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Ministry of Information,
Communication and
Information Technology



5thTAIC TANZANIA ANNUAL ICT CONFERENCE 2021 REPORT

Building the Digital Nation

Adapting digital competitive opportunities

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Executive Summary

The Fifth Annual ICT Conference (TAIC) was held in Arusha International Conference Centre, in Arusha from 20th – 22nd October, 2021. The three day conference on 'Building a Digital Nation' was the fifth such annual event organized by the Information and Communication Technologies (ICT) Commission. Hon. Kassim Majaliwa (MP), the Prime Minister of the United Republic of Tanzania, officially opened the conference.

Discussions consisted of seven sessions cutting across two main sub themes, Digital Economy and ICT Investment and Digital Economy and Digital Societies. In total there were 19 presentations and 5 panel discussions held, with participation from 845 dialogue participants across all sectors including national and international agencies, public, private, business and civil society. The three day conference was accompanied by a booth exhibition where 28 exhibitors showcased their ICT products and/or services.

Presentations, panel discussions and contributions from participants in this conference were centred/focused on these topics: Digital Economy, Promoting Digital Transformation and Innovation in Tanzania, Current Government Initiatives towards a Digital Nation, International Investment in ICT sector, Enabling Development Through Digital Economy, Technology Drivers of Digital Economy, Powering Development, Information and Technology Governance, Tanzania Postal Sector as Agent of Digital Transformation: Historical Assessment from 1885 to The Present, Digital Transformation in Sub Saharan Africa, Policy and Regulatory Requirements for Digital Transformations and 4IR, State of Global Broadband Infrastructure Development-Challenges and Opportunities for Tanzania, Cloud Relevance to the Digital Infrastructure and the Digital Economy, Huduma Pamoja Powered by Integrated Systems, e-Government for a Digital Nation, Future Proof Your Business with e-commerce, Ergonomic Hazards, Fatigue & Stress Management and Non-Communicable Diseases(NCDs), Online Gender Abuse on Women in Politics, Digital Skills for Youth Employment and Entrepreneurship-Report of the Tanzania Youth Digital Summit (TYDS), Transforming Information Societies to Knowledge and Business Societies and COVID19: The Experience From the Institute of Accountancy Arusha.

Award ceremony began by recognition of Hon. Samia Suluhu Hassan, the President of the United Republic of Tanzania and Hon. Kassim Majaliwa (MP), the Prime Minister of the United Republic of Tanzania as ICT Strategic Leader of the year and ICT Investment Enabler of the Year respectively. The awards were presented to President Samia Suluhu and Prime Minister Kassim Majaliwa who also accepted the award on behalf of the President.

For the first time since its inception TAIC conference featured awards for ICT stakeholders. A total of eighteen awards were presented to eighteen institutions/individuals for their exemplary performance/contribution to the growth of ICT sector in Tanzania. In addition to the awards the conference concluded by adopting seven resolutions that were presented to the government for consideration and implementation.



Opening Remarks

In her welcome address, Hon. Dr. Ashatu Kijaji (MP) the Minister of Information, Communications and Information Technology thanked the Prime Minister for accepting the invitation to officiate the event and noted this year's Uhuru torch race slogan "TEHAMA ni msingi wa Taifa endelevu itumike kwa usahihi na uwajibikaji" (Translating to, "Information and Communications Technology is the Basis of a Sustainable Nation; It should be Used Appropriately") as one of many indicators that the Prime Minister and the government in general are taking ICT sector's contribution serious.

The opening session was graced by Hon. Kassim Majaliwa (MP), the Prime Minister of the United Republic of Tanzania. In his keynote address to the participants, he reiterated the government's commitment to promote enabling environment that fosters ICT sector's growth

He emphasized that the government will continue investing in public schools and higher learning institutions to instil confidence and inspire the young generation into ICT. He called for International development partners, civil society,

public and private sector to join hands in ensuring equal access to connectivity for marginalised communities, safe environment in online spaces and safe and responsible use of ICT.

In his speech the Prime Minister vowed to keep pushing for digital transformation in government institutions and agencies. Tasked the ICT sector to prepare an investment profile and submit to his office for promotion and instructed Dar Rapid Transit Agency (DART) to start using ICT systems to collect revenue. He pointed out that the 2022 population and housing census will make use of ICT to collect, analyze and publish key findings. He encouraged the ICT commission to work on registration of ICT professionals, with a target of 5,000 ICT professionals by year 2025, registration and recognition of ICT innovators and tech hubs, use of ICT (e.g. video conference, learning facilities) on fight against COVID-19 and manufacturing and assembly of ICT equipment/gadgets locally. Local government authorities were encouraged to start thinking of smart and safe cities through the use of technology.

In reaffirming the government commitment, the prime minister said in 2021/2022 fiscal year, the government will spend TZS 170 billion in deploying 4,244 km of National ICT Broadband Backbone (NICTBB) infrastructure extending the existing optical fibre backbone from 8,319 km to 12,563 km and the plan is to have 15,000 km done by 2024/2025. This ultimately will result in reduced communication service cost, improved access to internet and other services which will not only benefit the citizens but also the service providers, public and private sectors.

Lastly he encouraged the general public to support the government in its fight against COVID-19 including positively responding to the government's call for vaccination. The Prime Minister, pointed out that successful vaccine rollout will reduce social and economic impact of the pandemic in the nation.



Summary of the Principal Observations Made

Spanning across the seven sessions during the three day conference the following principal observations were noted during the various presentations and panel discussions.

01

SUB-THEME: DIGITAL ECONOMY AND ICT INVESTMENT

DAY ONE: 20th October, 2021

Session One: :

Ministerial Dialogue on ICT Investment

Presentation 1: Tanzania ICT Sector Overview & Investment perspective

By Mulembwa Munaku, Director of ICT, Ministry of Information, Communications and Information Technology



Takeaways

01

Policies: ICT development in Tanzania is fostered by a policy legal framework that has been liberalized since 1993 which then allows for rapid traction and development of the sector, which is pivotal in delivering effective services to citizens.

