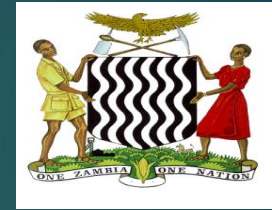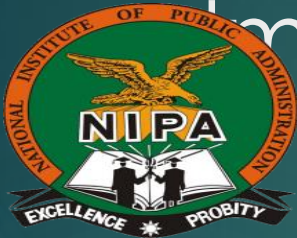# African Association for public administration and management
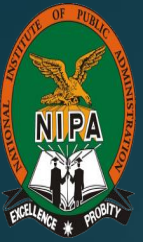
TOPIC: PUBLIC SERVICE INNOVATION AND DIGITAL TRANSFORMATION OF INSTITUTIONS AS A VERITABLE TOOL FOR ACHIEVEMENT OF SUSTAINABLE DEVELOPMENT GOALS IN ZAMBIA

DR. ENG. ELLIOT MUMBA

DEPUTY EXECUTIVE DIRECTOR AND SENIOR LECTURER

NATIONAL INSTITUTE OF PUBLIC ADMINISTRATION, ZAMBIA

Points of dialogue

- Vision 2030 & Africa's agenda 2063 & Public service innovation
- Smart Zambia national strategy for digital transformation
- Digital transformation & Sustainable Development in Zambia, African states
- Public Service Innovation as key driving force in societal transformation
- Digital transformation and interpretation of the sustainability paradigm shift in African states
- ► Digital revolution in achieving sustainable development goals and how to encourage shared responsibility approach
- ► Way forward for 41st Round table conference
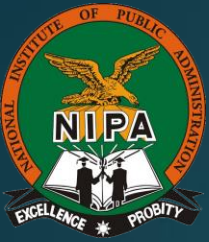
Quotes from UN
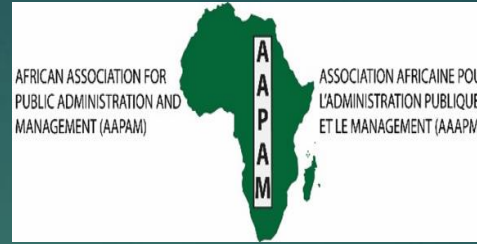
- "We must rise higher to **Rescue** the sustainable development goals and stay **True** to our promise of a world of peace, dignity and prosperity on a healthy planet" Antonio Guterres, secretary general of United nations.

- This statement means there is high risk(possibility of failure) to achieving the sustainable development goals by many states in especially in Africa. African leaders need to rise to the occasion. One such measure to do so, is what we have gather here for, sharing ideas and experiences on public service administration and management so that we stay true to our promise of achieving sustainable development goals in our countries!
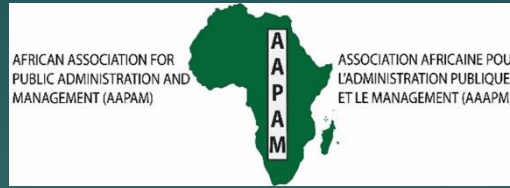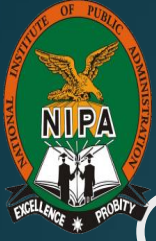
Questions addressed in this paper

- How can we show that public service innovation through digital adoption and changes are becoming a key driving force in societal transformation and contributing to achieving SDGS in Zambia, African states?

- How has Smart Zambia innovation been used as a veritable tool to contribute to achievement of sustainable development goals in Zambia? How can African states generally adopt digitalization as a tool for achieving SDGs?

- How can digital transformation radically alter dimensions of global societies and economies and change the interpretation of the sustainability paradigm shift in African states?

- What measures and steps can be recommended on the need for promotion of the togetherness spirit and institutional arrangements for innovation in public service in Africa that foster improved service delivery sustainably and equitably?
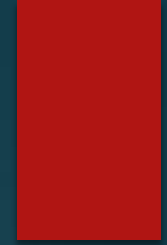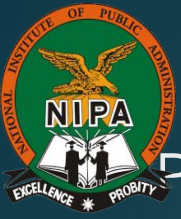
Public service innovation — a key driving force in societal transformation

▶ The digital transformation of the public sector is one of the major areas of public services innovation and policy changes taking place in Zambia today. Others programmes include Constituency development programme focus on decentralization, smallholder farmer support programme, Small enterprise development programme, etc. This paper is focused on Digital transformation.

