and Media Field Visits | Editors met and Field visits conducted | No of Editors Meetings and Field Visits | 5 | 1 | 1 | 1 | 1 | 1 | 5 | 5 | 5 | 5 | 5 | CEO/Communications/ Media |
| S9.3: Commercialization and Resource Mobilization | Review and update existing ICT Standards to guide digitalization | Revised 12 ICT Standards (ICT Networks, Data Center, End user computing devices, Optic fiber backbone, metro and last mile, Systems and applications, IT Governance, Information security, Cloud, Accessibility by persons with disability, Erecords management) | No. of GoK ICT Standard s reviewed and updated | 12 | | | 12 | | | | 10M | 10M | | | Director Standards and programs, Director Shared Services, DPICo |
| | Adopt National and International ICT Standards | E-waste Standard, Accessibility Standard for ICT Products and Services, Semi Conductor Standards | No. of Standards adopted | 3 | 1 | | 1 | | 3M | 3M | | 3M | | 3M | Director Standards and programs, Director Shared Services, DPIC, DD Standards |
| | Obtain accreditation on ISO 17020 & ISO 17024, ISO 2301, 9001, 27001 | Accreditation certification | No. of accreditation schemes | | | 3 | | | 2 | | 40 | | | 30 | Director Standards and programs/ Deputy Director Standards and processes |
| | Formulation of viable Resource Mobilization Proposals | Viable Resource Mobilization strategies | Successful Proposals | 10 Proposals for 10 different products and the market entry strategies | 2 Proposals | 2 Proposals | 2 Proposals | 2 Proposals | 2 Proposals | 15 | 15 | 15 | 15 | 15 | Business Development Officers |
| S9.4: Financial management and Accountability | Revenue Management Systems/Procedures | Receivables realized | Increased revenue received | Ksh 8.95 | Ksh 630M | Ksh 1.12B | Ksh 1.6B | Ksh 2.4B | Ksh 3.2B | 20 | 20 | 20 | 20 | 20 | Accountants |
| | Establishment of Database/ Linkages for Donors and Development Partners | Profiled Donors and Partners | Database established | 1 Database | 1 Database | | | | | 10 | 5 | 5 | 5 | 5 | Deputy Director - Finance |
| | Support and assist MCDAs through annual ICT Standards conformance assessments, System audits, development of IT strategic plans and policies | Reports on conformance assessments, IS Audit reports, digital strategies and policies | No. of MCDAs assisted | 250 | 50.00 | 50.00 | 50.00 | 50.00 | 50.00 | 5M | 5M | 5M | 5M | 5M | Director Standards and programs/ Deputy Director Standards and processes |
| S9.5: Infrastructure Optimization | Procure Communication Tools/ Equipment | Communications Tools/ Equipment Procured | No. of Communications Tools Procured | 5 | 1 | 1 | 1 | 1 | 1 | 8 | 1 | 1 | 1 | 1 | CEO/Communications |
| | Develop new ICT Standards to guide digitalization and emerging technology | Data management Standard. Emerging Tech. and Semi-conductor Standard, Public Wifi Standard | No. of GoK ICT Standard s developed | 4 | | 1 | 1 | 1 | 1 | | 3M | 3M | 3M | 3M | Director Standards and programs, Director Shared Services, DPICo |
| | Upgrade tools to aid conformance to ICT Standards | Tools for accreditation of ICT firms, elearning platform, accreditation of ICT professionals and practitioners, self assessment tool for conformance to standards | No. of tools upgraded | 4 | 2 | | 2 | | | 3M | | 3M | | | Director Standards and programs/ Deputy Director Standards and processes |