02

Human Capital: Low number of ICT graduates, estimated that 5,000 competent and skilled ICT workforce entering the labour market yearly these numbers are short of the labour force required to drive the ICT sector. Along the same lines, there is development of incubators and innovation hubs which help to foster the digital innovation ecosystem. Understanding the need for reskilling and upskilling of its ICT workforce, there is a concerted effort in positioning and establishing a centre of excellence for ICT Professional Development.

03

ICT Investment and the Future: With a well-developed ICT Infrastructure of 8319 km of optical fiber backbone, NIDC, Submarine cable EASSy & SEACOM, this results in low deployment cost of new technologies and enhances and fast tracks rural broadband connectivity. With the growth of the sector there is a raise in E-waste recycling and refurbishment centres. Future investment opportunities in this sector can be seen in blockchain technology, robotics, big data and AI service solutions.

04

A strategic location (geographically) and renowned business and services infrastructure. Tanzania is well positioned in the EAC, SADC countries to take the leading role in ICT connectivity and hub for software development.

05

Other ICT investment opportunities:

- a Investing as content aggregators, producers, distributors
- b Establishment of repair and maintenance of telecommunications facilities
- c Establishment of ICT equipment assembly industries
- d Establishment of ICT research centers

Presentation 2: Digital Transformation In Tanzania

By Andrew Mahiga, Director of Policy,
Research, Advocacy and Lobbying at TPSF



Challenges seen in the sector from the Private Sector's perspective

- 01 Over taxation: Compared to other markets, Mobile Network Operators (MNO) contribute about 34% and (general taxes and fees (16%) plus mobile sector-specific taxes and fees (18%) as a percentage of mobile sector revenues) higher to taxes which is very high compared to global markets: Sub-Saharan Africa (26%), Middle East & North Africa (24%), Asia Pacific (24%), Europe (21%), Latin America (18%).
Source: GSMA, 2021. Leading to sector's stagnation.
- 02 Need for investment in Research and Development (R&D) and reducing dependency on imported ICT.
- 03 Importance in ensuring that ICT developers are knowledgeable of Intellectual Property (IP) and property rights
- 04 Upskilling of existing labour in the market as the industry is constantly evolving

Recommendation on areas of interventions

- 01 To ensure that there is an enabling legal and regulatory environment through adoption of mechanisms such as Regulatory Sandbox to enable a safe testing environment and access to Digital Privacy Act to protect users.
- 02 With the high mobile usage in Tanzania, an approach could be to use "Mobile first approach" to provide services solutions to various problems via technology.
- 03 Continued investment in ICT enhances connectivity allowing the majority of Tanzanians to access ICT services which would prove to be beneficial.
- 04 Narrow the skills gap between Tanzania and other technologically advanced African countries. Having a dynamic and flexible academic curriculum to meet industry skills demands.

Presentation 3: Online Gender Abuse on Women in Politics

By Hon. Neema Lugangira (MP)



Recommendations

- 01 There is a need for key stakeholders such as TPSF (CSR), UCSAF, FSDT, UNDP and other development partners to collaborate in addressing the existing digital gender gap
- 02 Bridging the existing digital gender gap can be approached in two folds:
 - a. First is by ensuring that 50% of smallholder farmers who are women are being reached by the digital ecosystem to enable them to transform their livelihoods and that of their families
 - b. Second is curbing the rampant online abuse of women in politics by putting in place recourse and actions for those that engage in slandering and sexualising women in politics. Women should have an equal and safe space online where they can share their thoughts.
- 03 ICT policy should be reviewed/reformed so that it can be gender sensitive and inclusive of women and women in politics

Presentation 4: Remarks on Funguo Program

By Ms. Christine Musisi
Country Director of UNDP Tanzania



Investments and Areas of Interest

- 01 Funguo program is designed to lay the foundation for and unlock the potential of Tanzanian innovators and entrepreneurs to create Impact Ventures at scale so that these innovations can contribute to the achievement of national ambitions and the SDGs in Tanzania at scale. It therefore directly addresses development challenges related to innovation and entrepreneurship.
- 02 UNDP has designed the FUNGUO program to empower women & youth through innovation, Impact Ventures both for startups and for those in scaleup through innovation cycle. Funguo Program is meant to support financing for innovation in the country as well as advocating for enabling environments (innovation friendly strategies and policies) for the growth of the innovation ecosystem.
- 03 UNDP together with the Ministry of Land have developed 25 regional guides to date. In addition to this, an investment facility to be established to facilitate public private partnership, which will unlock finance in scalable projects.
- 04 Funguo financing facility (an independent market-facing entity) will continue selected activities beyond the closure of the program.
- 05 The SDGs investor map will help accelerate investment and enabling environment for digitalization, enabling environment for innovation in Tanzania
- 06 Raised a concern in ensuring that there is investment in the capacity building of teachers to ensure that they are trained accordingly to assimilate and adopt digital technologies.
- 07 UNDP is also partnering with the Ministry of Blue Economy and Fisheries Zanzibar in promoting economic growth, social inclusion and improved livelihoods at the same time as ensuring the environmental sustainability of oceans and seas as we strive to balance the three dimensions of sustainable development: economic, social and environmental.

Recommendations and Collaboration areas

- 01 Noted on the need for improved coordination between government and private sector to enhance youth & women digital opportunities
- 02 As a response to Hon. Neema Lugangira (MP), she noted that as UNDP they have invested in facilitating digital literacy for the girl child but has taken a special note on the need to look at digital safety for women. In addition to this, she further noted that UN Women has been focused in physical security for women in politics but will look into online abuse and what can be done
- 03 UNDP to engage with UNICEF to help facilitate ICT adoption in primary schools

PANEL DISCUSSION 1: ICT INVESTMENT

Moderator: Dr. Jim Yonazi, the Deputy Permanent Secretary of the Ministry of Information, Communication and Information Technology (MICT)

Panelists: Ms. Christine Musisi
Hon. Neema Lugangira (MP),
Andrew Mahiga
Mulembwa Munaku

The moderator allowed for questions, clarification and recommendations to be shared by the delegates in the hopes of promoting a learning space around the space of digital sector investment in Tanzania.