▶ At a national level, Smart Zambia has been formed to progressively address the national needs with a comprehensive agenda aimed at coordinating digital transformation across the country to achieve country's improved competitiveness, improved ICT infrastructure, for efficient government service delivery, strengthen the legal and regulatory framework for ICT, and better public service, for better quality of life for citizens.

▶ In particular, digital transformation initiatives by the republic of Zambia constitute a potent driver towards a better integration and higher levels of coordination in provision of government services to both the citizens and businesses.

▶ Several scholars have argued that technological changes represent a more integrated, efficient and accurate public actions addressing the needs of citizens and businesses in any particular state(Cordella and Tempini, 2018, Gupta, 2021).
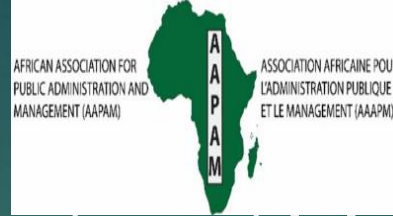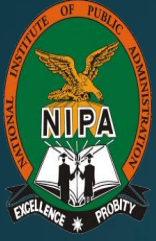
Public service innovation a key driving force in societal transformation, How?

- In this regard, Zambia's 8th National Development Plan (8NDP) sets out ambitious targets for economic growth and poverty reduction in Zambia.

- Digital transformation is playing an important role as Zambia advances its vision for economic transformation and country competitiveness.

- According to the World Bank (2020) achieving the goal of universal and affordable internet coverage can raise growth per capita by 2 percentage points per year and reduce poverty headcount by 1 percentage point per year.

- When internet coverage is complemented by human capital investment, growth per capita increases by approximately 5 percentage points and the poverty headcount falls by 2.5 percentage points per year.

- This contributes significantly to country's growth because of growth in productivity across economic sectors stimulated by investment in Internet coverage. It can be concluded that digital transformation is indeed a veritable tool for economic transformation and achievement of sustainable development goals
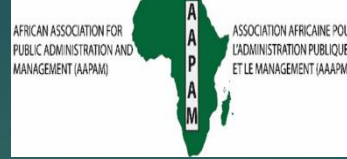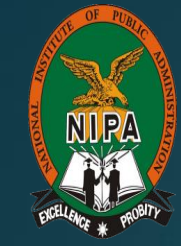
How has Smart Zambia innovation been used as a veritable tool to contribute to achievement of sustainable development goals in Zambia?

► The vision of Zambia for 2030 is to transition the country into a digital economy through launching of Smart Zambia. Smart Zambia's vision is "A Zambia transformed into an information and knowledge-based society and economy supported by consistent development of, and pervasive access to ICTs by all citizens by 2030."

► The smart Zambia e-government strategy outlines the priorities of government in attaining of the national vision 2030 and 8th National development plan. The plan builds on the past experiences and lessons learnt on previous development plans whilst incorporating aspirations to create an e-government system that is future ready, transformative and respond to society's needs for efficient and quick e-government services.

► This public innovation aims to encourage innovation in public sector. The smart Zambian national strategy is part of the African Union agenda 2063 which highlights the pan African vision to attain "an integrated, prosperous and peaceful Africa, driven by its own citizens and representing a dynamic force in the international arena. In this respect, by 2063, Africa aspires to have the necessary infrastructure in place to support its accelerated integration and development.
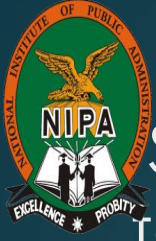
Smart Zambia innovation as a veritable tool to contribute to achievement of sustainable development goals in Zambia

▶ An assessments of Zambia 's digital landscape accelerated by launching of Smart Zambia, reveals that Zambia had made significant strides on its path to digital transformation and public service innovation. The assessments show that digital financial services in Zambia have increased significantly since 2016, laying the foundation to leverage digitized payment systems more fully across various sectors such government, business and informal sectors and has reached the poorest rural population of Zambia (Saasa, 2021).