| Strategy | Key Activities | Output Indicators | Expected Output | Target for 5 Years | Target | | | | | Budget (Kshs. Mn) | | | | | Responsibility |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Y1 | Y2 | Y3 | Y4 | Y5 | Y1 | Y2 | Y3 | Y4 | Y5 | Lead |
| | Develop and implement tools to aid cornformance to ICT Standards | Quality assurance framework and platform for digital investments | No. of tools developed and implemented | 1 | 1 | | | | | 3M | | | | | Director Standards and programs/ Deputy Director Standards and processes |
| S9.6: Data Management Improvement | Identify and Prioritize automation of processes and services | Effective and efficient services | % Automated processes and services | 100% | 20% | 50% | 75% | 100% | | 2 | 35 | 15 | 5 | 0 | CEO/DCS/DSS |
| | Continuous User Trainings of ICTA staff and Board/ Within HR | Staff and Board Trained | No. of staff trained | 300 | 40 | 60 | 100 | 60 | 40 | 3 | 5 | 6 | 5 | 3 | CEO/DCS |
| | Procure Relevant ICT equipment | 100% acquisition of Relevant ICT equipments | % ICT equipment | 100 % | 10% | 70% | 20% | | | 1 | 98 | 5 | 0 | 0 | CEO/DCS |
| | Develop and implement ICT Policy and Strategy | ICT policy;ICT strategy; | No. of Approved Policy and Strategy | 1 Policy, 1 Strategy; 100% implmentation | 1 Policy; 1 Strategy | 50% | 30% | 10% | 10% | 3 | 5 | 2 | 2 | 2 | CEO/DCS |
| | Procure and Implement storage and backup solutions | Storage and Backup solution | % Storage and Backup solution implemented | 100% | 20% | 60% | 100% | - | - | 2 | 5 | 3 | 0 | 0 | CEO/DCS |
| | Capture, edit and share imagery and content on social media | Social Media Content Posted | No of social media posts posted | 5 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | CEO/Communications |
| | Procure and Implement mordern conference solutions | 1 Mordern conference Solution for ICTA Offices | 1 Modern Conference Solution | 1 | - | 1 | | | | | 10 | | | | CEO/DCS |
| | Implement a comprehensive data management strategy including data governance, and data lifecycle management | Comprehensive data management strategy | Data Management Strategy | 100% | 10% | 30% | 80% | 100% | - | 2 | 3 | 7 | 2 | 0 | CEO/DCS |

| Strategy | Key Activities | Output Indicators | Expected Output | Target for 5 Years | Target | | | | | Budget (Kshs. Mn) | | | | | Responsibility |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Y1 | Y2 | Y3 | Y4 | Y5 | Y1 | Y2 | Y3 | Y4 | Y5 | Lead |
| Strategic Issue: | Governance | | | | | | | | | | | | | | |
| Strategic Goal: | Enhanced operational efficiency and effectiveness | | | | | | | | | | | | | | |
| KRA: 4 | Sustainable and adaptive digital ecosystem | | | | | | | | | | | | | | |
| Strategic Objective: 10 | Promote optimal resource mobilization, allocation and planning practices | | | | | | | | | | | | | | |
| Outcome: | Improved utilization of financial resources | | | | | | | | | | | | | | |
| S10.1: Re-engineering of Enterprise Resource Planning (ERP) | Adopt full automation of Finance and Accounting function | Automated Finance and Accounting processes | Percentage level of automation | 100% | 70 | 75 | 80 | 85 | 100 | 3 | 3 | 3 | 3 | 3 | DDFA |
| | Develop software export strategy for government use | Software export strategy document | % of development of the strategy | 100% | 100% | | | | | 20 | | | | | Directorate of Partnership Innovation & Capacity, Directorate of Programes, MICDE, MITI, National Treasury |
| | Establishment of 2 software manufacturing industries | Employment of 10,000 software engineers | No of software manufacturing industries established | 2 | 0 | 1 | - | 1 | - | - | 250 | - | 250 | - | Directorate of Partnership Innovation & Capacity, Directorate of Programes, MICDE, MITI, National Treasury |
| | Develop a framework for software testing and certification. | Increased export quality digital products | % of Establishment of a testing and certification scheme for software | 100% | 50% | 75% | 100% | 100% | 100% | 4 | 5 | 1 | 0 | 0 | Directorate of Partnership Innovation & Capacity, Directorates of Shared Services, Directorate of Programes |
| S10.2: Mobilize both financial and non-financial resources | Well defined and funded budget | Compliance to budget utilization | Percentage of budget absorption | 100% | 100 | 100 | 100 | 100 | 100 | 3 | 1 | 1 | 1 | 3 | DDFA |
| S10.3: Optimize available resources | Fully functional internal controls | Improved financial reporting | Reduced number of audit querries | 5 | 4 | 4 | 3 | 3 | 2 | 6 | 6 | 6 | 6 | 6 | CEO |
| S10.4: Support government priority programmes e.g. Ecosystem Restoration Programme | Develop Programmes Alignment Strategy | Programmes Alignment Strategy Developed | No of Programmes Alignment Strategy Developed | 5 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 3 | DDFA |

