



ICT AUTHORITY STRATEGIC PLAN

(2020-2024)



THE STRATEGIC PLAN (2020-2024)

Promoting Digital Inclusion for Sustained Social and Economic Growth and Governance



FOREWORD



Information and Communication Technology (ICT) presents an enormous opportunity to introduce significant and lasting positive transformation across the developing world. The rapid penetration of mobile phone access has resulted in considerable improvement in the lives of the poor in urban and rural areas. ICT will continue contributing to Kenya's ability to realise its national goals and leapfrog it into a transformed society where every citizen has better access to opportunities to improve their livelihoods and harness the benefits of a digital economy. The ICT Authority (ICTA) as a body mandated to promote and regulate ICT Standards in Kenya, will continue to play a pivotal role in facilitating an enabling environment for the country to realize opportunities presented by information and communication technologies.

The Authority has developed a transformative and inclusive Strategic Plan (2020-2024) that is envisioned to provide a roadmap to execute its mandate. The Plan will position Kenya to take advantage of the "Fourth Industrial Revolution" famously known as the Industry 4.0. This Plan also takes cognizance of the new and emerging technologies and the need to leverage on their capabilities.

The Plan is in line with Kenya's Economic Vision 2030, The Kenya Digital Economy Blue Print, The AU Agenda 2063, The Global Sustainable Development Goals (SDGs) as well as the Presidential "Big Four Agenda". The Authority is deeply indebted to H.E Uhuru Kenyatta the President of the Republic of Kenya for steering the country's ICT sector and providing an enabling environment for ICT investments to take place.

The successful implementation of this Strategic Plan will require a concerted effort and commitment from all stakeholders; national government agencies, county governments, private sector and development partners to create the synergies needed to realise the strategic objectives in this document. The Board is committed to provide oversight and strategic direction for the effective execution of plan.

A handwritten signature in blue ink, appearing to read 'N. Mungai', written over a light blue circular stamp.

Mr. Njoroge Nani Mungai,
Chairman, Board of Directors

ACKNOWLEDGEMENTS

Information and Communication Technology Authority.



The ICT Authority Strategic Plan (2020-2024) has been made possible through the support, dedication and the active involvement of multiple stakeholders who provided both technical and financial inputs. Special thanks goes to the Cabinet Secretary, ICT, Innovation and Youth Affairs, Joe Mucheru EGH for his stewardship and guidance to the Authority.

I thank the ICT Authority Board of Directors for their support and variable input in the document. The Strategic Plan also benefited immensely from the commitment and participation of every officer whose ideas and contribution culminated into the strategic objectives and themes. The ICT Authority management also engaged and consulted widely to ensure that these strategic objectives correspond to available resources.

Appreciation goes to the Authority's Director of Programmes and Standards who steered the process that has now produced this document. The Head of Planning, Monitoring & Evaluation Department hosted the secretariat that facilitated stakeholder forums and ensured that their views have been incorporated in the final document. The Head of Communication Department provided editorial services to ensure that the document is coherent.

We say a big thank you to the team of consultants who provided the much-needed technical support. These teams include the Policy Research and Evaluation Centre, Inspire Africa Initiatives International Ltd and with the UK Government's Department for International Development, through the Prosperity Fund's Digital Access Programme.

Lastly, I would like to thank all stakeholders largely drawn from national and county governments as well as the private sector for enriching the document through their invaluable input. This will indeed create ownership of the document and give the Authority the support needed during its implementation.



Dr. Katherine Getao, EBS,
Chief Executive Officer,
Information and Communication Technology Authority

ABBREVIATIONS & ACRONYMS

AGPO	Access to Government Procurement Opportunities
AI	Artificial Intelligence
AU	African Union
API	Application Programming Interface
BPO	Business Processing Outsourcing
CAK	Communications Authority of Kenya
CCK	Communication Commission of Kenya
CEO	Chief Executive Officer
CIH	Constituency Innovation Hub
CIO	Chief Information Officer
CIRT	Computer Incident Response Team
CMS	Content Management System
CoE	Centre of Excellence
CUE	Commission for University Education
DeG	Directorate of eGovernment.
DfID	Department for International Development
DLP	Digital Literacy Program
DMS	Document Management Systems
EATTP	East African Trade and Transport Facilitation Project
ERP	Enterprise Resource Planning
FY	Financial Year
GCCN	Government Common Core Network
GDC	Government Data Centre
GII	Global Innovation Index
GITS	Government IT Services
GOE	Government Owned Entities
GoK	Government of Kenya
HoD	Head of Department
HEIs	Higher Education Institutions
IaaS	Infrastructure as a Service
ICMS	Integrated Customs Management System
ICT	Information Communication Technology
ICTA	Information Communication Technology Authority
IEEE	Institute of Electrical and Electronic Engineers
IFMIS	Integrated Financial Management Information System
IP	Intellectual Property
IPR	Intellectual Property Rights
ISIC	International Standard Industrial Classification
IT	Information Technology
iTAX	Integrated Tax System

ABBREVIATIONS & ACRONYMS

ITC-NTF III	International Trade Centre Netherlands Trust Fund III
ITO/ITES	IT Outsourcing /IT Enabled Services
IXP	Internet Exchange Point
KENET	Kenya Education Network
KICTB	Kenya ICT Board
Km	Kilometre
KPI	Key Performance Indicator
MCDA	Ministries, Counties, Departments and Agencies
MDA	Ministries Departments and Agencies
MDM	Master Data Management
MoICT	Ministry of Information, Communication and Technology
MTP III	Medium Term Plan III
MTP	Medium Term Plan
NACOSTI	National Commission for Science, Technology and Innovation
NOFBI	National Optic Fibre Backbone Infrastructure
PDTP	Presidential Digital Talent Program
PESTLE	Political Economic Social Technology Legal and Environment
PWD	Persons with Disability
PKI	Public Key Infrastructure
PPP	Public Private Partnership
PWD	Person with Disability
R&D	Research and Development
RFID	Radio-Frequency Identification
SaaS	Software as a Service
SAGA	Semi-Autonomous Government Agency
SCIMM	State Corporation Information Management Module
SLA	Service Level Agreement
SME	Small and Medium Enterprise
SSO	Single Sign On
TIMS	Transport Information Management System
TSA	Transport and Safety Authority
UK	United Kingdom

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EXECUTIVE SUMMARY

Kenya is advancing towards becoming a knowledge-based economy through its investments in Information and Communication Technology. The ICT Authority plays a critical role in the government's efforts to positively change people's lives by making a digital economy a reality in Kenya.

The ICT Authority Strategic Plan covers the period 2020 to 2024 and is the strategic roadmap for the execution of its mandate. In this Strategic Plan, the ICT Authority has prioritised four strategic pillars, one enabler and one foundation as areas of focus to realise an inclusive digital economy. The four strategic pillars covered are: Digital Infrastructure; Digital Skills, Values & Culture; Digital Services; and Applied Research, Innovation & Enterprise. The strategic enabler and foundation adopted are Institutional Capacity and Governance & Leadership, respectively.

The ICT Authority will implement a result-based management framework, with measurable performance indicators across the entire organisation. The Key Performance Indicators (KPI) envisioned will deliver the following results by 2024:- (a)Growth of digital infrastructure from 9,000km to 15,000km of fibre optic cable (b)digital skills to spur digital economy with increased citizenry with appropriate competencies(c) enhanced digital services to promote ease of doing business and increased accessibility, equity and inclusivity to government services (d)enhanced and responsive institutional capacity in promoting digital growth and productivity(e) enhanced governance and leadership that is responsive to the values and culture enshrined in the Constitution of Kenya 2010 and (f) enhanced adoption of applied research, innovation and enterprise to promote digital economy.



CHAPTER BACKGROUND & PHILOSOPHICAL FRAMEWORK

```
elif_operation == "MIRROR_X":  
    mirror_mod.use_x = False  
    mirror_mod.use_y = True  
    mirror_mod.use_z = False  
elif_operation == "MIRROR_Z":  
    mirror_mod.use_x = False  
    mirror_mod.use_y = False  
    mirror_mod.use_z = True
```

```
#selection at the end -add back the deselected mirror mod  
mirror_ob.select= 1  
modifier_ob.select=1  
bpy.context.scene.objects.active = modifier_ob  
print("Selected" + str(modifier_ob)) # modifier ob is the act  
mirror_ob.select = 0
```

1.1 Introduction

The ICT Authority Strategic Plan (2020-2024) is a successor strategy for the ICT Authority Strategic Plan (2013-2018). This chapter provides the philosophical framework, the mandate, the rationale of the strategic plans and the methodology for the development of the plan.

1.2 Background

Adoption of ICT is a journey walked since independence, as the Government implemented strong policies to automate and improve government programs. Historically, the Government acquired its first computer in the 1950s to undertake accounting and payroll services. Its first customers in Nairobi were the then East Africa Railways (EAR) and East Africa Electricity and Lighting Company (EAE&L). After independence in 1963, the Government improved on the earlier models, and in 1967 acquired its first mainframe computer for data processing of payroll and other financial transactions within the Directorate of Statistics in the Ministry of Finance. The ICT landscape in the country thrived significantly in the later 2000s, a success that could be attributed to programmes implemented by the three ICT agencies: Government Information Technology Services (GITS), Directorate of e-Government (DeG) and the Kenya ICT Board (KICTB). In the last two decades, ICT has become a key agent in transforming the way the Government delivers services to the public, and there is a lot of expectation that it will play a crucial role in achieving the Government agenda.

Despite the success achieved by the three agencies, issues of coordination and duplication again emerged. In order to improve efficiency, streamline the operations of Government agencies and build synergy, the Government in 2013, through a Presidential Executive Order, transferred GITS and DeG from Treasury and Cabinet Affairs to the Ministry of Information, Communication and Technology (MoICT). With the expanded mandate, a bigger agency was required to harness their abilities. This saw the birth of the ICT Authority as a parastatal with the expanded mandate to take over the functions previously performed by GITS, DeG and KICTB, in line with the Kenya National ICT Masterplan 2017. The Information and Communication Technology Authority (ICTA) is a State Corporation under the MoICT.

Globally, ICT presents an enormous opportunity to introduce significant and lasting positive transformation across the developing world. The rapid penetration of mobile phone access has resulted in considerable improvements in the lives of the poor in both urban and rural contexts.

All evidence suggests that this trend is going to continue, as the availability expands, and the cost of access continues to decline.

The ICT Authority Strategic Plan (2020-2024) is in tandem with the national aspirations as articulated by the Kenya Vision 2030 and the Third Medium Term Plan (MTP III). The Kenya Vision 2030 envisages Kenya to be a globally competitive economy, with its citizens enjoying a high quality of life. It identifies ICT as an enabler of a knowledge-based economy. The ICT sector has undoubtedly huge potential to propel the country towards a middle-income economy by the year 2030. In Kenya, ICT is combined with transport in economic and GDP analysis. The two sectors contributed 12.7 per cent to the country's GDP in 2011. In 2017 the ICT sector contributed 7.1 % of the GDP registering a surge of 12.9 % in its value from KES 345.6 billion in 2017 to KES. 390.2 billion in 2018, largely driven by growth in the digital economy (Kenya National Economic Survey Report, 2019). Kenya's digital economy spans consumer information and communication, e-government, enterprise technology, interactive digital media and telecommunications. These figures indicate a growth trajectory in the next 10 years. The government considers ICT to be an enabler in attainment of the Big Four Agenda.

1.3 Mandate of ICT Authority

The mandate of the Authority as contained in Kenya Gazette Supplement No. 118, Legal Notice No.183 of 16th August 2013 are:

- 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; and
- b) Deploy and manage all ICT staff in the public service;
- c) Facilitate and regulate the design, implementation and use of ICTs in the public service;
- d) Promote ICT literacy and capacity;
- e) Promote e-Government services;
- f) Facilitate optimal electronic, electronic form, electronic record and equipment use in 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 public service.
- j) Implement and manage the Kenya National Spatial Data Initiative

1.4 Rationale for Strategic Planning

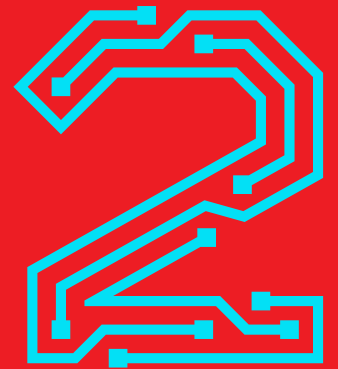
Strategic planning is a performance framework that will enable ICTA to chart its strategic direction in order to attain its vision and mission in line with its mandate. The ICTA Strategic Plan FY 2020-2024 is a successor strategy for the Strategic Plan FY 2013-2018, and is envisaged to build on the Authority's past performance, while focusing on new areas of transforming the Kenya ICT Sector. In addition, the plan is aligned to the Country's ICT development agenda as prioritized in the Vision 2030, MTP III (2018-2022). It will provide the roadmap for ICTA to execute its mandate.

1.4.1 Methodology

ICTA adopted a participatory approach to strategic planning in development of this plan. The process was highly inclusive, both internally and externally. It incorporated inputs largely from the top management comprising of the Board of Directors and the CEO.

The Directorates, under the leadership of the Directors and heads of departments, provide the much-needed technical inputs that constituted the bulk part of the strategic plan. Stakeholders mapping and analysis was carried out to ascertain the roles, influence and interests of each stakeholder to inform the extent of engagement. As required by the constitution, stakeholders subjected this document to public participation.

The strategic planning process also benefitted from a review of the performance of the previous Strategic Plan (FY 2013-2018). A macro and micro environment analysis was undertaken that involved, but not limited to, review of key documents including the Vision 2030, Medium-Term Plans II and III, the Constitution of Kenya 2010, national economic surveys, the Kenya Digital Economy Blueprint, Strategic Plans from MDAs, the Sustainable Development Goals, National ICT Policy 2019 and Africa Union Agenda 2063.



CHAPTER
SITUATION
ANALYSIS

2.1 Introduction

This Chapter highlights the ICT Authority's achievements for the period 2013-2018 with in-depth analysis of the Authority's current situation as a foundation for the next step of strategic planning and implementation. It looks at key milestones during the previous plan formulation, their implementation and lessons learnt. It analyses the challenges the Authority faces and the context it operates in by examining likely hurdles in the path of achieving planned objectives. The tools used for analysis are; Strengths, Weaknesses, Opportunities and Threats (SWOT), as well as the Political, Economic, Social, Technological, Legal and Environmental (PESTLE) analysis.

The Authority has significant strengths to leverage on in formulating and implementing the ICTA Strategic Plan FY 2020-2024. These include a committed, new and energized leadership with a substantive CEO and supportive Board and concentrated knowledge and expertise as well as a pool of highly trained and knowledgeable expertise found in management and staff among others. On the other hand, the Authority is tackling challenges, including weak internal controls, inadequate resources and aging infrastructure, to mention a few. The Authority sees a number of opportunities to position itself as a major leader in development of ICT in Kenya. These include; **a)** high literacy levels of citizens - thus increased capacity to adapt and use ICT; **b)** government plans and policies such as the Kenya Digital Economy Blueprint, Vision 2030, MTP III and the Big Four Agenda; **c)** high levels of internet

penetration in the country; **d)** existing partnerships in technology; **e)** expanded ICT infrastructure and a high potential for resource mobilization through commercialization, accreditation, certification of ICT infrastructure, Standards and other services. This document flags out external threats such as Cyber Security of data and services as well as reputational and mandate risks are external threats that the Authority needs to guard against.

Lastly, the chapter outlines the stakeholder's analysis and their level of influence in formulation and implementation of the Strategic Plan.

These constitute the basis for formulation of the strategic thematic areas, objectives, strategies and activities in the ICTA Strategic Plan (2020- 2024).

2.2 Performance Analysis of ICTA Strategic Plan FY 2013-2018

The formulation of the ICTA Strategic Plan FY 2013-2018 identified five strategic thematic areas to guide execution of its mandate. These are:

- Shared Services,
- ICT Innovations and Enterprises,
- Information Security,
- Human Resource Capital, and
- ICT Governance.

