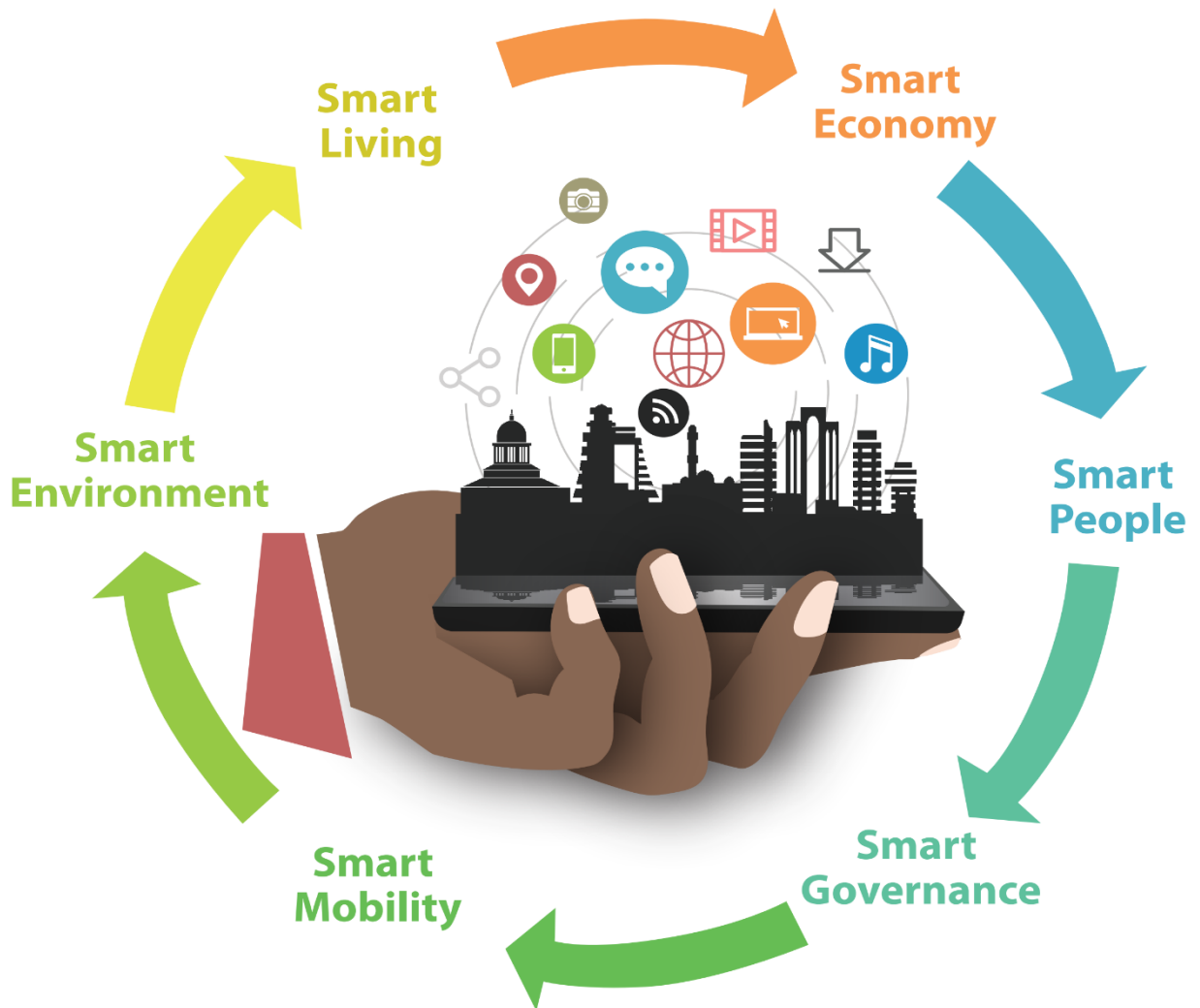


INFORMATION SYSTEMS

STRATEGIC PLAN 2020 - 2026



Towards a Smart City



INFORMATION SYSTEMS STRATEGIC PLAN 2020/2021-2025/2026

Acknowledgement

The Information Systems Strategic Plan 2020-2026 has been developed by the Information Systems Department with Support from the National Information Technology Authority Uganda (NITA-U) and KCCA Management. The process was spearheaded by Martin Ssekajja, the Deputy Director, Information Systems, Patrick Musoke, the Deputy Director, Strategy Management and Business Development.

The main authors of this strategic plan were Frank Tumusiime Batungwa, Edison Masereka, Robert Kyukyu, Agnes Kahwa, Agatha Ainomugisha and Rowena Turinawe.

The plan formulation benefited greatly from the detailed focused group discussions with all directorates and departments led by their Directors and inputs from the different sections of the ICT department. The formulation of this strategy was facilitated by Humphrey Anjoga, an Individual Consultant.

Table of Contents

Acknowledgement	I
Table of Contents	II
Abbreviations	III
List of Contributors	V
Welcome Messages	1
Introduction	3
Current Environment	7
Smart City Strategic Plan Overview	16
Smart City Strategies & Actions	16
Implementation, Monitoring and Evaluation	20
Required Resources and Outputs	23
Information Systems Strategy Map	25
ICT Department Implementation Oversight.....	26
Appendices	29

Abbreviations

KCCA	:	Kampala Capital City Authority
ICT	:	Information and Communication Technology
ISSP	:	Information Systems Strategic Plan
NITA-U:		National Information Technology Authority Uganda
MDA	:	Ministries, Departments and Agencies
NDP	:	National Development Plan
AI& ML:		Artificial Intelligence and Machine Learning
BI	:	Business Intelligence
CIO	:	Chief Information Officer
OTT	:	Over The Top Services
CAM/CAMV	:	City Address Model and Computer Aided Mass Valuation
IT	:	Information Technology
MoUs	:	Memorandum of Understanding
MoL	:	Ministry of Internal Affairs
MoFPED	:	Ministry of Finance, Planning and Economic Development
URA	:	Uganda Revenue Authority
MoD	:	Ministry of Defense
MEAW	:	Ministry of Environment and Water
NEMA	:	National Environment Management Authority
NITA	:	National Information Technology Authority Uganda (NITA-U)
ETS	:	Directorate of Engineering and Technical Services
PHSE	:	Public Health and Environment Services

List of Contributors



Patrick Musoke

Deputy Director Strategy Management
and Business Development



Frank T. Batungwa

Manager, Business Processes



Edison Masereka

Manager, Research & Development



Robert Kyuku

Manager, Strategy Manager



Agnes Kahwa

Systems Architect



Agatha Ainomugisha

Directorate of Revenue

EXECUTIVE SUMMARY

A smart city is one that utilizes and optimizes systems by use of technology and data to improve service delivery and customer satisfaction while creating new opportunities for engagement and problem-solving for better shared outcomes. With that in mind, the KCCA Smart City Strategic Plan strives to holistically weave technology throughout the urban fabric as a means of improving and enhancing community quality of life.

KCCA Smart City is an initiative of the Department of ICT that focuses on people first, recognizing that it is civic leadership and the broader community that makes Kampala a great place to live, work, and play. As resources and time are limited, KCCA Smart City focuses on empowering data-driven decision making, engaging stakeholders with relevant and timely information, and incorporating user feedback into service and program design for a better experience and outcomes.

KCCA Smart City builds on the strengths of Kampala as a city, and concurrently addresses current and future challenges involving the core SMART values of Sustainability, Mobility, Accessibility, Resiliency, and Transparency. These core values are inherent throughout the Strategic Plan, and serve as the guiding north stars based on current and future City priorities. KCCA Smart City capitalizes on the innovative initiatives already underway and seamlessly integrates technology, digital tools, and data to enable a connected, satisfied and innovative citizen experience.

A smart city starts with a smart city hall, so Kampala Smart City is designed to look inward to build an understanding of staff and the capacity to adapt to change. Therefore, the Strategic Plan details four foundational goals surrounding this approach.

- Enhance institutional effectiveness by providing Integrated Information Systems to support the Authority's mission and vision;
- Enhance the client experience by improving navigation, communication and access to services;
- Improve Collaborative Experience with strategic partners to Deliver Quality ICT Services and;
- Increase Productivity and efficiency through innovations to meet the client changing needs.

Welcome Messages

Message from the Executive Director

As our city grows, we are tasked with providing an increasing array of services in a more open and responsive way.