# ANNEX II: ANNUAL WORK PLAN AND BUDGET 2024/2025

| Strategy | Key Activities | Output Indicators | Expected Output | Target | Budget (Kshs. Mn) | Responsibility |
|---|---|---|---|---|---|---|
| | | | | Y1 | Y1 | Lead |
| S1.1: Promote investments in resilient digital Infrastructure with appropriate regional interconnectivity, for Government and Private Sector | Installation of 52,000 Km of Fibre Optic cable across the Country | No. of Km | 52000 Km of Fibre Optic Cable Installed. | 5141 | 10282 | CEO/ Directorate of Programmes and Standards |
| | Collaborate with private sector and other partners in the Installation of 48,000 Km of Fibre Optic cable across the Country | No. of Km | 48000 Km of Fibre Optic Cable Installed. | 0 | 0 | CEO/ Directorate of Programmes and Standards |
| | Establish 1450 Innovation hubs for citizen digital literacy training,online jobs, and access to government services | No of innovation hubs | 1450 digital hubs | 100 | 100 | CEO/ Directorate of Programmes and Standards |
| | Roll-out of 25,000 wifis in public locations across the country | No of the public places connected | 25,000 public wifis installed | 5,000 | 5,000 | CEO/ Directorate of Programmes and Standards |
| | Provide connectivity to 34,000 Government offices/institutions | No of offices/institutions connected | 34,000 offices/institutions | 3,500 | 3,500 | CEO/ Directorate of Programmes and Standards |
| | Provide connectivity to 40,000 learning institutions | No of learning institutions connected | 40,0000 schools | 1,000 | 1,000 | CEO/ Directorate of Programmes and Standards |
| | Establishment of three data centre and Cloud Services for government and private sector | No of Data centre | 3 Data centre established | | | CEO/ Directorate of Programmes and Standards |
| | Establish Regional Smart ICT Hub- to provide faster IP exchange and data storage for the Africa Region | No of hub | 1 hub | | | CEO/ Directorate of Programmes and Standards |
| | Develop policies and legislation on Integrated Infrastructure development with energy,, transport and water agencies | No of policies | No of infrastructure centric policies/ laws adopted | 1 | 133 | CEO/ Directorate of Programmes and Standards |
| | Establish an integrated NOC for OGN | No. of NOCs | Integrated modern NOC | | | CEO/ Directorate of Programmes and Standards |
| | Establish and equip digital county network surveillance centres | No. of centres | Digital county network surveillance centres | | | CEO/ Directorate of Programmes and Standards |
| | Upgrade of internet capacity | Improved service | Upgrade of capacity to 200G | 20G | 100 | CEO/ Directorate of Programmes and Standards |
| | Commercialize the One Government Network (OGN) | Amount of AIA collected | Revenue as AIA | 650 | 800 | CEO/ Directorate of Programmes and Standards |
| S1.2: Map- out and document digital infrastructure gaps. | Conduct digital infrastructure gaps survey. | No. of digital infrastucture survey reports. | Validated digital infrastructure gaps survey report | | | CEO/ Directorate of Programmes and Standards/ Planning Department. |
| S1.3: Promote digital infrastruture sharing. | Develop guidelines on digital infrastruture sharing | No. of guidelines | Validated digitals document. | | | CEO/ Directorate of Programmes and Standards |
| S1.4:Promote measures that increase affordability of broadband technologies, devices, products and services | Establish a digital device manufacturing facility | No. of local manufacture/assembly facilities, digital devices produced | Integrated modern NOC | | | CEO/ Directorate of Programmes and Standards |