Table 1: Key Achievements of ICTA Strategic Plan FY 2013-2018

Strategic Theme & Objectives	Strategies	Key Achievements
<p>Strategic Theme: Shared Services</p> <p>Strategic Objective 01: To facilitate efficient and effective delivery of government online services using a suitable combination of private and public cloud computing offerings</p>	<ul style="list-style-type: none"> + S1.1 Develop and implement shared services standards, guidelines and policies that promote data and information sharing culture + S1.2 Develop and implement a public service cloud computing strategy + S1.3 Enhance/develop reliable shared ICT infrastructure + S1.4 Enhance or develop reliable shared ICT information infrastructure + S1.5 Manage Flagship Projects in the National ICT Master Plan + S1.6 Promote and facilitate open access and affordable broadband + S1.7 Create appropriate legal framework to facilitate sharing of data, infrastructure, services and systems 	<ul style="list-style-type: none"> + Developed and implemented 9 standards and 6 policies + Projects implemented (GDC, GCCN, NOFBI) + Actualization of project governance in other MDAs + Involvement in project conceptualization EATTP + Persons Digital National Master Database in progress + E- registries/Digitization in progress + Integration Middleware/Master Data Management (MDM) + Assets data hubs - Transport information management system (TIMS) + Web hosting with a total 163 websites done + Help desk system + Government Unified Messaging system (GUMS) (Ongoing) + Development of a one-stop shop (MyGov) for unified access all government websites + E-Citizens' portal development initiated + Enterprise software/ database licensing initiated. + Recruitment of 85 staff;40% trained on relevant skills

Strategic Theme & Objectives	Strategies	Key Achievements
<p>Strategic Theme ICT Innovations and Enterprises</p> <p>Strategic Objective 02: To facilitate technology innovation and sustainable ICT enterprises in Kenya</p>	<ul style="list-style-type: none"> + S2.1 Facilitate the use of public data by the private sector + S2.2 Create programs to support commercialization of innovations + S2.3 Promote outsourcing of government ICT services + S2.4 Promote effective partnerships for local ICT companies abroad + S2.5 Enhance capacity of local firms to undertake outsourced work + S2.6 Market the local ITES industry 	<ul style="list-style-type: none"> + Improved capacity of local firms through the on-going classification by the standards department of 33 local companies selected to benefit from the ITC NTF 3 export Capacity program and Kenya Open Data Initiative published some datasets for use by local ICT firms to innovate + Scaling of ICT Innovations: Whitebox Platform is operational; 200 Innovations initiated; innovation and entrepreneurship capacity training programmes and the investible start-ups under incubation at CISCO C4D hub at University of Nairobi + Out-sourcing of Government ICT Services – AGPO (30% local Content); Digitalents digitizing in selected MCDAs; roll out of awareness and communication programme and the Connected summit on Nairobi Innovation Week + International trade by local ICT firms - Intermittent collaborations with ICT firms (Alibaba, ITC-NTF and Nasscom) + Kenya News Agency - Digitized but not commercialized + IBM Research agenda – a total of 35 global research scientists (6 Kenyans and 29 non-Kenyans) and 80 interns trained, IPs submitted to the ministry, 47 patents, 20 proof of concepts, 32 published scientific papers out of the ease of doing business programs
<p>Strategic Theme Information Security</p> <p>Strategic Objective 03: To ensure highly robust and trusted Government information systems</p>	<ul style="list-style-type: none"> + S3.1 Develop and adopt information security standards and guidelines + S3.2 Implement the national cyber security Masterplan and strategy + S3.3 Strengthen the information security function within ICTA + S3.4 Develop a comprehensive ICT asset register including classification and document handling methodology + S3.5 Implement public key infrastructure (PKI) + S3.6 Develop a risk assessment programme + S3.7 Undertake periodic risk assessment on government information infrastructure 	<ul style="list-style-type: none"> + Information security framework - Developed GoK Information Security Standard and Guidelines + Helped MCDA's develop InfoSec Policies + Information security function strengthening: Established an InfoSec Department (6staff), established the Government CIRT, implemented the National Public Key Infrastructure (Root CA and Gov. CA) and member to professional bodies (National KE-CIRT) + Information security capacity: Trained over 30 MCDAs on Information security Awareness, conducted awareness workshops on Information security standard, developed technical skills for the information security staff and conducted information security awareness workshops for ICTA staff. + ICT infrastructure appraisal and asset register: Developed critical information Assets register for ICTA and helped MCDAs develop critical information Assets registers. + Cyber security master plan and strategy implementation: Conducted Systems security Audit for MCDAs, Conducted Information Security Standards Compliance Audits and provided secure web hosting services for MCDAs + Risk Management: Developed a draft Enterprise Risk Management framework for ICTA, appointed a Committee responsible for Safety and Security matters, conducted a workplace Audit in-line with OSHA 2007, Trained InfoSec staff on ISO 27001, Trained ISMS champions for MCDAs, Developed an Information Assets Risk register for ICTA and Conducted trainings on ISRM for MCDAs
<p>Strategic Theme: Human Resource Capital</p> <p>Strategic objective 04: To develop ICT skills and managerial and leadership capacity to transform public sector for efficient and effective service delivery and sustainable national development</p>	<ul style="list-style-type: none"> + S4.1 Build and strengthen the technical, management and leadership capacity of ICTA + S4.2 Equip strategic leaders in public service with appropriate ICT leadership skills and understanding of the role of ICT + S4.3 Develop and sustain the ICT capacity of the public sector workforce to effectively exploit ICT infrastructure and systems + S4.4 Collaborate with academia and ICT industry to develop structured ICT training geared towards building high-end skills technical expertise, competencies and experience required to implement flagship ICT projects 	<ul style="list-style-type: none"> + High end ICT professionals – trained 900 DigiTalent and ICTA Staff + Develop Performance system; DigiTalent Portal + Public Service Capacity Building programme – conducted developed training needs assessment, County capacity building and training in Business Process Reengineering (BPR), Project Management, ITIL and Cyber Security Resilience. + Citizen capacity building programme: 147 Constituency Innovation Hub established
<p>Strategic Theme: ICT Governance</p> <p>Strategic objective 05: To ensure that Government ICT projects are cost-effective, integrated and aligned with national objectives</p>	<ul style="list-style-type: none"> + S5.1 Adopt and operationalize the national ICT governance framework for the selection, implementation and evaluation of public ICT projects + S5.2 Design and operationalize a Government Enterprise Architecture + S5.3 Design and operationalize a Government ICT Project Management Office + S5.4 Develop, disseminate and enforce ICT standards for infrastructure services, systems and human capacity 	<ul style="list-style-type: none"> + Development of the governance roadmap + Establishment of the project oversight secretariat if ICTA + Establishment and operationalization of GEA/GIF management office + Design, set up and operationalize a government ICT project management office + Develop, disseminate and enforce ICT standards for infrastructure services, systems and human capacity

2.3 Strategic Issues from the ICTA Strategic Plan FY 2013-2018

Inadequate Human Resource Capacity, Values and Culture: ICT skills at ICTA and externally, especially in the public sector workforce relative to demand to provide online jobs, are inadequate. Poor ethos also hinders trust.

Limited Financial Resources: Execution of the Authority's mandate was hampered by low financial resource capacity over the 2013/14 and 2017/18 period. This is mainly as a result of continued inadequate budget allocations across the years. The low financial allocations have led to ineffectiveness in implementation of programmes including completion of on-going projects.

Limited Policy, Legal and Institutional Frameworks: The Authority and the sector at large experienced limited policy, legal and institutional frameworks in national human resource planning & development for ICT as well as data and service security.

Leadership and Governance: Prolonged transition after the merger between the KICTB, DeG and GITS created weak organisational culture and partnership structures in

the absence of a proper framework between ICTA and the MoICT.

Inadequate ICT Infrastructure: The challenges include vandalism of ICT infrastructure, lack of a harmonized data management system, limited penetration of telecommunication infrastructure such as electricity in rural areas, and inadequate supply of affordable and uninterrupted power supply.

Limited Interoperability of Government Systems: Government E-Systems operate in a silo system that hinders data sharing and communication. This has reduced the rate of integration in various shared services, increased bureaucracy and delayed service delivery to the citizens. The cost of managing the information systems in GoK platforms has continued increasing due to duplications and multilayer processing of data and data management.

Rapid Technological Change: The technology landscape is in a constant state of change with new innovations shaping the industry being introduced. There is, therefore, a need to constantly monitor the changes and adapt to exploit emerging technologies. These require adequate resources to improve capacity in line with the changing environment..

2.4 Stakeholders Analysis (Interests and Influence)

Table 2: Summary of results of Stakeholder analysis

Name of stakeholder	Stakeholder's Expectation from ICTA	ICTA's expectation from the stakeholder	Influence (high/low)	Interest (high/low)	Strategic Action
Ministry of Information, Communication and Technology (MoICT)	+ Proper documentation and reports	+ Sufficient budgetary support	High	High	Manage closely
Counties	+ Innovations for service delivery to County citizens + Skills- digital Literacy + Standards- ICT roadmaps for development + Investors + Transformation in counties for employability, business and youth empowerment	+ Co- innovation + County thought leadership forums and road shows + Get by-in from County council assembly, county executive, devolution, treasury and county citizens/businesses (county stakeholders)	High	High	Manage closely
Ministries/Parastatals and Departments	+ Innovations for service delivery to citizens + ICT standards	+ Co- innovation + Uptake of innovation from ICTA + Inclusion in National development projects (NIIMS, KNEC)	Low	High	Keep Informed
ICTA Staff	+ Timely remuneration/payments, trainings, facilitations and support, relevant content	+ Work smart and deliver on the mandate of ICTA	High	High	Manage closely
The National Treasury	+ Funding and exchequer releases	+ Adequate and timely release of funds	High	High	Manage closely
Hubs	+ Government incentives or Subsidies + Inclusion in government innovation agenda	+ Space for incubation of innovator + Mentoring innovators + Acceleration of innovations	Low	High	Keep Informed
Universities and Colleges	+ Attachments + Internships and exchange programmes + Facilitation of innovations in universities to scale	+ Research collaboration + Knowledge transfer + Active engagement with industry trends and needs	High	Low	Keep Satisfied
Training institutions (e.g. KSG)	+ Standards on ICT trainings	+ Joint training curriculum on technology	High	Low	Keep Informed
Research institutions	+ Research needs	+ Research funds (National Research Fund) + Drive an ICT/Innovation research agenda	High	Low	Keep Informed

Name of stakeholder	Stakeholder's Expectation from ICTA	ICTA's expectation from the stakeholder	Influence (high/low)	Interest (high/low)	Strategic Action
Banking Sector	+ Business/ Government account + Value addition + Innovations in the banking sector	+ Support for bankable innovations + Co-innovation	Low	Low	Monitor
Kenyan ICT Companies	+ Marketing/ promotion of their products + Capacity/skills (IP, entrepreneurship, skills to code, mentorship and guidance etc. + Grants/Access to GoK funds + GoK procurement	+ Absorption of Digitalents for internship + Absorption of interns into formal employment + Adherence to ICT standards + Uptake of innovation from ICTA	Low	High	Keep Informed
Multinationals	+ Researched project plans (Direction) + Policy	+ Absorption of Digitalents for internship + Absorption of interns into formal employment + Sharing of best practices/global practices in the area of ICT	Low	High	Keep Informed
Citizens of Kenya	+ Digitizing of government accessing services + Ubiquitous, affordable government services	+ Identification of services that need to be digitized (priority areas)	High	High	Manage Closely
Office of Auditor General	+ Cooperation during audits	+ Objective audit reports	High	High	Manage Closely
Suppliers	+ Timely payments	+ Acceptable products or services	High	High	Manage Closely
Public Procurement Regulatory Authority (PPRA)	+ Timely submission of reports	+ Guidelines on Procurement Implementation	Low	High	Keep Informed
Ethics Anti-Corruption Commission (EACC)	+ Timely submission of reports	+ Continuous Sensitization of staff	Low	High	Keep Informed
Public Service Commission (PSC)	+ Compliance	+ Timey dissemination	Low	Low	Monitor
State Corporations Advisory Committee (SCAC)	+ Compliance	+ Continuous sensitization of Staff	Low	Low	Monitor
Salaries and Remuneration Commission (SRC)	+ Compliance	+ Continuous sensitization of Staff	Low	Low	Monitor

2.5 Environmental Analysis

2.5.1 Internal Environment Analysis (SWOT Analysis)

A Strategic situational analysis was carried out through evaluation of the Strengths, Weaknesses, Opportunities and Threats (SWOT). This is in view of the several changes that have happened both in internal and external environments of the society, which may influence the Authority's performance. This process aided in identifying key strategic issues, strategic objectives and the strategies for developing and implementing this strategic plan. In addition, the situational analysis aims at taking stock of the institution's functional resources, capacity and commercial opportunities. The design and success of a new strategy for the organisation depends on the strategic fit between both internal and the external conditions.

Table 3: Summary of the SWOT Analysis

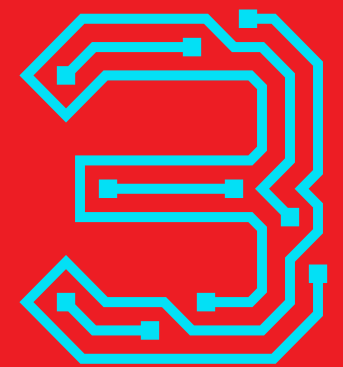
Strengths	Strategic Implication	Strategic Response
Strong institutional brand	+ Attracts potential development partners both local and international	+ Enhance collaboration and networking
High concentration of ICT knowledge and expertise	+ Efficient and effective service delivery that attracts critical government flagship programmes	+ Strengthen innovation capacity of staff
Existing digital skills enhancement program	+ Opportunity to up-skill professional and individuals	+ Enhance the content and capacity of the programs to deliver on digital skills at basic, intermediate and advanced levels
Clear ICT Mandate	+ Strategic environment for implementation of projects at both levels of Government	+ Building partnership and Strengthening coordination at both levels of government
Weaknesses	Strategic Implication	Strategic Response
Aging infrastructure	+ Hamper service delivery	+ Enhance infrastructure
Weak Organizational culture (Demotivation and workplace stress)	+ Low productivity + increased staff turn over	+ Embrace the ICTA core values + Enhance staff welfare
Weak Internal Controls	+ Integrity & negative public image	+ Develop standard operations procedures
Sub optimal use of technology in operations	+ Low utilization of resources	+ Enhance awareness of projects and activities and use of technology
Inadequate human capital, financial and material resources	+ Hamper service delivery + Delayed projects implementation + Inhibit adequate training	+ Lobby and mobilize resources + Enhance partnership and collaborations
Opportunities	Strategic Implication	Strategic Response
Goodwill of the GEA and Standards by MCDAs	+ Recognition and enhanced support	+ Continuous advocacy
Enabling Collaborations and partnerships	+ Resource Mobilization through Commercialization accreditation, certification and partnership	+ Develop and implement resource mobilization strategies
High affinity to adopt technology	+ Easy uptake and consumption of digital services	+ Build capacity of citizens to adopt and use ICT + Applied Research & Innovation on solutions for netizens
Emerging technologies (internet, big data, block chain, Artificial Intelligence, robotic)	+ Expanded business sector, and opportunities for a digital economy, efficiency and effectiveness	+ Demand for new products that meet the needs of emerging technologies
Government Plans and Policies – Vision 2030 MTP III through the Big Four Agenda, Mwongozo		
Increasing connectivity due to infrastructure deployments	+ Increased market Demand for ICT based products and services	+ Tap into the business opportunities for wealth and job creation
Devolved levels of Government	+ Faster delivery of services and enhanced digital inclusivity	
Threats	Strategic Implication	Strategic Response
Cyber Security	+ Loss of data, Litigation + Cyber Terrorism, Theft/Loss of IP, Loss of Assets	+ Strengthen and Entrench the cyber security programmes to prevent and minimise impacts of security breaches.
Rapid technological advancement	+ Inadequate resources to adopt to changes in technology	+ Establish and implement a Change Management Strategy

2.5.2 External Environment Analysis (PESTLE Analysis)

The Micro and Macro Environmental analysis involved an elaborate screening of the external environment by assessing the Political, Economic, Social, Technological, Legal and Environmental (PESTLE) Factors. The micro environment focuses on ICTA internal strengths and weaknesses. Strengths examines what ICTA want to protect that it has or is good at while weaknesses what ICTA want to improve that it has or is not good at. On the other hand, the external environment explored the Opportunities and Threats. Opportunities are elements that ICTA want to take advantage of while Threats are those aspects that ICTA want to defend against in order to achieve its strategic vision. The tool gave ICTA an opportunity to assess the current environment and potential changes to find out if ICTA is better placed than its competitors and would be able to respond to changes more effectively in order to achieve its vision.

