

**THE ROLE OF INFORMATION TECHNOLOGY
EDUCATION IN THE GOVERNMENT'S DIGITALISATION
AGENDA**

Remarks by

Dr. Mahamudu Bawumia

At

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- The Chairman of the Governing Council, Accra Business School, Bishop Gideon Titi-Ofei
- Members of the Governing Council
- Representatives of South East Technological University
- President of Accra Business School, Professor Cedric Bell
- Vice-President of Accra Business School, Professor Elvis Cornerstone
- Registrar
- Faculty Members
- Non-teaching Staff
- Students
- Parents and Guardians
- Invited Guests
- Friends of the Media
- Ladies and Gentlemen

I would like to first of all thank the Chairman of the Governing Council, Accra Business School, Bishop Gideon Titi-Ofei and management of the ABS for extending an invitation to me to share a few remarks at this milestone event – the launch of three new programmes that are in alignment with the times we find ourselves in.

What I'd like to do today is to position my speech in the broader context in which it is nested. I am going to focus on five realms that provide the architecture for these programmes under the theme, "The Role of Information Technology Education in the Government's Digitalisation Agenda:

- 1) Making sense of the data deluge;
- 2) Ever-changing cyber security landscape;
- 3) Marketing in a noisy world
- 4) The automation advantage; and
- 5) Overwhelmed by tech overload

The government, and the stakeholders that it exists to serve, are rapidly becoming 'digital' in every way. The shift to digital is a long-term trend that has been accelerated by COVID-19 and will continue with improving technology like the rollout of 5G. Now, more than ever, digital must be front and centre of government's priorities to meet user needs.

For the education sector, considered to be the auxiliary backbone of Ghana, schools have surely had a challenging period these past 2 years. They've required new ways of working, an acceleration of digitisation, and a fresh perspective on future opportunities. COVID-19 and the resultant lockdown created a huge barrier between our youth and their education. Ghanaian companies and institutions such as the Accra Business School have rallied together to ensure that students receive access to schooling in innovative ways. The incredible work of our nation's

educators ought to be acknowledged and celebrated. They have adapted to the challenges of the pandemic to prioritise the education of their learners. I highly commend companies that are empowering our economy by uplifting our education sector. While education builds the foundation of an economy, high-quality education allows our nation's citizens to contribute more effectively to our economy and navigate the global landscape.

The turbulence of our times has necessitated a nimble response to fast-rising demand for some sectors of the economy. For others, it has called for agility to cope with new limitations on deliverability and access to customers. In both scenarios, technology has emerged as a driving force and facilitator. The world including Ghana is heading towards a digital future. But, while technology is often heralded as a solution for all seasons, having to traverse the digital landscape without a clear understanding of

exactly what challenges it can solve is problematic.

The introduction of Information Technology into classrooms is a necessity for the government's digitalisation agenda. It is the perfect match for knowledge-seekers everywhere as the world is brought to them with concision and wit; an opportunity to learn the language of the digital future and the digital economy.

The role of IT education in an increasingly interconnected and interdependent world transcends geographical boundaries, economies, and sectors. Over the past decade, information and communication technology (ICT) has helped create the most rapidly growing industry sectors, driven efficiency in government and business operations, and developed the essential building blocks of a knowledge-based economy. In this era of global integration, ICT becomes indispensable and embedded in everyday activities. The promises it offers seem limitless. It can

provide governments, businesses, and citizens with access to relevant information and allow them to communicate to make informed decisions and enable more efficient processes and services to address various economic, social, financial, and educational needs.

As a sector, ICT has contributed to the creation of the most rapidly growing industries, such as electronics, business process outsourcing, and telecommunication and internet services. As an infrastructure, ICT is seen as an enabler of economic growth and competitiveness based on the uptake and utilization of ICT in business, education, and society. However, the asymmetrical level of ICT use and pace of ICT diffusion in Ghana have caused the uneven distribution of the benefits of ICT. This creates the “digital divide” within the country and among communities within it, and calls for attention and assistance from international development

agencies.