| Strategy | Key Activities | Output Indicators | Expected Output | Target for 5 Years | Target | Budget (Kshs. Mn) | Responsibility |
|---|---|---|---|---|---|---|---|
| | | | | | Y1 | Y1 | Lead |
| Develop Government Digitization and Automation strategy | Digitalization GAP analysis | Approved digitalization framework | Digitalization Gap analysis report | Approved digitalization framework | Approved digitalization framework | 50M | Directorate of Shared Services |

| Strategy | Key Activities | Output Indicators | Expected Output | Target for 5 Years | Target | Budget (Kshs. Mn) | Responsibility |
|---|---|---|---|---|---|---|---|
| | | | | | Y1 | Y1 | Lead |
| Enhance Government Systems integration, interoperability and availability. | Develop and enforce the Government Interoperability Framework and Government Enterprise Architecture with associated standards and guidelines for Shared Government services | GEA and GIF guideline documents available to guide MDAs in digitization and automation | Number of MDAs cascaded to and implementing the framework | GEA & GIF documents availed to Govt ICT stakeholders | GEA & GIF draft | 50M | CEO/Directorate of Shared Services/ MDAs |
| Roll out whole of government national data resource platform | Re-engineering of business processes and automation of the same | Reengineered business processes and Automation of critical services | Number of of backend processes automated | 21 | | 55M | CEO/Directorate of Shared Services/ MDAs |
| Promote development of customised digital solutions for different customer segments | Implement Government Middleware to Promote data/information sharing and reuse | Data sharing platform to serves as the single point of integration for GoK systems | No. of Systems integrated | Middleware Deployed and in use across government | | | CEO/Directorate of Shared Services/ MDAs |
| | Acquire and implement an EDRMS System complete with a workflow engine and digitalization of government recrds | Functional EDRMS | EDRMS Acquired, No of MCDAs utilising the EDRMS, No of digitized records | 1,71,750M | | 122M, 180M | CEO/Directorate of Shared Services/ MDAs |
| S3.13:Invest in high-end digital expertise to deliver social and economic benefits to the country | Onboarding of government services on the E-Citizen portal | Government services accessible online | Number of services accessible | 25,000 | 15,000 | 2B | CEO/Directorate of Shared Services/ MDAs |
| S5.1:Enhance and review the digital skills curricula in line with evolving needs and trends in the digital economy | Conduct the assessment of nationwide digital skills gap: strategy and roadmap development | Number of reports | 2 Digital Skills survey Report | 2 Digital Skills Gap survey | 1 | 50 | DPIC, DPS |
| | Review the digital skills curricula | Validated digital skills curricula | 1 Validated Curricula | 1 Curricula | - | - | DPIC, DPS |
| | Initiate the policy change on the validated digital skills curricula to the national curriculum recommendation. | Incorporated validated curricula | Digital skills curricula incorporated in the education system | Incorporated curricula | - | - | DPIC |
| S5.2:Promote partnerships and collaborations in digital skills programme | Collaborate and carry out training on digital skills to the citizens | Citizens trained | Number of citizens trained | 10,000,000 | 2,000,000 | 5,000 | DPIC, DPS |
| | Collaborate and carry out training on the the public sector workforce | Public Sector workforce trained | Number of public servants trained | 166,667 | 33,334 | 667 | DPIC/MICDE/MCDAS |
| | Collaboration, linkages and partnerships with key stakeholders and partners/donors locally and globally in digital skills programmes | Stakeholders and partnership developed | 5 stakeholders and partners | 5 | 1 | 15 | DPIC |
| | Collaborate with accredited training institutions to conduct training for the ICT profesionals, workforce and citizens to improve productivity and enhance digital inclusion | Profesionals trained | Number of professionals trained | 20,000 | 4,000 | 800 | DPIC |
| | Develop e-learning portal and multi media interactive content and to promote online and continous self learning | E-Learning Platform | 1 e-learning platform | 1 Elearning platform | 1 | 50 | DPIC |
| Leverage on existing platforms to upscale digital literacy training: FM Radios, Television, Internet, on-line and social media platforms | Partner with existing platforms to upscale digital literacy training | Platforms utilized | 3 Platforms | 3 | 1 | 10 | DPIC |