Takeaways and Recommendations

Taxation:

- a. ICT director to engage Ministry of Finance (MoF) regarding digital service taxes, Hon. Neema Lugangira (MP) called for this conference and/or separate meeting specifically to discuss digital service taxes
- b. Caution was raised on building a conducive environment as it relates to policy around taxation of digital services.
- c. The focus should be on fostering a sustainable path and net social economic gain instead of just raising tax base/revenue otherwise companies will not be able to compete in global market
- d. Tanzania Internet Service Provider Association: We host the caching so we know the amount of data going through, we can help the ministry with accessing and analysing these data. We don't object to tax but rather to over taxation and call upon a review.

Online Safety for women and users

- a. Neema (MP): Final stages of initiating Internet governance caucus in parliament to champion addressing all online space issues raised

Infrastructure investment and creating enabling environments (policies etc)

- a. Postal codes/addresses will help to boost the e-commerce
- b. DISCT shared that there is 170B Tshs this financial year to add 4244km of fiber backbone. As it stands there are 43 districts connected and 22 to be added within the next year making it a total of 65 with the investment.
- c. DG-ICT: ICT commission working with UN capital development, Tanzania startup association and other regulatory bodies and sandbox framework should be ready by December 2021 and all innovations to be tested in the real environment.
- d. Representative from GSMA, Caroline Mbugua noted that there is a 26% digital gap which needs to be worked are content availability in a language understood, security of service

Way forward

- 01 There was a point in ensuring that recommendations adopted during the conference are being adhered to and reported on during the following conference to ensure that there is accountability and traction on the matters raised during the conference. This comment was raised specifically on questioning updates of past resolutions and progress to date.

Way forward

- 01 As relates to Data Privacy, the Ministry is in the process of delivering a Personal Data Protection Act
- 02 There is importance in involving all stakeholders from the drafting stage of key policies which will result in easier adaptation and implementation of policies that will be put in place.
- 03 DG ICT: Regulatory Sandbox is already drafted and will be ready by December. Working closely with TSA to ensure that ICT solutions are tested in real environments
- 04 Representation from Zanzibar:
 - a. Did a call for Investment in the neutral data centre in Zanzibar in a PPP modality
 - b. ISP investment in the tourism sector
- 05 Tanzania to look into how it make use of the African Continental Free Trade Area (AfCFTA) and advance the digital agenda
 - a. GSMA extended a hand of invitation to partners in a learning forum to help advance the Digital agenda
 - b. There was a request in having social enterprises officially

02

Session Two:

TECHNOLOGY DRIVERS OF DIGITAL ECONOMY

Presentation 5: Current Initiatives towards a Digital Economy

By Eng. Stephen Wangwe, from MICT



Takeaways

- 01 Pillars of the digital nation include: Supportive policies, legal and regulatory framework, Supportive infrastructure, Supportive systems and technologies, Human capital and digital skills.
- 02 Supportive policies, legal and regulatory frameworks:
 - a. Challenge: Legal framework to manage personal data in digital ecosystem
Solution: Enactment of Personal Data Protection Act (To be unveiled soon);
 - b. This act will cover: Data collection limitation, data quality, use limitation, individual rights, accountability and security safeguards
- 03 ICT infrastructure development:
 - a. To enhance adoption and use of ICT, the government has removed VAT from ICT related equipment/gadgets as well as continued enhancement of infrastructure such as NICTBB development, which connects Tanzania to 7 borders, 25 regional HQs, and increased capacity from 600 to 800 Gbps.

Digitized system which mainly involves Physical Address in line with location information: National Physical Addressing System (NaPA) has developed a mobile application whose benefit includes enhancing Know Your Customer (KYC), facilitating e-commerce growth, improving tax and revenue collection and strengthening security among communities. NaPA web portal: www.address.go.tz

- C. National Internet Data Center (NIDC): Colocation, dedicated server, virtual servers, storage & backup services offered at NIDC. The plan is to enhance data center infrastructures to provide cloud services. There is a need for enhancing other supportive infrastructure: e.g. Electricity

04 Other government initiatives include: ICT equipment recycling and assembly center, establishment of softcenter, recognition of ICT professionals, e-government systems (e.g. paying tax, utilities, licenses), Development of Tanzania digital economy blueprint, and the Digital Tanzania project (a 5 year project targeted to start in October 2021)

05 Areas of challenge noted were on availability of Minimum local content, poor or lack of ICT manufacturing plants/firms which results in high importation of ICT related equipment, weak R&D and lack of comprehensive collaboration framework between the government, private sector and higher learning institutions as it relates to capacity building of ICT human capital.

Presentation 6: Enabling Development Through Digital Economy

By Irene Madeje Mlola,
Interim Executive Director for FSDT



01 As relates to the digital agenda, those left behind are usually rural youth, women and rural farmers of which the impact is in overall income growth of the country, job creation and improved livelihoods if addressed. The digital economy enables rapid economic growth.

02 To build our digital economy there needs to be digital leadership, digital innovations, digital skills and an increase in number of digital citizens

03 There is a need to look at how the informal are brought into the formal cash flow in the economy. It was identified that an estimated **TZS 184 trillion** in payments flows in the informal pathways and adding to this the BOT quarterly reports show that physical money in circulation has increased by **13%,**

PANEL DISCUSSION 2: ADAPTING ADVANCED TECHNOLOGIES AND DIGITAL INNOVATION INITIATIVES IN TANZANIA: CHALLENGES AND OPPORTUNITIES FOR YOUTHS

Moderator: Grayson Julius

Panelists: Eng. Stephen Wangwe
Ms. Irene Madeje Mlola
Mr. Moses Ismail
Mr. Joseph Manirakiza (UNDP)

Takeaways and Recommendations

01 UDSM has an ICT incubator which works with the industry to equip students with the capacity to deliver. In addition there are other initiatives such as Smart Kid initiative, a STEM initiative that instils ICT culture into the young generation.