Table 4: Summary of the PESTLE Analysis

Category	Issue	Impact on the strategic direction
Political	<ul style="list-style-type: none"> + Existence of a legal notice Good will of parliament in enactment of laws and allocation of resources + Government Support in the e-government + Budgetary allocation 	<ul style="list-style-type: none"> + Compliance to legal requirements + Effective delivery of public projects and programmes + Increased opportunities
Economic	<ul style="list-style-type: none"> + High investments in the digital economy promoting the 4thIndustrial Revolution 	<ul style="list-style-type: none"> + Enabling digital business environment
Social	<ul style="list-style-type: none"> + Increasing population of digi-generation + Highly receptive population to ICT solutions 	<ul style="list-style-type: none"> + High opportunity for digital inclusion + Uptake of technology
Technological	<ul style="list-style-type: none"> + Dynamic evolution towards the fourth industrial revolution (4IR) 	<ul style="list-style-type: none"> + Tap into the digital economy and promote a sustainable and inclusive enterprises
Environmental/ Ecological (2Es)	<ul style="list-style-type: none"> + Compliance to E-waste management regulatory and statutory frameworks that promotes Green and Blue Economy 	<ul style="list-style-type: none"> + Inculcate the 2Es in Governance and Management of ICTA operations towards a Corporate Social Responsive organization. + Managing e-waste and promoting a sustainable Green and Blue economy
Legal	<ul style="list-style-type: none"> + Compliance to Global, International & regional conventions and National Policy Frameworks 	<ul style="list-style-type: none"> + Maintain quality Standards and Monitoring through an adopted Quality Management System



CHAPTER BACKGROUND & PHILOSOPHICAL FRAMEWORK

Vision

Transforming lives using ICT

Kenya Digital Economy Blue Print: “a digitally empowered citizenry, living in a digitally enabled society”

Mission

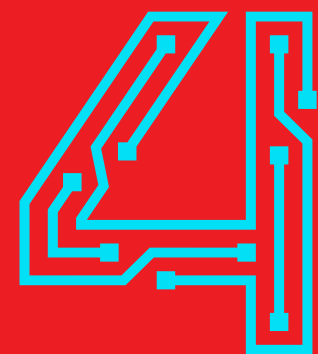
To champion and harness ICT to enable efficient and effective access in delivery of public service, for wealth creation and well-being of Kenya

Kenya Digital Economy Blue Print: ‘a nation where every citizen, enterprise and organization has digital access and the capability to participate and thrive in the digital economy’

Core Values

The Authority is committed to be guided by the following core values, for which the acronym ICTA has been adopted as follows:

- | | |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| Integrity | We are trusted to efficiently use our resources to deliver our promise with utmost honest, accountability, and in the most knowledgeable way. |
| Community | We work together and team up with strategic partners to deliver sustainable solutions for betterment of our customers. |
| Think | Our work is rooted in accurate data, tested knowledge and superb, collaborative thinking. |
| Action | We do the right thing for the right reason at the right time and in the right way. |

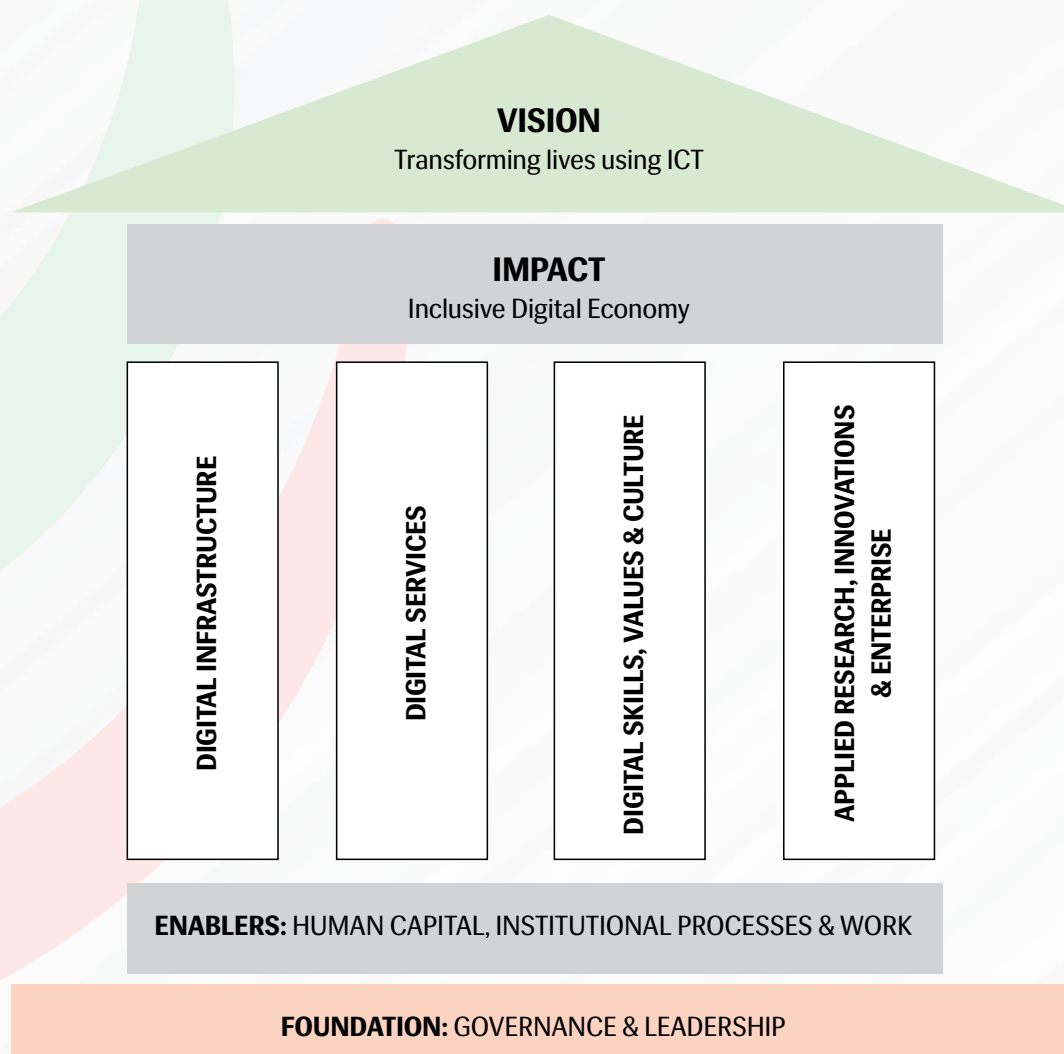


CHAPTER
STRATEGIC PILLARS,
ENABLERS &
FOUNDATION

4.1 Introduction

This chapter covers the four strategic pillars, six objectives and various strategic initiatives towards achieving the organisation's mission. A high-level conceptual framework is presented in Figure 1 below:

Figure 1: Strategic pillars conceptual framework



4.2 Strategic Pillars

Strategic Pillars are critical cornerstones that address strategic challenges identified in realisation of the ICT Authority's Mandate, Mission and Values. They form the areas of excellence that define the shape and distinctive thrust of the organisation's growth and direction. These are the strategic focus areas wherein ICTA must excel to achieve its vision. The pillars of excellence under the ICTA Strategy FY 2020-2024 are:

Table 5: Summary of Strategic pillars of excellence and strategic direction

Strategic Pillars of Excellence	Strategic Direction
<i>Digital Infrastructure</i>	<i>Enhanced Connectivity, Data Management, Information Security, Integration of government systems and citizenry inclusion</i>
<i>Digital Services</i>	<i>Enhance ease of doing business and increase accessibility to government services</i>
<i>Digital Skills, Values and Culture</i>	<i>Equip the stakeholders with adequate capacity, attitudes, values and inclusive culture to embrace the digital ecosystem and citizenry</i>
<i>Applied Research, Innovation & Enterprise</i>	<i>Inculcate research, innovation and enterprise in promoting digital economy</i>

From each of these Strategic Pillars, Strategic Objectives, Strategies, Initiatives, outcomes and outputs are derived.

4.2.1 Digital Infrastructure

The Digital Infrastructure is strategic in promoting the realization of the Authority's vision. The ability to store and exchange data through a centralized communication system, enhanced connectivity, secured information will support the integration of government systems to deliver quality services to citizens. Digital Infrastructure is transformative and the Authority will provide an innovative environment to grow the assets required to meet the dynamic demands in the industry as shown in Strategic Objective 1:

Strategic Objective 1: To grow and expand a secure digital infrastructure in line with the dynamic ICT industry requirements

Strategy 1: Improve and maintain a secure, reliable & accessible digital connectivity			
Key outputs/outcomes	Key Strategic Programmes/Initiatives /Projects	Key Performance Indicators	Key Assumptions
<p>Outputs</p> <ul style="list-style-type: none"> + 15, 000KmFibre Cable + High Speed and Affordable connectivity + Last Mile connectivity + Eight Point of Presence Established + Constituency Innovation hubs + Stable and reliable connectivity + Unified Connectivity + Government Call Centre + Data Centres and Data recovery centres + Number of cyber security threats proactively reported to MCDAs + early warning and + Incident monitoring response systems + working committee for cyber security in the Public Sector + Online Portal for Cyber Security Reporting + Operationalized cyber security bill + National Certification & Training Centre + 200 Trained Staff + MCDAs Trained on cyber security + Reviewed Information Security & Cyber security Policies Publish standards, methods and guidelines 	<ul style="list-style-type: none"> +Expand ICT the fibre optic cable and increase connectivity and access to the reliable network +Expand the reach of the fibre optic backbone to the ward level +Implement policies for sustainability such as integrated infrastructure development +Create a sustainable business model to enable effective delivery of services to clients including security and storage +Creation and implementation of the business model for cost-effective delivery of broadband to remote communities using a PPP 	Number of Km of fibre cable laid	Support from all the key stakeholders
		No of sub-counties connected under the last mile connectivity	
		Number of Point of Presence established	
		Number of Constituency Innovation Hubs (CIH)	
		No. of MDA's, Hospital, School, Police with stable reliable connectivity	
		One broadband connectivity, corrective and preventive maintenance	
		No. of Recovery Centres	
		No. of tones disposed	
		% Level of implementation	
		No. of DCs and DRCs Established	
% Level of implementation			
Number of cyber security threats proactively reported to MCDAs			
<p>Outcome</p> <ul style="list-style-type: none"> + Improved and maintained secure, reliable & accessible digital connectivity 	<ul style="list-style-type: none"> Improve the disposal of E-waste materials 	No. of Recovery Centres No. of tones disposed	
<p>Output</p> <ul style="list-style-type: none"> + Digital sharing Guidelines 	<ul style="list-style-type: none"> Establish a reliable infrastructure that will promote continuity of government business 	% Level of implementation	Support from all stakeholders
<p>Outcome</p> <ul style="list-style-type: none"> + Improved utilization of scarce ICT Resources 		No. of DCs and DRCs Established % Level of implementation	
<p>Output</p> <ul style="list-style-type: none"> + Internet Exchange Points 	<ul style="list-style-type: none"> Integrate Information Security for Continuity of government operations and reduce cyber security breaches across. 	% Level of implementation	Support from all stakeholders
<p>Outcome</p> <ul style="list-style-type: none"> + Improved Local Internet Exchange Connectivity 		Number of cyber security threats proactively reported to MCDAs	
	<ul style="list-style-type: none"> Establish Internet Exchange Point (IXP) to enhance local internet ecosystem 	% Level of implementation	Support from all stakeholders

4.2.2 Digital Services

Digital Services focuses on transforming Government Services and information through adoption of digital technologies. The Government through ICTA will establish frameworks and standards to guide digitization, interoperability of digital services, scalability and effective use of resources. These will lead to improved service delivery and promote digital economic growth. ICTA shall promote flexibility and agility in service delivery to minimize resistance to change in digitization process by availing services perceived to be usefulness and easy to use. ICTA will create an enabling environment to promote

secure government transactions through adequate identity and verification mechanisms that enhances transparency and trust thereby improving service delivery. Digital inclusivity shall be the cornerstone in building equitable service delivery. With increased Internet connectivity in rural areas, ICTA shall implement programmes to enhance capacity of the citizens to access the e-government solutions. To achieve this various strategic issues, programs and initiatives have been identified to provide accessible E-government services to all stakeholders under Strategic Objective below:

Strategic Objective 2: To provide simple E-government services for ease of use and quick adoption by digital natives and naturally persuasive to digital immigrants

Strategy 2: Promoting coherence in digitization of government services			
Key Outcome/ Outputs	Key Strategic Program	Key Performance Indicator	Key Assumptions
<p>Outputs</p> <ul style="list-style-type: none"> + Digital services Master plan + Guidelines on budget allocation for digitization + Complete GEA + Increased Government systems conforming to ICT standards + Number of Legislations enacted and revised to support GEA framework and ICT standards + Government systems adopting GEA framework and ICT standards with the support of legislation <p>Outcomes</p> <ul style="list-style-type: none"> + Coherent implementation of E-government systems + More government services digitized + User-centric service delivery + Optimization of government resources + Flexibility and agility in service delivery 	<ul style="list-style-type: none"> + Rationalize digitization of government services by developing Digital services master plan + Enhance GEA and ICTA standards to support and guide digitization of government services to achieve cost effective and efficient government solutions + Develop and acquire middleware to facilitate rapid development of e-government services 	<ul style="list-style-type: none"> + % level of development and implementation + % level of development and implementation + % level of GEA Review and completion + % of manual services funded for digitization through budget allocation + % of government systems conforming to GEA and ICT standards + Number of systems connected through GoK middleware 	<ul style="list-style-type: none"> + Willingness to adjust budget allocation to support digitization + Willingness to adjust budget allocation to support digitization + Willingness by MCDAs to adhere to GEA and ICT standards
<p>Outputs</p> <ul style="list-style-type: none"> + Government systems adopting GEA framework and ICT standards with the support of legislations + Collaborations between ICTA and Private sector in enforcing digitization <p>Outcomes</p> <ul style="list-style-type: none"> + Flexibility and agility in service delivery + Reduced effort duplication in digitization 	<p>Revise the existing legislative and enact new frameworks to support adoption of GEA and ICT standards in digitization of convenient and efficient government services</p>	<ul style="list-style-type: none"> + Number of identified legislations hindering convenient rollout of online services + Enactment of digitization bill by Parliament + Number of revised/enacted legislations supporting convenient rollout of online services 	<ul style="list-style-type: none"> + Willingness of legislature to support the revision and enactment of new laws to support digitization + Readiness of MCDAs to adhere to GEA and ICT standards

Strategy 3: Provisioning seamless Government Systems that promote Interoperability and Corporate Governance

Key Outcome/ Outputs	Key Strategic Program	Key Performance Indicator	Key Assumptions
<p>Outputs</p> <ul style="list-style-type: none"> + Government Middleware + GEA data models and system architecture + Adoption of GEA and ICT standards support interoperability + GEA tools and programs + Connected Government data sources + A platform that support Interoperability in line with the policies and ICT security standards in place + Uniform digital Management system across government systems GovtApps portal and guiding standards <p>Outcomes</p> <ul style="list-style-type: none"> + Rapid growth of scalable and reusable government systems + Compatible and secure way of identifying users of e-government services + Customer-focused service transformation 	<ul style="list-style-type: none"> + Build the platforms necessary for convenient rollout of online services 	<ul style="list-style-type: none"> + % Level of development of government middleware + % Level of design and implementation of government middleware data models and system architecture + % Level of adoption of interoperability in government systems + Number of GEA sensitization and mainstreaming tools and programs developed + % level of linking between core government data sources to the government middleware + % level of implementation + % level of development of digital identity management system + % level of development 	<ul style="list-style-type: none"> + Willingness of MCDAs to interlink government systems by opening their independent systems for integration and data sharing
<p>Outputs</p> <ul style="list-style-type: none"> + Candidate core government systems for integration + Integrated core government systems + Single user identity across core government systems + Integrated State Corporation Information Management Module (SCIMM) to core government systems <p>Outcomes</p> <ul style="list-style-type: none"> + Cost effective and seamless government systems + Secure, convenient, efficient and transparent access to core e-government services + Enhanced performance of state corporations 	<ul style="list-style-type: none"> + Integrate core government systems to support scalability and reuse of resources 	<ul style="list-style-type: none"> + Number of systems to be integrated + Number of integrated core government systems + Number of government systems integrated to Digital Identity management system for identification and verification of online users + % level of development and integration of SCIMM to core government systems 	<ul style="list-style-type: none"> + Possibility of integration of core government systems

Strategy 4: Promote digitization of government information management system

Key Outcome/ Outputs	Key Strategic Program	Key Performance Indicator	Key Assumptions
<p>Outputs</p> <ul style="list-style-type: none"> + Framework to digitize government records + Government record digitization business employing Digitalents + Digitized government records + Government data platform/EDMS <p>Outcomes</p> <ul style="list-style-type: none"> + Transparency in government services delivery 	<ul style="list-style-type: none"> + Convert government paper-based data into electronic form to achieve a transparent way of government service delivery 	<ul style="list-style-type: none"> + % level of Frameworks development + Number of Digitalents employed + % level of EDMS development + % Number of government records uploaded successfully in the EDMS 	<ul style="list-style-type: none"> + Willingness of MCDAs to digitize paper-based government records
<p>Outputs</p> <ul style="list-style-type: none"> + E-knowledge management system <p>Outcomes</p> <ul style="list-style-type: none"> + Efficiency and cost saving in service delivery 	<ul style="list-style-type: none"> + Develop and leverage e-knowledge management system as an integral enabler of e-government 	<ul style="list-style-type: none"> + % level of e-knowledge management system development 	<ul style="list-style-type: none"> + Willingness of MCDAs in information sharing

Strategy 5: Enhance a one-stop shop (Single Window) service delivery model for convenience and ease of use of e-government services for everyone

Key Outcome/ Outputs	Key Strategic Program	Key Performance Indicator	Key Assumptions
<p>Outputs</p> <ul style="list-style-type: none"> + Developed Standard to guide availing of government services on E-citizen portal + More Government services accessible from the E-citizen portal + Increased internal capacity to manage E-citizen Portal + Personalized access of Government services on E-Citizen portal <p>Outcomes</p> <ul style="list-style-type: none"> + Easy access to e-government services + Uniform user experience 	<ul style="list-style-type: none"> + Improve E-citizen and MyGov to a one stop shop e-government service portal 	<ul style="list-style-type: none"> + Number of government services offered outside E-citizen + Number of experts that can manage E-citizen + Number of new government services available on E-citizen + Time in Seconds taken to search for a service on E-citizen + Number people with special needs able to access e-government services 	<ul style="list-style-type: none"> + Willingness from MCDAs to move their services to E-citizen
<p>Outputs</p> <ul style="list-style-type: none"> + Content management systems (CMS) for government websites + Improved MyGov portal + More websites on MyGov portal <p>Outcomes</p> <ul style="list-style-type: none"> + Flexibility in delivery of government websites + Uniform user experience 	<ul style="list-style-type: none"> + Improve MyGov portal to be a one stop shop for all government websites 	<ul style="list-style-type: none"> + % level of implementation of CMS + Number of users trained to upload content on the CMS + % level of development of MyGov Portal 	<ul style="list-style-type: none"> + Willingness from MCDAs to move their websites to MyGov