▶ The government has developed smart Zambia as a digital transformation strategy to help the country meet its national development targets and achieve sustainable development goals, improve the fiscal space and contribute to attaining development goals.
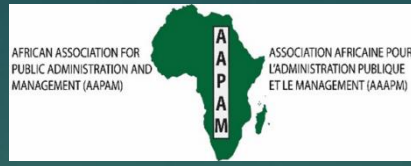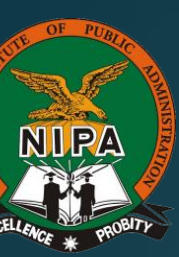
Smart Zambia innovation as a veritable tool to contribute to achievement of sustainable development goals in Zambia

This new created environment will no doubt encourage public service innovation. It is widely accepted that information and communication technology in particular are a catalyst for socio-economic development capable of eradicating poverty by stimulating growth in the rural and urban sectors of the county. The convergence of technologies on the digital platform is opening up immense new possibilities of improving quality of life for Zambian citizens. For instance, digital revolution has been described as the profound and accelerating transformation of business activities, processes, competencies, and models to fully leverage the changes and opportunities of digital technologies and their impact across society in a strategic and prioritized manner (digital guide 2015).
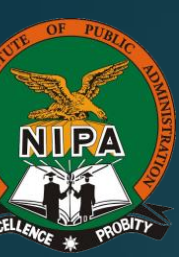
)

Smart Zambia innovation as a veritable tool to contribute to achievement of sustainable development goals in Zambia

▶ Because of Smart Zambia, Zambia is becoming a connecting hub for its eight neighboring countries.

▶ Fibrecom (a subsidiary of ZESCO) has fiber links to Botswana, Malawi, Namibia, Tanzania, and Zimbabwe. Furthermore, links are planned with Democratic Republic of Congo and Angola. Zambia has made significant investment in digital infrastructure since 2014. As a result, all provincial centers have a state of art data center that can be leveraged for government and commercial use.

▶ The foundation has been built to now focus on the use of infrastructure as well as on ensuring the reliability and security of the infrastructure that is in place (Hunt, 2019

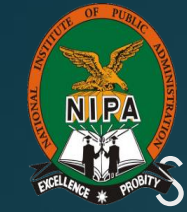# Smart Zambia innovation as a veritable tool to contribute to achievement of sustainable development goals in Zambia

- ▶ Regarding expanded access, which is in case of Zambia translates to last mile internet access and its affordability, a key decision for Zambia or for African states, is whether the internet should be considered a public good similar to roads, for example. This has a lot of implications on how to achieve sustainable development goals and national development goals and contributing to vision 2030 for achieving fully developed digital economy for Zambia, and contribute to 2063 aspirations for africa.

- ▶ Achieving universal access to internet can indeed stimulate public service innovation and contribute to achievement of sustainable development goals because of the enabling benefits of the internet access for public service innovation and transformation
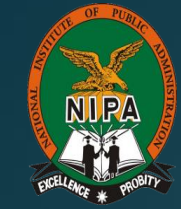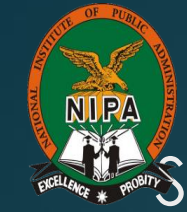
Smart Zambia innovation as a veritable tool to contribute to achievement of sustainable development goals in Zambia

- A growing number of citizens in Zambia are using information and communication Technologies on a regular basis on a number of daily economic activities. This has made digital technologies pivotal to the improvement of livelihoods. The informal sector is slowly embracing cashless transactions with majority of traders now accepting digital payments (Zambia National Marketers Association, ZANAMA, 2022). A survey by ZANAMA (2022) revealed that the informal sector is now accepting digital transactions, mainly done through mobile money services. The survey conducted by Zambia Chamber of small and medium Business association in 2021, reveals that 85 % of respondents out of 3 000 sampled traders indicated that they accepted digital payments for their merchandise.

- In many instances, citizens now pay for groceries, consumer goods, essential services like water, electricity, banking, transport, security, health using mobile money platforms.

- A lot of economic value is created through these digital economy (Wail El Hilali, 2020). According to a bank of Zambia report in June 2022, the mobile money transactions per month both by value and volume had reached over ZMW300 billion. Most banks have lost business and have hoped to form collaborative service provision with the mobile providers.