| Strategy | Key Activities | Output Indicators | Expected Output | Target for 5 Years | Target | Budget (Kshs. Mn) | Responsibility |
|---|---|---|---|---|---|---|---|
| | | | | | Y1 | Y1 | Lead |
| Provide commercialization support and scale up innovations in ICT systems and technologies. | Conduct local and International Innovation Expos to showcase and sensitize on viable Kenyan innovations | Accelerated commercialization of innovations | No. of innovations/ startups scaled to digital enterprises | 500 | 100 | 80 | Directorate of Partnership Innovation & Capacity, MICDE, Innovation Ecosystem Players |
| | Conduct strategic hackathons and boot camps | New innovative products/ services | No. of new innovative products/services | 200 | 20 | 30 | Directorate of Partnership Innovation & Capacity, Development Partners, Innovation Ecosystem Players |
| | Formation of a special purpose vehicle(SPV) for government ICT innovations commercialization. | Increase in number of startups scaled to digital enterprises | No. of new innovative products/services | | | | Directorate of Partnership Innovation & Capacity, Legal Dept., MICDE, National Treasury |
| | Establish programmes to support start-ups in research, development and Innovation to grow from small enterprises to scalable entities nationally and globally | Increase in number of highly digital innovators in the country | % of Implementation of the Whitebox project | 100% | 100% | 12 | Directorate of Partnership Innovation & Capacity, Institutions of Higher Education, Development partners |
| | Develop strategic partnerships and collaborations with ecosystem players based on their competencies and capacity to support Innovation skills development at all levels | Skilled innovators in digital entreprenureship and innovation scalling | No. of Innovators trained | 38,000 | 4,000 | 28 | Directorate of Partnership Innovation & Capacity, Institutions of Higher Education, Development partners |
| | Operationalization of Digital hubs | Equiped and operationalized digital hubs | 1450 digital hubs operationalised:- Provision of digital devices, innovation incubation and ecommerce | 1,450 | 100 | 1,500 | Directorate of Partnership Innovation & Capacity, Directorates of Shared Services, Directorate of Programes, MICDE, KONZA, NGCDF Board,Communications Authority |
| Promote development of frameworks and policies on funding of start-ups that would attract Venture capitalist and Angel Investors. | Promote establishment of policy guidelines to promote incentives to investors in start-ups such as tax holidays, subsidies, waivers etc | Increase in start-ups | % of establishment of Startup regulations/Act | 100% | 80% | 30 | CEO/Directorate of Partnership Innovation & Capacity, Legal Dept., MICDE, National Treasury, KRA, Parliament |
| | Establish regulator accelerator and sandboxes to enable innovators to conduct live test of their products | Increase in start-ups<br>Increase in ICT enterprises | Number of accelerators and sandboxes | 32 | 3 | 15 | CEO/Directorate of Partnership Innovation & Capacity, MICDE, Universities, Industry Regulatory bodies |
| | Facilitate access to direct funding and funding mechanisms to commercially viable digital enterprises | Increase in investment in innovation<br>Increased revenues/ income | Amount of direct funding to startups and digital enterprises | 3334.96 Million (USD) | 603.54 Million (USD) | 100 | CEO/Directorate of Partnership Innovation & Capacity, MICDE, National Treasury, Development partners |
| | Develop, institutionalize and monitor the implementation of the Research & Development Strategy | Increase in investment in innovation<br>Increased revenues/ income | Amount of direct funding to startups and digital enterprises | 3334.96 Million (USD) | 603.54 Million (USD) | 100 | CEO/Directorate of Partnership Innovation & Capacity, MICDE, National Treasury, Development partners |