Technology has developed in leaps and bounds over the last 20 years. It continues to advance. The educational system of this country should not be frightened of technology but should harness it to provide a better and more efficient service to the public which at the same time creates new avenues for revenue generation for the state and its citizens, and eventually improves the quality of life of Ghanaians.

In times of crisis and uncertainty, we look for signals to reaffirm who we are, how we should act, and where to go. Heading towards a digital future means that we need a significant transformation of our workforce to get the most out of our organisations. IT education is pivotal in the government's digitalisation agenda because it offers the

opportunity to build human resources for general ICT literacy and ICT professional skills through the use of ICT to be applied in all sectors. Once the process of digitalisation is implemented, new technologies within this digital environment not only represent a competitive edge for companies that can take advantage of their potential but also provide a unique opportunity to innovate.

Information Technology education will help us in powering digital life by rethinking competition, capitalism and the roots of collaboration between the public and private sectors. Technology will be our servant, not our master. It provides the scope for our courts to resolve disputes more quickly and less expensively, for money to reach various destinations at the speed of sound, to expand market reach and lower costs of doing business, and generally expand the ability of businesses in all sectors to take advantage of

global value chains. The widespread adoption of ICT can only be achieved through education. However, none of this can be achieved without a strong strategic centre, making better use of data, and building capability across the state's digitalisation agenda.

As the country emerges from the twin crises the whole world is facing, we will take forward what we have learned, to make sure that we use data more intelligently and sensitively in how we craft and deliver public services with ethical considerations. The pandemic gave fresh impetus to digital projects across the public sector, with so many services stalled across government in response to COVID-19. So it is timely that today I can re-echo the government's digitalisation ambitions. We pursue digitalisation, not for its own sake, but as a vehicle to solve problems faced by ordinary Ghanaians and transform the

economy. Through digitalization, government has been able to solve many problems that have faced Ghanaians.

TABLE 1. THE NPP’S RECORD OF FIXING PROBLEMS WITH DIGITALIZATION

	PROBLEM INHERITED	WHAT WE HAVE DONE SO FAR
1	No unique National Identification system	We have implemented a national Identification system with the Ghanacard.
2	Access to student loans limited for many students because of the inability to obtain guarantors for the loans	No guarantor student loan policy introduced for students with the Ghanacard
3	Problem and cost of acquisition of visas by diasporan Ghanaians. Many have lost passports in the process.	We have obtained ICAO certification for the Ghanacard to be used as a travel document for travel to Ghana from abroad without the need for a visa
4	No functional National Address System	We have implemented the digital address system
5	No mobile money interoperability between telcos (E.g. you could not send money from a Vodaphone customer to an MTN customer)	We have implemented mobile money interoperability which allows customers of one telco to transfer mobile money to customers of another telco.
6	No interoperability between bank accounts and mobile money wallets	We have now got interoperability between bank accounts and mobile money wallets

7	Majority of adults did not have a bank account . Many people faced difficulties in opening a bank accounts: literacy, referees, etc.	As a result of mobile money interoperability over 90% of adult Ghanaians now practically have a bank account. To open a bank account today all you need is a Ghanacard and a mobile phone. No filling of forms is needed.
8	Cash dominance in payment system	With the implementation of mobile money interoperability, Universal QR Code (first only one in Africa), Ghanapay (which introduced the first bankwide mobile money service in the world), Cash transactions have reduced. Currency in circulation as a percentage of GDP has reduced from 6.8% in 2016 to 4.7% in 2021.
9	The refusal by some international retailers and online outlets to accept Visa and Mastercard credit and debit cards issued in Ghana.	Following the major payment system reforms implemented, agreement has been reached with Visa and Mastercard under which Ghipss will be a domestic and International processor for Visa and Mastercard transactions. This will mean that Visa and Mastercard cards issued in Ghana will be internationally acceptable for e-commerce
10	Difficulty of renewing National Health Insurance membership	Fixed it. We have made it easy for people to renew their national health insurance membership on their phones without having to spend precious time in long queues.
11	Difficulty and inconvenience in buying electricity units from ECG for your meter	ECG customers can now can easily buy pre-paid electricity units conveniently from wherever you are from your mobile phone.
12	Bureaucracy and corruption in obtaining a passport	The online passport application processes are helping many people and making it easier to obtain a passport. Revenue has increased from GHC1.1 million in 2017 to GHC56.7million by 2021
13	Bureaucracy and corruption in clearing goods at the ports	We digitized process of clearing goods at the ports through the paperless ports program.
14	Difficulty and bureaucracy in applying for scholarships	Following digitization at the Scholarship Secretariat, everyone is able to apply for scholarship and receive same in the comfort of his or her home via online applications.

