

## Empowering Creative Industries through Digital Readiness: The Role of Digital Infrastructure

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### Key Highlights

Leveraging on digital connectivity for growth of the creative economy is a key focus of Bottom-up Economic Transformation Agenda (BETA). However, challenges persist in effectively gauging the readiness of utilizing digital platforms in arid and semi-arid lands (ASALs). This policy brief focuses on the potential of leveraging digital readiness to enhance the creative economy in Kenyan ASALs. The key highlights include:

- i) Digital infrastructure is the foundational technological components and facilities that enable the functioning of digital technologies.
- ii) Tremendous achievements have been made in the fiber infrastructure. Fiber infrastructure serves as a digital highway providing secure infrastructure for business application and value addition services.
- iii) A significant gap exists in achieving last-mile connectivity and cost of access in implementation of digital infrastructure plans. There is need to enhance Last-Mile connectivity initiatives.
- iv) Promoting Internet affordability will require subsidy programmes or incentives to make digital services affordable for all segments of the population.
- v) Promoting local content integration will require development of policies that encourage the seamless integration of local creative content into the digital infrastructure.

### Introduction

Digital infrastructure is important in driving employment within the dynamic landscape of creative industries. Undoubtedly, the creative industry has experienced disruption by technology in unimaginable, inspiring, and yet innovative ways. Digital technologies have transformed the creation, production, distribution, and consumption of creative content. Creatives have access to a remarkable set of tools to reach and cultivate audiences, patrons, and supporters. Additionally, there are more ways to create, collaborate, and connect with peers, partners, and audiences. And yet, digital technology offers an avenue to creating a successful and resilient creatives industry capable of creating gainful employment. Use of digital technologies in the creative industries can be used to foster economic growth and job creation towards building a robust business environment.

The most recent acknowledgment and attempt to capitalize on the potential of the Creative Industry to create employment is through the *Talanta Hela* initiative, which was launched in June 2023. The initiative, which is part of the Government's Bottom-up Economic Transformation Agenda seeks to identify,

recruit, nurture, market and monetize talent. To fully enjoy and capitalize on the benefits of a transformed creative industry, a good digital infrastructure base is fundamental. Robust and efficient digital technology is built upon and dependent on good and capable digital infrastructure.

Digital infrastructure is the foundational technological components and facilities that enable the functioning of digital technologies. It encompasses a wide variety of physical and virtual elements that support the transfer and storage of information. The key components of digital infrastructure in which Kenya has made huge strides in developing are fiber optic infrastructure and the mobile network infrastructure. The legal and policy framework that underpins the development of the digital infrastructure has undergone tremendous evolution and is constantly changing to address the ever-evolving digital landscape.

The National ICT Policy (2006) laid the necessary policy framework needed to emulate the success of other nations that had leveraged ICT to attain significant social and economic development. It sought to improve

the livelihoods of Kenyans by ensuring that availability of accessible, efficient, reliable, and affordable digital infrastructure. The policy also acknowledged the vital role technology plays in the development of creative content and sought to improve it. It ushered in the concept of Public Private Partnership in the development of the necessary digital and ICT infrastructure. The framework that the National ICT Policy 2006 laid saw the country get connected to its first undersea fiber cable in 2009. This was a major developmental achievement, considering before then the country relied solely on satellites for Internet connectivity and international communication. To co-opt changes that had taken place in the digital space, the ICT Policy (2006) was revised and replaced by the ICT Policy of 2020. Its objective was to create enabling infrastructure and frameworks. The new policy recognized the development of digital infrastructure as a shared responsibility between the County and National Governments. The National Government was charged with responsibility of developing a National Integrated Infrastructure Plan while each county was to develop a county integrated infrastructure plan.

Infrastructure was one of the three foundational pillars of the Kenya ICT Master Plan (2014-2017). Under the plan, integrated ICT infrastructure is seen as a prerequisite for cost-effective delivery of digital products and services. The Master Plan recognized the multifaceted role of digital technologies in shaping social, economic, and political landscapes and provided a structured framework to guide interventions in key foundational areas. The subsequent National Digital Master Plan for 2022-2032 builds upon this foundation, solidifying a continued commitment to harnessing the transformative power of digital infrastructure for sustained economic development.