Smart Zambia innovation as a veritable tool to contribute to achievement of sustainable development goals in Zambia

- According to the 2017 global connectivity index: Investment in ICT infrastructure brings multiplier effects to economic growth with every one dollar invested in ICT could bring a return of up to US$5.00 in GDP from 20188 to 2025. As such with an additional 10% of ICT investment each year, this will bring an accumulative potential impact of US$17.6 trillion in GDP by 2025.

- It can be argued therefore that public services innovation and digital transformation of institutions is a veritable tool for achieving sustainable development goals

Smart Zambia innovation as a veritable tool to contribute to achievement of sustainable development goals in Zambia

- Technology can play a central role as Zambia pursues the vision 2030 for sustainable growth and economic transformation. Evidence from research show that the introduction of digital systems in Zambia have a transformative effective on National development goals and contribute to sustainable development goals too. It is estimated that developing countries could collectively save 0.9 to 1.1 percent of GDP, equivalent to US$220 billion to US$350 billion annually (IMF, 2017), by introducing digital systems in the governance system of the country that increase efficiency and reduce the potential leakages to happen.

- Additionally, significant effectiveness gains can be realized by equipping government institutions responsible for public service delivery with access to better data, systems and tools to manage these institutions in a better way

Smart Zambia innovation as a veritable tool to contribute to achievement of sustainable development goals in Zambia

Furthermore, evidence reveals that implementation of e-government in public service delivery has the potential to achieve significant benefits for a country and contribute to achieving SDGS because of the following :

- ▶ Improved citizens experience and thus improved perceptive value of the government

- ▶ Targeted benefits distribution to all sectors

- ▶ Reduced cost of doing government business

- ▶ Material efficiency improvement in service delivery

- ▶ High and efficiency reach to all citizens by government services

- ▶ Reduction in the real cost transacting with government

- ▶ Effective communication strategy for connecting with the large population and rural people(e-society)

- ▶ High participation from citizen, sharing experiences, interactions, exchaing views about society problems

With These derived benefits we can conclude that public services innovation and digital transformation is a tool for achieving sustainable development.
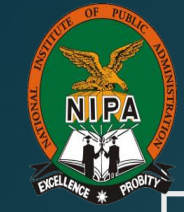
How digital transformation is radically altering dimensions of global societies and economies
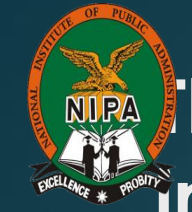
▶ The concept of digital transformation is so huge that before long, no human activity or industry activity will be beyond reach. The global society of today have entrusted its life to digital platforms. People use internet vastly to keep in touch with friends, workmates, supervisors, peers, families, search for employment, distribute intellectual property works, develop travel plans, shop for groceries, share experiences, and essentials ,find dates, and the list goes on and on. This is how digital transformation has radically altered societies and economies. Societies and communities have an interesting relationship with technology which has enhanced how they relate for various reasons.

▶ According Nathan Sykes (2018), innovation that begins here in the name of efficiency and product throughput have a tendency to trickle through the rest of the economic activities and society endeavors. This statement from Sykes explains how radically digital transformation has altered the dimensions of global societies and economies. It is all about turning the previous three industrial revolutions 'lessons in mass communication into something that can serve every facet of society and economy globally. It does not end there. It has further brought better communication for all breaking all , cultural geographic barriers and times zones, regulatory barriers etc.
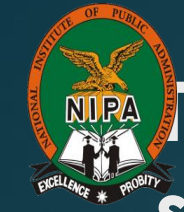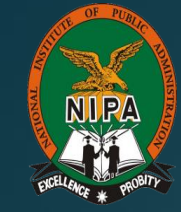
The interpretation of the sustainability paradigm shift in African states

- Therefore, the world and its society has radically changed. Digital technology has altered its dimensions. It is not the fittest, nor the most intelligent that survives. It is the most adaptable to change that survives (Charles Darwin). But as digital transformation continuous to disrupt sector after sector, Charles Darwin's words are just as relevant for humanity as today as they are for the very existence of life as we know it. **Today's leaders need to transform their organizations, their communities, their societies, their countries, their businesses to be adaptable, the question is how? (Enterprise, 2019)**

- It took 8000 years for humans to move from the agricultural revolution to the first industrial revolution. It has taken only **fifty years** to mover from the third to the fourth revolution.