- 01 To ensure uptake of concepts such as 4IR, artificial intelligence, big data, machine learning there is a need for local use cases to better equip students and improve their understanding. The UDSM currently has such a program in collaboration with BOT & the Ministry of Finance.
- 02 The creation of an enabling Innovation financing environment for start-ups through financing facilities such as the Funguo program could be a solution in promoting growth in this sector.
- 03 National ICT policy will soon be available in Swahili just like other laws that are now made available in both English and Swahili.
- 04 Human centered design/challenge driven education is now implemented at UDSM, proving to be the best way for students to learn, use cases help a lot.
- 05 An area of improvement noted by one of the delegates was to ensure that the exhibition like the ones just outside the conference auditorium showcase Tanzanian innovations. For example traffic lights installed across Dar es Salaam city are from the Dar es salaam Institute of Technology (DIT). In addition to this, the 6th TAIC was challenged to go paperless.

03

Session Three: PROMOTING DIGITAL TRANSFORMATION AND INNOVATION

Presentation 7: Owning Development, Information and technology Governance

By Emmanuel Johanes,
Kepler Associates Limited



Takeaways

- 01 It was noted that we do have NIST Cybersecurity Framework but it may not be up to par with international standards and this needs a critical look to operate and be competitive in the digital economy.
- 02 Attention was raised to the need of a digital governance framework that will help solve digital governance issues and set us on a viable pathway to digital economy.
- 03 Technology/Digital governance is important especially in the 4th Industrial revolution to govern the collection, oversight and use of such data.
- 03 Measurement frameworks to be deduced on how we are benefiting from our infrastructure investments such as COBIT 2019 Framework

Presentation 8: Tanzania Postal Sector as Agent of Digital Transformation: Historical Assessment from 1885 to the Present

By Mr. Nkundwe Mwasaga



Takeaways

- 01 People are embracing E-commerce and this can be evidenced by the increase in parcels posted and decrease in mail deliveries.
- 02 In showcasing the evolution of the Tanzania Postal Sector, there were 4 key waves, (i) Postal automation, (ii) Revenue generating services, (iii) Digital to enhance core (iv) Digital transformation (this is where impact will be seen)
- 03 It was noted that the sector has more female workforce but the boardroom (top management) roles are reversed.

Presentation 9: Digital Transformation in Sub Saharan Africa

By Caroline Mbugua from GSMA



Takeaways

- 01 Drivers of digital economy in the region are
 - a. **Investment:** MNOs are committed to continue investing at \$52B in capex for the period of 2019 - 2025. Government is also invested in this area
 - b. **Connectivity:** Has to be reliable and affordable
 - c. **Innovation:** This helps to drive citizen adoption of digitization of the economy
- 02 Acceleration of digital transformation: We will not be able to achieve the goals if we do not have as many people as possible using broadband services. 48% of Tanzanians do not use mobile internet despite being covered by mobile broadband. There has been a steady improvement over the years but Tanzania needs to understand why there is a gap and what needs to be done to close the gap. As long as people are not using broadband services we will not be able to achieve digital inclusion
Infrastructure enhancement: There is a need to promote digital infrastructure development for effective digital revolution
 - a. Encourage network investment
 - i. Spectrum to be made accessible timely and affordable
 - ii. Technology neutrality licensing stimulates digital innovation. TCRA is already implement this and it is a good direction to ensure that the population can benefit from the evolution of technology from 2G all through 4G
- 03 Sound digital policies will result in increased digital literacy, local content increase and promotion of e-government services.
- 04 Taxation in the digital economy:
 - i. The high taxation for the mobile sector results in increased service use which results in a barrier for people accessing the services.
 - ii. Digital service tax is inevitable for us to talk about but there needs to be more research on this space before adoption. Are we saying that this is the mobile service? As people are already paying tax. If we are looking at the case studies, what benefits have they received and what revenue are they getting from this tax to date? How will we go about implementing it and when would be the ideal time to do so? Are there any other alternatives?
 - iii. Tanzania is higher at 34% while Sub-Saharan Africa is 26% as it stands when it comes to overall taxes charged to MNOs. Is it better to tax and stifle a growing industry or is it better to groom and then understand how best to tax overtime?

Presentation 10: Policy and Regulatory Requirements for Digital Transformations and 4IR

Dr. Emmanuel Manasse,
TCRA



Takeaways

01 94% of the population have 2G coverage, 68% have 3G, and 45% have access to 4G network. Device penetration is still low at 26% of devices that can connect to 3G and 4G network which is the reason for high data usage. There is government effort in removing taxes on devices to ensure increased uptake.

02 Logistics infrastructure to provide certainty and security of services/products

- Connectivity infrastructure:** Logistics infrastructure assists in last mile delivery which is key in digital economy e.g postcode and addressing system is crucial say in e-commerce

- Payment infrastructure:** Security in payment such as blockchain to ensure security of payments online. 96% of TANESCO sales go through mobile platforms which means it has made the service accessible and the last mile cost delivery of the service has also been reduced for the institution.

- Data Centre infrastructure:** Digitization produces a lot of data and there is a need for analyzing and getting insights from the data

03 Challenges raised

- a. Access to broadband due to low device penetration and poor connectivity in rural areas. Services are affordable at the moment but devices are high thus proving to be a barrier

- b. Absence of a supportive framework for acquisition of Right of Way (RoW). It costs \$1,000 per kilometer of optic fiber but it is cheaper for copper, water pipes etc. This needs to be reviewed.