15	Fake insurance certificates and difficulty of checking the validity of insurance for motor vehicles.	We have implemented the digitization Motor Insurance Database which can be accessed simply with any mobile phone by the insured, the police, and the public. Many advanced economies like the UK do not have this system.
16	Bureaucracy and difficulty in obtaining a drivers licence	We have digitized the operations of DVLA and today our citizens have a much more convenient and easy way to acquire their driver's license and register their vehicles. Revenue increased from GHC71.5m (2013-2016) to 168.4 million (2017-2020, a 135% increase!
17	Difficulty in finding pharmacies which stock prescribed medicines, prices of medicines and avoiding fake drugs	The first national scale electronic pharmacy platform in Africa has been established. All licensed pharmacies in Ghana are required to be on the digital platform. Launch on 18 th July 2022.
18	No wifi access at our senior high schools	We are providing free Wifi to 700 senior high schools, the 46 Colleges of Education, 260 district education offices, and an initial successful pilot of 13 public universities.
19	Difficulty and bureaucracy in accessing government services	We have developed a one-stop shop for government services (Ghana.Gov). The process of on-boarding all government institutions is ongoing. 1018 agencies of MMDAs onboarded. On this website you can apply for and obtain various government services from MMDAs.
20	Lack of transparency in accounting for travel expenses by government officials	Introduced a Government travel card for all government officials which will keep the record of all payments made by officials during travel.
21	Very few people (only 4% of the adult population) had Tax Identification Numbers (TIN)	By making the National ID number the TIN number, we have increased the proportion of adults with TIN numbers from 4% in 2016 to 85% now.
22	Weak Property tax system with taxes being collected on	GRA in collaboration with the Ministry of Local Government is implementing a Unified Common Digital. Platform for Property Tax Collection from a

	only 9% of properties.	database of 7.5 million properties. This will complement the existing Department of Local Revenue (DLRev) software which is to be deployed to all MMDAs
23	Reluctance or difficulty experienced by people in filing and paying taxes	GRA has completed the development of a Mobile App which simplifies the tax filing and payment process through a mobile phone. After successfully filing, the taxpayer will automatically receive a tax clearance certificate. The tax clearance certificate will become a requirement for obtaining many government services. The Mobile App will be formally launched soon.
24	Fake birth certificates, bureaucracy and corruption at the births and deaths registry	Ongoing Digitization of the births and deaths registry with a link to the Ghanacard from birth.
25	Football Clubs and Authorities lost revenue from corruption associated with ticketing for football matches	Implemented E-Ticketing for football matches. Major increase in revenue
26	Banking system was about to collapse	With Banking sector clean-up, we have rescued the banking system and saved the deposits of 4.6 million Ghanaians by spending GHC25 billion.
27	Difficulty in accessing medicines and blood in remote areas	Introduced drones in the delivery of critical medicine, vaccines and blood to people in remote parts of the country. Ghana has now the largest medical drone delivery service in the world. There are six Zipline Distribution Centres in Omenako, Mpanya, Vobsi, Sefwi Wiawso, Kete Krachi and Anum.

Now, back to the five realms that I mentioned earlier in my introduction.