In response, the Kampala Capital City is shifting its view to recognize our role as part of a larger ecosystem. We are at the crossroads of a complex system of social, economic, political and technological networks. Embracing the perspectives from individuals, industry and academic sectors of the community is how we can best achieve our goals, deliver programs and services and provide an exceptional quality of life for citizens.

Embracing a Smart City is a cornerstone for our role as leaders to build effective institutions and enhance public service delivery. The next frontier for Authority is how to use data and analytics to make better evidence-based decisions. All of this information has tremendous potential to influence how we plan, build and live in our city.

Kampala as a Smart City, will use technology to transform how we build, manage and run the Authority's agenda which include but not limited to garbage collection, street parking, permits, trading licenses, move people around and design a carbon-neutral community. As a Smart City, we will continue to find new strategies and solutions for the challenges and opportunities that face our city. It will enable us to build a city that is more resilient, livable, workable and altogether more uplifting.



Message from the Head, Information Systems Department

This Information Systems Strategic Plan (ISSP) 2020-2026 also herein referred to as the Smart City Strategic Plan) 2020-2026 is the guiding strategy for planning and implementing Smart City initiatives for KCCA, and the highest level planning document for ICT across our organisation. The Smart City Strategic Plan 2020-2026 will guide and inform decisions on any changes to technology and is an integral part of an organization's future focus. This Smart City Strategic Plan is a strategic view of the future for KCCA's Information Systems and support and will help us understand the investment KCCA intends to make in its technology.

Our thinking and planning to refresh the Information Systems Strategic Plan was developed following pending activities in the previous KCCA IT strategy plan, a current needs assessment from internal and external stake holders and objectives derived from the KCCA Corporate Strategy and other national strategic documents

From the analysis of the feedback from the discussions, we concluded that there should be a strategic emphasis to transform Kampala into a Smart City. The Department of Information Systems will continue to be responsive to the needs of our clients, customers and business partners, and to refine the information and communication technology direction as we transform Kampala towards a Smart city.



Ssekajja Martin
Deputy Director, Information
Systems

Introduction

The Need for Kampala as a SMART City

The world is evolving, and cities are near the epicenter of this evolution. Society has become increasingly digital, mobile, connected and urban. In a government context, the need to be responsive, transparent and efficient is higher than ever. Some experts even suggest that cities are entering a new stage of modern transformational change, shaped by technological innovation. Technology is part of the fabric of the information and knowledge economy, as fuel for opportunity, innovation and engagement. Technologies make the connections between service providers and users tighter, faster, more personal and more comprehensive. They enable residents, businesses, and governments to work more efficiently, interact with each other in new and better ways and increase local quality of life.

Meanwhile, modern cities are under tremendous pressure from a range of social, economic and environmental factors. These can include population growth and urbanization, economic and demographic change, regulatory demands, environmental impacts, technological advancement, infrastructure renewal, rising public expectations and more. These factors are complex, highly interdependent and feature competing objectives from different stakeholders.

To meet the challenges of the modern age and our evolving digital society, progressive cities are embracing “Smart City” principles and technologies. Kampala is a community that recognizes the value in doing so, as a complement to its existing reputation as Uganda’s best place to live, best place to raise a family, and best place to invest. The KCCA Information Systems Strategy 2020-2026 is built on the premise of the KCCA Corporate Strategy, National Development Plan (NDP) III in particular pointing to the following National Development strategies; 1) Re-engineer the Public service to promote investment (4.6.20); Enhance partnerships with non-state actors for effective service delivery (4.6.21); Increase access to social protection (4.6.16); Promote Science, Technology, Engineering and Innovation as well as ICT (4.6.15); and Improve access and quality of social services (4.6.12) among others and last the National Vision 2040. The formulation of the Information Systems strategy was guided by the theme: ***Towards a Smart City***. The Plan is also formulated in line with the KCCA ICT Strategic Direction to ***efficiently, effectively deploy, manage and continually improve ICT systems to enhance the productivity of KCCA***.

The Information Systems Strategic Plan 2020-2026 is also referred to as the KCCA Smart City Strategic Plan 2020-2026.

SMART CITY Definition and Description

There is no universal way to design a community of the future, and there is currently no one definition of a Smart City. Even while the term ‘Smart City’ has become the most commonly used, it can be varied with alternate terms such as ‘Digital City’, ‘Intelligent Community’, ‘Cyber City’, and others. Regardless of the label, a Smart City strategy or

initiative must be relevant to each individual community. Therefore, the definition of a Smart City adopted for use in this Strategic Plan is:

“A City area that solves its core issues through innovation and collaboration, and that applies new technologies and data for the benefit of all”

Smart Cities are forward-looking, progressive and resource efficient. They promote social and technological innovation, foster openness and accessibility, incorporate new development and management concepts, engage their residents over multiple channels and experiment with new approaches to city life.

Strategic Alignment and Community Benefit

To move forward as a Smart City in a coordinated manner, KCCA requires an integrated Information Systems Strategic Plan aligned to its current situation as a lens through which the city can view and plan for its future. This Smart City Strategic Plan is a roadmap that KCCA can follow as it evolves through the 21st century, and seeks to support local transformation in effectiveness, collaboration, client experience and service delivery through innovation.

In preparing the Smart City Strategic Plan, it was ensured direct alignment to the entity's vision and mission.

The Vision of KCCA is ***“To be a vibrant, attractive and sustainable City”***

It was also recognized that Smart City initiatives connect to almost every area and directorate/function of the Authority, and complement almost all of the Authority's other strategies in some way, while also shaping future decisions within those strategies as well. These efforts are important to generate direct benefits to Kampala's residents, visitors, businesses, and city operations.

Focus Areas

As Smart Cities encompass a broad and deep array of potential initiatives, a framework was also required to frame discussion and emphasize key concepts. The Information Systems Department has adopted a set of focus areas that were utilized to identify and present various strategies for the Strategic Plan. The Information Systems Strategic Plan envisions to transform Kampala as a smart city and will focus on the following areas:

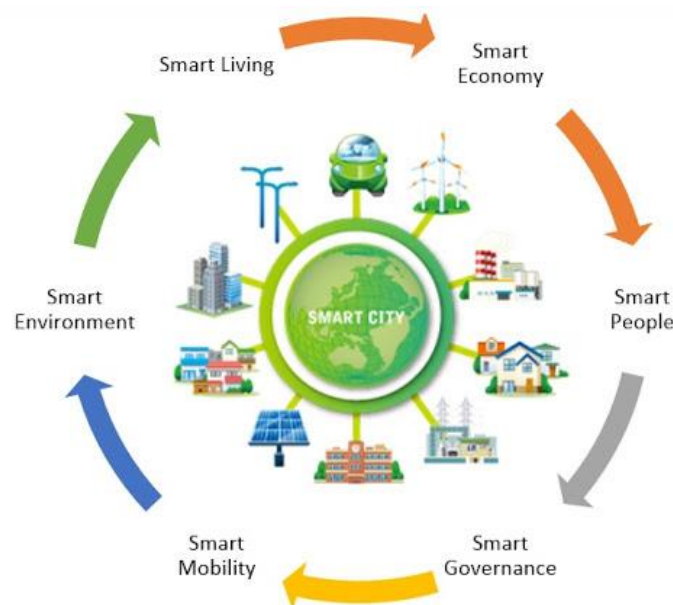
- SMART People: ***Connect, support, and empower citizens to innovate for sustainable Development.***
- SMART Mobility: ***Improving the efficient movement of people and goods within and through Kampala city.***
- SMART Governance: ***be open and transparent, accountable, efficient and accessible through the use of***

digital services and technologies that improve customer service.

- SMART Economy: ***Facilitating the success of existing businesses, and attracting innovative businesses and entrepreneurs to Kampala City.***

- SMART Environment: ***Supporting effective environmental monitoring and sustainability through technology.***

- SMART Living: ***Applying Smart systems to improve quality of life, public services, and safety of citizens.***



Key Outcomes

This Smart City Strategic Plan 2020-2026 required a strong foundation and a strategic approach to its design, particularly as it was the first of its kind for the City. The Strategic Plan therefore aligned to a set of key outcomes and conceptual focus areas. The Strategic Plan supports four key outcomes, aligned directly to the needs of the Authority and broader community. These outcomes served to focus discussion, and guide the selection of each of the Strategic Plan's strategies and actions.

The outcomes include:



Institutional Effectiveness

Support opportunities for process alignment, cost reduction, and revenue improvement.



Client Experience

Enhance client experience through participation, client feedback and Online efficiency.

**Collaboration Experience**

Create effective collaborations with other government entities, private sector and international organisations to promote Smart City Services.