4.2.3 The Digital Skills, Values and Culture

The digital revolution, characterized by emergence of new digital skills in fields like artificial intelligence, big data, cloud computing and mobile robotics, has continued to influence people's lives. The Authority shall therefore promote digital technologies, values and skills aimed at providing the citizens and professionals with opportunities as presented by the changing global trends. To fully utilise this potential, ICTA shall promote appropriate digital skills, values and culture to enable digital interactions that are founded on trust. To achieve these various strategic issues, programs and initiatives have been identified to create a globally trusted and digitally competent workforce & citizenry for a digital economy as per the Strategic Objective 3 below:

4.2.4 Applied Research, Innovation and Enterprise

Strategic Objective 3: To create a globally ethical and digitally competent workforce & citizenry for a Digital Economy

Strategy 6: Develop and enhance training programs to empower professionals in workplace and individuals with digital skills necessary for improved productivity and inclusivity across all economic sectors.			
Key outcomes	Key Strategic Programmes/Initiatives	Key performance indicators	Key Assumptions
<p>Outputs</p> <ul style="list-style-type: none"> + Digital skills Enhancement Master Plan + Report on digital skills in the country + A sectorial digital skills gap matrix + Identified key digital skills gaps for a digital economy + Categories of digital skills that support the different sectors of Kenyan economy + Inventory of existing digital skills Development programs <p>Outcomes</p> <ul style="list-style-type: none"> + Attract the head-quarter of ICT brands to locate in Kenya + Improved provision and consumption of digital services + Broadened future talent pipeline for ICT and digital skills + Increased number of digital innovators and digital products + Increased pool of digital skilled experts for Kenya's digital economy + Increased utilization of digital services + Increased digital service delivery 	<ul style="list-style-type: none"> + Establish and enhance training programs(DLP, AJIRA, PDTP)to promote digital skills development for professionals in workplace and individuals(senior citizens, children, out-of-school youth, women and PWD) to enhance their competences to perform basic and specialized task. 	<ul style="list-style-type: none"> + Sectorial digital skills gap matrix + % Level of implementation of digital skills curricula + No. of successfully organized workshops/conferences + % level of development and utilization of functional e-learning and edutainment kits + % levels of equipping and upgrading of digital skills centres 	<ul style="list-style-type: none"> + Existence of partnership + Existence of other providers digital literacy/skills
Strategy 7: Enhance strategic partnership and collaborations to train on key strategic competencies to stimulate innovative thinking and improve performance for the growth of the digital economy in line with vision 2030			
Key outcomes	Key Strategic Programmes/Initiatives	Key performance indicators	Key Assumptions
<p>Output</p> <ul style="list-style-type: none"> + Collaborations and partnerships signed + Specialized professional and workforce + Inventory of partners offering digital skills training <p>Outcome</p> <ul style="list-style-type: none"> + Digital inclusivity + Optimization/sharing of training resources + Increase on the number of partnerships + Increased highly digital skilled professional, workforce and general public 	<ul style="list-style-type: none"> + Expand and enhance strategic partnerships and collaborations training institutions based on their competencies and capacity to support digital skills development in all skill levels 	<ul style="list-style-type: none"> + Survey report on strategic limitations + No. of collaborations established and maintained + No. of professionals trained in specialized skills 	<ul style="list-style-type: none"> + Existing framework for establishing partnership and collaborations

Strategy 7: Enhance strategic partnership and collaborations to train on key strategic competencies to stimulate innovative thinking and improve performance for the growth of the digital economy in line with vision 2030

Key outcomes	Key Strategic Programmes/Initiatives	Key performance indicators	Key Assumptions
<p>Output</p> <ul style="list-style-type: none"> + Collaborations and partnerships signed + Specialized professional and workforce + Inventory of partners offering digital skills training <p>Outcome</p> <ul style="list-style-type: none"> + Digital inclusivity + Optimization/sharing of training resources + Increase on the number of partnerships + Increased highly digital skilled professional, workforce and general public + Aligned skill set training from learning institutions to the industry needs + Expanded referral to other services/opportunities + Accelerated capacity development within ICTA 	<ul style="list-style-type: none"> + Expand and enhance strategic partnerships and collaborations training institutions based on their competencies and capacity to support digital skills development in all skill levels 	<ul style="list-style-type: none"> + Survey report on strategic limitations + No. of collaborations established and maintained + No. of professionals trained in specialized skills 	<ul style="list-style-type: none"> + Existing framework for establishing partnership and collaborations

Strategy 8: Enhance integration of soft skills into the digital skills training and workplace

Key outcomes	Key Strategic Programmes/Initiatives	Key performance indicators	Key Assumptions
<p>Output</p> <ul style="list-style-type: none"> + Soft-Digital skills enhancement boot camps + Mobile/online campaigns + Online testing and certification programs on digital skills <p>Outcome</p> <ul style="list-style-type: none"> + Improved work quality and results + Improved levels of employee retention + Higher levels of employee loyalty and commitment + Raising the profile of the ICT and digital technology sector and careers + Increased access to opportunities + Increased conversion of innovative ideas into business ventures 	<ul style="list-style-type: none"> + Establish an autonomous supportive environment to promote positive staff practices, supportive relationships, integration of learning contexts and experiential learning through challenge, experience & practice 	<ul style="list-style-type: none"> + Needs gap at organisational and individual levels + % Level of assimilation of soft skills in the workplace + % Level and quality of online testing and certification 	<ul style="list-style-type: none"> + Receptive audience

Strategy 9: Enhance access to technology and the digital skills needed to empower the citizens to create, innovate and participate in a digital economy

Key outcomes	Key Strategic Programmes/Initiatives	Key performance indicators	Key Assumptions
<p>Output</p> <ul style="list-style-type: none"> + General and sector-specific Policy frameworks on digital inclusion + skills for Jobs + Citizens common applications and tools for digital empowerment <p>Outcome</p> <ul style="list-style-type: none"> + Increased user satisfaction and awareness 	<ul style="list-style-type: none"> + Remodel existing programs and policies to promote citizen's economic participation and enhance digital inclusion by seizing digital opportunities + Link all programmes with a digital skills and appropriate applications component to fast track use 	<ul style="list-style-type: none"> + % Implementation and quality of business cases developed + % level and quality of online digital and entrepreneurial skills content developed + Number of strategic digital boot camps/ hackathon organized 	<ul style="list-style-type: none"> + Existence of a digital economy

Strategy 9: Enhance access to technology and the digital skills needed to empower the citizens to create, innovate and participate in a digital economy

Key outcomes	Key Strategic Programmes/Initiatives	Key performance indicators	Key Assumptions
<ul style="list-style-type: none"> + Empowered citizens with digital skills for an Inclusive Digital Economy + Reduced cyber security breaches + Increased ICT-based companies operating in Kenya + Increased access to government services by the citizenry + Increased number of Kenyans directly/indirectly employed in the digitally enabled sector + Increased number of Kenya using digital skills to grow their businesses 			

Strategy 10: Enhance policies and legal framework to promote appropriate values and cultures for digital economy

Key outcomes	Key Strategic Programmes/Initiatives	Key performance indicators	Key Assumptions
<p>Output</p> <ul style="list-style-type: none"> + Policies and legal documents on use of digital skills + Document detailing digital code of ethics/conduct + Mentorship and coaching programs + Internship programs + Job induction programs + Reward and reprimand programs + Institutional cultural renewal campaigns + Online campaigns on national values and ethos <p>Outcome</p> <ul style="list-style-type: none"> + Enhanced trust and Social Cohesion + Promotion of intercultural dialogue to harness social cohesion thereby, creating an environment conducive to development + Preference of Kenya as the location of choice for global ICT companies and brands + Enhanced Kenyan pride and national unity 	<ul style="list-style-type: none"> + Establish a system framework and policies on values and principles of culture that govern digital technology development and use + Develop values-based interventions for each of our programmes. 	<ul style="list-style-type: none"> + Number of analysis on incentives structures that erode trust done + % Level of adaption and implementation of ICT standard + % implementation level of the policies, plans and programmes + % level of execution of the signed partnership agreement + % implementation level of policy guidelines on mentoring and coaching + % level of adaption and implementation of reward/reprimand policy guidelines 	<ul style="list-style-type: none"> + Cooperation from partners + Existence of a well-regulated environment on use of digital technology

Across the world and particularly in Africa, there is empirical evidence that increased adoption of ICT is associated with improved public sector management.

This can be realized through: collaboration between the private sector, public sector and civil society organizations; Applying the lessons learned in designing effective digital tools with broad user appeal, user engagement and scalability; Employing the triggers that drive digital inclusion such as design, offline support, multi-stakeholder's participation. Therefore, the preparation of this strategic plan by ICTA (Kenya) presents a golden opportunity to improve scalability of ICT within Kenya's public service.

ICTA shall address the challenges technology poses for user privacy,

new knowledge, will be pursued by ICTA. Experimental development is systematic work that draws on the knowledge gained from research and practical experience to produce or improve products and processes. Innovation is a linear product development process that starts with scientific research and ends with the production and commercialization of products, services and processes. ICTA operates in a dynamic industry and therefore needs to adopt organizational learning model in institutionalizing innovative change for effective data and knowledge management programmes that enhance informed decision making. To achieve this, various strategic issues, programmes and initiatives have been identified to integrate applied research and innovation to promote enterprises and service delivery.

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Strategic Objective 4: To integrate applied research, innovation and enterprise for improved service delivery and digital inclusion

Strategy 11: Enhance the existing policy and procedures on Applied Research, Innovation and enterprise for sustained growth			
Key Outputs/Outcomes	Key Strategic Programmes/Initiatives	Key Performance Indicator	Key Assumptions
<p>Output</p> <ul style="list-style-type: none"> + Applied Research & Innovation Master Plan + Risk Management Policy Guidelines + Identified Government Challenges that require innovative solutions + M&E Framework + Survey Report on Viable Government Digital Solutions Identified <p>Outcome</p> <ul style="list-style-type: none"> + Streamlined approach/methodology on research, innovation and enterprise. + Improved Risks Management Approaches on Research + Increased digitization on Government Services 	<p>Streamline Applied Research, Innovation and Enterprise Policies to support creation of new products and services that are scalable locally and international Link every ICTA programme with an applied research project to enhance problem solving and spur innovation.</p>	<ul style="list-style-type: none"> + % implementation Develop research innovation Policy framework + Number of Working Innovations for Government Agencies and Private Sector engaged 	<ul style="list-style-type: none"> + Support by relevant stakeholders
Strategy 12: Enhance Strategic Partnerships & Collaborations frameworks to support programmes and projects to increase innovation and commercialization of research outputs			
Key Outputs/Outcomes	Key Strategic Programmes/Initiatives	Key Performance Indicator	Key Assumptions
<p>Outputs</p> <ul style="list-style-type: none"> + ICTA High end Skills & capacity survey report + Partnerships & Collaborations Agreements + New innovations through partnerships + New Applications geared towards the marginalized groups + ICT knowledge Centres of Excellence + Survey Report on the Extent of digital Inclusion in the country and recommendations + Recommendation report on improving the Whitebox + Business Accelerators, incubators and hubs <p>Outcomes</p> <ul style="list-style-type: none"> + Enhanced digital inclusion + Increased Partnerships + Increased Number of Knowledge centres of excellence + Increased revenues/income/ + Investments in Innovation + End to End business processes and procedures 	<p>+ Establish strategic partnerships and collaborations with potential partners and leverage on their competencies and capabilities to grow service delivery and improve innovation with priorities in health, education, energy and agriculture</p>	<ul style="list-style-type: none"> + Number of Collaborative successful research projects + Number of Centres of Excellence with institutional of Higher Learning + Number of Start-ups, products and services channelled the market + Number of accelerators and technology Parks + Growth in investments in the information economy + Number of viable business established 	<ul style="list-style-type: none"> + Commitment from the Partners and collaborators + Favourable economic conditions

Strategy 13: Enhance and operationalize the effective stakeholder engagement and Management framework

Key Outputs/Outcomes	Key Strategic Programmes/Initiatives	Key Performance Indicator	Key Assumptions
<p>Outputs</p> <ul style="list-style-type: none"> + Strategic Forums + New networks promoting innovation + Innovation pitching events Locally and Internationally + Reviewed AGPO Policy <p>Outcomes</p> <ul style="list-style-type: none"> + Improved stakeholder engagement + Inclusion of all special groups (Women, PLWD, minorities) 	<ul style="list-style-type: none"> + Create a responsive mechanism to promote the needs of the stakeholders within an informed and evidence-based decision process making environment for a sustain commercializing the applied research outputs 	<ul style="list-style-type: none"> + ICTA Stakeholder engagement strategy Developed + No. of Forums + No. of Edutainment materials produced and disseminated 	<ul style="list-style-type: none"> + Supportive regulatory and Statutory Policy frameworks + Available pool of talents from the community

Strategy 14: Enhance strategic Data and knowledge management systems to support Applied Research, Innovation and production

Key Outputs/Outcomes	Key Strategic Programmes/Initiatives	Key Performance Indicator	Key Assumptions
<p>Outputs</p> <ul style="list-style-type: none"> + ICTA Data Management Policy & Procedures + Data Centres + Customer Data Sets + Reviewed Kenya Open Data Initiative (KOPI) + Trained Staff + Partnership with KNBS + Open Government data <p>Outcomes</p> <ul style="list-style-type: none"> + Accessible open data and data centres to support in establishing new products and services/solutions 	<ul style="list-style-type: none"> + Implement and operationalize a Customer data management system to support establishing new products and services/solutions 	<ul style="list-style-type: none"> + Customer Satisfaction Index + No. of Innovations + No. of Staff trained on high end skills on Innovation 	<ul style="list-style-type: none"> + Enabling Statutory and regulatory framework + Commitment from Government Agencies and Ministries

Strategy 15: Improve Legal frameworks that promote and encourage investments in and Enterprise development

Key Outputs/Outcomes	Key Strategic Programmes/Initiatives	Key Performance Indicator	Key Assumptions
<p>Output</p> <ul style="list-style-type: none"> + New Start-apps + Structured Partnership with Kenya Industrial Property Institute + Trained Staff on Intellectual Property and Patents management + Grants and Investments in established business <p>Outcome</p> <ul style="list-style-type: none"> + Enhanced operating environment promotion + Increased investments in start-ups 	<ul style="list-style-type: none"> + Establish programmes to support start-ups in Research, development and Innovation programs to grow from small enterprises to scalable entities nationally and globally 	<ul style="list-style-type: none"> + Number of successful partnerships in Intellectual Property commercialized + Number of innovators trained on IP & Patents Management + Number of successful joint ventures with Government and Private sector 	<ul style="list-style-type: none"> + Supportive and enabling business environment + Availability statutory and regulatory framework supporting the business community

4.3 Strategic Enablers

Enablers are critical strategic capabilities that will be provided to support the vision 2023 Strategy implementation. Resources from human capital, financial, business processes that promote efficiency, effectiveness and accountability have been identified as follows:

Enablers	Strategic Direction
Organisation Capacity	
Human Capital	+ High end skilled human capital + Streamlined succession management + Productive workforce
Business Processes	+ Standardization and integration of management systems, processes and procedures
Work Environment	+ Agile and compliant work environment

From each of these Strategic Enablers, Strategic Objectives, Strategies, Initiatives, outcomes and outputs are derived.

The dynamic nature of ICT industry demands institutional digital transformation for improving organisational productivity; thereby enabling innovative and adoptive systems for effectiveness, efficiency and accountability. ICTA will therefore prioritize human capital, business processes and work environment to support the strategic pillars. In the context of the ICTA strategy, productivity is viewed as the creation of an enabling environment to promote sustainable growth. To achieve these various strategic issues, programs and initiatives have been identified to provide accessible E-government services to all stakeholders.

Strategic Objective 5: To enhance Human capital, business processes and work environment for increased efficiency, effectiveness and accountability

Strategy 16: Enhance the organisational structure to respond to the dynamic needs of the authority.			
Key Outputs/Outcomes	Key Strategic Programmes/Initiatives	Key Performance Indicator	Key Assumptions
Outputs + Revised organisational structure + Updated staff establishment Outcomes + ICTA is empowered to effectively execute mandate	+ Review the organisation's structure and staff establishment to ensure that the right people with the right skills are at the right place and at the right time.	+ % of rollout of the staff establishment plan	+ Support from stakeholders
Outputs + ICTA has been categorized from level 6C to 7 Outcomes + Enhanced ability of ICTA to meet its core regulatory and developmental mandate	+ Enhance the ability of the Authority to meet its core regulatory and developmental mandate through the categorisation of ICTA as a state corporation	+ Re-categorisation of ICTA	+ Approval from State Corporations Advisory Committee.
Strategy 17: Enhance internal processes to increase efficiency, effectiveness and transparency in service delivery.			
Key Outputs/Outcomes	Key Strategic Programmes/Initiatives	Key Performance Indicator	Key Assumptions
Outputs + ISO 9001:2015 Certification + ISO/IEC 27001 Certification + Corporate ICT Strategy Outcomes + Efficient and effective business processes that optimize productivity + Alignment of technology with organisational goals.	+ Implementation of Quality Management Systems + Development and implementation of a corporate ICT strategy and policies that shall align organisational goals with technology requirements.	+ ISO 9001:2005 Certification Attained + IS) /IEC 27001 Certification Attained + % of implementation of corporate ICT strategy	Support from stakeholders

Strategy 17: Enhance internal processes to increase efficiency, effectiveness and transparency in service delivery.