- c. There is no clear policy that defines broadband which can be versatile with time Regulatory measures needed to ensure optimal national outcomes (Set broadband target for the digital infrastructure)

- d. There is a need to align Educational Policies and ICT to reach the goals of digital economy

- e. Quality of broadband service is not at par and needs to be invested in

PANEL DISCUSSION 3: PROMOTING DIGITAL TRANSFORMATION AND INNOVATION

Moderator: Peter Baziwe

Panelists: Mr. Emmanuel Johanes
Mr. Shakil Dharamsi
Dr. Emmanuel Manase,
Mr. Nkundwe Mwasaga

Takeaways

- 01 "Think around, do we have the right policies and regulation in place to achieve digital economy" - *Caroline Mbugua*
- 02 *Mwasaga* - "The essence of looking at the postal sector as an agent or catalyst in digital transformation is very important"
- 03 *Johanes* - "Affordable ICT services, more local content. National ICT Policy was last developed in 2016. As a country we need to agree on where we want to go by taking a stock of what we have as there is currently a lack of coordination. We all need to speak the same language"
- 04 *Manase* - "We no longer regulate vertically but regulate horizontally. E.g Fintech, Postal services. The 4th industrial revolution will bring such cases thus there is a need to work together in ensuring that there is streamlining and involvement of all stakeholders. The world has moved from Regulatory collaboration to Collaboration regulation."

04

Session Four:

SUB-THEME: DIGITAL ECONOMY AND DIGITAL SOCIETIES

Presentation 11: State of Global broadband Infrastructure Development-Challenges and Opportunities for Tanzania

By Mr. Noah Maina,
SEACOM/TISPA



- 01 TISPA is a key stakeholder to the government payments (eGA) as all payments run through their systems. TISPA has 6 exchange points within the country that allows internal connectivity among agencies regardless of what is happening outside (submarine cables)
- 02 Some of the challenges raised ranged from; the high cost of right of way at \$1,000 per km, withholding tax on internet services, product-market fit innovation (impeded by regulations), internet penetration, accessibility, availability and affordability.
- 03 There has been increased use cases of broadband during the pandemic with the rise of working from home and distance learning

04 Challenges faced with TISPA

- a. Interacting with government and stakeholders with one of the main issue being TARURA high RoW charges e.g. Tanzania USD1000 per km while Uganda it is USD 0/km
- b. High VSAT license fees
- c. Destruction of ICT infrastructure
- d. WHT on internet services/taxation on internet services

05 Regulations impede on

- a. Product-market fit innovation - resulting on stifling of start-ups
- b. Internet affordability where Tanzania is expensive comparative

06 Tanzania has the potential of being a hub for all neighboring countries if we position ourselves strategically. There is a need for TCRA, ICT Commission, BOT, e-GA coming to the table and talking to other the stakeholders

Presentation 12: Tanzania's Cloud Journey Towards Digital Transformation

By Evans Luhanga,
Raha Limited Tanzania



Takeaways

01 Opportunities of cloud computing result in; flexible payment options, reduction of IT maintenance, scalability and flexibility of infrastructure, more resources available for data protection, significant decrease in Total Cost of Ownership (TCO) etc.

02 The future of digital infrastructure is based on

- a. Ubiquitous deployment
- b. Autonomous operations
- c. Cloud native technology

03 Digital economy growth indicators

- a. Infrastructure
- b. Empowering societies
- c. Innovation and technology adaptation
- e. Jobs and growth - the increase in specialised roles such as machine learning specialists etc

04 Key challenges faced are: Limited internet access, lack of expertise, cloud cost management and dealing with multi cloud vendors security methods incompatibility.

Presentation 13: Huduma Pamoja Powered by Integrated Systems

By Mr. Macrice Mbodo,
Postmaster General, TPC



Takeaways

01 There is bureaucracy around securing permits, licenses, across the various government agencies such as NIDA, BRELA, TRA, Ministerial agencies, NSSF, OSHA, WCF etc. Besides the bureaucracy, most of these IT systems are in silos and do not allow cross cutting communication

01

Huduma Pamoja is powered by integrated systems, it is a one stop centre where multiple government services are offered in one place under a single window approach. The service will enable a citizen to pay one payment while at the backend there will be segregation of which agency receives what percentage thus easing the process for the user. This service integration platform will have frontend consolidated access platform and a backend business processes integration allowing provision of a self-service kiosk

02

Huduma Pamoja project implementation plan: Phase I (Jul 2021-Dec 2022): 10 centers across 10 regions inclusive of 2 centers from Zanzibar. The multi window approach will be in use through December 2022. Phase II (Jan 2023-Jun 2024): Citizens will be served through a single window system and have additional 18 regions. Phase III (Jul 2024-Dec 2024): Single window approach, centers to all districts.

Presentation 14: e-Government for a Digital Nation

By Sylvani Shayo,
Director of Compliance and Security
Management, e-Government Authority



Takeaways

01

There is a need for an enabling environment that facilitates e- payment and infrastructure to ensure that this is made possible.

02

Guidelines are important and case in point is on acceptance of electronic receipts where guidelines had to be put in place to allow this.

03

There is more efficiency and effectiveness across the operations of the government based on the integration and adoption of ICT across government agencies.

Way forward

- a. Achieving a digital government which has resulted in greater revenue contribution
- b. Enhancing human resource capacity to manage e-government:
Skills around ICT not only within the government but also with the citizens to enable them to utilize the services
- c. Enhancing cyber security of e-government initiatives to ensure that data & systems are secure
- d. Harmonizing government business processes and facilitate smooth information exchange
- e. Ensure compliance to e-government laws and regulations, procedures, standards and guidelines
- f. A connected government

Presentation 15: Future Proof Your Business with e-commerce

By Mr. Shakil Dharamsi,
Power Computers



Takeaways

01

Approaches to take to make our business future proof with e-commerce: Understand e-commerce ecosystem, investment in IT infrastructure, computerize the business, train staff on ICT (up skill/re skill them on ICT), make your company website "e-commerce ready" (that means all products should be available on the website for selection), give promos for e-commerce orders (special prices, delivery free), take one step at a time.

