THE RELATIONSHIP BETWEEN DIGITAL TECHNOLOGIES AND SUSTAINABLE ECONOMIC GROWTH (MOBILE E-LEARNING, DIGITAL SOLUTIONS)

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Abstract

This study presents the impact of individuals on sustainable economic growth through digital technology. This presentation describes a how mobile e-learning (Digital Solutions) brings many unprivileged women and youth closer to accessing the internet and an opportunity to broaden their knowledge and skills in their endeavors. It also describes the already existing interventions and how this solution brings guidance to individuals who do not know the path to digitalization and its importance to them and the country as a whole.

Introduction

Digitalization has been a campaign policy message for some political parties in Ghana. Many who found digitalization policies greatly important voted massively for the present government in 2016 and have kept them in power till date. There has been digitalization revolution since then till now. There have also been various surveys and research work to analyze people's perspectives on digitalization and the results have proven that digitalization is the way forward. A catalyst for economic development (Anthony Xavier Chabry July 11,2021) where digitalization refers to the facilitation of economic process by leveraging digital technologies and digitized data. Economies with robust digital infrastructure were best prepared for the covid -19 pandemic shock. Ghana felt the need to revolutionize digitalization not only for the purpose of the pandemic but to sustain and cause economic growth. They developed the Drone Delivery System, Mobile Money Interoperability, Paperless Port System, Integrated e-immigration system, e-procurement, e-Parliament, e-justice, e-cabinet and the integration of Government Database.

(Edna Maeyen Solomon, Aaron Van Klyton, the impact of digital technology usage on economic growth in Africa, 2020) distinguished the impact of individual, business and government ICT usage on economic growth. They proved with their research that only individual usage has a positive impact. It has proven to make work faster, data retraceable and work more effective.

These are only government impacts which has not really sustained economic growth in some years as expected. The sustainability of Ghana's economic growth using digitalization did not meet its expectation. According to World Bank's overview of Ghana's economy, Large capital outflows combined with monetary policy tightening in advanced economies put significant pressure on the exchange rate, together with monetary financing of the budget deficit, resulting in high inflation. These developments interrupted the post COVID-19 recovery of the economy as GDP growth declined from 5.1% in 2021 to 3.1% in 2022. Therefore, individual impact is the way to go.

Why individuals have a high impact on sustainable economic growth with digital development.

Government plays an impactful role in sustaining economic growth through digital technologies, likewise, the business sector. Both government and Businesses need individual impact to sustain economic growth through digital technologies.

Most private businesses use E-commerce for a faster and convenient trading. People have adopted to these systems, but minority of African countries have shown how effective E-commerce are as compared to most western countries. Individuals need to skill up, get knowledgeable and find practical measures to be in synch with new technologies. E-commerce in Africa generally face lots of challenges. Address systems, inadequate ICT infrastructure, lack of basic ICT knowledge and threats of cybercrimes has created these barriers. (Dennis Ndonga, E-commerce in Africa: Challenges and solutions. Africa journal of legal studies 5 (2012) 243-268).

Another contributing factor that destroys the good effect digital technologies is under skilled digital workers which in turn affect Sustainable economic growth.

An example is the Ghana Post Service (GPS). It has a digital address system, a software that makes finding locations easier than it was in the past, with or without a well demarcated residence, yet many individuals barely use this software. There are many digital development initiatives by both Government and private businesses to improve productivity and cause less, yet effective hours of service. Though such initiatives exist today, most individuals do not make maximum utilization of such developments due to lack of basic ICT knowledge and infrastructure and other barriers. This shows that individuals with digital skills are fuel for sustainable economic growth.

The diagram below shows simply the dependence on individuals to impact sustainable economic growth through digitalization:

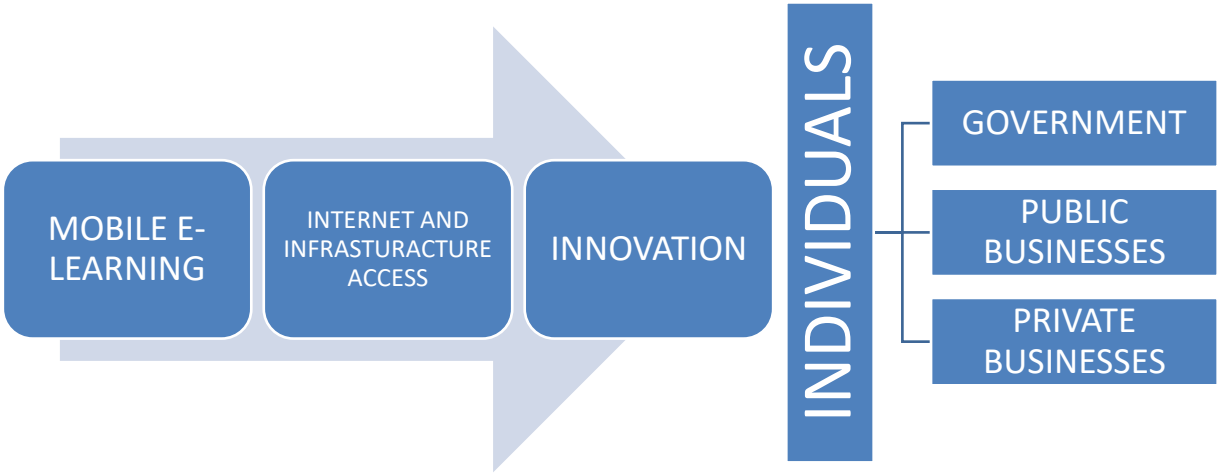

Figure 1: presentation on how government and businesses depend on skilled individuals