Key Outputs/Outcomes	Key Strategic Programmes/Initiatives	Key Performance Indicator	Key Assumptions
<p>Outputs</p> <ul style="list-style-type: none"> + Digitized records + Automated business processes <p>Outcomes</p> <ul style="list-style-type: none"> + Digital transformation of operational processes, workforce and customer experience. + Improved records management and institutional memory. + Transparent, reliable, consistent and cost-effective service delivery 	<ul style="list-style-type: none"> + Enhance the digitalization of the authority by employing digital technologies and information to transform business operations, particularly for event-driven and mission-critical business processes. 	<ul style="list-style-type: none"> + %level of automation of business processes 	<ul style="list-style-type: none"> + Support from stakeholders
<p>Outputs</p> <ul style="list-style-type: none"> + Efficient and effective project teams. + Successful project delivery. <p>Outcomes</p> <ul style="list-style-type: none"> + Successful project delivery 	<ul style="list-style-type: none"> + Strengthen the organisational project management capacity to successfully deliver strategic projects through the prudent application of knowledge, skills, tools and techniques. 	<ul style="list-style-type: none"> + % level of successful project execution 	<ul style="list-style-type: none"> + Support from stakeholders

Strategy 18: Strengthen capacity of the organisation's workforce to enhance efficiency, effectiveness and transparency in an inclusive and diversified workplace environment

Key Outputs/Outcomes	Key Strategic Programmes/Initiatives	Key Performance Indicator	Key Assumptions
<p>Outputs</p> <ul style="list-style-type: none"> + Human resource management policies including: + Performance Management policy, + Career progression guidelines, + Schemes of Service as well + Staff training & development policy <p>Outcomes</p> <ul style="list-style-type: none"> + Highly motivated and productive workforce 	<ul style="list-style-type: none"> + Attract, retain and grow exceptional talent through effective human resource management. 	<ul style="list-style-type: none"> + % level of implementation of Human Resource Management Policies 	<ul style="list-style-type: none"> + Support from stakeholders
<p>Outputs</p> <ul style="list-style-type: none"> + Improvement of staff welfare + Improved collaboration & learning + Increased creativity <p>Outcomes</p> <ul style="list-style-type: none"> + Team spirit and stronger results + A culture of accountability, collaboration and feedback + An inclusive workforce that embraces diversity 	<ul style="list-style-type: none"> + Promote a positive workplace culture and physical environment that emphasizes ethical values, fosters inclusivity and embraces diversity. 	<ul style="list-style-type: none"> + Employee Satisfaction Index 	<ul style="list-style-type: none"> + Support from stakeholders

4.4 Foundation

Getting the foundations right will lead to the achievement of the vision, the planned outcomes and their associated targets. Institutionalizing a strong Governance and leadership will lead to realizing ICTA's Mandate. Below is a breakdown of the foundation and the strategic foundation it will support:

Foundation	Strategic direction
Governance and Leadership	<ul style="list-style-type: none"> + Inculcate the Environmental and ecological (2Es) management in Governance + Management of ICTA operations towards a Corporate Social Responsive organisation. + Managing E-Waste and promoting a sustainable Green and Blue economy + Maintain quality standards and monitoring through an adopted Quality Management System + Establish policy framework to institutionalize ICT standards in the public and private sector.

From each of these foundations, Strategic Objectives, Strategies, Initiatives, outcomes and outputs are derived.

Strategic Objective 6: To enhance prudent leadership and governance of the organization that is accountable to its stakeholders and sensitive to the environment.

Strategy 19: Institutionalise compliance to ICT standards, statutory and regulatory requirements both globally, regionally and locally			
Key Outputs/Outcomes	Key Strategic Programmes/Initiatives	Key Performance Indicator	Key Assumptions
Output + Sustainable E-waste Management policy + CSR policy + ICT Standards + Secure cyber environment	+ Establish an accountable and sustainable organization that protects all the stakeholders' interests	+ % level of implementation	+ Support from stakeholders
	+ Establish policy framework to institutionalize ICT standards in the public and private sector.	+ % level of implementations	+ Support from stakeholders
Outcome + Responsible corporate entity + Standardized and regulated ICT environment.	+ Institutionalise cyber-hygiene policies and procedures in ICTA projects and programs	+ % level of implementations	+ Support from stakeholders
Strategy 20: Enhance ICTA values and culture for effective leadership			
Key Outputs/Outcomes	Key Strategic Programmes/Initiatives	Key Performance Indicator	Key Assumptions
Output + Established system of values and culture	+ Establish and institutionalize system of values, culture and principles to promote effective leadership	+ %level of implementation	+ Conducive and adoptive environment
Outcome + Responsible leadership			
Strategy 21: Integrate a risk management approach in governance			
Key Outputs/Outcomes	Key Strategic Programmes/Initiatives	Key Performance Indicator	Key Assumptions
Output + Enterprise Risk Management	+ Establish an Enterprise Risk Management Framework at all levels of management	+ % Level of risk exposure	+ Predictable near future operating environment
Outcome + Increased success level of the organization			

5.1 Introduction

The Chapter presents ICTA's organisational structure and functions of the various arms of the Authority. It further outlines key strategies that will be utilized by the organisation to ensure effective implementation of the Strategic Plan. In addition, the responsibilities for implementation have been outlined to enhance accountability.

5.2 Organization Model

To facilitate the implementation of the Strategic Plan, ICTA has developed a functional organisational structure that is aligned to the strategies being implemented. The organisational structure shall be reviewed from time to time to ensure it supports the strategic plan.

ICT Authority has Directorates that are charged with the responsibility of ensuring the realization of the Authority's objectives in the implementation of this Strategic Plan. The Authority has five (5) Directorates namely: (a) Directorate of Standards and Compliance (b) Directorate of Digital Services (c) Directorate of Innovations & Enterprise (d) Directorate of Programmes & Planning and (e) Directorate of Corporate Services, as in Annex 1 of the document.

5.2.1 Mandate of Top Organization Leadership

5.2.1.1 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 (2020-2024).

5.2.1.2 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.

5.2.1.3 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.

5.2.2 Accountability Framework

The overall role of implementing this Strategic Plan rests with the office of the Chief Executive Officer of the Authority. The holder of the office will be charged with overseeing the actual implementation of the Strategic Plan to meet the Strategic Objectives set and the targets as outlined in the Implementation Matrix at the end of this document. She/ he will oversee providing overall policy direction in the implementation of all activities outlined in the Strategic implementation matrix. This includes the allocation and re-allocation of resources. Continuous monitoring of performance will be mainstreamed in the organization including preparation of Quarterly and Annual Progress Reports. Specifically, annual reviews to include an assessment of the assumptions and risks are set out in the log frame. ICTA will ensure tightening of feedback and learning loops, to enable real-time adjustment of the programmes/project action points.

5.3 Strategies for Implementation of the Strategic Plan

The Authority will pursue the following strategies to ensure effective implementation of this Strategic Plan.

5.3.1 Communicating the Strategic Plan

Communication plays a critical role driving the successful implementation of a Strategic Plan and its effective dissemination at all levels. The Authority has put in place a communication strategy, in line with the Authority's Communication Policy, that will support the implementation and dissemination of the Strategic plan (2020-2024). The Strategy also contains communication plans for all programmes and projects which the Authority is implementing as well as services offered to MCDAs and Mwananchi. Specifically, this communication Strategy will:

- a) Create awareness of the Strategic Plan at all levels of the Authority and among stakeholders
- b) Provide education on key strategic concepts and principles to identified stakeholders
- c) Generate the engagement of key stakeholders whose support and commitment is needed for the successful implementation of the Strategic Plan
- d) Ensure the outcomes of the Strategic Plan are disseminated using SMART communication activities

The communication plan provides a high-level summary of activities that to be undertaken to communicate the Strategic Plan

Strategic Pillars:

a) Digital Infrastructure

b) Digital Services

c) Digital Skills, Values & Culture

d) Applied Research, Innovation & Enterprise

Communication Objectives: To enhance the communication of the four pillars of the Strategic Plan			
Enhance dissemination of all projects being managed by the Authority whose implementation will realize the provision of the country's digital infrastructure	+ Develop Communication policy	+ Communication policy developed	+ Communication policy (2019 -2020)
	+ Develop Communication Strategy	+ Communication Strategy Developed	+ Communication Strategy (2019 -2023)
	+ Develop Communication Plan to support the implementation of the Strategic Plan	+ Communication Plan developed	+ Communication Plan for the Strategic Plan (2019-23)
	+ Hosting Connected Kenya and using it to disseminate messages on the four strategic pillars	+ Annual Conference held	+ No. of Conferences held
	+ Conduct Public Participation, Awareness and Sensitization activities across the country	+ Informed citizen's Media on ICTA Mandate, programs, projects, services and activities related to digital infrastructure	+ No. of Media engagement workshops held
	+ Develop Information, Education and Communication Materials	+ Media kits, Brochures, Fact Sheets and other IEC materials developed	+ No. of IEC Materials developed
	+ Hold Editors' Breakfast meetings	+ Sensitized Media Editors on the KICD Mandate and Mission	+ No. of Editors Breakfast Meetings held
	+ Use media to carry out public education campaigns on the four strategic pillars	+ Public education campaigns Developed	+ No of public education campaigns developed
	+ Sensitize ICTA Staff using their own social media platforms	+ Informed staff on Social Media Handling	+ No. of members of staff sensitized
	+ Support the planning and implementation of stakeholders' engagement forums	+ Stakeholder engagement events to promote organizational brand, image and reputation	+ No. of media mentions resulting from stakeholder engagement forums.
	+ Production of internal and external publications to disseminate messages on the Strategic Pillars	+ Publishing the ICT Authority Newsletter + Publishing an ICT Sector Journal	+ No. of Newsletters produced + No. of journals produced
	+ Carry out Corporate Social Responsibility activities	+ Corporate Social Responsibility activities carried out	+ No. of Corporate Social Responsibility activities carried out + Reports on impact of CSR
	+ Develop public complaints and access to information infrastructure	+ Public Complaints and Access to Information Infrastructure developed	+ Public Complaints and Access to Information Infrastructure
	+ Managing ICTA website and social media platforms	+ Updated website and social media platforms.	+ Updated website and social media platforms
	+ Training the Communication Staff to equip them with up to date new skills	+ Well trained Communication Staff	+ No. of Communication Staff trained.
	+ Develop ICTA Signature Documentaries for all programmes/projects	+ ICTA Documentaries Developed	+ No. of documentaries
+ Conduct media Tours to all ICTA run Programmes & Projects	+ Media appreciates mandate of ICTA	+ No. of media tours	
Enhance brand visibility to improve public awareness of ICTA	+ Review and implement the Authority's Brand to reflect the new Mission, Vision & Core Values	+ Comprehensive ICTA Brand positioning activities carried out.	+ Launching the Strategic Plan + Hosting a re-branded Connected Kenya + Communication marketing

5.3.2 Cascading the Strategic Plan

For a Strategic Plan or any change initiative to make a true difference, it must be properly executed and cascaded throughout an organisation. This means once the Strategic Plan has been approved, it is cascaded to all ICTA staff for implementation, having understood the detailed strategic plans, actions and metrics and work to achieve them. The cascading of this document is aimed at address the challenges that may hamper the effective implementation of the Strategic Plan. The challenges include: (a) the feeling by some of the department heads that either some strategic goals are not relevant or not within their purview (b) when it is not unclear to Heads of Departments the specific strategic objectives and components they are mandated or guided to implement and how the ones that was excluded yet its core to their department can be included (c) some goals/ or metrics in the Strategic Plan are in conflict with departmental goals or metrics (d) a low level of clarity of the Strategic Plan by both Management and staff yet they will be relied upon to implement it.

5.3.3 Financing the Strategic Plan

This strategic plan has been developed with cost component in mind. Its success is hinged on ICTA's abilities to secure funding in order to implement the strategic programmes/initiative defined herein. The Authority shall use this Strategic Plan for resource mobilization and partnership with like minded partners. Strict and prudent financial management practices will be espoused during the implementation period. The Authority will be keen to plan, organize, and monitor the financial resources given to it from the exchequer and also manage the resources mobilized from partners, on their behalf. The Authority shall be transparent to enhance credibility to the society they serve and in the eyes of the funding organisations. It is expected that the financing options for the activities defined in this Strategic Plan will include but not limited to:

It is expected that the financing options will include:

- i) Government of Kenya
- ii) Internally generated income
- iii) Innovative funding models including
 - a) Resource mobilization through Partnerships
 - b) Strategic Alliances with Key Sector Players
- iv) Support by the International Community

KES 50.86 billion Investments will be required to implement the strategic plan as seen in the table below:

Table 6: Summary Budget for implementation of the Strategic Plan

Strategic Areas	Budget Amount (KES 'B')
Strategic Pillar: Digital Infrastructure	47.0
Strategic Pillar: Digital Services	0.79
Strategic Pillar: Digital Skills, Values and Culture	0.26
Strategic Pillar: Applied Research, Innovation and Enterprise	1.25
Enabler: Capacity	0.15
Foundation: Governance and Leadership	0.20
Total	50.86

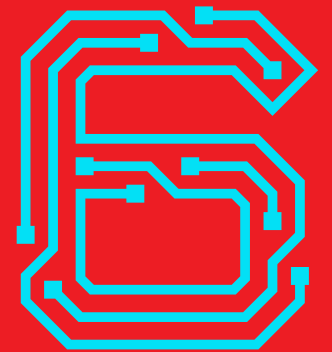
5.4 Risks and Mitigation Plan

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 7 below:

Table 7 Potential risks and mitigation plans

Potential Risks	Mitigation Strategies
Inadequate legislative and regulatory framework both internally, nationally and counties	+ Collaborate with the MoICT in advocating for National Assembly to pass appropriate legislation
Corruption or perceived corruption	+ Implement government anti-corruption strategy, enforcing rules and regulations and develop and implement code of ethics
Weak Implementation Capacity	+ Strengthen adoption and implementation of result-based management strategies including performance evaluation systems to improve accountability culture at institutional and individual levels
Inadequate Stakeholders Engagement	+ Adopt public participation and encourage consultations with stakeholders to enhance inclusivity
The programmes/projects with a multiplicity of actors and this makes them complex given that they are implemented by independent institutions and may become difficult to monitor and supervise	+ Hold regular review workshops with important actors to discuss implementation challenges and their role in implementation of the programmes/projects
Inadequate resource allocation	+ Lobby government to increase budgetary allocation to the ICT Authority + Develop and implement a robust resource mobilization strategy
Appropriate Staffing and human capacities	+ Pursue competence-based recruitment, rationalization and accelerated staff training
Cyber Security threats	+ Enhance cooperation and networking between stakeholders involved in cyber security space, Sensitization and awareness creation and Formulation of policies and legislation on cyber security
Technological changes	+ Adherence to ICT standards, regular review of systems and processes and regular up-skilling programmes
Increased demand for digital services	+ Enhance resources mobilization, increase collaborations with the relevant stakeholders and develop capacities on service delivery on digital platforms



CHAPTER
STRATEGY
MONITORING &
REPORTING

This chapter outlines how the Strategic Plan will be monitored, how the results will be evaluated throughout the organisation. Key Performance Indicators and the reporting framework through the strategic period are provided.

6.1 Monitoring and Evaluation

Monitoring and Evaluation is an integral part of the Strategic Planning and Execution. Monitoring can be defined as the process of continuously tracking the implementation of planned programmes or activities to assess their progress and performance. Evaluation on the other hand, is the system of determining to what extent set objectives have been met. Monitoring and Evaluation (M&E) provides regular and timely information in support of evidenced-based decision-making serving as a key driver towards the realization of an organisation's goals. The information prepared includes progress made, challenges encountered and identification of emerging issues. This information can also be used to promote a culture of learning and for the application of lessons learned.

The M&E framework will be in three components: Setting Performance Targets, Monitoring Performance, and Performance Evaluation. Monitoring and evaluation will be on three levels: Corporate Level; Operational Level; and Individual Performance Level. The performance of ICTA will be as a result of the performance of all employees.

The ICTA Strategic plan FY 2020-2024 effectiveness shall be tested using a longitudinal approach taking into consideration the achievements at the end of the strategic period. ICTA shall develop an impact assessment framework for evaluating the extent of the achievement of the strategic initiatives, project and programs in partnership with other relevant government institutions.

6.2 Key Performance Indicators

The concept of Key Performance Indicators (KPIs) is a measurable value that demonstrates how effective an organisation is achieving key strategic business objectives. ICTA use KPIs at multiple levels to evaluate their success at reaching targets. ICTA has defined the following impact level results to be achieved by 2023.

- i. Growth of digital Infrastructure from 9, 000km to 15,000km of fibre optic cable.
- ii. Digital Skills to spur digital economy with increased citizenry with appropriate competencies
- iii. Enhanced Digital Services to promote ease of doing business and increased accessibility, equity and inclusivity to government services
- iv. Enhanced and responsive institutional capacity in promoting digital growth and productivity
- v. Enhanced Governance and Leadership that is responsive to the values and culture that promotes Kenyan Constitution
- vi. Enhanced adoption of Applied Research and Innovation to promote digital economy

6.3 Implementation Reporting Framework

The purpose of this M&E Framework is to facilitate the tracking of progress towards ICTA results and generation of strategic information to inform decision-making by stakeholders at the organisational and at National Level. Defined data requirements and design responsibility for tracking of ICTA implementation at all levels is critical, further the management of data protocols and assignment of responsibility for data collection, data flow, analysis and reporting by different stakeholders is also very important.