- **How long will it take to move from fourth to digital revolution? Your guess is just as mine!**

- The rate of change far outstrips our human ability to adapt and humans are only just beginning to see what the future will hold.

- The impact of the first revolution can't be overstated. It moved entire populations. Before the Industrial Revolution, it's estimated that 90% of world people lived in rural areas, working on farms for their living. By the mid-1800's, just 50 years after the introduction of mechanization, half the people in the world lived in cities and worked in factories. This affected how things were being done by city authorities to respond to new city needs.

- The introduction of electricity during the second revolution led to mass production, making the car available to the middle classes. People no longer had to live in overcrowded cities to work in factories and offices. People started driving to work and suburban areas developed. The personal computer and the internet transformed the way people lived and worked again to earn their living. Sparking a new age of instant global communication, ramping up productivity to unseen levels in human history. There is now more content published on the internet every minute than any one person could ever hope to read in a lifetime (Chandola, 2016).

- What is being demonstrated here is that each time the world has gone through a period of industrial upheaval, the changes have been unprecedented. The impact has been far more wide-reaching than the simple introduction of new technology. It has completely overhauled how humans exist in the world and interact within it

How these digital changes Affect the Interpretation of the Sustainability Paradigm Shift in African States?

▶ *"Those who want to talk about digitalization should also talk about the circular economy and sufficiency". Professor Andre Reichel.*

▶ **Is the digital economy an enabler for a sustainable society? What role do commons, both digital as well as physical, play when it comes to inclusion, equity and mitigating climate change? How can different actors in society frame digital technologies from the normative perspective of Sustainability?**

▶ These and other questions should be answered in order for us to understand and explain how these changes brought about by digitalization affect the interpretation of the sustainability shift in African states.
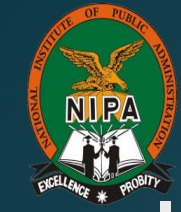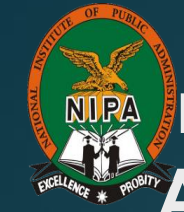
Interpretation of the Sustainability Paradigm Shift in African States

▶ Most leaders interpret sustainability to include integration on the social, economic and environmental issues of sustainable development. The sustainable development agenda call for African states to include transformation in their national development through enhanced creativity and innovation in the public service delivery at all levels of governance, through advocacy and analytical research, as well as leadership and human resource capacity development. states in Africa can move towards sustainable development in their countries through public service transformation agendas(Wirtz.J, 2017).

▶ There are also many things in which sustainability can be interpreted and embraced by African states where resources are scarce, shared responsibility in the implementation of facilitating the implementation of the national agenda to achieve SDGs. National leaders should look at policy and strategy planning, providing accessible, affordable and quality public services to all citizens, developing support infrastructure, mobilizing resources, monitoring and evaluating public programmes, projects, and development activities, and developing institutional and human resources capacities.
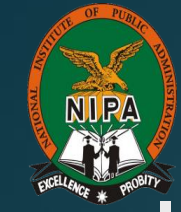
Interpretation of the Sustainability Paradigm Shift in African States

► These interpretations should be supported by values such as **inclusion, equity, equality, social justice, and social protection, integration, leaving no one behind, transformational leadership, partnership, collaboration and resilience** when inculcated in society, can achieve the sustainable development needed by African states.

► Leaders need to pioneer new approaches, work differently, take risks and innovate in their national development agendas.

Interpretation of the Susta... radigm Shift in African States

▶ Improved access to digital technologies and effective use of data and digital system in Zambia can thus be a powerful tool in the quest to increase public service value creation, increase private sector productivity, enhance public sector coordination, efficiency and effectiveness, and improve the accountability of both the public and private sectors.

▶ As a result, digital revolution can contribute to achieving national development goals, help realize vision 2030 agenda, and thus play a central role in contributing to achieving sustainability in development.