The National ICT Policy 2020 underscores the pivotal role of digital infrastructure in shaping the growth trajectory of the economy. By prioritizing infrastructure development, fostering economic contribution, engaging globally, investing in education and skills, and striving for global recognition, the policy envisions a dynamic and innovative ICT ecosystem that contributes significantly to economic development and societal well-being.

## Progress in Provision of Digital Infrastructure

Tremendous achievements have been made in the investments in fiber infrastructure. Fiber infrastructure serves as a digital highway providing secure infrastructure for business application and value addition services. Its purpose is to provide affordable and quality broadband infrastructure, with the end goal being to reduce the cost of digital products and services. Kenya currently has 6 submarine cables that offer connectivity to the rest of the World. Inland, the

government through the National Optic Fiber Backbone Infrastructure (NOFBI) project constructed the backbone infrastructure that cuts across all the 47 counties. The NOFBI is primed to meet the increased demand for accessible infrastructure to drive high volume data/Internet services that are accessible across the country. NOFBI phase one was implemented between 2007 and 2009 and covered all former provincial headquarters and 6 border towns in Kenya. NOFBI phase two was implemented between 2014 and 2017 and covered all county headquarters and all sub-county headquarters.

As a result of continued investment in digital infrastructure, between 2011 and 2021, the total number of fixed and wireless Internet subscriptions increased by 86.72 per cent. According to the Communications Authority (CA), mobile data/Internet subscriptions in Kenya were 47.76 million in the second quarter of 2022, with 66.8% of these subscriptions being on mobile broadband. As of December 2022, the penetration of smartphones in Kenya was 60.2%. The number of mobile SIM subscriptions stood at 65.7 million, representing a penetration rate of 133.1%. A penetration rate above 100% indicates that some users have more than one mobile subscription.

## Gaps in Implementing Digital Solutions for Creative Economy

While notable progress has been made, critical gaps persist in the implementation of digital infrastructure policies. Notably, a significant gap exists in achieving last-mile connectivity. While the NOFIB was extended to cover all sub-county headquarters, the challenge has been connectivity to users far away from these areas. Some areas are geographically leaving people living far from sub-county headquarters disadvantaged. Remote and underserved areas face persistent challenges in accessing digital infrastructure, limiting the inclusivity of the digital revolution.

The cost of digital access is a barrier for a substantial portion of the population. Affordability concerns have limited access to digital resources, hindering the benefits of digital infrastructure from being enjoyed across the socio-economic strata.

In the rapidly evolving digital landscape, there is a pressing need to fortify cybersecurity frameworks. Ensuring the security and reliability of digital infrastructure is paramount to foster trust and resilience in the digital economy.

Additionally, policies need to evolve to ensure the seamless integration of local creative content into the digital infrastructure framework. This is essential for preserving cultural identity and promoting the growth of local creative industries.

## Policy Recommendations

To address the above gaps, interventions include:

### **i) Targeted Last-Mile connectivity initiatives**

Prioritize and implement programmes specifically designed to extend digital infrastructure to remote and underserved areas, addressing the Last-Mile connectivity challenge.

### **ii) Promote internet affordability**

Explore innovative strategies to further reduce the cost of digital access. Introduce subsidy programmes or incentives to make digital services affordable for all segments of the population.

### **iii) Enhance cybersecurity measures**

Strengthen national cybersecurity frameworks to guarantee the integrity and reliability of digital infrastructure. This involves investing in advanced technologies and establishing effective monitoring systems.

### **iv) Promote local content integration**

Develop policies that encourage the seamless integration of local creative content into the digital infrastructure. This will not only preserve cultural diversity but also stimulate local creative industries.

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## References

Kamunye K. and Kioko J. (2023), *Leveraging on Digital Readiness to Enhance the Creative Economy in Kenyan ASALs*. KIPPRA Discussion Paper

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### About KIPPRA Policy Briefs

KIPPRA Policy Briefs are aimed at a wide dissemination of the Institute’s policy research findings. The findings are expected to stimulate discussion and also build capacity in the public policy making process in Kenya.

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