Making Sense of the Data Deluge

Being a small and externally-oriented economy, Ghana has been particularly sensitive and responsive to the effects of globalization. We have been active participants in the international community and must continue to do so as our future depends on our active engagement with the globalised world which encourages the free flow of trade, capital and knowledge. Our universities must provide a platform for students to prepare for that future by exposing students to a multicultural learning and social environment, so that they will be willing and able, and competitive enough to work effectively in Africa, Europe, America, Asia or elsewhere. Unlike budget, capacity and time, one thing Ghanaian businesses are not short of is data. Traditionally, big data has been assumed to belong to the realm of big business, but things are changing. There is

growing awareness of data management solutions for smaller operations, but further education and convincing are required.

Ever-changing Cyber Security Landscape

The digitalisation era is witnessing the growing threats of cyber attacks on different businesses and institutions. News of Australian small and medium-scale businesses and firms of different sizes and capacities in the US and other developed countries, as well as state institutions like what happened with the UK army being targeted with ransomware cyber threats, have emerged as a source of growing concern. While security has long been a fundamental consideration, until recently there has been a widespread lack of understanding as to the extent of cyber threats to organisations other than large corporates.

Awareness of potential security breaches and their ramifications is something businesses and state institutions are now seeking.

The rise in ransomware attacks on different businesses and institutions has brought home the point that cyber security is a serious concern for organisations of every size.

Marketing in a Noisy World

Online presence now is a requirement, but it would seem the bigger the marketing budget, the better known the brand. Yet marketing is a must for ongoing growth and market share for any enterprise. The digital age has meant that businesses rely less on traditional marketing methods, which in many ways has made messaging the masses more accessible. From social media to time-saving Artificial Intelligence (AI) list building, there are many exciting

marketing options for businesses in all sectors of the Ghanaian economy. Maximising budget is everything and there is a great deal of focus and concern in the entrepreneurial community about employing people who understand how to maximise reach and produce the campaigns and content to do so; Marketing in a noisy world is both easier and more complex. The question then is, how do you know you are doing everything possible to attract new customers and get your brand in front of the people looking for a small business like yours?

The Automation Advantage

While many institutions can sense the opportunities that the digitalisation agenda offers, the abundance of opportunities also makes it difficult for institutions to make the appropriate choice on how far and where they should

go. In this context, I would like to suggest a guiding principle that should apply to all institutions: whatever initiatives that an institution is pursuing, they have to be done with the prime objective to enhance the quality of life for Ghanaians. Many business ventures are exploring and embracing automation to streamline business processes and increase efficiencies. There are many options available to automate basic, repetitive, rules-based tasks – allowing them to reduce human error and free up employee time to work on more creative growth-building tasks. With more and more low-cost automation solutions available, there is an enthusiasm to learn more and discover real-world examples of how they can automate areas such as marketing, sales, operations and finance. “It’s clear that there are some tasks that can and should be automated to create more efficiency and free up employees to make better use of their time. And there’s always that worry that

if we don't, our competitors will.

Overwhelmed by Tech Load

The pandemic has accelerated the digital transformation of most industries and those that have embraced it have some experience with the benefits of cloud services, connectivity and mobility and automation. Understanding that these categories of technology are available is one thing, but navigating them is another. Right now, industry leaders are inundated with information and overwhelmed with technology options. The overabundance of choice adds to the pressure of knowing where to begin to find a solution that will work seamlessly with existing systems and satisfy future goals. There is a fear of the known unknown. Selecting the right solution is more important than selecting the right vendor. Vendors tend to push technology

not solutions. Small businesses don't care so much about technology, it's more about business outcomes. Tech vendors value the complexity of a solution and therefore the cost of investing. There is a need to first establish trust that solutions work before understanding the technology.

At the heart of these five realms is the role of Information Technology education to determine a solution's likelihood of meeting the following criteria:

- Establish the problem to determine the solution. Emphasis needs to be on solving business challenges rather than the technology itself.
- Understand the potential ROI for the business, with defined and quantitative outcomes.
- Ease of integration within the business.