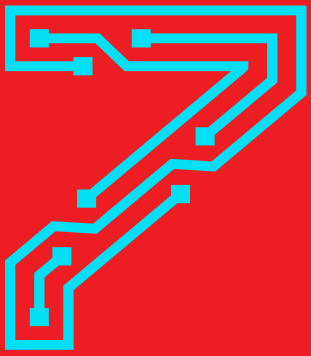
Table 8 Monitoring & Evaluation Reporting Framework

Strategic Issues	Output/Outcome	Activity	OVI/KPIs	Baseline	Target	Achievements	Variance	Lessons Learned
SP Issues 1								
Objective 1								
SP Issue 2								
Objective 2								

6.4 Monitoring and Evaluation Coordination

Result based Management will have adopted where every individual contributes towards the realization of this strategic plan.

- i. Individual Performance Targets will be set and agreed upon between Directorates and their respective Staff Members. For Support Services, the performance targets must be aligned to the strategic direction of the Mandate of the Organisation
- ii. Performance Evaluation will be carried out on Quarterly basis with the final evaluation to be done at the end of the year
- iii. Departmental Meetings will be held to monitor the implementation of Action Plans Cascaded from the Strategic Plan
- iv. The Board will monitor the Implementation of the Strategic Plan on Quarterly Basis
- v. Annual Strategic Reviews workshops will be held to evaluate the impact of Planned Actions and the level of achievement of the Strategic Objectives



CHAPTER
STRATEGY
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7.1 Strategic Pillar 1: Digital Infrastructure

Strategic Objective 1: To grow and expand a secure digital infrastructure in line with the dynamic ICT industry requirements

Strategy 1: Improve and maintain a secure, reliable & accessible digital connectivity								
Strategic Programmes /Projects /Initiatives	Activities	Responsibility	KPI / Objective Verifiable Indicator (OVI)	Baseline	Implementation Period (FY)			
				19/20	20/21	21/22	22/23	23/24
Expand ICT infrastructure to increase connectivity and access to the reliable network Collaborate with roads sector towards integrated infrastructure development	Lay 15, 000 Km of fibre optic cable	CEO/ Directorate of Digital Services	KMs Fibre Cable Laid	9000	1500	3000	3000	4500
	Lay ducts to prove a basis for sharing infrastructure	CEO/ Directorate of Digital Services	Number of ducts laid	N/A	100	100	100	100
	Lay 5, 000 Km of fibre cable through Last Mile Connectivity	CEO/ Directorate of Digital Services	KMs in Counties under the last mile connectivity	None	1000	1000	1000	1000
	Establish eight Point of Presence and user support systems	CEO/ Directorate of Digital Services	No. of Point of Presence established	None	2	2	2	2
	Enhance Constituency Innovation Hubs (CIHs)	CEO/ Directorate of Digital Services	No. of Hubs	None	290	290	290	290
	Increase Nairobi Metro active devices to 700km and implementation of the active devices	CEO/ Directorate of Digital Services	No. of MDAs with stable and reliable connectivity	22	140	140	140	140
	Comprehensive repair of and maintenance of 9000Km of existing fibre optic	CEO/ Directorate of Digital Services	% Level of implementation	None	100	100	100	100
	Establish the ICT Infrastructure sharing framework	CEO/ Directorate of Digital Services	% Level of implementation	None	100	100	100	100
Improve the disposal of E-waste materials	Create Public Wireless data access points at strategic areas in partnership with various stakeholders to promote connectivity and accessibility of affordable and reliable network	CEO/ Directorate of Digital Services	% Level of implementation	None	100	100	100	100
	Establishment of strategic e-waste collection centres at every county	CEO/ Directorate of Digital Services	% level of implementation	None	25	25	25	25
Establish a reliable infrastructure that will promote continuity of government business	Engage various stakeholders to dispose the e-waste materials with the required standards	CEO/ Directorate of Digital Services	% level of implementation	None	25	25	25	25
	Explore ways of adopting integrated modern disaster/business recovery models	CEO/ Directorate of Digital Services	% level of implementation	None	25	25	25	25
	Develop a Unified Communication and information sharing systems for MDAs, Counties, sub counties and wards	CEO/ Directorate of Digital Services	% level of implementation	None	100	100	100	100
	Establish Data Centres and Data Recovery Centres	CEO/ Directorate of Digital Services	No. of Data Centres	2	3	3	3	3
	Establish and institutionalize a secretariat to create critical infrastructure awareness	CEO/ Directorate of Digital Services	% Level of implementation	N/A	100	100	100	100
Integrate Information Security for Continuity of government operations and reduce cyber security breaches across.	Establish e-government Call Centre with automated process	CEO/ Directorate of Digital Services	% Level of implementation	None	25	50	75	100
	Create a risk assessment and reporting method for risks in GoK ICTA hosted/Managed Systems and cyberspace	CEO/ Directorate of Digital Services/Director Shared Services	% Level of implementation	None	25	50	75	100
	Establish and institutionalize the coordination and creation of awareness on policies on critical infrastructure	CEO/ Directorate of Digital Services/Director Shared Services	% Level of implementation	None	25	50	75	100
	Create and implement early warning and Incident monitoring response systems to all GoK Core systems and Installations hosted/Managed by ICTA.	CEO/ Directorate of Digital Services/Director Shared Services	% Level of implementation	None	25	50	75	100
	Establish a working committee for cyber security in the Public Sector and secure Organizational support for its activities.	CEO/ Directorate of Digital Services/Director Shared Services	% Level of implementation	None	25	50	75	100
	Establish an Online Portal for Cyber Security as a part of the central government portal and help desk.	CEO/ Directorate of Digital Services/Director Shared Services	% Level of Implementation	None	25	50	75	100

Strategy 1: Improve and maintain a secure, reliable & accessible digital connectivity

Strategic Programmes /Projects /Initiatives	Activities	Responsibility	KPI / Objective Verifiable Indicator (OVI)	Baseline	Implementation Period (FY)				
				19/20	20/21	21/22	22/23	23/24	
	Support for respective Ministry and Agencies in the operationalization of the cyber security bill	CEO/ Directorate of Digital Services/Director Shared Services	% Level of Implementation	None	100	100	100	100	
	Create a National Certification & Training Centre or Secure cooperation with competent authorities for cyber security training in the area of Cyber security.	CEO/ Directorate of Digital Services/Director Shared Services	% Level of Implementation	None	25	25	25	25	
	Train 200 staff on security, network, fibre, data centre and sub marine cables	CEO/ Directorate of Digital Services/Director Shared Services	No. of Staff Trained	None	50	50	50	50	
	Systematically increase awareness of cyber security aspects for all MCDA's and adoption of ISMS	CEO/ Directorate of Digital Services/Director Shared Services	% Level of implementation	None	100	100	100	100	
	Annual review of Information Security & Cyber security Policies Publish standards, methods and guidelines	CEO/ Directorate of Digital Services/Director Shared Services	% Level of implementation	None	100	100	100	100	
	Implement DAM, Patch Management System. Deploy a SIEM System. Gateway Firewalls, Anti-DDOS and Network-Access Control	CEO/ Directorate of Digital Services/Director Shared Services	% Level of implementation	None	100	100	100	100	
	Identify and Classify Critical Resources for Monitoring and Tightening privileged user policies, practices, and procedures.	CEO/ Directorate of Digital Services/Director Shared Services	% Level of implementation	None	100	100	100	100	
	Develop and Implement a Security Operation Centre (SOC)	CEO/ Directorate of Digital Services/Director Shared Services	% Level of implementation	None	100	100	100	100	
	Undertake information usage, risk and security assessment and develop an Evaluation Lab facility	CEO/ Directorate of Digital Services/Director Shared Services	% Level of implementation	None	100	100	100	100	
	Conduct Continuous Vulnerability Assessments and Risk Management & Assessments to all GoK MCDA's hosted facilities Annually.	CEO/ Directorate of Digital Services/Director Shared Services	% Level of implementation	None	100	100	100	100	
	Ensure cyber security risks in alignment with ICTA guidance, which is based on international best practices	CEO/ Directorate of Digital Services/Director Shared Services	% Level of implementation	None	100	100	100	100	
	Develop and implement cyber hygiene tools that are adaptable to Kenya's cyber space	CEO/ Directorate of Digital Services/Director Shared Services / Directorate of Programmes and Standards	% Level of implementation	None	100	100	100	100	
Establish and operationalize digital infrastructure sharing guidelines to prevent unnecessary duplication and waste of scarce ICT resources.	Review and Implement the Broad Band Strategy to ensure provision of high speed and affordable connectivity to all citizens	CEO/ Directorate of Digital Services / Directorate Shared Services / Directorate of Programmes and Standards	% Level of implementation	None	100	100	100	100	
	Design and develop publicly owned supporting infrastructure to facilitate commercial last mile service provision	CEO/ Directorate of Digital Services / Directorate Shared Services / Directorate of Programmes and Standards	% Level of implementation	None	100	100	100	100	

Strategy 1: Improve and maintain a secure, reliable & accessible digital connectivity								
Strategic Programmes /Projects /Initiatives	Activities	Responsibility	KPI / Objective Verifiable Indicator (OVI)	Baseline	Implementation Period (FY)			
				19/20	20/21	21/22	22/23	23/24
Establish Internet Exchange Point (IXP) to enhance local internet ecosystem	Develop and deploy IXP infrastructure	CEO/ Directorate of Digital Services / Directorate Shared Services / Directorate of Programmes and Standards	% Level of implementation	None	100	100	100	100
	Undertake capacity building and promote the usage of IXP infrastructure	CEO/ Directorate of Digital Services / Directorate Shared Services / Directorate of Programmes and Standards	% Level of implementation	None	100	100	100	100

7.2 Strategic Pillar 2: Digital Services

Strategic Objective 2: To provide simple E-government services for ease of use and quick adoption by digital natives and naturally persuasive to digital immigrants

Strategy 2: Promoting coherence in digitization of government services								
Strategic Programmes /Projects /Initiatives	Activities	Responsibility	KPI / Objective Verifiable Indicator (OVI)	Baseline	Implementation Period (FY)			
				19/20	20/21	21/22	22/23	23/24
Rationalize digitization of government services by developing digital services masterplan	Develop and implement digital services Master plan to guide digitization process for government services while incorporating strategies for user awareness and user satisfaction mechanisms	CEO, Director Digital Services, HoD E-Government, Director standards and compliance	% level of development and implementation	N/A	-	100	100	100
Enhance GEA and ICTA standards to support and guide digitization of government services to achieve cost effective and efficient government solutions	Review and complete GEA	CEO, Director Digital Services, HoD E-Government	% level of GEA Review and completion	GEA Framework and ICT standards	-	100	100	100
	Develop and enforce guidelines that will influence planning and budget allocation for digitization	CEO, Director Digital Services, HoD E-Government, Director standards and compliance	% of manual services funded for digitization through budget allocation	N/A	-	50% of manual services	75% of manual services	100% of manual services
	Enforce government systems to conform to GEA framework and ICT Standards	CEO, Director Digital Services, HoD E-Government, Director standards and compliance	% of government systems conforming to GEA and ICT standards	10	All the core government systems	50% of all government systems	75% of all government systems	100% of all government systems
Revise the existing legislative and enact new frameworks to adopt GEA and ICT standards in support of digitization of convenient and efficient government services	Conduct assessment to identify and revise legal frameworks which unnecessarily prevent the interoperability and data sharing among government systems	CEO, Director Digital Services, HoD E-Government, Director standards and compliance	Number of revised/enacted legislations supporting convenient rollout of online services	0		A list of all the legislations supporting rollout of convenient online services	-	-
	Develop a bill that can be enacted to allow ICTA in collaborate with private sector to enforce digitization including registration of ICT professionals and IT Governance	CEO, Director Digital Services, HoD E-Government, Director of standards and compliance	Enactment of the bill allowing ICTA enforce digitization	-		1		

Strategy 3: Provisioning seamless Government Systems that promote Interoperability and Corporate Governance								
Strategic Programmes /Projects /Initiatives	Activities	Responsibility	KPI / Objective Verifiable Indicator (OVI)	Baseline	Implementation Period (FY)			
				19/20	20/21	21/22	22/23	23/24
Build the platforms necessary for convenient rollout of online services	Develop/procure government middleware	CEO, Director Digital Services, HoD E-Government, HoD infrastructure	% Level of development of government middleware	N/A		100	100	100
	Design and implement underlying data models and system architecture for e-government middleware	Director Digital Services, HoD E-Government, HoD Infrastructure	% Level of design and implementation of government middleware data models and system architecture	N/A		100	100	100
	Enforce adoption of GEA and ICT standards that support interoperability and data sharing among government systems	CEO, Director Digital Services, HoD E-Government, Director standards and compliance	% Level of adoption of interoperability and data sharing in government systems	N/A		40	100	100
	Develop GEA sensitization and mainstreaming tools and programs	Director Digital Services, HoD E-Government,	Number of GEA sensitization and mainstreaming tools and programs developed	N/A		+10	30	50
	Connect 4 core government data sources to e-government middleware	Director Digital Services, HoD E-Government, HoD infrastructure	% level of linking between core government data sources to the government middleware	N/A		100	100	100
	Implement policy layer, security layer and APIs to enable MCDAs to conveniently access E-government middleware	Director Digital Services, HoD E-Government, HoD infrastructure, HoD Information Security, Director Standards and compliance	% level of implementation	N/A		50	80	100
	Develop Digital Identity system by leveraging the 'Huduma Namba' to identify individuals online across various government systems	CEO, Director Digital Services, HoD E-Government, HoD infrastructure, HoD Information Systems	% level of development of digital identity management system	N/A		80	100	100
	Develop Gov Apps portal and guiding standards	Director Digital Services, HoD E-Government, HoD infrastructure, Director innovations and enterprise	% level of development	N/A			50	100
Integrate core government systems	Conduct an assessment to identify core systems and their candidatures for integration and Ensure conformity of systems to GEA and ICT standards supporting interoperability	Director Digital Services, HoD E-Government,	Number of systems to be integrated	N/A		+8	+15	+20
	Integrate the core government systems, including and not limited to Land, Assets, registration of persons, tax returns, companies	Director Digital Services, HoD E-Government, HoD infrastructure	Number of integrated core government systems	N/A		+8	+15	+20
	Integrate and enforce single identity management system for all the integrated systems	CEO, Director Digital Services, HoD E-Government, HoD infrastructure, HoD Information Systems, Director standards and compliance	Number of government systems integrated to Digital Identity management system for identification and verification of online users	N/A		+8	+15	+20
	Finalize development and integrate SCIMM core government systems	CEO, Director Digital Services, HoD E-Government, HoD infrastructure, HoD Information Systems, Director standards and compliance	% level of development and Integration of SCIMM to core government systems	-		50	100	

Strategy 4: Promote digitization of government information management system								
Strategic Programmes /Projects /Initiatives	Activities	Responsibility	KPI / Objective Verifiable Indicator (OVI)	Baseline	Implementation Period (FY)			
				19/20	20/21	21/22	22/23	23/24
Convert government paper-based data into electronic form	Develop a framework to convert paper-based government data to digital form	CEO, Director Digital Services, HoD E-Government, HoD infrastructure, HoD Information Systems. Director standards and compliance	% level of Frameworks development	N/A	100	100	100	100
	Build a government record digitization business employing Digitalents	Director Digital Services, HoD E-Government, HoD infrastructure, HoD Information, Director Innovation and enterprise	Number of Digitalents employed	N/A	+10	+50	-	-
	Develop a platform/EDMS to upload digitized government data	Director Digital Services, HoD E-Government	% level of EDMS development	N/A	100	100	100	100
	Train users and enforce electronic record and data management ICT standard	Director Digital Services, HoD E-Government, Director programs and planning HoD Capacity Development	% Number of government records uploaded successfully in the EDMS	N/A		8	100	100
Develop and leverage e-knowledge management system as an integral enabler of e-government	Organise intergovernmental forums to discuss best practices in government knowledge management	CEO, Director Digital Services, HoD E-Government, HoD infrastructure, HoD Information Security, Director programs and planning HoD Capacity Development	Number of successful forums with outputs	N/A		2	2	2
	Develop and implement a framework for information sharing among MCDAs	CEO, Director Digital Services, HoD E-Government, HoD infrastructure, HoD Information Security, Director Standards and compliance	% level of development and implementation of e-knowledge management sharing framework	N/A		50	80	100
	Develop/procure e-knowledge management system	Director Digital Services, HoD E-Government, HoD infrastructure, HoD Information Security, Director Digital Services, HoD E-Government	% level of development of e-knowledge management system	ICTA Open Data portal		50	80	100
	Analyse and visualize data to support decision making focus in food security, Universal health care, affordable housing and manufacturing		Number of significant decision/Resolutions made by optimal utilization of availed knowledge	-		2	2	5
Strategy 5: Enhance a one-stop shop(Single Window) service delivery model for convenience and ease of use of e-government services for everyone								
Strategic Programmes /Projects /Initiatives	Activities	Responsibility	KPI / Objective Verifiable Indicator (OVI)	Baseline	Implementation Period (FY)			
				19/20	20/21	21/22	22/23	23/24
Improve E-citizen to a one stop shop e-government service	Implement GEA framework and master plan to provide government services from a single service platform	Director Digital Services, HoD E-Government, Director standards and compliance	% level of implementation	E-citizen		100	100	100
	Conduct an assessment to find out if services delivery through E-citizen portal is satisfactory, identify and recommend areas of improvement to reach out excluded populations including and not limited to the retirees, more women, seniors, unemployed, out of school youth.	Director Digital Services, HoD E-Government	% level of service delivery improvement through E-citizen	-	-		-	-
	Collaborate with national treasury to develop internal capacity to manage E-citizen	Director Digital Services, HoD E-Government, Director programs and planning HoD Capacity Development	Number of experts that can manage E-citizen	0	-	10+	10+	10+