**Service Delivery through ICT Innovation**

Identify, partner and support innovations or technologies to improve asset management, sustainability, and enhance city service delivery.

KCCA's SMART City Foundation

Kampala Information Systems Strategic Plan has been built on a strong foundation of the City's previous efforts and the community's key advantages. The Authority has previously completed a variety of Smart City projects, for example, the City has installed e-Services like eCitie, interactive web portal, Unified messaging, Automated Revenue Collection, Computer Aided Mass Valuation and much more. These initiatives have been built upon, and integrated into the strategic directions within this Strategic Plan.

The capital city community itself also has numerous advantages that make it a prime candidate for Smart City success. As a capital city of Uganda, it is one of the most preferred place to live, raise children and invest. Kampala is also in one of the higher growth regions of Uganda with forecasts that the community population will steadily grow. This growth will mean need for new jobs, new homes, new infrastructure and new economic activity. However, with this growth also comes new pressures, such as on local infrastructure, City programs and services, transportation networks, and environmental preservation. This reinforces the importance of the Smart City Strategic Plan as a proactive response – a means to ensure its infrastructure is future-proofed, to integrate key principles into new neighborhood planning and to embed standards into policies that will ensure the community's long-term success.

Current Environment

ICT Department Organisation

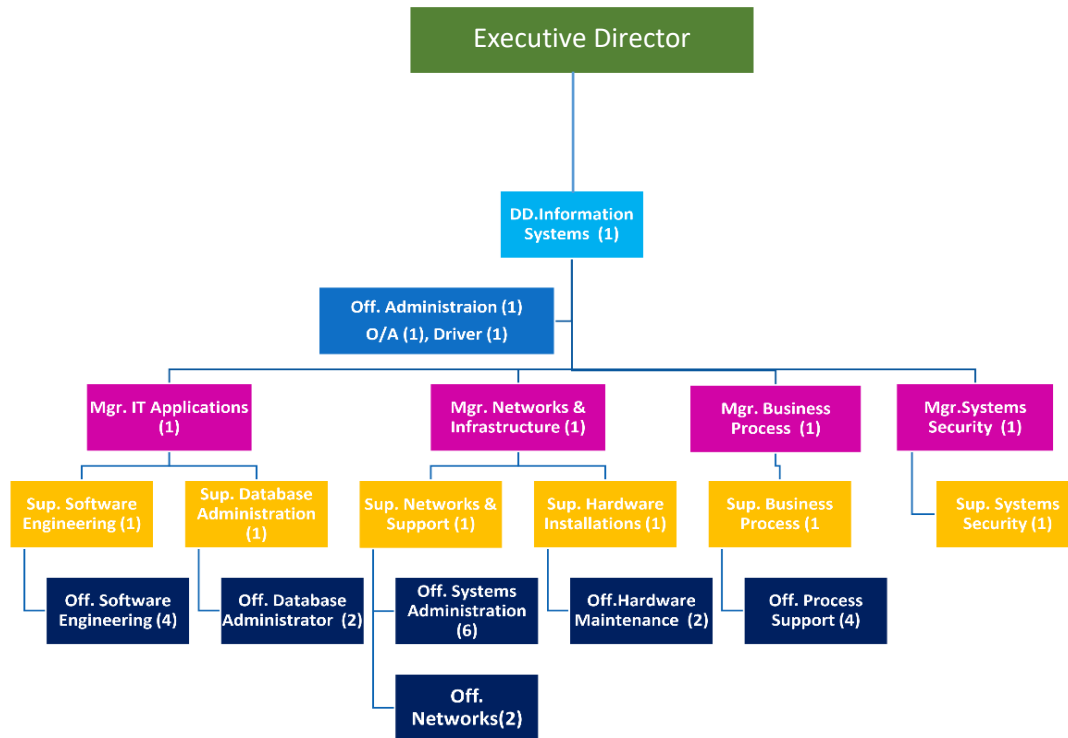
ICT Department is led by the Deputy Director, ICT. The department is responsible for planning the development, implementation, maintenance and support of all ICT systems and infrastructure to the Authority and guiding the Authority on the development and implementation of ICT policies and procedures. The strategic direction of this department is to provide efficient, effective and continuously improving ICT systems to enhance staff productivity.

The core functions of the Department of ICT include;

- a) Develop, review and coordinate implementation and compliance to approved ICT policies and best practices in line with the KCCA ICT Strategy and industry standards.
- b) Plan, coordinate and monitor customization, implementation and operational support of ICT systems/infrastructure in line with identified departmental needs and timeframes.
- c) Review, monitor and make periodic recommendations for updating the ICT Strategy in accordance with departmental business plans, stakeholder interests and management decisions.
- d) Review and monitor systems security, data integrity and disaster preparedness of all ICT systems/infrastructure and make recommendations for smooth business continuity mechanisms.

- e) Study and monitor ICT Industry trends/emerging technologies and advice management, staff and sector stakeholders on the best solutions to adopt.
- f) Initiate and coordinate staff ICT literacy programs to ensure that systems usage conforms to set quality service standards in line with the KCCA objectives.
- g) Develop integrated information sharing ICT systems in line with the KCCA ICT Strategy and Management decisions.

Structure of the ICT Department



Smart City Governance

The office of the Executive Director has the overall oversight of the KCCA Smart City Strategic Plan. The Deputy Director, Information Systems shall coordinate, monitor and evaluate the implementation of Smart City Initiatives.

ICT Steering Committee is the key body that should convene on the basis of need to ensure that the SMART City strategies being pursued by the Authority are aligned with its strategic and corporate objectives, budget and Results and Services Plan. The ICT Steering Committee will oversee smart cities projects. It shall oversee the development and successful implementation of this SMART City Strategy. The ICT Steering Committee shall be appointed by the Executive Director, with clear terms of reference and will comprise of ICT Management, and Leaders from across the directorates.

Smart City Framework: The Smart City Framework will provide clear demarcation of scope of roles and responsibility for prioritizing, developing and implementing Smart City services and related digital projects. This Smart city framework could also provide a needs assessment methodology that shall identify/define the gaps between the current state and desired state of the Smart City/Digital projects.

Ongoing Public Engagement: Smart City Strategy has been designed with public engagement as a key feature. Through collaborations, client engagement and the Innovation Challenges the public will be asked for input on an ongoing basis. This input will be used to inform and direct decisions about Smart City projects.

Internal and External ICT Users

Internal Users: One of the purposes of this Smart City Strategic Plan is to encompass the relevant business needs of all the Authority users. Therefore, it is important to understand the business goals and needs of the Authority's directorates/departments. All directorates and/or departments were engaged through Focused Group discussions to understand goals and Information Technology services and requirements.

External Users: The Authority directorates provide services to external users including residents, local businesses and industries, community organizations, and other governmental agencies. Technology has either a direct or an indirect impact on the City's ability to deliver these services. The KCCA's long-term outcomes include community engagement and fostering a dynamic smart economy. The Smart City Strategic Plan recognizes the need to consider how technology can affect the external users and assist in achieving the Authority's goals

Vision, Mission and Mandate

- **Vision of Kampala Capital City Authority**
 - To be a vibrant, attractive and sustainable City
- **Mission of Kampala Capital City Authority**
 - To deliver quality services to the city
- **Mandate of the ICT Department**
 - To plan the development, implementation and support of all ICT Systems and Infrastructure of the Authority.
- **Core Objectives**
 - Improve Institutional Effectiveness
 - Improve Client Experience
 - Improve Collaboration Experience
 - Improve Service Delivery through ICT Innovation

SWOT Analysis of ICT Environment

S

Management Support, Focused Leadership, Competent ICT team, Strong ICT Policies, Availability of Information technology infrastructure, Good Communication channels, Well defined stakeholders

W

Insufficient funds, Limited skills to match expanded ICT roles, Low technology illiteracy amongst staff, Low staffing levels, Staff resistance to adopt to change, Disintegrated systems, Low levels of staff morale, Inadequate office space, Low levels of Citizen participation, Limited Intergovernmental (MDA's) partnerships, Un-defined business processes in various directorates, Underutilised service desk, Lack of specialized IT Infrastructure to support specialised services like GIS, aging network infrastructure, better process documentation, standalone applications, weak linkages with key stakeholders, and limited connectivity within the office environment.