GOING TO THE IMF

Before I conclude, I would like to use this opportunity to make some comments on an issue on the minds of many Ghanaians: the decision by government to opt for an IMF program to stabilize the economy in the midst of global crises (the COVID-19 pandemic and the Russia Ukraine War). A crisis which has visited untold hardships on Ghanaians with rising prices of virtually everything from fuel to bread, tomatoes, building materials and so on. In the midst of this global crisis, Ghana's fiscal and debt sustainability has worsened.

Some commentators and analysts have argued that COVID-19 expenditures alone could not be the reason for the large increase in the fiscal deficit and the debt stock. In fact, they are right. COVID-19 expenditures alone were not

the reason for the large increase in Ghana's debt stock by the end of 2021.

In fact, as I stated in my April 7th lecture, in addition to COVID-19, there were two major items of expenditure that are critical to understanding the evolution of the fiscal deficit and the debt stock: the Banking Sector Clean up (GHC 25 billion) and the Energy Sector Excess Capacity payments (GHC 17 billion).

The excess capacity payments of GHC 17 billion relate to a legacy of take or pay contracts that saddled our economy with annual excess capacity charges of close to \$1 billion. These were basically contracts to supply energy to Ghana way in excess of our requirements, but we were obligated to pay for the power whether we use it or not. The excess

capacity payments includes GHC 7 billion of payments for gas resulting from the previous government signing an offtake agreement for a fixed quantity of gas with ENI Sankofa on a take or pay basis which was way in excess of what was needed at the time. Not keeping up with the excess capacity payments would have meant throwing the country back into a new bout of dumsor.

We were also confronted with a banking crisis as a result of the mismanagement of the banking sector. Ghana's banking system was on the verge of collapse and not dealing decisively with it would have meant disaster for the economy with millions of people losing their savings.

Direct COVID-19 expenditure amounted to GHC 12.0 billion, made up of GHC8.1 billion in 2020 and GHC 3.9billion in 2021.

The data in Table 2 shows that the three items of expenditure cumulatively amounted to **GHC 54.0 billion (the equivalent of some \$7.0 billion)**, which was borrowed. The Ministry of Finance estimates that the interest payment on this borrowing for the three items amounts to GHC 8.5 billion annually. This is some 23% of Ghana’s annual interest payments of GHC 37 billion.

TABLE 2: EXPENDITURE ON EXCEPTIONAL ITEMS 2018-2021

Exceptional Items:	GHC BILLIONS
Financial Sector	25
Excess Capacity Charges	17
COVID-19 (Direct) ¹	12.0
Total	54.0

Source: Ministry of Finance

¹ Made up of GHC 8.1 for 2020 and GHC3.9 for 2021

To put the expenditure on these three items in perspective, it is important to juxtapose it against the total expenditure (releases) on some of the governments key flagship projects, including Free SHS, one district one factory, planting for food and jobs, Development Authorities, Ghanacard, Zongo Development Fund, NABCO, and teacher and nursing trainee allowances. The data shows that the expenditure on these key flagship programs over the five year period between 2017 and 2021 amounted to **GHC15.62 billion** compared to the **GHC 54.0** billion expenditure on the three exceptional items. The expenditure on the three exceptional items amounted to more than three times the expenditure on the flagship programs over five years..

In fact, the annual interest cost of the borrowing the GHC 54.0 billion for the three exceptional items would pay for

double the annual cost of all the flagship programs referred to.

It should be noted that without the GHC 54.0 billion debt for the three exceptional items (COVID-19, Financial Sector and Energy), Ghana's debt to GDP would be within the sustainability threshold of some 68% instead of the 76.6% at the end of 2021.

Following the Russia-Ukraine war, Energy and Food Prices Skyrocketed globally! For many advanced economies, inflation reached 30-40 year highs.

- Inflation in Ghana increased to 29.8% in June 2022.
- Global supply chains were disrupted and shipping costs increased by over 1000%
- Economic growth slowed down
- Higher Revenue projections in the 2022 budget (based on tax exemptions, property rates and the e-levy) did not materialize.