02

Tanzania's global position in e-commerce is 110/152, was occupying 99th position in 2019

03

80% of Tanzania businesses are Small Medium Business (SMB), the question is how we cater for this group which poses a great revenue generation around Business to consumer (B2C) space. 7% of SMBs use e-commerce to date in Tanzania showing that there is an opportunity to tap and scale this number

04

Action plan for e-commerce:

Local content to be in Swahili: In Europe, 42% of online users say they

- a. never shop online in any language other than their own. Even in the Netherlands, where English-language learning is widely used in schools, 50% of adults who have shopped online in the past three months agree that they only shop on websites in their native language i.e. Dutch.
- b. Training (ICT Skills)
- c. Enabling environment
- d. A challenge around access to finance, banks financing ICT infrastructure

PANEL DISCUSSION 4: THE DIGITAL ECONOMY LANDSCAPE-DRIVING INFRASTRUCTURES AND BUSINESS ENVIRONMENT TOWARDS A DIGITAL NATION

Moderator: Francis Saliboko

Panelists: Sylvani Shayo
Evans Luhanga
Mr. Noah Maina
Mr. Macrice Mbodo
Mr. Shakil Dharamsi

Takeaways and Recommendations

01

Digitization on health

- a. Clarification was given from TAMISEMI in that there is a digital transformation roadmap. The health sector strategic plan involves all health centers from local government to main hospitals.
- b. Made a call for people invested in this area to reach out to them as an area of investment and collaboration

05

Session Five:
PROMOTING DIGITAL TRANSFORMATION AND INNOVATION

Presentation 16: COVID19: The Experience From the Institute of Accountancy Arusha

Takeaways

By Prof. Eliamani Sedoyeka



01

In transforming the institution to e-learning there were some challenges faced such as: Some tools were not practical, resistance to change especially from lecturers/facilitators, data costs, system reliability, remote assessment, regulatory framework etc.

02

Currently all AIA Graduates programs are going to be blended, with the COVID-19 experience, all graduate programs are now available remotely, lectures are recorded in the studio and can be downloaded. Zoom used for discussions, students only come to campus for exams. Learn, Research, Innovate: Distance learning has evolved, most global Higher Education (HE) courses are now available online

03

As a country the option of going online is inevitable and the mechanisms are possible with e-learning methods.

04

As regards to latency issues with accessing zoom, TISPA provided a solution around this space to ensure that there is reduced latency and dedicated servers. This solution can be scaled across other learning institution and TANEP

06

Session Six:
LIVING HEALTHY AND STRESS MANAGEMENT

Presentation 17: Ergonomic Hazards, Fatigue & Stress Management and Non-Communicable Diseases(NCDs)

Dr. Garvin Kweka, Muhimbili National Hospital

Takeaways

The presenter spoke about importance in considering ergonomics at the workplace and the negative effects of ICT in the community can result in challenges around ergonomics, with regards to ICT equipment usage by children with no monitoring. He also advocated for behavioral (personal habits and attitudes), lifestyle change and stress management towards a healthy living.

07

Session Seven:
TRANSFORMING INFORMATION SOCIETIES TO KNOWLEDGE AND BUSINESS SOCIETIES

Presentation 18: Digital Skills for Youth Employment and Entrepreneurship-Report of the Tanzania Youth Digital Summit (TYDS)

By Ms. Diana Ninsiima,
Country Director, Digital Opportunity Trust



Takeaways

01

Youth constitute more than 75% of the Tanzanian population with entrepreneurship being the common path for many. The report shows that 51% of youth spend between Tshs 500 - 2,500 on weekly bundles, 48% said they needed digital skills for businesses, 23% Employability Skills. 26% use it for social media while 23% access e-services, 13% online learning, 10% recreation, 9% job hunting

02

Starters skills needed for youth were highlighted as below:

- a. Youth need to tap into using social media and internet as a powerful tool for digital livelihoods
- b. Digital skills for market research - the fact that social media is now being used more for work
- c. Digital marketing and a new generation of creative tools - tools such as canva, google docs etc

03

E-commerce and digitization - COVID-19 accelerated the movement from traditional commerce to e-commerce

04

The report showed that there is a need for online safety and a need to curb the increasing gender digital divide. To put this in numbers, the ICT Commission only accounts for 12% women. In addition there is a high cost of getting online, scarcity of content, content that is relevant and empowering for women

05

There is a need for training centers for youth to run design sprints as well as providing youth with seed grants to test their ideas. Alongside this, there is an importance of creating an enabling environment and infrastructure where youth can get access to computers

06

Way forward to an inclusive digital future

- a. Digital skills are no longer optional - need for access and skills e.g for cultures like in Zanzibar where a woman cannot go to the market to showcase her business e-commerce can be very helpful
- b. More young women need to be included in the digital economy in order to curb the gender digital divide
- c. Government alignment - there is investment and readiness as can be evidenced by the plans of opening up of 5 zonal soft centers

Presentation 19: The Tech-Gender Gap-Its Impact and What We Can do to Minimize it

By Dr. Salome Maro,
University of Dar es salaam-COICT



Takeaways

01

Gap between men and women in

- a. Using technology solutions (Mobile & Internet penetration)
- b. Developing technology solutions
- c. Education/training (STEM subjects)

02

Impact of underrepresentation of women can be seen in gender biasness (Conscious or unconscious) when creating or designing of products/services/policies e.g.

- a. Gender bias application development: Health apps recommending wrong diagnosis
- b. Toxic work environment forcing 50% of women out of ICT careers by the age of 35

03 Social bias, technology gaps exist around (minority/disadvantaged groups) people with disabilities, elders and children

Recommendations

SHORT TERM PLAN:	LONG TERM PLAN:
<ul style="list-style-type: none"> a. (Actively) Encourage diversity through hiring more diverse tech teams b. Creating tech solutions with all genders in mind c. Including females in user testing –pre and post collect gender disaggregated data d. The need for retention of women in ICT <ul style="list-style-type: none"> i. Fair wages ii. Recognition and respect at the workplace 	<ul style="list-style-type: none"> a. Motivating girls to take STEM subjects <ul style="list-style-type: none"> i. Integrate female role models in ICT when talking about people who have transformed the space/industry ii. Awareness programs iii. Introducing ICT subjects at lower levels b. Formulating gender sensitive ICT policies (e.g., education, hiring processes, workplace inclusion ...)