| Strategy | Key Activities | Output Indicators | Expected Output | Target for 5 Years | Target | Budget (Kshs. Mn) | Responsibility |
|---|---|---|---|---|---|---|---|
| | | | | | Y1 | Y1 | Lead |
| Promote Applied Research and Knowledge Management to support creation of new products and services that are scalable locally and international | Develop, institutionalize and monitor the implementation of the Research & Development Strategy | No. of Research reports generated. | 4 reports | 4 reports | 1 | 5 | CEO/Department of Planning, Research, Monitoring and Evaluation/ Knowledge Management Unit |
| | Review and operationalize the Kenya Open Data Initiative(KODI) to have a robust system | % data on-boarded | 1 | 1 | - | - | CEO/Department of Planning, Research, Monitoring and Evaluation/ Knowledge Management Unit |
| | Conduct training of ICTA Open Data Initiative(KODI) champions | No. of trainings conducted. | 4 training conducted. | 4 | - | - | CEO/Department of Planning, Research, Monitoring and Evaluation/ Knowledge Management Unit |
| | Initiate partnership with KNBS on operationalization of Open Data Initiative(KODI) | | | | | | |
| | Undertake annual ICTA programme/ project knowledge Survey and implement the recommendations | No. of reports developed and shared. | 4 reports | 4 reports | - | 2 | CEO/Department of Planning, Research, Monitoring and Evaluation/ Knowledge Management Unit |
| Promote visibility on uptake of digital skills and knowledge transfer | Develop software export strategy for government use | Software export strategy document | % of development of the strategy | 100% | 100% | 20 | Directorate of Partnership Innovation & Capacity, Directorate of Programes, MICDE, MITI, National Treasury |
| | Establishment of 2 software manufacturing industries | Employment of 10,000 software engineers | No of software manufacturing industries established | 2 | 0 | - | Directorate of Partnership Innovation & Capacity, Directorate of Programes, MICDE, MITI, National Treasury |
| Promote technology innovation through implementation of GovApps (government applications) infrastructure to power provision of effective and efficient citizen services | Develop a platform though which innovators can plug in their solutions that will then be available to the public for consumption-GovApps | Improved provision and consumption of digital services (both private sector and government) | % Of development | 100% | 60% | | Directorate of Partnership Innovation & Capacity, Directorates of Shared Services, MICDE, Development partners |
| | | Increased number of digital innovators and digital products | No of digital services integrated. | 370 | 20 | 10 | |
| To Strengthen the Security and resilience of our Digital Infrastructure and Services. | To conduct an annual National Cyber Risk Assessment (NCRA) to Identify and classify Critical Information Infrastructure Services (CIIs) and inherant risk. | An Annual National Cyber Risk Assessment (NCRA) Report with the National Cyber Risk Posture and Critial Information Infrastructures Cyber Risk Ranking. | No. of National Cyber Risk Assessment (NCRA) Report | 70% of Identified Government Defined CII Systems being below High Risk. | 14% of Identified Government Defined CII Systems being below High Risk | 26M | "MOICTE/ICTA/DSS |
| | Design, Develop, Establish and Promote for Adoption a National Cybersecurity Enterprise Architecture | A coherent and effective up-to-date cybersecurity policies, laws, regulations and standards across MCDA's | % Adoption of the Developed Cyber Architecture, Regulations and Standards by MCDA's | 70% adoption of Identified Government Defined CII Systems from the MCDA' Based on the NCRA. | 14% Annual Adoption of the Developed Cyber Architecture, Regulations and Standards by MCDA's. | 78M | "MOICTE/ICTA/DSS |