O

Presence of NITA-U, National Fibre Optical Cable, NITA-U Data Center , National SMS Gateway and e-Payment Gateway, Good Corporate image, Existence of Development partners, Collaboration with MDA's and Academia, Cloud applications and platforms, Grant opportunities, Smart City and e-Government opportunities (new cost-effective mature technologies, research programs, projects, initiatives, events, awards, Internet of Things, robotics, AI& ML, big data, mobile technologies, Cloud resources, Electric/Connected /Smart/Autonomous Vehicles), ICT literate Populace, Supportive legislative initiatives and enactments, Growth and advancement of ICT in the Country, Increased public awareness and demand for e-services, Possibility of benchmarking with other regional/County Governments, regionally and globally, Ongoing public sector reforms, Well spread mobile penetration, and economically endowed population, social distancing protocols, and greater reliance on technology in government operations, Increased use of digital technology Business transactions due to COVID19.



Political interference, Political pronouncements, Unfavourable government policies e.g. OTT and NITA-U Cloud policies, Expensive Internet services, Inadequate ICT coverage in the City, Resistance to change by stakeholders, Enlightened and litigious citizenry, changing user requirements, Changing ICT Technologies, Physical, systems security attacks, changing legislations, Unforeseen system failures, and use of bootleg software.

Current Departmental Projects

In the previous planning period, the department has registered success in various projects and initiatives including International awards such as Chief Information Officer Top 100 Recognition, both 2014 and 2015 by Price Waterhouse Coopers and CIO East Africa, Kenya; Business Excellence Award 2015, Uganda Communications Commission; Digital Impacts Award, 2014 and Executive Director's Award for Best team 2013.

The Information Systems Department has registered key achievements in the previous years which include among others; the implementation of a modern data center for consolidation of all application hosting and data storage, Unified messaging for computer and mobile users for 1400 staff, Enterprise Content Management System, Network installation at nine KCCA offices and 14 Traffic signals, interactive web portal, ICT structure, Automation of Revenue Collection, Computer Aided Mass Valuation, Automation of Human Resources Processes, KCCA Call Centre Solution, and managed printing and photocopy services.

The department will continue to run and complete the current projects such as Weyonje, CAM/CAMV, eCitie Improvements, SACCO Systems, HR Management system and ensure the current partnerships such as WeGo continue to operate.

Some of the cited achievements of the ICT department are of great benefit to the Authority as illustrated below; -

The Data Centre facilitated consolidation of all application hosting and data storage hence improved security, compliance and maintenance costs of IT applications of KCCA. The datacenter optimized the power usage of ICT equipment hence reducing on the cost of power.

*The **Enterprise Content Management System** through the intranet has provided a one stop center for all KCCA staff to access business information, collaborate and share documents. This in the long run has led to increased staff productivity and experience, improved internal communication and knowledge sharing.*

*The **KCCA call center** is equipped with toll free calling solutions that enable the city dwellers to log their queries and complaints at no charges.*

This has promoted citizen participation in the delivery of services and enabled collection of feedback from citizens.

*The Authority's **ICT Strategic partnerships** such as WEGO and ASTON have provided opportunities for building staff capacities. They have also provided benchmarking avenues for ICT projects with other cities.*

*The **KCCA Web Portal** has greatly improved the corporate image of the Authority; it has enabled quick access to authority information by the citizens. The web portal has played a great role in displaying KCCA projects hence attracting development partners.*

*The authority deployed **Computer Aided Mass Valuation and City Address Model** which has improved revenue collection from property tax. Together with GIS the City address model has improved navigation for city residents and tourists.*

Automation of revenue collection
through e-citie has increased revenue collection by 200%, it has reduced the turnaround time of doing business for example obtaining a trading license was changed from 21 days to 3 hours.

ICT Achievements in Pictures



Well-equipped and networked office space



Traffic control center



Various Communication platforms such as Email, Intranet, VoIP, etc..



ICT Department received various awards such as Best CIO by National Information Technology Authority-Uganda



CCTV Cameras Installation At City Hall



Centralized printing and photocopy services



Networked Traffic Junctions



Digital City Address Model



KCCA Call Center



KCCA Data center



Automation of Revenue Collection E-CITIE



Automation of Human Resource Management Processes



Strategic partnerships- Launch of the Africa Smart Cities Network (ASTON). Kampala is the Lead city.

Smart City Strategic Plan Overview

Overall, Smart City strategies have been identified for the KCCA ICT Department, based on their impact on key outcomes and the Authority's strategic direction.

Following is a listing of each proposed strategy and its related actions. Again, these strategies have been divided into focus areas for ease of reference, and developed based on the key outcomes (institutional effectiveness, client experience, collaboration experience and service delivery through innovation). The strategy summaries also contain an indication of current status and estimated timing. Estimated timing represents the potential timing of each action item, subject to change based on budget availability, organizational capacity, and other long term planning.

Smart City Strategies & Actions

1.1 Core Objectives and Focus Areas

Each of the 4 (Four) core strategic objectives has focus areas defined. The subsequent Actions are based on the projects under each focus area and addresses the core objectives.

1.1.1 Objective #1. Improve Institutional Effectiveness

This objective aims at enhancing institutional effectiveness through the provision of Integrated Information Systems to support the Authority's mission and vision. It will involve business process re-engineering, documentation and implementation of critical business processes for the Authority.



Core Objectives

- To re-engineer, automate and integrate core business processes across the Authority for effective service delivery;
- To enhance the capacity of ICT staff and end users;
- To improve network connectivity, security, availability and access in the Authority and across the City;
- Apply data analytics and business intelligence solutions to drive better informed decisions;
- To acquire, develop and continually maintain the Authority's ICT applications;

Major Direction of Change and Benefit

- KCCA Processes aligned and integrated to achieve Authority objectives;
- Reduction in operational costs; and
- Improvement in the collection and realization of revenue for the Authority.

Focus Areas

- SMART Governance
- SMART Environment

1.1.2 Objective #2. Improve Client Experience

This objective aims at improving the experience of both internal and external clients through the navigation, communication and access of Smart City Services.

Core Objectives

- Enhance client participation in the delivery of SMART City Services;
- Improve the Quality of ICT Services through the adoption of the Information Technology Service Management (ITSM) Framework;
- Improve citizen-centric initiatives to obtain feedback about city services;
- Support inclusion and accessibility to services through digital technology; and
- Engage with customers and key stakeholders in the sourcing, implementation and development of new technologies.



Major Direction of Change and Benefit

- Enhance involvement of citizens in the governance of the city and service delivery;
- Enhanced citizen engagement, feedback and participation in the city development; and
- Improved online efficiency in customer service delivery.

Focus Areas

- SMART People
- SMART Living
- SMART Environment
- SMART Mobility

1.1.3 Objective #3. Improve Collaboration Experience

This objective aims at enhance the collaboration of strategic partners to deliver Quality Smart City Services to Kampala residents, visitors and the business community. It will involve formation of consortiums and public private partnerships with key stakeholders including Ministries, Government Departments, Agencies and Development Partners to improve service delivery.

Core Objectives



- Champion the formation of consortiums with public entities for effective service delivery;
- Enhance Public Private Partnerships in providing and promoting Smart City services; and
- Enhance relationships with development partners for resource mobilization.

Major Direction of Change and Benefit



- Improved flexibility in the authority's service delivery
- More productive engagements with strategic partners
- Attraction of top talent through collaborative partnerships
- Accelerated business/service delivery
- Higher retention rates of employees
- Sharing of Innovative ideas
- Better alignment with stakeholders



Focus Areas

- SMART People
- SMART Economy
- SMART Mobility

1.1.4 Objective #4. Improve service delivery through innovation

This objective aims at increasing the productivity and efficiency through innovations to meet the changing client needs. It will involve developing an Innovation framework and policy to guide innovation accelerator programmes between the Authority and the community including higher institutions of learning.

Core Objective

- Enhance the ICT Innovation Framework.
- Enhance partnerships to accelerate development of ICT innovations; and
- To foster community-based innovation and digital literacy through defined programs, public education, and co-creation initiatives.

Major Direction of Change and Benefit

- Meeting client's needs and expectations through innovative service delivery approaches
- Transparent and prudent use and distribution of city resources.

Focus Areas

- SMART People
- SMART Living
- SMART Environment
- SMART Mobility

Implementation, Monitoring and Evaluation

Overall responsibility for the implementation and delivery of this strategic plan lies with the Office of the Executive Director. Under the guidance of the Deputy Director, Information Systems, all ICT section Managers, Manager Networks and Infrastructure, Manager IT Applications, Manager Business Processes and the Supervisor Systems Security, will coordinate and are responsible for implementing, monitoring and evaluating the Smart City Strategic Plan. The Business and Systems Analyst will provide overall assistance to the departments and ensure that all activities are aligned with the Strategic Plan and evaluated on a quarterly, biannual and annual basis.