▶ Zambia's digital vision is anchored on the five pillars that will stimulate economic activities, together form the foundation upon which the benefits of digital transformation can be realized, namely digital infrastructure, digital skills, digital entrepreneurship, digital platforms and digital financial services(World Bank, 2020),

▶ Progress in these pillars combined with analog complements such as favorable business environment, strong human capital investment, and good public governance can enable and accelerate development returns, help achieve SDGS.
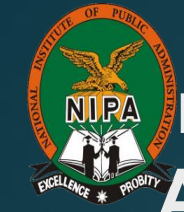
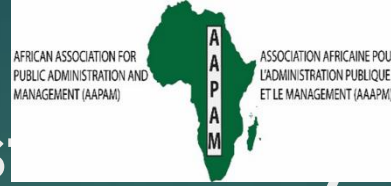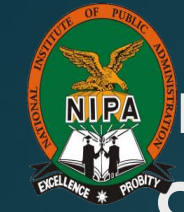# Interpretation of the Sustainability Paradigm Shift in African States

- Achieving these milestones require concerned efforts and co-creation in the value activities of the development process. Therefore, the digital economic goals cannot be implemented by the government alone. The economic, social and environmental goals enshrined in sustainable development should be carried out by multiple disciplinary approach in close collaboration with multiple stakeholder of public, and private sectors, driven by private sector actors. It requires comprehensive public institutional reforms, strategy planning and morning and evaluating systems. It is only when everyone, every community, every sector, and public and private sectors are involved that these shared responsibilities can contribute to leaving no one behind, integration and social protection.

- The digital infrastructure foundation has played a significant central role on the use of the digital services and help reduce transaction costs associated with serving Zambian society. As a result, the take up of digital financial services in Zambia has increased significantly since 2016.

# Interpretation of the Sustainability Paradigm Shift at a country level

- Zambia has a strong commitment to financial inclusion over the course of the past several years that has driven this uptake. Access to financial accounts have more than doubled from 21percent in 2011 to 46 percent in 2017, and increased access to mobile money providers has been driving the bulk of this growth and increase chances of employment creation since 2016(Bank of Zambia, 2021).

- In the 2019, the national payment switch enabled the interoperability of all domestic transactions. This functionality is available for all point-of-sale and mobile transactions. This step has further increased convenience, reduced cost of doing business, improved business reach, and created opportunities for business development for citizens and businesses. This has the potential to contribute to employment creation, increased income, generation of needed government revenue and improved standards for citizens

# Interpretation of the Sustainability Paradigm Shift at a country level

▶ Substantial progress is also achieved to have digital government salaries, pension payments, provision of national IDs and passports, paying for services like Road tax, Zampay platforms, and gains made in G2B, B2G payments and digital pay slips and receipts. Government e-payments show that transaction costs decreased by 85% and several ghost workers were identified and removed from government payroll.

▶ These outcomes show that digital revolution can contribute to efficient government and provides opportunities for effective governance that contribute to national development goals and sustainable development goals.

▶ It is widely accepted that Information and Communication Technology and e-Government in particular are a catalyst for Socio-economic development capable of eradicating poverty by stimulating growth in the rural and urban sectors of the country. The convergence of technologies on the digital platform is opening up immense new possibilities of improving the quality of human life in African states.
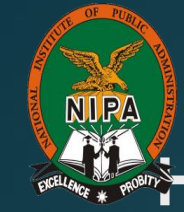
How can African states Promote the Spirit of togetherness and Institutional Arrangements for Innovative Public Service capacity in Africa that Foster Improved Service Delivery , Sustainably and Equitably in African States?

► Is it possible for African states to create an enabling environment for last minute internet access in households by making internet access a public good?

► At the end of the day, the purpose of this 41ˢᵗ round table discussion is to come up with concerted efforts, reveal lessons learnt and views that are implementable in Public Institutions across African States, with view to strengthen public service institutions and contribute to the Vision of African States 2063. These recommended steps and measures should help African States contribute to efficient and effective public service delivery that meets citizens' expectations.