Strategy 5: Enhance a one-stop shop(Single Window) service delivery model for convenience and ease of use of e-government services for everyone									
Strategic Programmes /Projects /Initiatives	Activities	Responsibility	KPI / Objective Verifiable Indicator (OVI)	Baseline	Implementation Period (FY)				
				19/20	20/21	21/22	22/23	23/24	
	Enforce and guide availing of government service on E-citizen portal to Increase the current online services	Director Digital Services, HoD E-Government, Director standards and compliance	Number of new government services available on E-citizen	-	-	+36	+100	+200	
	Create a search engine optimization mechanism to allow personalized access to services in E-citizen portal	Director Digital Services, HoD E-Government	Time in Minutes taken to search for a service on E-citizen	N/A		Less than a minute	-	-	
	Provide tools, facilities and training programs for excluded groups in the society, for instance people with special needs, the elder, marginalized groups etc. to access online services	Director Digital Services, HoD E-Government, Director programs and planning HoD Capacity Development	Number excluded people in the society able to access e-government services	N/A	-	40%of the exclude population	80%of the exclude population	100%of the excluded population	
Improve MyGov portal to be a one stop shop for all government websites	Acquire, Implement and maintain content management system(CMS)	Director Digital Services, HoD E-Government	% level of implementation of CMS	N/A	100	100	100	100	
	Train users on how to upload data	Director Digital Services, HoD E-Government, Director programs and planning HoD Capacity Development	Number of users trained to upload content on the CMS	-	+100	+200	-	-	
	Develop dynamic, database driven portal as entry point to citizens	Director Digital Services, HoD E-Government	% level of development of MyGov Portal	N/A	100	100	100	100	

7.3 Strategic Pillar 3: Digital Skills Values and Culture

Strategic Objective 3: To create a globally ethical and digitally competent workforce & citizenry for a Digital Economy

Strategy 6: Develop and enhance training programs to empower professionals in workplace and individuals with digital skills necessary for improved productivity and inclusivity across all economic sectors.									
Strategic Programmes/Projects /Initiatives	Activities	Responsibility	KPI / Objective Verifiable Indicator (OVI)	Baseline	Implementation Period (FY)				
				19/20	20/21	21/22	22/23	23/24	
Establish and enhance training programs (DLP, AJIRA, PDTP)to promote digital skills development for professionals in workplace and individuals (senior citizens, children, out-of-school youth, women and PWD) to enhance their competences to perform basic and specialized task	Carry out digital skills surveys in the country to establish digital skill gaps for a digital economy	CEO, Director Programmes and Standards, HoD Project management office, Regional ICT Officers	Sectorial digital skills gap matrix	N/A	8	1	1	1	
	Carryout a survey on existing digital skills development and enhancement program that can be tapped into	CEO, Directorate of Partnership, Innovation and Capacity Development, HoD Capacity Development	No. of surveys on existing digital skills development	N/A	8	1	1	1	
	Develop/adapt digital skills curriculum to train professionals, workforce and everyone to improve productivity and enhance digital inclusion	CEO, Director of Programmes & Planning	% Level of implementation of digital skills curricula	N/A	100	100	100	100	
	Organize annual workshops/conferences to promote networking and knowledge exchange on emerging digitals	CEO, Director of Programmes & Planning, Director of Corporate Services	No. of successfully organized workshops/conferences	N/A	1	1	1	1	
	Establish learning platforms like e-learning portals, online/offline digital content and edutainment kits to promote online and continuous self-learning	CEO, Director of Programmes & Planning, Director Innovation & Enterprise	% level of development and utilization of functional e-learning, online/offline digital content and edutainment kits	N/A	25	50	75	100	
	Equip and upgrade existing digital skills centres to maker spaces to support high end skills development	CEO, Director Programmes and Standards, HoD Project management office, Regional ICT Officers	% levels of equipping and upgrading of digital skills centres	10	50	100	100	100	
	Develop a policy and curriculum on cyber hygiene in partnership with relevant bodies.	CEO, Director Programmes and Standards	% Level of implementation of developed policies and curriculum	N/A	100	100	100	100	

Strategy 7: Enhance strategic partnership and collaborations to train on key strategic competencies to stimulate innovative thinking and improve performance for the growth of the digital economy in line with Vision 2030								
Strategic Programmes/Projects /Initiatives	Activities	Responsibility	KPI / Objective Verifiable Indicator (OVI)	Baseline	Implementation Period (FY)			
				19/20	20/21	21/22	22/23	23/24
Expand and enhance strategic partnerships and collaborations training institutions based on their competencies and capacity to support digital skills development in all skill levels	Carryout institutional survey to identify the strategic limitations and gaps within ICTA and entire digital economy on digital competencies development and resourcing challenges	CEO, Director Corporate services, HoD Capacity Development, HoD Innovations	Survey report on strategic limitations and gaps	N/A	1	1	1	1
	Carryout a survey on capacity of existing and potential partners in digital literacy	CEO, Director Corporate services, HoD Capacity Development, HoD Innovations	Survey report on potential partners	N/A	1	-	-	-
	Create programs that enhance creativity and innovativeness for enhanced innovation in workplace	CEO, Director Corporate services, HoD Capacity Development, HoD Innovations	No. of programs on creativity and innovation created	N/A	1	1	1	1
	Enhancing collaborations and partnerships from public and private institutions on digital skills development	CEO, Director Corporate services, HoD Capacity Development, HoD Innovations	No. of collaborations Established and maintained No. of professionals trained in specialized skills	0	2	2	2	2
Strategy 8: Enhance integration of soft skills into the digital skills training and workplace								
Strategic Programmes/Projects /Initiatives	Activities	Responsibility	KPI / Objective Verifiable Indicator (OVI)	Baseline	Implementation Period (FY)			
				19/20	20/21	21/22	22/23	23/24
Establish an autonomous supportive environment to promote positive staff practices, supportive relationships, integration of learning contexts and experiential learning through challenge, experience & practice	Conduct a performance needs analysis to identify capability needs at organization and individual levels including soft skills gaps	CEO, Directorate of Partnership, Innovation and Capacity Development, HoD Capacity Development	Needs gap at organisational and individual levels	N/A	1	1	1	1
	Create project-based learning forums for practice, reflection and refinement of the soft skills acquired	CEO, Directorate of Partnership, Innovation and Capacity Development, HoD Capacity Development, HoD Planning	% Level of assimilation of soft skills in the workplace	N/A	50	100	100	100
	Create a self-directed learning mechanism to promote continuous staff development and certification processes	CEO, Director of Partnership, Innovation and Capacity Development, Director shared services, Director Programmes & Standards, HoD Capacity Development, HoD Shared services, HoD Standards, HoD Security	% Level and quality of online testing and certification	N/A	50	100	100	100
Strategy 9: Enhance access to technology and the digital skills needed to empower the citizens to create, innovate and participate in a digital economy								
Strategic Programmes/Projects /Initiatives	Activities	Responsibility	KPI / Objective Verifiable Indicator (OVI)	Baseline	Implementation Period (FY)			
				19/20	20/21	21/22	22/23	23/24
Remodel existing programs and policies to promote citizen's economic participation and enhance digital inclusion by seizing digital opportunities	Develop clear policy and business cases to sustain the funding and focused implementation of digital technologies projects for citizens capacities enhancement	CEO, Director of Partnership, Innovation and Capacity Development, Director shared services, Director Programmes & Standards, HoD Capacity Development, HoD Shared services, HoD Standards, HoD Communication	% Implementation and quality of business cases developed	N/A	20	50	75	100
	Develop and implement innovative web-based/online instruments and digital enhancement programs to foster digital and entrepreneurial skills	CEO, Director of Partnership, Innovation and Capacity Development, Director shared services, Director Programmes & Standards, HoD Capacity	% level and quality of online digital and entrepreneurial skills content developed	N/A	25	50	75	100

Strategy 9: Enhance access to technology and the digital skills needed to empower the citizens to create, innovate and participate in a digital economy									
Strategic Programmes/Projects /Initiatives	Activities	Responsibility	KPI / Objective Verifiable Indicator (OVI)	Baseline	Implementation Period (FY)				
				19/20	20/21	21/22	22/23	23/24	
		Development, HoD Shared services, HoD Standards, HoD Security, HoD Applications							
	Promote and facilitate strategic digital boot camps/ hackathon locally to create awareness of digital opportunities	CEO, Director of Partnership, Innovation and Capacity Development, Director shared services, Director Programmes & Standards, HoD Capacity Development, HoD Shared services, HoD Standards, HoD Security, HoD Innovations	Number of strategic digital boot camps/ hackathon organized	N/A	3	3	3	3	
	Promote development of citizen-friendly applications and tools to promote digital inclusion	Development, HoD Shared services, HoD Standards, HoD Security, HoD Innovations							
Strategy 10: Enhance policies and legal framework to promote appropriate values and cultures for digital economy									
Strategic Programmes/Projects /Initiatives	Activities	Responsibility	KPI / Objective Verifiable Indicator (OVI)	Baseline	Implementation Period (FY)				
				19/20	20/21	21/22	22/23	23/24	
Establish a system framework and policies on values and principles of culture that govern digital technology development and use	Analyze severity levels of incentive structures that erode trust and finding ways to change them	CEO, Director shared services, Director Programmes & Standards, HoD Capacity Development, HoD Shared services, HoD Standards, HoD Planning	Number of analysis on incentives structures that erode trust done	N/A	1	1	1	1	
	Conduct a study on the existing policies/laws that address digital values and culture to establish gaps and levels of their implementation	CEO, Director shared services, Director Programmes & Standards, HoD Capacity Development, HoD Shared services, HoD Standards, HoD Planning	Report on gaps and levels of implementation of policies	N/A	1	-	-	-	
	Develop and implement ICT policies and standard	CEO, Director shared services, Director Programmes & Standards, HoD Capacity Development, HoD Shared services, HoD Standards, HoD Planning, HoD Legal	% Level of adaption and implementation of ICT standard	N/A	50	100	100	100	
	Develop and implement policies, plans and programmes that support the development of values and culture in ICTA and general public	CEO/Director shared services, Director Programmes & Standards, HoD Capacity Development, HoD Shared services, HoD Standards, HoD Planning, HoD Legal	% implementation level of the policies, plans and programmes	N/A	50	100	100	100	
	Develop and implement a policy guideline detailing the digital code of ethics/conduct within ICTA and general public	CEO/Director shared services, Director Programmes & Standards, HoD Capacity Development, HoD Shared services, HoD Standards, HoD Planning, HoD Legal	% implementation level of the policy	N/A	100	100	100	100	
	Establish a partnership with National Cohesion and Integration Commission (NCIC) to promote national values and cultures for greater social inclusiveness and rootedness, resilience, innovation, creativity and entrepreneurship for individuals and communities, and the use of local resources, skills, and knowledge	CEO/Director shared services, Director Partnerships Innovations and Capacity, Director Programmes & Standards, HoD Capacity Development, HoD Shared services, HoD Standards, HoD Planning, HoD Legal, HoD Application	% level of execution of the signed partnership agreement	N/A	100	100	100	100	
	Develop and implement policy guidelines on mentoring and coaching to promote information sharing and trust	CEO/Director shared services, Director Programmes & Standards, HoD Capacity Development, HoD Shared services, HoD Standards, HoD Planning, HoD Legal	% implementation level of policy guidelines on mentoring and coaching	N/A	25	50	100	100	
	Develop and implement the reward and reprimand policy guidelines for applicable to ICTA and external stakeholders	CEO/Director shared services, Director Programmes & Standards, HoD Capacity Development, HoD Shared services, HoD Standards, HoD Planning, HoD Legal, HoD Human Resources	% level of adaption and implementation of reward/reprimand policy guidelines	N/A	50	100	100	100	

7.4 Strategic Pillar 4: Applied Research, Innovation & Enterprise

Strategic Objective 4: To Integrate Applied Research, Innovation and Enterprise for Improved Service Delivery and Digital Inclusion

Strategy 11: Enhance Existing Policy Frameworks on Applied Research, Innovation and Enterprise for sustained growth								
Strategic Programmes/Projects /Initiatives	Activities	Responsibility	KPI / Objective Verifiable Indicator (OVI)	Baseline	Implementation Period (FY)			
				19/20	20/21	21/22	22/23	23/24
Streamline Applied Research, Innovation and Enterprise Policies to support creation of new products and services that are scalable locally and international	Develop and implement applied research innovation policy guidelines and procedures in the organization to attract and improve innovative culture in the Government and Private sector	CEO/Innovation department	% Level of implementation	N/A	50	60	100	100
	Develop a Research and Development coordination function to institutionalize and monitor the implementation of the Applied Research & Innovation Strategy	CEO/Innovation department	% Level of implementation	N/A	100	100	100	100
	Develop and implement Research, Innovation and Enterprise Master Plan to provide an economic direction on research ICT related outputs	CEO/Director Strategy Planning, Director Partnerships innovations and Capacity	% Level of implementation	N/A	50	100	100	100
	Develop and implement a comprehensive Risk Management, Monitoring & Evaluation Policy on geared towards improving research, innovation and enterprise programs	CEO/Director Innovation, HoD Innovation, HoD Corporate planning and M&E,	% Level of implementation	N/A	50	100	100	100
	Survey and Identify innovations required in ICTA, programmes (DLP, NOFBI, etc.) the National Government, County Government and other Government Agencies, design, incubate and sell to them workable solutions to promote service deliver in the Government	CEO, Director Programmes and Standards, HoD Project management office, Regional ICT Officers, ICT Officers, Assistant ICT Officers, HoD Innovations	Number of new Innovations identified and developed solutions	N/A	30	70	80	100
Strategy 12: Enhance Strategic Partnerships & Collaborations frameworks to support programmes and projects to increase innovation and commercialization of research outputs								
Strategic Programmes/Projects /Initiatives	Activities	Responsibility	KPI / Objective Verifiable Indicator (OVI)	Baseline	Implementation Period (FY)			
				19/20	20/21	21/22	22/23	23/24
Establish strategic partnerships and collaborations with potential partners and leverage on their competitiveness to grow service delivery and improve innovation with priorities in health, education, energy and agriculture	Undertake a survey to establish the required competencies, current resource limitations that is required to deliver an effective research, innovation and enterprise Programme that is aligned to ICTA Mandate	CEO, Director Corporate services, HoD Capacity Development, HoD Innovations	% Implementation	N/A	50	70	100	100
	Enter into mutual beneficial partnerships with institutions of higher learning, research institutions, financiers, angel investors & venture capitalists to promote research innovation and enterprise	CEO, Director Partnerships Innovations and Capacity	Number of Mutually developed innovations fully commercialized by Government Institutions annually	N/A	10	10	10	10

Strategy 12: Enhance Strategic Partnerships & Collaborations frameworks to support programmes and projects to increase innovation and commercialization of research outputs

Strategic Programmes/Projects /Initiatives	Activities	Responsibility	KPI / Objective Verifiable Indicator (OVI)	Baseline	Implementation Period (FY)				
				19/20	20/21	21/22	22/23	23/24	
	Leverage on synergy in partnerships from the private sector and individual innovators, develop new solutions, test viability and market the solutions	CEO, Director Partnerships Innovations and Capacity	Number of Marketable Solutions Developed in Partnership with the private sector Annually	N/A	20	20	20	20	
	Develop ICT knowledge centres of excellence in institutions of higher learning to enhance incubation of research outputs into commercially viable products and services to promote digital inclusion at various counties	CEO, HoD Standards and Processes	Number of ICT Centres of Excellence open	N/A	10	10	10	10	
	Undertake a survey and collect challenges /problems from key stakeholders on digital inclusion and proposals to support innovators to design, incubate and innovate ideas for digital inclusion	CEO, HoD Innovations, HoD Project Management office, HoD Communications	% Level of implementation	N/A	50	70	100	100	
	Review the gaps and improve the existing White box platform to include the end to end innovation support to generate quality and marketable solutions/products	CEO, HoD Innovations, HoD Applications	% level of implementation	50	75	80	85	100	
	Buy, grow and sell potential businesses that are within the digital economy to investors by developing linkages and connecting the value chain.	CEO, HoD Innovations, HoD Communications	Number of digital business sold	N/A	20	20	20	20	
	Develop database of Kenyan Professionals across all disciplines, spatial data on enterprises across sectors and counties to facilitate in informed decision making in the public service	CEO, HoD Innovations, HoD Communications	% implementation	N/A	30	60	100	100	
	Engage potential partners to fundraise and promote a sustainable system that will attract resources to promote contributions on innovations in institutions	CEO, Director Partnerships Innovations and Capacity, HoD Innovations, HoD Communications	% of ICTA Budget	N/A	10%	10%	10%	10%	
	Hold the Connected Kenya forum for idea, business solutions showcase, thought leadership in the ICT space	CEO	Number of Connected Kenya Forums	1	3	3	3	3	