Solution

Mobile E-Learning (Digital Solutions)

UNITAR's training programme ***Developing Essential Digital Skills for Women and Youth in Africa*** in partnership with Microsoft, IBM and Pasona, with support from the Government and People of Japan is a bigger example of E-learning for women and Youth in Africa. This training has already impacted knowledge on women and youth who are enthusiastic about acquiring digital skills. It has definitely increased employment opportunities for these women. With badges and certificates acquired from this training their branding boosted, professional careers opened, the needs of the digital economy could be met. It is expected that, this opportunity will increase digital service creation and sustain economic growth for the African continent.

Great innovations are expected to rise from this training program and could be Africa's next revolution. Though, participants in this training program have access to some needed tools like a reliable computer, Wi-Fi, connection to the internet, accessories like headphones and USB drive, this cannot be said for those who wished to be a part but lack the needed tools. Digital Solutions is expected to solve this problem to a higher percentage.

Eighty nine percent of learners across Sub-Saharan Africa do not have access to computers and eighty two percent lack internet access. (Sampson Kofi Adotey, Global Shaper, Accra Hub, Next Einstein Forum, Digital Inclusion is Key to Improving Education in Africa, 2021). Digital inclusion for almost every part of Africa is yet to actualize.

Steps that can be taken to reach this goal, include Mobile E-learning. A mobile operator in Ghana, Tigo, in 2015 partnered with a non-profit organization, Street Library and created E-library on Wheels. It was designed to provide rural community children with education and digital inclusion. Here, children select their preferred digitized books.

Mobile E-Learning with a free ICT Course for all ages and a learning plan for most individual according to their needs will keep them in check for upskilling digitally in whatever field they find themselves. People can also have the privilege of learning technical skills like;

- Cloud Computing so they may understand the need for storing and processing data to stir innovations,
- Artificial Intelligence,
- Cybersecurity to broaden knowledge and put Africa on an accessible map where we could also generate income,
- Data Science to have a structured way of handling their production and services,
- Block chain for transactions improvement,
- Internet of Things especially for rural development, and
- Computer Networking basics.

Infrastructural development

The awareness of an effective E-library on Wheels for children's education, less technical skills and the lack of basic ICT Knowledge and other digitalization barriers, creates a great opportunity to collaborate with organizations, non-profitable institutions and individuals that believe in digital technology and its education to actualize this solution.

The practical use of sensors and resources for the study of Internet of things and Artificial Intelligence. Solar paneled vehicles with charging systems for computers is one most potable

digitalization strategies known. It must contain computers and consultants that guide individuals to a study plan or a project guide.

Target

1. Women in the Agricultural sector. They could get the opportunity to;
    - Use Block chain,
    - To share data with their supply chain partners
    - To research and learn about their productions,
    - Receive weather reports for adequate preparation.
    - have a learning plan that will cause these women to be more knowledgeable in their field.
    - Engage in digital trading, E-commerce and broaden their network.
2. Entrepreneurial youth. They could gain the ability to learn;
    - Basic ICT,
    - Cloud Computing so they may understand the need for storing and processing data,
    - Artificial Intelligence,
    - Cybersecurity,
    - The importance of Data Science,
    - Block chain for better trading,
    - Internet of Things especially for innovations,
    - and Computer Networking basics.
3. Employed women and youth who want to upskill for a better career opportunity.
4. Persons who desire to own a computer or any technological gadget. Computer and other accessories can be sold at a discounted price for women and youth in various communities.

Competitive events

Annual award programs could be organized to support sustainable innovations and immediate technologies with skills earned. Consultation sessions for the youth especially with practical needed when it comes to technologies.

Opened Internship and Voluntary Experience

This will create an opportunity for those who are already skilled and knowledgeable to come on board. They will be of great assistance to individuals who are zealous about applying digital technologies to their field of work or interests. Everyone gets a happy learning environment. Especially, using design thinking techniques to achieve their aim.

Collaboration and Funding

There are a list of organizations, non-profitable institutions and individuals who grant funds to digital development project. Examples include; USAID, GET Fund and World bank. Examples of collaborations for our case study, Ghana, are Coral reels, Network Operators; Ministry of Agriculture, Ghana Education Service, Ministry of Communication and digitalization, the media and interested individuals.
Needed tools are computer, vehicles, solar systems, internet access, study syllabus and resources for innovations. These collaborators are potential suppliers for these tools.

Conclusion

Perspectives of people throughout many surveys conducted in Africa has proven that, digital technology has a positive impact on a country's sustainable economic growth but government and business interventions have not actualized their expectations completely. This is due to the gap between well skilled individuals and individuals without the knowledge of digital technologies. By providing Digital Solutions implementation of skills learnt will come easily. Women and youth will be inspired to do more in Ghana and in Africa as a whole. There will be more collaborations among individuals and technological skills will be widely gained. This is the greatest revolution into digitalization most organizations, non-profitable institutions and the media will not want to be exempted.

References

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