| Strategy | Key Activities | Output Indicators | Expected Output | Target for 5 Years | Target | Budget (Kshs. Mn) | Responsibility |
|---|---|---|---|---|---|---|---|
| | | | | | Y1 | Y1 | Lead |
| To enhance capabilities to protect, detect, respond, and recover from malicious cyber activities | To Acquire & Implement and Operationalize a fully functional Government Security Operation Centre (GOVSOC) and IGW/Perimeter Security layer. | A fully functional ICTA GOVSOC | No. of Critical Information Infrastructure Services (CIIs) mapped to the GOVSOC | 100% of Identified Government Defined CII Systems from the MCDA' Based on the NCRA. | 20% of Identified Government Defined CII Systems from the MCDA' Based on the NCRA mapped to the GOVSOC. | 300M | "MOICTE/ICTA/DSS/DD-IS |
| | To ehnance, Optimise and scale the functionality, services and Adoption of the National Public Key Infrastucture (NPKI) and Digital Signatures usage. | 100% Adoption and use of Digital Signatures for Government CII Systems for Digital Trust Ecosystem. | Activation and funtionality of the NPKI Services & No. Of MCDA's whom we have On-Boarded; | 100% Activation and funtionality of the NPKI Services & 30 No. Of MCDA's whom we have On-Boardedand 500,000 Digital Signatures; | 80% Activation and funtionality of the NPKI Services & 10 No. Of MCDA's whom we have On-Boarded and 100,000 Digital Signatures; | 300M | MOICTE/ICTA/DSS/DD-IS |
| | To Design, Acquire, Deploy & Implement Interntional Internet Gateway/ Perimeter Security for OGN, Public WI-FI and related Digital Assets. | A fully depoyed layered Security for all International Internet Gateways /Breakout Points Fully operational and Monitered. | No of Breakout Points fully secured with integrtated Visibility and signed / Commisioned | 100% Security of IGW/OGN Breakout Points AND 100% Security for all Public WI-FI Access Points | 20% Security of IGW/OGN Breakout Points AND 100% Security for all Public WI-FI Access Points | 120M | "MOICTE/ICTA/DSS |
| Enhance standardization of the ICT ecosystem | Develop new ICT Standards to guide digitalization and emerging technology | Data management Standard. Emerging Tech. and Semi-conductor Standard, Public Wifi Standard | No. of GoK ICT Standard s developed | 4 | | | Director Standards and programs, Director Shared Services, DPICo |
| | Review and update existing ICT Standards to guide digitalization | Revised 12 ICT Standards (ICT Networks, Data Center, End user computing devices, Optic fiber backbone, metro and last mile, Systems and applications, IT Governance, Information security, Cloud, Accessibility by persons with disability, Erecords management) | No. of GoK ICT Standard s reviewed and updated | 12 | | | Director Standards and programs, Director Shared Services, DPICo |
| | Adopt National and International ICT Standards | E-waste Standard, Accessibility Standard for ICT Products and Services, Semi Conductor Standards | No. of Standards adopted | 3 | 1 | 3M | Director Standards and programs, Director Shared Services, DPIC,DD Standards |
| | Upgrade tools to aid conformance to ICT Standards | Tools for accreditation of ICT firms, elearning platform, accreditation of ICT professionals and practitioners, self assessment tool for conformance to standards | No. of tools upgraded | 4 | 2 | 3M | Director Standards and programs/ Deputy Director Standards and processes |

| Strategy | Key Activities | Output Indicators | Expected Output | Target for 5 Years | Target | Budget (Kshs. Mn) | Responsibility |
|---|---|---|---|---|---|---|---|
| | | | | | Y1 | Y1 | Lead |
| | Develop and implement tools to aid cornformance to ICT Standards | Quality assurance framework and platform for digital investments | No. of tools developed and implemented | 1 | 1 | 3M | Director Standards and programs/ Deputy Director Standards and processes |
| | Support and assist MCDAs through annual ICT Standards conformance assessments, System audits, development of IT strategic plans and policies | Reports on conformance assessments, IS Audit reports, digital strategies and policies | No. of MCDAs assisted | 250 | 50.00 | 5M | "Director |

# Annex III: Quarterly Progress Reporting Template

***Table 8.2: Quarterly Progress Reporting Template.***

| QUARTERLY PROGRESS REPORTING TEMPLATE | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Expected Output | Output Indicator | Achievement for Year .... | | | | Cumulative to Date(Years) | | | Remarks | Corrective Intervention |
| | | Annual Target (A) | Target (B) | Actual (C ) | Variance (C - B) | Target (E) | Actual (F) | Variance (F - E) | | |
| | | | | | | | | | | |
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# Annex IV: Annual Progress Reporting Template