PANEL DISCUSSION 5: TRANSFORMING INFORMATION SOCIETIES TO KNOWLEDGE AND BUSINESS SOCIETIES

Moderator: Pamela Chogo, Arusha Institute of Accountancy

Panelists: Dr. Salome Maro
Ms. Diana Ninsiima
Faraja Kotta Nyalandu - Shule Direct/Ndoto hub,
Gibson Kawago-Project Inspire, Tanga

Takeaways

01 Case study on starting Ndoto Hub was shared profiling the importance of creating spaces to empower the girl child with the right tools to run their business and earn a livelihood

- 02** Projekt Inspire shared about their methodology in working with young students to inspire them around the space of STEM and how some of the program graduates go on to start businesses of their own and employ other youth. E.g Green Ventures was started by a Projekt Inspire alumnae while in secondary school and now he is in University while his business of transforming plastic into plastic wood is operating in Njiro, Arusha
- 03** Capacity building around ICT is paramount in ensuring that we have human capital that can innovate and drive the agenda and thus it is key to have a revised curriculum that is inclusive of the 4th Industrial revolution as well as ensuring that youth graduating can take on the gig economy and access opportunities while in Tanzania but operating across the world.
- 04** From the family level there should be encouragement for the girl child to take on STEM subjects

Resolution Adopted

The 5th Tanzania Annual ICT Conference 2021 adopted the following seven resolutions:

- 1** The government should create a legal, policy and tax-friendly environment that will stimulate investment and growth in the ICT sector to increase its contribution to the GDP.
- 2** The government should increase stakeholder inclusion and this includes the private sector in the development of ICT policies as well as the coordination of sustainable ICT development programs.
- 3** The government should consider and encourage gender equality (and inclusion of the marginalized) in the development and safe use of ICT
- 4** The government should develop ICT training systems at various levels to boost human capital development (digital skills) and thus increase contribution to the growth of the digital economy.
- 5** The government should put in place strategies that enable innovation and stimulate ICT sector development and solve community problems, especially in rural and non-commercially attractive areas.
- 6** The government should improve the strategic environment by investing more in telecommunications infrastructure to reduce the cost of ICT services as well as stimulate Tanzania (which is in a strategic geographical location) to become a Regional and International ICT hub.
- 7** The government should create an enabling environment to improve e-commerce services without hindering innovation.

Conclusion

ICT Commission held its 5th annual conference of ICT professionals and stakeholders on 20-22 October, 2021 with the theme "Building a Digital Nation".

The conference participants acknowledged the work the Tanzanian government has done so far in promoting ICT sector especially with construction of tier three National Internet Data Center (NIDC), plans for two more NIDCs to be constructed in Dodoma and Zanzibar and continued efforts in extending the deployment of fiber optic cable network (NICTBB) to more districts. Participants came together and aired their views on what impedes ICT sector's growth and its contribution to the GDP. The conference adopted seven resolutions, which were presented to the guest of honour and will be shared with all stakeholders. This will help in follow-up and to gauge progress made between this 5th conference and the next planned 6th conference. It was unanimously agreed that the next, 6th TAIC Conference will be held in Zanzibar from 26th – 28th October, 2022.

In winding up, Dr. Zainabu Chaula Permanent Secretary to the Ministry of Information, Communications and Information Technology on behalf of Hon. Dr. Ashatu Kijaji (MP) the Minister of Information, Communications and Information Technology noted and appreciated the tireless efforts of the conference organizing committee, called for an open door policy in government offices and agencies to encourage exchanging of ideas and collaboration.



ANNEX PAGE

LIST OF INSTITUTION PARTICIPATED IN TAIC 2021

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TOTAL NO. OF
INSTITUTIONS
ATTENDED



GOVERNMENT
MINISTRIES

14

Presidents Office-Public Service Management and Good Governance
Presidents Office-Regional Administration and Local Government
Presidents Office- Public Service Recruitment Secretariat
Prime Ministers Office
Ministry of Agriculture
Ministry of Arts, Culture and Sports
Ministry of Education, Science and Technology
Ministry of Energy
Ministry of Health, Community Development,Gender, Elderly and Children
Ministry of Information, Communication and Information Technologies
Ministry of Finance and Planning
Ministry of Livestock and Fisheries
Ministry of Tourism and Natural Resources
Ministry of Works and Transport



GOVERNMENT
INSTITUTIONS/
DEPARTMENTS,
JUDICIARY,
COMMISSIONS
AND
COUNCILS

92

Architects and Quantity Surveyors Registration Board (AQRB)
Air Tanzania Company Limited
Arusha Airport
Attorney General's Chamber
Business Registrations and Licensing Agency (BRELA)
Bukoba Urban Water Supply and Sanitation Authority (BUWSSA)
Bunda Water Supply and Sanitation Authority (BUWASA)
Capital Markets and Securities Authority (CMSA)
Centre for Foreign Relations
e-Government Authority (e-GA)
Ethics Secretariat
Engineers Registration Board (ERB)
Dar es Salaam Rapid Transport Agency (DART)
Dar es Salaam Stock Exchange (DSE)
Dar es Salaam Water Sanitation Authority (DAWASA)
Fire & Rescue Force
Fair Competition Commission (FCC)
Government Chemist Laboratory Authority (GCLA)
Geological Survey of Tanzania (GST)
Judiciary of Tanzania
Kahama Shinyanga Water Supply and Sanitation Authority (KASHWASA)
Lindi Urban Water Supply and Sanitation Authority (LINDIUWASA)
Iringa Water Supply and Sanitation Authority (IRUWASA)
Judiciary of Tanzania
Presidents Office-Public Service Management and Good Governance
Presidents Office-Regional Administration and Local Government
Presidents Office- Public Service Recruitment Secretariat
Prime Ministers Office
Ministry of Agriculture
Ministry of Arts, Culture and Sports
Ministry of Education, Science and Technology
Ministry of Energy
Ministry of Health, Community Development,Gender, Elderly and Children
Ministry of Information, Communication and Information Technologies
Ministry of Finance and Planning
Ministry of Livestock and Fisheries
Ministry of Tourism and Natural Resources
Ministry of Works and Transport
Judicial Service Commission
Marine Services Company Limited (MSCL)
Masasi Nachingwea Urban Water Supply and Sanitation Authority (MANAWASA)
Media Council of Tanzania (MCT)
Medical Stores Department (MSD)
Mbeya Urban Water Supply and Sanitation Authority (Mbeya-UWASA)