The ICT Steering Committee is the key body that should convene on the basis of need to ensure that the ICT strategies being pursued by an Authority are aligned with the NDP III, KCCA strategic and corporate objectives, budget and Results and Services Plan. It shall ensure the effective use of ICT resources and that only prioritized smart city projects/initiatives are implemented.

Included in this plan, is the implementation matrix (Appendix 1). This matrix will assist the ICT Department in developing annual work plans and delivering on the Smart City Strategic Plan. The implementation matrix outlines a proposed timetable for the implementation of each Smart City Project/Activity proposed in the Smart City Strategic Plan. The implementation matrix will need to be a flexible document that will be seen as a guide that can be amended to suit the requirements of both internal and external users.

Smart City Strategic Plan Implementation

The Smart City Strategic Plan provides a 5-year outlook and will be directed by the following:

- The Smart City Goals that will be the basis for measurement tools for Smart City initiatives.
 - The Smart City Framework will guide the direction and set the basis for Smart City processes.
 - The Smart City Strategic Plan that aligns with strategic processes across the organization and will work in tandem with Smart City projects.
 - A series of actions and processes as outlined in the Appendix 1, of this document. The ICT Department, a home to the Smart City team, will both lead on projects and provide an advisory role throughout the Authority.

- This Strategic plan is intended to be a living agile document that is intended to keep in line with changes in technology, public and social expectations.

Guiding Principles for Implementation

To be flexible and recognize that new opportunities will continually arise as digital technologies evolve. Potential new activities can be assessed and prioritized based on alignment with the strategic outcomes and initiatives that underpin this Strategy.

Customer Centric	Residents, business, industry and government will be engaged early and often. We will use technology to be more community connected and encourage participation, access and inclusion through the design of citizen centric digital services.
Collaboration	We will make it easy to partner and focus on shared outcomes.
Innovation	We will influence regulation to reduce red tape, test and trial new technology.
Measurable	We will measure the effectiveness of the smart city approach to projects

Project/Initiative Prioritization	Priority will be given to projects that meet any of the following criteria
1. In Train	We already have a project underway that supports one or more of our Smart City Objectives
2. Foundation Project	Particular infrastructure that is required to support Smart City Objectives
3. Strong Business Case	A commercial business case that shows significant savings or community benefit
4. Funding Available	Grant Funding is available
5. Demonstration Project	Pilots and demonstrations projects that are visible to the community and displays the community benefit

Risk Management

This is the identification, assessment, and prioritization of risks followed by coordinated and economical application of resources to minimize, monitor, and control the probability and/or impact of unfortunate events or to maximize the realization of opportunities. Risk is measured in terms of likelihood and impact.

The KCCA Risk Management Manual will be utilized as an instrument to assist in identifying, assessing, prioritizing risks during the implementation, monitoring and evaluating the smart city initiatives and projects. The Manual will also be used in identifying opportunities to mitigate risks.

Measuring the Smart City

The Kampala Smart City projects/initiatives will be measured and tracked through a variety of tools including:

- Achievements and ICT Department's Annual Business Plan and Budget.
- Annual Smart City Strategic Plan progress reports
- Global, national and regional benchmarking.
- Against the goals of the Smart City

Required Resources and Outputs

Smart City Strategic Plan Resourcing

Implementation of the Smart City Strategic Plan will require dedicated staff. This staff will develop the Smart City program and manage the complex Smart City projects and relationships required for a Smart City. The required financial resource will be identified through the indicative and entity's Annual Budget process.

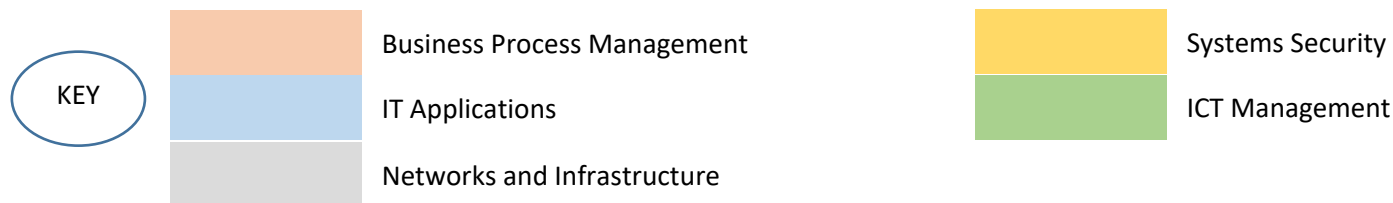
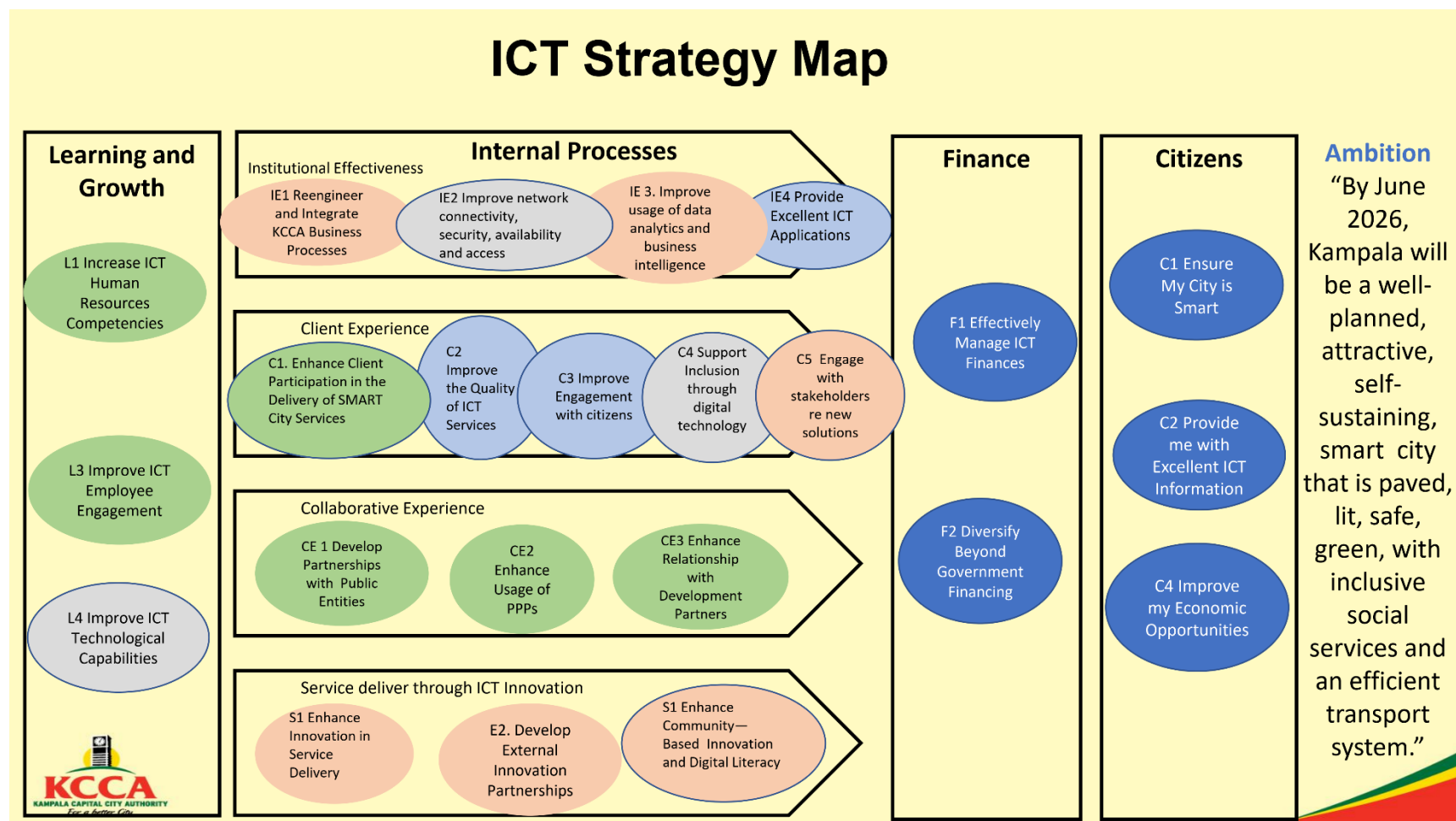
Innovation Challenges will also require an innovation fund to ensure that adequate resources are available to contribute to the co-creation or innovation of the challenge. Innovation Challenges and pilot projects will be public procurements.