***Table 8.3: Annual Progress Reporting Template:***

| ANNUAL PROGRESS REPORTING TEMPLATE | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Expected Output | Output Indicator | Achievement for Year .... | | | Cumulative to Date(Years) | | | Remarks | Corrective Intervention |
| | | Target (A) | Actual (B) | Variance (B -C) | Target (D) | Actual (E) | Variance (E-D) | | |
| | | | | | | | | | |
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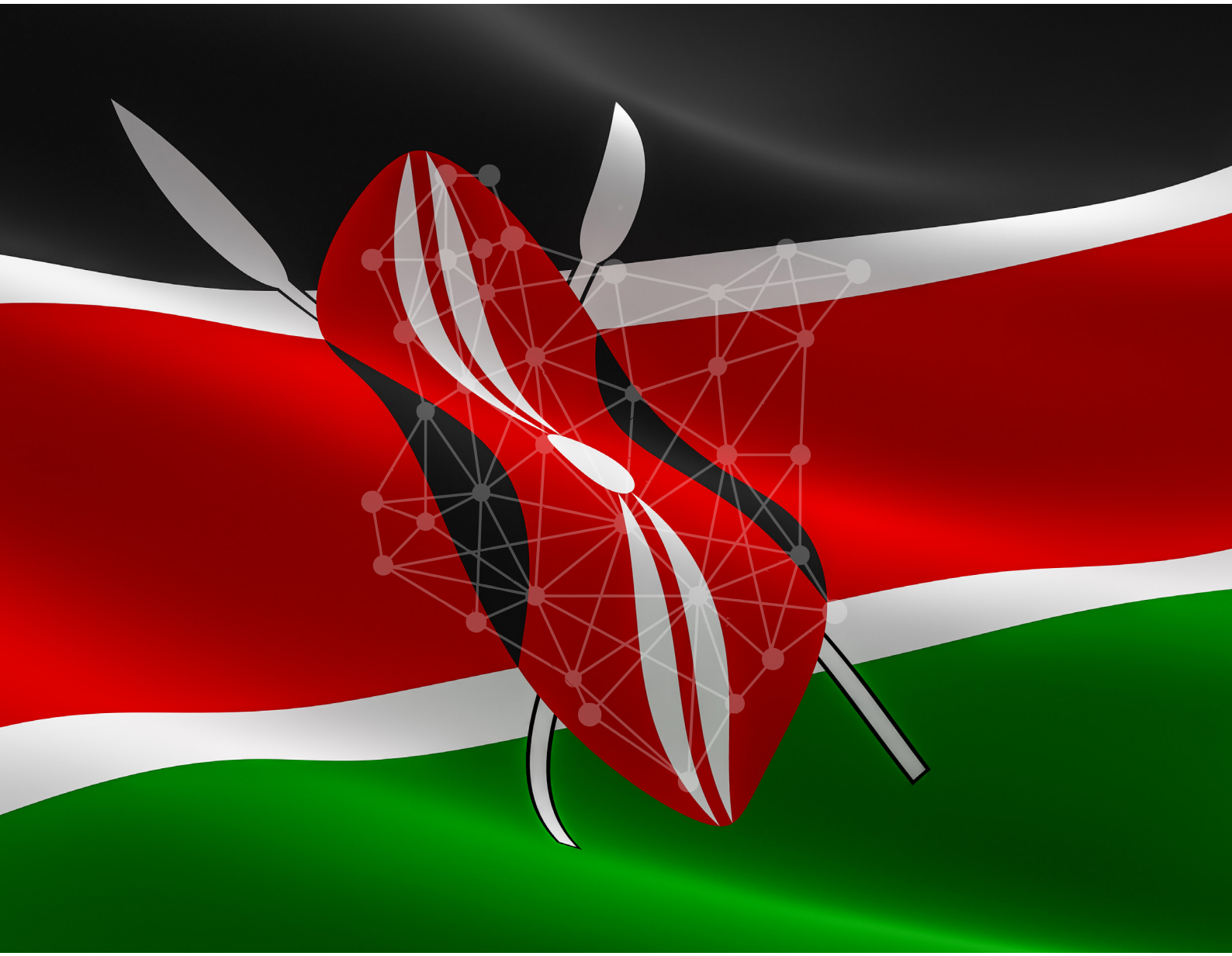
# Annex V: Evaluation Reporting Template

***Table 8.4: Evaluation Reporting Template***

| EVALUATION REPORTING TEMPLATE | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Key Result Area | Outcome | Outcome Indicator | Baseline | | Mid-Term Evaluation | | End of Plan Period Evaluation | | Remarks | Corrective Intervention |
| | | | Value | Year | Target | Achievement | Target | Achievement | | |
| KRA1 | | | | | | | | | | |
| KRA2 | | | | | | | | | | |
| KRA3 | | | | | | | | | | |
| | | | | | | | | | | |


Limitless Opportunities

ICT Authority



# STRATEGIC PLAN

## 2024 - 2027