- The debt sustainability analysis continued to place Ghana at a high risk of debt distress
- There was a Credit Ratings downgrade by international credit ratings agencies
- Before COVID-19, Ghana was borrowing \$3 billion annually from the international capital market.
- Following COVID-19, the international capital markets have been largely inaccessible by emerging market countries like Ghana.
- Furthermore, as a result of increases in interest rates in developed economies and increased perceived risk of emerging market economies, investors have pulled \$50 billion from emerging market bond funds in 2022 alone.
- Non resident holders of bonds in Ghana were not rolling over maturities resulting in a decline in foreign exchange reserves as repatriations increased.

- With the challenges in accessing the international capital market, balance of payments support was needed to bridge the financing gap, stabilize the economy and create space to implement structural reforms and restore debt sustainability.
- Hence decision to seek IMF support

I should note again that Ghana has been hit by a quadruple whammy in the last few years :

- Energy Sector Excess Capacity Payments,
- Banking Sector Clean-Up,
- COVID-19, and
- the Russia- Ukraine war.

If you take out the fiscal impact of this quadruple whammy, Ghana will not be going to the IMF for support because our fiscal, debt and balance of payments outlook

would be sustainable. Of the four factors, two (COVID-19 and the Russia Ukraine war) were external and the other two (the banking sector clean up and the excess capacity payments) were the result of policies of the previous government.

Today , all over the world, fuel prices are rising in virtually every country, food prices are rising, inflation is at a high for many years, currencies are falling in value, fiscal deficits are increasing, debt levels are increasing, etc. This tells us that what we are dealing with is a global phenomenon.

Let me give you an analogy to make my point. If you ask a carpenter to roof your house and suddenly the roof collapses without any wind or rainfall, will you not blame the carpenter who did the roofing?

But if a carpenter roofs your house and the roof collapses because of a tornado and a storm which has also blown away the roofs, windows and walls of many houses, will you blame the carpenter?

WAY FORWARD

Unfortunately, judging from where we are today, there is no end in sight for the Russia-Ukraine war. While we hope for a quick end to the war, we must understand that things could get worse before they get better.

The major lesson of the last two years is that we have to be more self-reliant as a country. It is important that we take decisions that will inure to the benefit of the country regardless of whether we are going to the IMF for a program or not.

- The immediate task is to restore Fiscal and Debt Sustainability – through revenue and expenditure measures and structural reforms.
- Non-concessional borrowing should be curtailed to enhance debt sustainability.
- Indeed, the reliance on international capital markets to fill the financing gap of about \$3 billion annually exposed the vulnerability of the economy once the capital markets shutdown to emerging economies. This has heightened the need for Ghana to build foreign exchange reserve buffers to cater for unanticipated shocks like COVID-19 and the Russia-Ukraine war.
- Notwithstanding being one of the big gold producers in the world, Ghana’s reserves of gold at the central bank at the end of 2021 was only 8.7 kilograms. It was

against this background that the Bank of Ghana started a Gold purchase program from gold producers to build up its foreign exchange reserves. To enhance this program, Government will implement a new policy (which is already backed by law) under which the central bank (Bank of Ghana) will have first right of refusal for all gold mined in Ghana. The central bank will purchase the gold at world market prices and the mining companies will export the portion that is not purchased by the Bank of Ghana. Ultimately, once we accumulate enough gold, future borrowing and our currency can be backed by gold. This will stabilize the cedi long term.

- We must also deepen our industrialization through value addition to gold – Even though Ghana has two gold refineries, none has London Bullion Market Association (LBMA) certification. This limits our full

participation in the gold value chain. We will urgently work towards LBMA certification for our refineries in the next few years. Value addition to minerals such as lithium and bauxite will similarly be pursued in addition to the IDIF program and the continued implementation of the automotive sector policy.

