Exploring the Nexus between Blockchain Technology & Digital Transformation

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Ladies and gentlemen,
I am very pleased I am able to speak to you by the Internet which barely 30 years ago was not possible in Ghana..

I am to speak on blockchain and digital transformation

Blockchain is a particular way of organizing digital information for a purpose in an application

The digital transformation on the other hand produces digital information some of which benefit from Blockchain style of organizing digital information

Thus, the link between blockchain and digital transformation is natural

At the core of the digital economy are computing and internet technologies which create cyber space that enable digital transformation and blockchain

Data in today's cyberspace has become increasingly centralized and often located in successful internet companies on the market

The consolidation on a decentralized internet network has occurred through competition to serve users seeking the ease of use and other services

It so happens that traditional regulation is entity based which favor a few centralized organizations under regulation.

However, these centralized organizations may become single point of failure. These corporations optimize to shareholder value making them somewhat opaque. Additionally, vulnerabilities and other operational malfunctions such as security infraction which reveal user information or user privacy compromised

That is the user as an owner is not in control and not empowered

To reverse this trend, new technologies attempt to empower the user including reducing involvement of intermediaries by applications level decentralization. Blockchain is one such technology with great promise and questions

Bitcoin started its Blockchain in 2009 after the Banking bubble and it's introduction was to challenge the norm with a currency system with limited and fixed amount of money in circulation. It also came with a decentralized public ledger called blockchain and an ecosystem of service providers

Ghana is not new to Blockchain and crypto currency. Since Bitcoin mining operation started in 2015, there's been engagement with government, regulators, financial intelligence center and others. There's been workshops from blockchain academy and annual conference from blockchain network

The system sought to build trust using cryptographic technologies and a mechanism of agreement on the state of accounts on the immutable decentralized time ordered ledger, through a process known as consensus. Other blockchains emerged notable amongst them is Ethereum which introduced in 2015 a variant of Bitcoin blockchain with software programs that exist on blockchain. This unleashed an

the industry with a wide variety of coins for various purposes and Decentralized Finance applications. This further caused new types of coins called non fungible tokens that can represent rights to digital art, digital goods and physical goods

All these innovations have raised numerous challenges to regulation. Firstly, regulators attention tends to be linear while the growth in innovation is exponential creating pressures. Secondly the decentralized nature of blockchain coupled with its global reach created concerns around money laundering, terrorism financing and other criminal activities. Others have argued the confirmation of transactions called mining consumes too much electricity

and terrible for the world not mentioning that existing systems also consume appreciable amount of electricity. There has to be a cost to permission less trust that there's no double spending which the blockchains ensure. Lastly, the value of these private coins depend on user acquisition and therefore volatile by nature and been portrayed as a major consumer protection concern.

Note that amidst all these issues associated with blockchain, digital and crypto currencies, we have new converts notable among them are governments issuing CBDC and corporations who are also rushing to issue stable coins. We congratulate Bank of Ghana for its e-cedi initiatives

There are additional responsibilities that the user of such systems must learn how to protect its secret keys in similar way momo users protect PIN numbers but as the transfers are not reversible a user can't afford any mistakes and must take extreme precautions

The potential of blockchain extends beyond finance and banking applications to applications that require immutability, supply chain management, rights and certificates, and many more. Securing government documents by blockchain have been cited as low hanging fruits to show blockchain use cases. Above all traceability and audit ability of blockchain have proven attractive to enthusiasts

Governance initiatives are necessary for safe adoption of Blockchain. In Ghana, GDC has been asking to be regulated since 2015. In the early years the barrier was how to regulate an unknown technology. Along the way the industry was driven underground following some unfavorable happenings in the finance sector. It was not till 2021 that GDC was approved to operate in the Bank of Ghana sandbox. While this is good for Ghana can do, it also shows that regulation takes time and we can miss opportunities. The global industry is already consolidating and global companies have built up wallets while local companies were restrained and law abiding. A country has gone further and recognized Bitcoin as legal tender and volcano devastated Tonga is in

recent news about how crypto currency helped in restoration…We as a country should move forward and adopt crypto currencies through innovative regulation. As with all technology waves the early bird catches the worm

We are hopeful that Blockchain technologies do not suffer same fate as internet where we went from over 100 local ISPs in '90s to the handful of multinational companies providing internet services today.

The policy environment should support Ghanaian companies to venture into providing crypto currency services locally before market captured by international operators

Thank you