Smart City Strategic Plan 5 Years Indicative Budget

SNN	Strategy and Action	Costs (UGX Millions)
Goal 1: Enhance institutional effectiveness by providing Integrated Information Systems to support the Authority's mission and vision		
1.1	To re-engineer, automate and integrate key business processes across the Authority for effective service delivery	20,000
1.2	To enhance the capacity of staff in the use and support of ICT services	750
1.3	To improve network connectivity, system security, availability and access in the Authority and across the City	4,000
1.4	Apply data analytics and business intelligence solutions to drive better-informed decisions	820
1.5	To acquire, develop and continuously maintain the Authority's ICT applications and data	6,900
1.6	Integrate Information security management services	910
Goal 2: Enhance the client experience by improving navigation, communication and access to services.		
2.1	To enhance client participation in the delivery of SMART City Services	720
2.2	To enhance the capacity of internal and external clients in the utilization of Smart City services	1,500
2.3	To improve citizen-centric initiatives to obtain feedback about city services	50
2.4	To support inclusion and accessibility to services through digital technology	650
2.5	To engage with customers and key stakeholders in the sourcing, implementation and development of new technologies.	50
Goal 3: Improve Collaborative Experience with strategic partners to Deliver Quality IT Services.		
3.1	To champion the formation of consortiums with public entities for effective service delivery	50
3.2	To enhance Public Private Partnerships in providing and promoting Smart City services	50
3.3	Enhance relationships with development partners for resource mobilization.	50
Goal 4: Increase Productivity and efficiency through innovations to meet the client changing needs.		
4.1	To enhance the ICT Innovation Framework.	50

4.2	Partner to launch a multi-sector innovation centre where entrepreneurs, business, academic, and the public to collaborate and create shared value.	700
4.3	Promote an Innovative Culture	20

Information Systems Strategy Map



ICT Department Implementation Oversight

BUSINESS PROCESSES MANAGEMENT SECTION

The section is mandated to support the core business processes and systems which are driving the business environment in KCCA.



Frank Tumusiime Batungwa
Head, Business Process

Core Functions:

- Manage KCCA Business Processes; impact analysis; change orders; improvements; develop business rules to support KCCA systems.
- Management of a team of resources to specifically provide for Level 2 business process & information system support.
- Lead development, integration, and maintenance of KCCA information systems in liaison with IT Applications Section.
- Develop and maintain all business procedure guidebooks and manuals.
- Define and develop specifications for new applications and modules for integration with KCCA operating systems.
- Conduct regular research and innovation on best practices for continuous business process improvement.

Strategic Direction: To re-engineer, automate and integrate key business processes across the Authority for effective service delivery.

MANAGER NETWORKS AND INFRASTRUCTURE SECTION

The Mandate of the Networks and Infrastructure section is to Plan and monitor the installation, maintenance of hardware infrastructure, performance of the KCCA network system and manage a system for business continuity in line with the industry best practices and in accordance with the KCCA ICT Strategy.



Leonard Walekula
Head, Networks and Infrastructure

Core Functions:

- Design, Plan, Supervise and guide the Implementation and use of WAN/LANs as per ICT Strategy & requirements.
- Develop guidelines for network usage, administration and security mechanisms and monitor network performance and level of availability according to the agreed standards.
- Maintain a database /Inventory of Equipment, their respective configurations, and Service Warranties and plan for acquisition and disposal of IT equipment and materials for Hardware and Network maintenance activities as per the KCCA guidelines.
- Coordinate and evaluate the implementation of the Help Desk services to sustain a high-quality customer care service.
- Plan, monitor and evaluate the implementation of best practices and approved service standards.

Strategic Direction: To improve network connectivity, system security, availability and access in the Authority and across the City.

IT APPLICATIONS SECTION

The Mandate of IT Application section is to plan, monitor the translation of KCCA system requirements and processes into an automated customized solution, coordinate and maintain KCCA information and data in line with the business plans, management decisions and ICT Strategy



Ronald Mayambala
Head, IT Applications

Core Functions:

- Translate operational requirements into functional specifications for use by developers in collaboration with relevant business units.
- Define strategic technical direction for application development & guide development in line with ICT Strategy.
- Develop, test, and deploy business applications
- Develop and maintain all standards pursuant to data structures, models, and provide life cycle architectural guidance to ensure quality technical deliverables.
- Develop and monitor the implementation of scheduled backups; develop strategies for data acquisitions, archive recovery, and implementation of the data warehouse per industry best practices and KCCA requirements.
- Design Data Architectures and build the Data Warehouse and maintain KCCA databases and Database servers in line with the KCCA requirements.
- Develop schemas for all business applications, review current operational data structures and recommend optimizations and reconfigurations as warranted.

Strategic Direction: To acquire, develop and continually maintain the Authority's ICT applications

SYSTEMS SECURITY SECTION

The Mandate of the Systems Security section is to Plan, co-ordinate the risk assessment, install controls, and manage the security of the enterprise system networks, software, databases and hardware that support KCCA's business in accordance with the ICT Policy.



Bornix Nyine
Head, Systems Security

Core Functions:

- Implement and monitor of the Information System Security Policy, sub-policies and oversee their adherence in accordance with the national ICT Policy Standards.
- Coordinate Audit risk assessment for Enterprise Systems.
- Monitor Network, Database, Application & Hardware security.
- Install and implement controls for security loopholes.
- Monitor performance and advise about Enterprise antivirus software

Strategic Direction: *Integrate Information security management services in the Enterprise ICT Services.*

Appendices

APPENDIX I: IMPLEMENTATION MATRIX

Goal 1: Enhance institutional effectiveness by providing Integrated Information Systems to support the Authority's mission and vision

Strategic objective 1.1: To re-engineer, automate and integrate core business processes across the Authority for effective service delivery.

SNN	Activities/ Projects/Initiatives	Timeline	Indicator	Targets	Responsible
1.1.1	Documentation of the Institution process	2026	<ul style="list-style-type: none"> Number of Documented processes, Percentage of Process workflows and designs completed 	>95%	BPM and Directorates
1.1.2	Automation of Business processes	2025	<ul style="list-style-type: none"> Number of processes automated Number of Client self-service processes automated 	>100%	ICT Department and user departments
1.1.3	Identify, analyze, improve and standardize core processes in the Authority	2024	<ul style="list-style-type: none"> Number of processes improved Integrated ISO Certification 	>95%	ICT Department and user departments
1.1.4	Acquire/Develop and operationalize an integrated e-services platform	2026	<ul style="list-style-type: none"> % of e-services integrated % of e-Services rolled out % of services on the Single sign on platform. % of services accessible on the mobile platform 	>80%	ICT Department and user departments
1.1.5	Acquire ICT Infrastructure for Smart City Services	2025	<ul style="list-style-type: none"> Ratio of computers to staff Number of handheld Smart devices for field staff. 	1:1	Networks and Infrastructure

Strategic objective 1.2: To enhance the capacity of staff in the use and support of ICT services.

SNN	Activities/ Projects/Initiatives	Timeline	Indicator	Targets	Responsible
1.2.1	Reinstate the ICT training center.	2021	<ul style="list-style-type: none"> Number of Computers in ICT training centre. %age of staff trained Number of Trainings conducted in the Center 	>85%	Networks and Infrastructure; Manager IT Applications

SNN	Activities/ Projects/Initiatives	Timeline	Indicator	Targets	Responsible
			<ul style="list-style-type: none"> Number of training programmes offered in the center 		
1.2.2	Train staff in professional short courses and certifications.	Periodically	<ul style="list-style-type: none"> Number of certifications attained by ICT staff. Number of staff maintaining membership to professional bodies 	>95%	ICT management, All ICT staff
1.2.3	Staff participation in international conferences, seminars, and workshops.	Periodically	<ul style="list-style-type: none"> Number of conferences/workshops attended 	>55%	ICT Management
1.2.4	Subscribe to ICT online training institutions/firms.	Annually	<ul style="list-style-type: none"> Number of subscriptions 	At least 1 course per staff per year	ICT Management
1.2.5	Subscription to ICT professional bodies.	Annually	<ul style="list-style-type: none"> Number of professional bodies ICT department subscribes to. 	At least 3 Professional bodies	ICT Management
1.2.6	Provide staff with relevant ICT tools.	Periodically	<ul style="list-style-type: none"> Number of supporting software and hardware tools acquired. 	All directorates	Networks and Infrastructure, IT Applications
1.2.7	Develop and Implement ICT user training curriculum and content	2021 and continuous	<ul style="list-style-type: none"> Number of users trained per year Number of new ICT Courses developed per year 	60% in 2021, rising to 100 % by 2025	Deputy Director, ICT
1.2.8	Communicate the operations and procedures within the ICT function	2021 and continuous	<ul style="list-style-type: none"> Extent of communication of operations and procedures 	High	Deputy Director, ICT
1.2.9	Communicate the operations and procedures to end users	2021 and continuous	<ul style="list-style-type: none"> Extent of communication of operations and procedures 	High	Deputy Director, ICT
1.2.10	Enhance the capacity and energy of staff through annual Team Building activities	Annually	<ul style="list-style-type: none"> Number of staff participants Team Building Activity Report 	100%	ICT Management

Strategic objective 1.3: To improve network connectivity, system security, availability and access in the Authority and across the City.