- We are also poised for a major reform of the energy sector. The energy sector has proven to be the Achilles heel of the economy. The reforms will make the sector more market based.
- The investment in TVET has been massive and we will continue to focus on TVET to provide the skills needed for industry.

- Domestic revenue mobilization is key to self-reliance.

We have put in place the architecture and infrastructure to expand the tax base and collect more taxes:

- A new unified common platform for the collection of property taxes,
- Rationalization of tax exemptions through the tax exemption bill,
- Ease of filing and paying taxes through a GRA Mobile APP
- Mandatory filing of taxes and presentation of tax clearance certificates

The new architecture for domestic revenue mobilisation should be fully operational by the end of the year

- The circumstances call for an increased focus on agricultural production in the face of predicted global food shortages
- Digitalization is the key to our participation in the fourth industrial revolution and we must therefore deepen the digitization of the economy.

It is important to note that the focus of economic management by successive governments since independence in Ghana has been on crisis management as a result of factors such as the collapse in commodity prices, increase in oil prices, debt unsustainability, political instability, macroeconomic instability, etc. Governments, have by and large, not focused on building systems and institutions that underpin economic activities in a modern economy. The systems that will reduce bribery and corruption, the systems that will make the delivery of public services efficient, the systems

that will enhance domestic revenue mobilization, and the systems that will make life generally easier for Ghanaians.

I should note that Ghana has gone to the IMF for a program 17 times since independence and after each IMF program, the underlying system and structure of the economy remained the same. After each of the 17 IMF programs:

- Ghana had no National ID Card
- No functioning National Digital Property Address System
- Only 30% of the adult population had bank accounts
- Inefficiency, bribery and bureaucracy at the ports

- Bureaucracy and corruption in the delivery of government services
- No digitization at the Passport Office, DVLA and Births and Deaths registry
- No motor insurance database
- No credit scoring by credit reference agencies
- Less than 4% of the population had tax identification numbers
- There was no integration of the databases of the GRA, SSNIT, CAGD, NHIS, GHS, Passport Office, DVLA, Police, Immigration, Bank accounts and SIM Cards with a unique identifier
- There were no drones to deliver medical supplies
- No Universal QR Code Payment System
- No national scale E-Pharmacy
- No Unified Common Platform for Property Taxation

- No Gold Purchase program by the Bank of Ghana with a first right of refusal by the central bank for all gold mined in Ghana
- No Focus on TVET education.
- No industrial policy like IDIF
- No overarching agricultural policy like planting for food and jobs
- No Free SHS

We are talking now about a different Ghana. A Ghana that is being rapidly transformed. The underlying systems are being dramatically changed through digitalization and other policies that would transform the structure of the economy.

With enhanced fiscal discipline and structural reforms to restore debt sustainability and growth, we should emerge stronger than we have with the previous 17 IMF programs.

But it will take hard work and difficult decisions.

Ladies and gentlemen, With great pride and personal pleasure, it is good that we are all part of this launch of three new programmes by the Accra Business School in collaboration with the South East Technical University. It's a day when the neglect of many decades comes to an eventual end. It's a beginning to lay the foundations of strengthened institutions to take up the challenges of time with an able and apt workforce. It's a day when a new beginning is being made by forging a common alliance between the government and academic leaderships to protect, preserve and promote above all, democracy via

digitalisation. And to turn this dream into a formidable reality, I launch the academic programmes of:

- BSc. IT Management
- BSc. Cybercrime & IT Security
- MSc. IT Management

The mathematician and philosopher Alfred North Whitehead once said that *“The art of progress is to preserve order amid change and to preserve change amid order.”*

That is our task: to preserve what Ghana has been and has stood for across decades, even in the face of pressures to focus on the immediate and instrumental. And to evolve to meet the demands of these changing times. we do not face a choice between tradition and change, between the familiar and the new. We face an opportunity and an imperative both to embrace thoughtful change and to affirm our core values in ways that fulfil this great nation’s

enduring promise to its citizens and the world. It is my great privilege to be joined by you in this work.

Thank you very much for your attention.

God bless us all!