Strategy 13: Enhance and operationalize the effective stakeholder engagement and management framework								
Strategic Programmes/Projects /Initiatives	Activities	Responsibility	KPI / Objective Verifiable Indicator (OVI)	Baseline	Implementation Period (FY)			
				19/20	20/21	21/22	22/23	23/24
Create a responsive mechanism to promote the needs of the stakeholders within an informed and evidence-based decision making process environment to sustain commercializing of the applied research outputs	Plan and roll out strategic forums and public and private sector engagement geared toward establishing networks, markets to promote research, innovation and enterprise	CEO, HoD Communications, HoD Innovations	Number of Private and Public Sector Forums	N/A	2	2	2	2
	Participate in Strategic pitching events both locally and internationally to create market awareness for new products/innovations	CEO, HoD Communications, HoD Innovations	Number of forums organized/ attended that has resulted into business deals	N/A	3	3	3	3
	Undertake affirmative action to identify and engage groups that represent the interests of minorities, facilitate forums that increase capacity for special groups (youth and PWDs) to be able to develop innovative ideas and do business with government	CEO, Director Corporate Services, HoD Projects Management Office & programmes, HoD Communications, HoD Procurement, HoD Finance	% Increase in number of special groups doing business with the Government in the digital economy	N/A	+ 20	+20	+20	+20
	Establish an online mechanism that institutionalizes the AGPO policy in ICTA-innovations that support the AGPO policy	CEO, HoD Procurement, HoD Finance, HoD Innovations, HoD Applications	% of implementation	N/A	20	60	40	100
	Identify talent and facilitate training to enable PWDs establish and grow competencies and capabilities that will support the digital economy	CEO, HoD Capacity Development, HoD Communications, HoD Procurement,	Number of PWDs, special interest groups Mentored, trained	N/A	250	250	250	250
Strategy 14: Establish strategic Data and data management mechanisms to support Applied Research, Innovation and Production								
Strategic Programmes/Projects /Initiatives	Activities	Responsibility	KPI / Objective Verifiable Indicator (OVI)	Baseline	Implementation Period (FY)			
				19/20	20/21	21/22	22/23	23/24
Improve the Customer data management system, open data and data centres to support establishing new products and services/solutions	Develop and implement ICTA data Management policy and procedures	CEO, HoD Corporate planning, HoD Innovations, HoD Standards,	% Level of Policy implementation	N/A	100	100	100	100
	Undertake a Customer satisfaction survey and collection of data that will define critical customer delivery problems and innovate digital solutions that will enhance decision making and improve serve delivery	CEO, Director Corporate services, HoD HR, HoD Innovations, HoD Communications	% Level of Implementation	N/A	100	100	100	100
	Review the Kenya Open Data Initiative(KODI) to have a robust system and a living platform that is interactive with the used, updated datasets that support innovations	CEO, Director Programmes and Standards, HoD Planning and M&E, HoD innovations,	% level of implementation	N/A	100	100	100	100
	Train and retain a high-end skilled team to Increase capacity on open data at ICTA to manage and promote open data for to support research	CEO/Director Human Resource, HoD Planning,	Number of High end Skilled Trained on Managing open data system	20	20	20	20	20
	Engage Kenya National Bureau of Statistics (KNBS) for partnership to promote and increase development and usability of open data initiative	CEO/Director Partnerships Innovations and Capacity, Director Programmes and Standards, HoD planning and M&E, HoD Innovations	% implementation of Partnership agreement	N/A	100	100	100	100

Strategy 14: Establish strategic Data and data management mechanisms to support Applied Research, Innovation and Production								
Strategic Programmes/Projects /Initiatives	Activities	Responsibility	KPI / Objective Verifiable Indicator (OVI)	Baseline	Implementation Period (FY)			
				19/20	20/21	21/22	22/23	23/24
	Engage all sectors to promote the benefits of open data in Government Agencies	CEO/Director Partnerships Innovations and Capacity, Director Programmes and Standards, HoD planning and M&E, HoD Innovations HoD Communications	% of sectors implementing Open Data Policy Initiative	11	+ 20	+20	+ 20	+ 20
	Use Customer care officers, Communications department, RICTOs, ICTOs, AICTOs as open data fellows for increased Programme/project datasets from the counties that are needed for ICTA, National Government, County Governments and other Government Agencies for research and innovation	CEO, HoD HR, HoD Communications, HoD Project management office and Programmes	Number of Data Sets established	689	+ 20	+20	+20	+20
	Develop and implement ICTA Corporate Information Knowledge Management Policy and Procedures	CEO, HoD Standards and Processes, Director Corporate Services	% level of implementation	30	100	100	100	100
	Undertake ICTA knowledge assessment Survey and implement the recommendations	CEO, HoD Standards and Processes	% level of implementation	N/A	50	75	100	100
	Establish and operationalize an information and Knowledge Centre to Institute and sustain Knowledge Management practices	CEO, HoD Standards and Processes, Director Corporate Services	% level of implementation	N/A	100	1001	100	100
	Organize knowledge sharing forums Create forums and opportunities that enable sharing of technology resources	CEO, HoD Standards and Processes, Director Corporate Services HoD Communications	Number of Sharing Forums organized per year	N/A	4	4	4	4

Strategy 15: Improve Legal frameworks that promote and encourage investments in and Enterprise development								
Strategic Programmes/Projects /Initiatives	Activities	Responsibility	KPI / Objective Verifiable Indicator (OVI)	Baseline	Implementation Period (FY)			
				19/20	20/21	21/22	22/23	23/24
Establish programmes to support start-ups in Research, development and Innovation programs to grow from small enterprises to scalable entities nationally and globally	Develop Policy Guidelines and Regulatory frameworks to support e-commerce products such as tax incentives for start-ups to attract and grow the innovation start-ups	CEO, Director Partnerships Innovations and Capacity, Company Secretary	% Level of implementations	N/A	50	100	100	100
	Identify Policy frameworks that inhibit promotion of innovation-oriented institutions/ enterprises and propose reviews in order to support start-ups	CEO, Director Partnerships Innovations and Capacity, Company Secretary, HoD Projects and Programmes	% Level of implementation	N/A	50	100	100	100
	Develop a policy guideline/manual and provide terms for an NDA to innovators	CEO, HoD Innovations, Company Secretary	% Level of implementation	N/A	100	100	100	100
	Structure Partnership with Kenya Industrial Property Institute to guide on commercializing innovations in a structured manner that protects the interest of the innovators while promoting the mandate of ICTA in the digital economy	CEO, Director Partnerships Innovations and Capacity, Company Secretary	Number of successful partnerships in Intellectual Property commercialized	N/A	+5	+5	+5	+5

Strategy 15: Improve Legal frameworks that promote and encourage investments in and Enterprise development									
Strategic Programmes/Projects /Initiatives	Activities	Responsibility	KPI / Objective Verifiable Indicator (OVI)	Baseline	Implementation Period (FY)				
				19/20	20/21	21/22	22/23	23/24	
	Build capacity on Intellectual Property and Patents management to innovators through training forums such as Connected Kenya to enhance confidence and credibility	CEO, Director Partnerships Innovations and Capacity, Company Secretary	%increase of the number of innovators trained on IP & Patents Management	N/A	+25	+25	+25	+25	
	Structure approach to basic research in partnership with NACOSTI to promote innovation	CEO, Director Partnerships Innovations and Capacity, HoD Capacity Development, HoD Communications	Number of successful Joint Engagements	N/A	100	100	100	100	

7.5 Strategic Enabler: Organisational Capacity

Strategic Objective 5: To Enhance Human Capital, Business Processes and Work Environment for Increased Efficiency, Effectiveness and Accountability

Strategy 16: Enhance the organisational structure to respond to the dynamic needs of the authority									
Strategic Programmes/Projects /Initiatives	Activities	Responsibility	KPI / Objective Verifiable Indicator (OVI)	Baseline	Implementation Period (FY)				
				19/20	20/21	21/22	22/23	23/24	
Review the organisation's structure and staff establishment to ensure that the right people with the right skills are at the right place and at the right time.	Review of organization structure and staff establishment	CEO, Dir. Corp. Services, HR & Admin	Approval of updated organization structure & staff establishment	0	100				
	Develop a staff establishment rollout program	Dir. Corp. Services, HR & Admin	% of completion of the rollout program	100	100				
	Implement the staff establishment rollout program	Dir. Corp. Services, HR & Admin	% of implementation	5	10	30	30	30	
Enhance the ability of the authority to meet its core regulatory and developmental mandate through the re-categorisation of ICTA as a state corporation	Implement the re-categorization from 6C of 6A.	CEO, HR & Admin	% of implementation	100	100	N/A	N/A	N/A	
	Initiate process of re-categorization from 6A to 7	Board, CEO, Services, HR & Admin, Corp. Secretary & Legal Affairs	% of completion	0	0	50	70	90	

Strategy 17: Enhance internal processes to increase efficiency, effectiveness and transparency in service delivery.									
Strategic Programmes/Projects /Initiatives	Activities	Responsibility	KPI / Objective Verifiable Indicator (OVI)	Baseline	Implementation Period (FY)				
				19/20	20/21	21/22	22/23	23/24	
Implementation of Quality Management Systems	Develop and document business processes	CEO, Dir. Corporate Services, Dir. Standards & Compliance	% of business processes documented	10	30	50	80	100	
	Pursue ISO 9001:2015 certification	Dir. Standards & Compliance, All Directorates	ISO 9001:2015 certification attained.	0	0	100	100	100	
	Pursue ISO/IEC 27001 certification	Dir. Standards & Compliance, All Directorates	ISO/IEC 27001 certification attained	0	0	0	100	100	
Development and implementation of a corporate ICT strategy and policies that shall align organizational goals with technology requirements.	Develop and implement ICT Strategy and policies	Dir. Corporate Services, ICT Unit	% of implementation	0	100				
Enhance the digitalization of the authority by employing digital technologies and information to transform business operations, particularly for event-driven and mission-critical business processes.	Assess digital technology and information requirements that will lead to digital transformation.	Dir. Standards & Compliance, Dir. Digital Services, Dir. Corporate Services,	% of completion of assessment	0	100	N/A	N/A	N/A	
	Digitalization of ICTA records and data.	Dir. Corporate Services, Dir. Digital Services	% of digitalization or records and data	10	20	30	50	100	
Strengthen the organizational project management capacity to successfully deliver strategic projects by entrenching prudent	Conduct an institutional project management capacity assessment.	CEO, Dir. Of Programmes & planning	% of completion of assessment	0	100	N/A	N/A	N/A	
	Develop and implement corporate project management framework and	CEO, Dir. Of Programmes & planning	% of implementation	10	30	50	80	100	

Strategy17: Enhance internal processes to increase efficiency, effectiveness and transparency in service delivery.								
Strategic Programmes/Projects /Initiatives	Activities	Responsibility	KPI / Objective Verifiable Indicator (OVI)	Baseline	Implementation Period (FY)			
				19/20	20/21	21/22	22/23	23/24
application of knowledge, skills, tools and techniques	policies aligned to a results-based management strategy.							
	Develop and implement a legal and regulatory framework for management of service delivery through contractors.	CEO, Dir. Of Programmes & planning, Corp. secretary & Legal Affairs	% of compliance by contractors	15	30	50	80	100
	Develop and implement project-specific risk management frameworks and mitigations.	Dir. Of Programmes & Planning, Audit & Risk, Finance	No. of project specific risk management framework.	10	30	50	80	100
	Develop and implement a framework for knowledge management.	Dir. Of Programmes & Planning, Dir. Of Standards & Compliance, Public Communications	% level of implementation of knowledge management.	0	30	50	80	100
Strategy18: Strengthen capacity of the organisation's workforce to enhance efficiency, effectiveness and transparency in an inclusive and diversified workplace environment								
Strategic Programmes/Projects /Initiatives	Activities	Responsibility	KPI / Objective Verifiable Indicator (OVI)	Baseline	Implementation Period (FY)			
				19/20	20/21	21/22	22/23	23/24
Attract, retain and grow exceptional talent through effective human resource management.	Review human resource management policies and procedures, career progression guidelines, staff training and development as well as scheme of service.	CEO, Dir. Of Corp. Services, HR	% of completion of review	20	30	50	70	100
	Develop and implement individualized programs for capacity review, skills development and succession management.	Dir. Of Corp. Services, HR & Admin	% individualized programs implemented	0	10	30	70	100
	Develop and implement staff motivation strategies including rewards, recognition, icebreakers, team building, retreats & workshops.	Dir. Of Corp. Services, HR & Admin	% of implementation of staff motivation strategies	20	40	80	100	100
Promote a positive workplace culture and physical environment that emphasizes ethical values, fosters inclusivity and embraces diversity.	Assess the current culture to determine what is required to foster alignment.	CEO, Dir. Of Corp. Services, HR & Admin	% of completion of the assessment	0	100	N/A	N/A	N/A
	Develop and implement desired behaviour change strategies and approaches.	CEO, HR & Admin, Public Communications	% change of employees adopting desired organizational behaviour.	0	25	50	75	100
	Develop and implement code of ethics for ICTA.	CEO, Dir. Of Corp. Services, HR & Admin	% of employee violation of code of ethics	5	10	5	0	0
	Develop and implement a 360-degree performance evaluation and feedback mechanism.	CEO, HR & Admin	% of 360-degree performance evaluations completed	0	100	100	100	100
	Review physical workplace environment and implement recommendations for improvement.	Dir. Of Corp. Services, HR	% of implementation of recommendations	10	20	40	70	100

7.6 Strategic Foundation: Governance and Leadership

Strategic Objective 6: To enhance prudent leadership and governance of the organisation that is accountable to its stakeholders and sensitive to the environment.

Strategy 19: Institutionalise compliance to ICT standards, statutory and regulatory requirements both globally, regionally and locally								
Strategic Programmes/Projects /Initiatives	Activities	Responsibility	KPI / Objective Verifiable Indicator (OVI)	Baseline	Implementation Period (FY)			
				19/20	20/21	21/22	22/23	23/24
Establish an accountable and sustainable organization to protect all the stakeholders' interests	Develop and implement a sustainable E-Waste and ecological policy framework	CEO/ Directorate Corporate Services	% Level of implementation	100	100	100	100	100
	Develop and implement corporate Social Responsibility (CSR) framework	CEO/ Directorate Corporate Services	% level of implementation	100	100	100	100	100
	Profile and ensure compliance to relevant statutory and regulatory requirements that govern the ICT sector	CEO/ Directorate Corporate Services	% level of implementation	100	100	100	100	100
Establish policy framework to institutionalize ICT standards in the public and private sector.	Formulate the standards	CEO/ Directorate Programmes and Standards	% level of implementation	100	100	100	100	100
	Engage Stakeholders	CEO/ Directorate Programmes and Standards	% level of implementation	100	100	100	100	100
	Implement, monitor and evaluate ICT standards in the public and private sector	CEO/ Directorate Programmes and Standards	% level of implementation	100	100	100	100	100
	Work with County Governments and other Government Agencies to develop harmonised way leave guidelines and charges to protect the ICT infrastructure	CEO/ Directorate Programmes and Standards	% level of implementation	N/A	100	100	100	100
Institutionalize cyber-hygiene policies and procedures in ICTA projects and programs	Conduct a cyber hygiene survey to establish the baseline and subsequently implement the recommendations	CEO/ Directorate Programmes and Standards	% level of implementation	100	100	100	100	100
	Establish a dynamically and regularly updated cyber hygiene register and map (geospatial)	CEO/ Directorate Programmes and Standards	% level of implementation	100	100	100	100	100
	Implement and manage policies and procedures on cyber hygiene	CEO/ Directorate Programmes and Standards	% level of implementation	100	100	100	100	100
	Testing and certification on ICT professionals	CEO/ Directorate Programmes and Standards	% level of implementation	100	100	100	100	100

Strategy 20: Enhance ICTA values and culture for effective leadership									
Strategic Programmes/Projects /Initiatives	Activities	Responsibility	KPI / Objective Verifiable Indicator (OVI)	Baseline	Implementation Period (FY)				
				19/20	20/21	21/22	22/23	23/24	
Establish and institutionalize system of values, culture and principles to promote effective leadership	Train top management on national values and code of ethics	CEO/ Directorate Corporate Services	% level of implementation	100	100	100	100	100	100
	Train all staff members on values, culture and principles of governance	CEO/ Directorate Corporate Services	% level of implementation	100	100	100	100	100	100
	Undertake a survey to establish ICTA values and culture and develop programmes and initiatives for improvement	CEO/ Directorate Corporate Services	% level of implementation	100	100	100	100	100	100
	Undertake annual Board evaluation and implement the recommendations	CEO/ Directorate Corporate Services	% level of implementation	100	100	100	100	100	100
Strategy 21: Integrate a risk management approach in governance									
Strategic Programmes/Projects /Initiatives	Activities	Responsibility	KPI / Objective Verifiable Indicator (OVI)	Baseline	Implementation Period (FY)				
				19/20	20/21	21/22	22/23	23/24	
Establish an Enterprise Risk Management Framework at all levels of management	Develop an Enterprise Risk Management Framework	CEO/ Directorate Corporate Services	% level of implementation	100	100	100	100	100	100
	Train all Risk Management Champions and cascade risk implementation at all levels of management	CEO/ Directorate Corporate Services	% level of implementation	100	100	100	100	100	100
	Continuous scanning of environment to identify emerging risks	CEO/ Directorate Corporate Services	% level of implementation	100	100	100	100	100	100





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Year 2018