SNN	Activities/ Projects/Initiatives	Timeline	Indicator	Targets	Responsible
1.3.1	Improve the KCCA LAN infrastructure.	2026	<ul style="list-style-type: none"> Number of users connected per year number of network nodes Network reliability 	20% improvement on access of the network per year.	Networks and Infrastructure

SNN	Activities/ Projects/Initiatives	Timeline	Indicator	Targets	Responsible
1.3.2	Upgrade, create and extend Office LANs for to schools, hospitals, and road junctions	2025	<ul style="list-style-type: none"> Number of social and public facilities networked. 	<ul style="list-style-type: none"> 5 schools. 30 road junctions 6 hospitals 	Networks and Infrastructure
1.3.3	Procure tools and test gears for network monitoring, optimization and support	Periodically	<ul style="list-style-type: none"> Reduced Turn Around Time in Fault Repair; % increase in Faults addressed 	<ul style="list-style-type: none"> 3Hrs 100% 	ICT Management; Networks and Infrastructure
1.3.4	Inform users of the range of ICT network resources and services available at the Authority	Continuous	<ul style="list-style-type: none"> Increased User Acceptance; Participation in Service Use 	<ul style="list-style-type: none"> 100% 	ICT Management; Networks and Infrastructure
1.3.5	Implement a log management system to aggregate system and user logs.	2023	<ul style="list-style-type: none"> Real-time log tracking Log files 	100%	ICT Management and Infrastructure
1.3.6	Integrate data and telephone networks and expand the range of services to include Voice over IP; Voice Mail; Direct Inward Dialing; GSM gateways such as GoU SMS gateway; and Unified Numbering Systems	Annually	<ul style="list-style-type: none"> % Reduced communication expenses; new & improved communication services 	> 50%	ICT Management; Networks and Infrastructure
1.3.7	Develop replications and redundancies to ensure continuity of services	Continuous	<ul style="list-style-type: none"> Installed and functioning replication servers Functioning replicas of MIS, proxy, Web and e-Mail Network Mean time between failure Number of Services hosted in GoU Data Center 	All 100%	ICT Management and Security Officer
1.3.8	Implement network access control to enforce network security.	Continuous	<ul style="list-style-type: none"> %age of services with controlled access 	100%	ICT Management and Security Officer
1.3.9	Ensure adequate power conditioning and UPS to keep ICT services uninterrupted	Continuous	<ul style="list-style-type: none"> Installed, maintained stable & sustainable power supply for ICT equipment. 	100%	ICT Management
1.3.10	Adopt a Smart City Framework	2021	<ul style="list-style-type: none"> Smart City Framework Approved 	100%	ICT Management

Strategic objective 1.4: Apply data analytics and business intelligence solutions to drive better-informed decisions.

SNN	Activities/ Projects/Initiatives	Timeline	Indicator	Targets	Responsible
1.4.1	Document an open data policy.	2022	<ul style="list-style-type: none"> Documented Open data Policy 	100%	ICT Management

SNN	Activities/ Projects/Initiatives	Timeline	Indicator	Targets	Responsible
1.4.2	Acquire Business intelligence tools to support visualizations and data-based decision making across the authority.	2024	<ul style="list-style-type: none"> Number of business intelligence tools acquired. %age of decisions supported by BI tools 	75%	Business Process
1.4.3	Procure ICT Infrastructure to support visualization of monitoring tools.	2024	<ul style="list-style-type: none"> %age of Infrastructure available support BI tools 	100%	Networks and Infrastructure
1.4.4	Implement an enterprise open data portal to allow public access to citizens.	2022	<ul style="list-style-type: none"> An open data portal that allows public access to citizens. 	75%	IT Applications
1.4.5	Benchmark with other public sector entities and international organizations.	2022, 2024	<ul style="list-style-type: none"> Number of public sector & international organizations benchmarked. 	3 international and 3 local organisations	ICT Management
1.4.6	Engage stakeholders in customizing, Data mining, data processing, and presentation	Continuous	<ul style="list-style-type: none"> Number of Stakeholder engagement events held Stakeholder engagement Reports 	75% of Stakeholder interest groups	ICT Management

Strategic objective 1.5: To acquire, develop and continuously maintain the Authority's ICT applications and data.

SNN	Activities/ Projects/Initiatives	Timeline	Indicator	Targets	Responsible
1.5.1	Software and database upgrades	Continuous	<ul style="list-style-type: none"> % of Software and databases upgraded. 	>95%	IT Applications
1.5.2	Maintenance and support to existing ICT applications.	Continuous	<ul style="list-style-type: none"> Number of Change Requests Application uptime 	99.9%	Business Process IT Applications
1.5.3	Implement an electronic staff attendance register and access control.	2022	<ul style="list-style-type: none"> Electronic Staff Attendance Register Access Control system 	1	Systems Security IT Applications
1.5.4	Implement an enterprise data backup solution	2024	<ul style="list-style-type: none"> Increased data storage Capacity; Improved storage availability (MTBF); Improved data backup and recovery 	High	IT Applications
1.5.5	Improve disaster recovery and business continuity systems.	Continuous	<ul style="list-style-type: none"> A disaster recovery & business continuity plan. 	100%	Systems Security
1.5.6	Implement source code versioning	Continuous	<ul style="list-style-type: none"> Number of versions of source codes 	100%	Business Process IT Applications

Strategic objective 1.6: Integrate Information security management services.

SNN	Activities/ Projects/Initiatives	Timeline	Indicator	Targets	Responsible
1.6.1	Formulate the KCCA Information security framework	2022	<ul style="list-style-type: none"> Approved Information Security Framework Data Protection and Privacy Program 	2024	Systems Security
1.6.2	Antivirus Management	Periodically	<ul style="list-style-type: none"> Antivirus Reports 	100%	Security Officer
1.6.3	Perform periodic vulnerability testing on systems	Periodically	Systems Vulnerability report	100%	Security Officer
1.6.4	Perform general ICT Risk Based Audits	Periodically	Periodic Security Audit reports Updated ICT Risk Register	100%	Security Manager
1.6.5	Conduct periodic application security reviews	Periodically	Security review report	100%	Security Supervisor
1.6.6	Perform network vulnerability and security scans	Periodically	Network Vulnerability Report	100%	Security Supervisor
1.6.7	Perform a firewall security review	2021	Firewall security status reports	100%	Security Supervisor
1.6.8	Perform Web application vulnerability scans & assessments	Periodically	Web vulnerability assessment report	100%	Security Officer
1.6.9	Perform risk management	Biannually	Risk Report Updated ICT Risk Register	100%	Security Manager
1.6.10	Increase user awareness in information security	Periodically	Awareness Report	100%	Security Supervisor

Goal 2: Enhance the client experience by improving navigation, communication and access to services.

Strategic objective 2.1: To enhance client participation in the delivery of SMART City Services.

SNN	Activities/ Projects/Initiatives	Timeline	Indicator	Targets	Responsible
2.1.1	Documentation of ICT customer service charter	2022	<ul style="list-style-type: none"> % of services offered in compliance with service level agreements. 	100%	Business Process
2.1.2	Enhance and implement an electronic client engagement platforms	2023	<ul style="list-style-type: none"> Number of Clients actively engaged on the different platforms. 	>75%	IT Applications
2.1.3	Acquire office collaboration tools and technologies	2021	<ul style="list-style-type: none"> % of completed tasks through the collaboration tools. Number of tools effectively supporting employee collaboration. 	100%	Networks and Infrastructure
2.1.4	Launch a program to recognize residents integrating “Smart” technologies in their homes and lives	Annually	<ul style="list-style-type: none"> Number of residents recognized 	50%	ICT Management

Strategic Objective 2.2: To enhance the capacity of internal and external clients in the utilization of Smart City services.