► Management of the digital transformation programmes should be based on the principles of results-based management whose emphasis is on the need for all players to account for programme results and ensure timeliness on the delivery of those results. It should also recognize the need to focus attention on the outcomes while allowing for flexibility and innovativeness in meeting the desired outcomes.
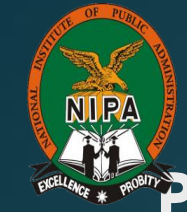
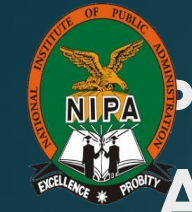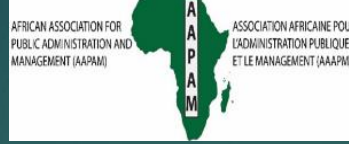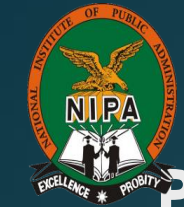# Promoting the Spirit of togetherness and Institutional Arrangements for Innovative Public Service capacity in Africa that Foster Improved Service Delivery, Sustainably and Equitably in African States

► The institutions should, however, ensure that the management process conforms to the provisions of various Policy, Legal and Regulatory frameworks, which include the Constitution of a particular state, National ICT Policy, e-Government Act, Information and Communications Technologies Act, Cyber laws (such as Cyber Security Act, Data Protection Act, Electronic Transactions Act) Public Finance Act, and the Planning and Budget Policy among others in a coordinated way (Ziaslou, 2021).

► This is what it means to have a shared responsibility in the implementation process

► Sustainable development has a unique value chain that involve a range of groups across public and private actors, making very complex web of activities and thus difficult to implement, both globally and increasingly local in low-and-middle income countries in African states where many of the problems the SDGs set out to solve are most acute. This experience puts the development community and partners in a strong position to lead transformation agenda

Promote the Spirit of togetherness and Institutional Arrangements for Innovative Public Service capacity in Africa that Foster Improved Service Delivery , Sustainably and Equitably in African States

▶ The sustainable development agenda recognizes the need to strengthen institutional capacities in the public sphere, build peaceful, just and inclusive societies that provide equal access to justice and that are based on the respect for humanity and governance at all levels, accountability and transparent, effective and accountable institutions, to achieve the agenda of poverty eradication and sustainable growth (Hunt, 2019).

▶ The objectives should be to ensure responsive, including participatory and representative decision making at all levels, emphasizing the importance of non-discriminatory laws and policies that encourage achieving sustainable development goals of agenda 2030.

▶ Co-creation practices that mobilize the experiences, resources, and ideas of a plurality of public and private actors in the creation of public solutions are on the rise. African governments should increasingly aim to involve citizens actively in proving public welfare services and in solving social and political problems and challenges. Regional authorities seek to co-create planning and transport solutions with private stakeholders.

Promote the Spirit of togetherness and Institutional Arrangements for Innovative Public Service capacity in Africa that Foster Improved Service Delivery Sustainably and Equitably in African States

▶ National governments should forge networks of public and private actors that formulate and monitor regulatory policies, and, in most cases, the African Union supports regional partnerships aiming to stimulate growth and employment in rural areas. In some countries, there are long traditions of citizens, civil society organizations, and public authorities joining forces and co-creating solutions to common problems. Although such endeavors have only recently been referred to as "co-creation," the empirical phenomenon is by no means new

▶ The causes of poor performance of public institutions is as a result of many factors such as Dysfunctional Structures, Lack of Innovation, Bad Public Policy Framework, Poor Corporate Governance and Leadership, and above all Lack of Transformative Leadership and Innovation. This gap leads to not achieving sustainable development goals in many instances.

▶ Public institutions require redesigning and repositioning to function optimally and deliver better services for citizens and this requires innovation and shared responsibility approach which involves defining roles in line with economic rationale, identifying capacity needs, and restructuring.

conclusions
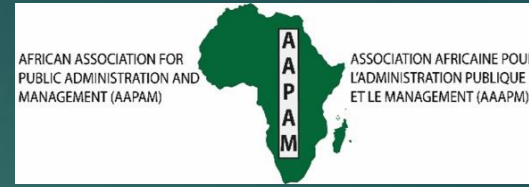
- Public Service Innovation through Digital Adoption and Changes act as key Driving Force in Societal Transformation. Smart Zambia national strategy for e-government service is a veritable tool for achieving sustainable development in Zambia. Citizens are able to access government services, transact, share experiences, socialize and better their lives.

- Digital Transformation has Radically Altered Dimensions of Global Societies and Economies. These Changes Affect the Interpretation of the Sustainability Paradigm Shift in African States in a number of ways. Furthermore, digital revolution plays a centrality role in achieving sustainable development goals and these can best be done through shared responsibility approach that contribute to leaving no one behind, equitably, integration, partnership and universality.