SNN	Activities/ Projects/Initiatives	Timeline	Indicator	Targets	Responsible
2.2.1	Acquire computing resources for internal clients	Annually	<ul style="list-style-type: none"> Availability of computing resources for internal clients. 	20% per year	ICT Management
2.2.2	Acquire specialized software resources for KCCA staff.	Annually	<ul style="list-style-type: none"> Availability of specialized software resources for KCCA staff. 	20% annually	IT Applications
2.2.3	Install Wi-Fi Connectivity at all KCCA places and managed installations including markets, parks etc.	2026	<ul style="list-style-type: none"> Number of Free Internet Hotspots in KCCA Places 	2 Hotspots per year	Networks and Infrastructure

Strategic Objective 2.3: To improve citizen-centric initiatives to obtain feedback about city services.

SNN	Activities/ Projects/Initiatives	Timeline	Targets/Indicator	Targets	Responsible
2.3.1	Develop a citizen feedback platform with mobile friendly capabilities	2024	<ul style="list-style-type: none"> Number of citizens using the citizen feedback platform. Digitalized service delivery mechanisms. Availability of mobile friendly citizen feedback system with App and USSD. 	55% of users using platform	IT Applications
2.3.2	Adopt an Internet of Things approval process	2024	<ul style="list-style-type: none"> Approved procedure for Internet of Things 	100%	Business Process

Strategic Objective 2.4: To support inclusion and accessibility to services through digital technology.

SNN	Activities/ Projects/Initiatives	Timeline	Targets/Indicator	Targets	Responsible
2.4.1	Enhance all services to be web accessible	Periodically	<ul style="list-style-type: none"> Constantly updated user-friendly website. %age of KCCA Services that are web accessible 	>80%	IT Applications
2.4.2	Specialized equipment and applications for people with special needs in schools, and libraries	2024	<ul style="list-style-type: none"> %age of public facilities with smart assertive technologies. 	10 Schools and 1 Public Library	Networks and Infrastructure
2.4.3	Pilot alternative customer service channels to assist with language, hearing and other communication challenges.	2026	<ul style="list-style-type: none"> %age of services with alternative and inclusive customer service channels 	60% of KCCA Services	Business Process

Strategic Objective 2.5: To engage with customers and key stakeholders in the sourcing, implementation and development of new technologies.

SNN	Activities/ Projects/Initiatives	Timeline	Indicator	Targets	Responsible
2.5.1	Implement an appointment system	2021	<ul style="list-style-type: none"> An appointment system in place. 	100%	IT Applications
2.5.3	Implement a customer centric Civic Participation Platform that allows two-way communications with the Authority	2025	<ul style="list-style-type: none"> 2 Way Communication Platform implemented 	100%	Business Process and IT Applications
2.5.5	Citywide School Inspection and Reporting Platform	2025	<ul style="list-style-type: none"> Number of Schools fully registered on the platform Reports generated by the system 	All schools both Primary and Secondary	Business Process; IT Applications; Directorate of Education and Social Services
2.5.6	Create a “service tracker” tool for managing workflows for internal processes.	2024	<ul style="list-style-type: none"> Service tracker dashboard List of processes to be tracked 	100%	Business Process and IT Applications
2.5.7	Develop systems support tools to enhance usage of systems and applications	Periodically	<ul style="list-style-type: none"> User manuals and Handbooks 	100%	Business Process

Goal 3: Improve Collaborative Experience with strategic partners to Deliver Quality IT Services.

Strategic objective 3.1: To champion the formation of consortiums with public entities for effective service delivery

SNN	Activities/ Projects/Initiatives	Timeline	Indicator	Targets	Responsible
3.1.1	Champion the formation of consortium for government agencies such as (MoL, MoFPED, NITA, URA, URSB, Uganda Police, Utilities Companies, MoD, MoI, MEAW, NEMA).	2021	<ul style="list-style-type: none"> Consortium Formed 	10 government Entities	IT Applications; Directorate of PHSE, ETS
3.1.2	Adopt a data sharing policy and tools to make it easier for Agencies to share and access data.	2023	<ul style="list-style-type: none"> A single data sharing policy across agencies in the consortium 	95%	ICT Management
3.1.3	Improve Data Sharing with Agencies	2024	<ul style="list-style-type: none"> A shared agency database 	100%	IT Applications
3.1.4	Procure a technology that will enable the consortium to integrate all of shared data into one united platform	2025	<ul style="list-style-type: none"> Shared Data Platform 	95%	IT Applications

Strategic objective 3.2: To enhance Public Private Partnerships in providing and promoting Smart City services

SNN	Activities/ Projects/Initiatives	Timeline	Indicator	Targets	Responsible
3.2.1	Develop a Public Private Partnership Business case for Smart City Services	2025	<ul style="list-style-type: none"> Business Case 	<ul style="list-style-type: none"> 75% of unfunded smart city projects 	ICT Management

SNN	Activities/ Projects/Initiatives	Timeline	Indicator	Targets	Responsible
3.2.2	Enter into Partnership Agreements with partners to provide smart city services.	2024	<ul style="list-style-type: none"> Signed MoUs Partner Register 	<ul style="list-style-type: none"> ¼ of the unfunded projects with a business case. 	ICT Management

Strategic objective 3.3: Enhance relationships with development partners for resource mobilization.

SNN	Activities/ Projects/Initiatives	Timeline	Indicator	Targets	Responsible
1	Develop and implement a reporting mechanisms for partners	2020	Number of reports shared with development partners	100%	ICT Management
2	Equip staff with Report writing and presentation skills for partner projects	Annually	Number of staff trainings conducted	60%	ICT Management
3	Develop concept papers for unfunded projects	Annually	Number of concept papers approved and shared with development partners	2 concept papers year	ICT Management

Goal 4: Increase Productivity and efficiency through innovations to meet the client changing needs.

Strategic objective 4.1: To enhance the ICT Innovation Framework.

SNN	Activities/ Projects/Initiatives	Timeline	Indicator	Targets	Responsible
4.1.1	Review the KCCA Innovation concept paper	2021	Approved Concept paper	100%	Business Process
4.1.2	KCCA Innovation policy	2023	Approved Policy	100%	Business Process
4.1.3	Document KCCA Innovation procedures and guidelines	2023	Innovation manual	100%	Business Process
4.1.4	Establish an Innovations management system	2024	Innovation Management System Developed	100%	Business Process
4.1.5	Launch the innovation framework	2023	innovation framework launched	100%	Business Process

Strategic objective 4.2: Partner to launch a multi-sector innovation centre where entrepreneurs, business, academic, and public innovators collaborate to create shared value.

SNN	Activities/ Projects/Initiatives	Timeline	Indicator	Targets	Responsible
4.2.1	Formulate a stakeholder engagement strategy	2021	<ul style="list-style-type: none"> Stakeholder Engagement Plan MoUs between KCCA and Partners Partnership Database 	65%	Business Process
4.2.2	Establish KCCA innovation center/space (KIC)	2020	<ul style="list-style-type: none"> KCCA Innovation Space Staff Recruited in the Innovation space 	80%	Business Process

SNN	Activities/ Projects/Initiatives	Timeline	Indicator	Targets	Responsible
4.2.4	Develop innovation themes	Annually	<ul style="list-style-type: none"> Annual Innovation Themes 	At least 1 theme annually	Business Process
4.2.5	Recruit innovators into the Innovation Center	Annually	<ul style="list-style-type: none"> Appointment of Innovators 	50 Innovators	Business Process
4.2.6	Build the capacity of innovators	Annually	<ul style="list-style-type: none"> Number of Innovators trained 	80%	Business Process
4.2.7	Asses, select and support the implementation of new innovations	Annually	<ul style="list-style-type: none"> %age of innovations implemented 	20%	Business Process

Strategic objective 4.3: Promote an Innovative Culture

SNN	Activities/ Projects/Initiatives	Timeline	Indicator	Targets	Responsible
4.3.1	Evangelize IT success stories across the Authority and across government.	Continuous	<ul style="list-style-type: none"> Number of Success stories documented and shared 	35%	Business Process
4.3.2	Invest in Research & Development (R&D) activities to improve business value and develop new city services	Annually	<ul style="list-style-type: none"> Number of Research Studies Conducted Number of Research findings 	2 studies per year	Business Process