Morogoro Urban Water Supply and Sanitation Authority (MORUWASA)
Moshi Urban Water Supply and Sanitation Authority (MOSHI-UWSA)
Musoma Urban Water Supply and Sanitation Authority (MUWASA)
Mwanza Urban Water Supply and Sanitation Authority (MWAUWASA)
Muhimbil National Hospital-Mloganzila
National Electoral Commission (NEC)
National Examination Council of Tanzania (NECTA)
National Identification Authority (NIDA)
National Insurance Corporation (NIC)
National Irrigation Commission (NIRC)
National Museum of Tanzania (NMT)
National Public Health Laboratory
Ngorongoro Conservation Area Authority (NCAA)
Prevention and Combating of Corruption Bureau (PCCB)
Procurement and Supplies Professionals and Technicians Board (PSPTB)
Registration Insolvency and Trusteeship Agency(RITA)
Shinyanga Urban Water Supply and Sanitation Authority (SHUWASA)
Singida Urban Water Supply and Sanitation Authority (SUWASA)
Songea Urban Water Supply and Sanitation Authority (SOUWASA)
State Mining Corporation (STAMICO)
Tanzania Airports Authority (TAA)
Tanzania Building Agency (TBA)
Tanga Urban Water Supply and Sanitation Authority (TANGAUWASA)
Tanzania Food and Nutrition Centre (TFNC)
Tanzania Investment Centre (TIC)
Tanzania Peoples Defense Forces (TPDF)
Tanzania Posts Corporation (TPC)
TTCL Corporation
Tanzania National Service (JKT)
Tanzania National Business Council (TNBC)
Tanzania Railway Corporation (TRC)
Tanzania Revenue Authority (TRA)
National Environmental Management Council (NEMC)
Tanzania Commission for AIDS (TACAIDS)
Tanzania Medicines and Medical Devices Authority (TMDA)
Tanzania Electric Supply Company Limited (TANESCO)
Tanzania Electrical, Mechanical and Services Agency (TEMESA)
Tanzania Roads Agency (TANROADS)
Tanzania Shipping Agencies Corporation (TASAC)
Teachers Service Commission (TSC)
Tanzania Petroleum Development Corporation (TPDC)
Tanzania Tobacco Board
Tanzania Automotive Technology Centre
Tanzania Wildlife Research Institute (TAWIRI)
UTT-AMIS
Weight and Measurement Agency (WMA)
Zanzibar Ports Corporation(ZPC)
Zanzibar Roads Agency



PRIVATE
COMPANIES
AND INNOVATION HUBS

29

AFRIMAX	Infotech	Smile Tanzania
BOTNET GROUP (T)	Kilombero Sugar Company Limited	Tanzania Mortgage Refinance Company Limited
Capital Technologies	Kepplers Academy and Associates	Tanzania Datalab
Computer Consult Limited	LENOVO	Thinkmate Company Limited
Dimension Data	Raddy Fiber Solution LTD	Trademark East Africa – Tanzania
ECHO Tanzania	Machinery Euro Africa Co. Ltd	TNT Resources Ltd
Gadgetronix	mWater	Octopus Engineering Ltd
HIK VISION	Nokia Solutions and Networks Tanzania	Powercomputers Telecommunication Company Limited
HUAWEI Tanzania	Sentinel Africa Consulting	Vodacom Tanzania
Infinityplex	Soft-Tech Consultants Ltd	

LIST OF INSTITUTION PARTICIPATED IN TAIC 2021



REGULATORY BODIES 07

National Council for Technical Education (NACTE)
 Tanzania Commission for Universities (TCU)
 Occupational Safety and Health Authority (OSHA)
 Petroleum Upstream Regulatory Authority (PUR)
 Public Procurement Regulatory Authority (PPRA)
 Tanzania Insurance Regulatory Authority (TIRA)
 Tanzania Communications Regulatory Authority (TCRA)



PUBLIC AND INDEPENDENT FUNDS 08

Agricultural Inputs Trust Fund (AGITF)
 National Health Insurance Fund (NHIF)
 North Mara Community Trust Fund
 Roads Fund Board
 Tanzania Social Action Fund (TASAF)
 Universal Communication Services Acces Fund (UCSAF)
 Workers Compensation Fund (WCF)
 Zanzibar Social Security Fund (ZSSF)



INTERNATIONAL ORGANISATIONS 07

Digital Opportunity Trust (DOT)
 European Union
 Financial Sector Deepening Trust (FSDT)
 PATH Tanzania
 United Nations Capital Development Fund (UNCDF)
 United Nations Development Programme (UNDP)
 Zaina Foundation



ADVOCACY, CIVIL SOCIETIES AND POLITICAL PARTIES 02

Chama cha Mapinduzi
 Tanzania Private Sector Foundation (TPSF)



ACADEMIC INSTITUTIONS 13

Dar es Salaam University College of Education (DUCE)
 Institute of Accountancy Arusha (IAA)
 Institute of Rural Development Planning (IRD)
 Institute of Social Work (ISW)
 Kilimanjaro Christian Medical University College (KCMC)
 Mbeya University of Science and Technology (MUST)
 Mzumbe University
 National Institute of Transport (NIT)
 Nelson Mandela Institute Of Science and Technology (NM-AIST)
 State University of Zanzibar (SUZA)
 Tanzania Institute of Accountancy (TIA)
 University of Dar es Salaam (UDSM)
 United World College East Africa (UWCEA)



FINANCIAL SECTOR INSTITUTIONS & AUDIT FIRMS 09

Akiba Commercial Bank
 Bank of Tanzania
 CRDB Bank
 Financial Sector Deepening Trust (FSDT)
 KPMG
 National Audit Office (NAO)
 Stanbic Bank
 Standard Chartered Bank
 Tanzania Commercial Bank (TCB)



HEALTH SERVICES 10

Gongo la Mboto Hospital
 Jakaya Kikwete Cardiac Institute (JKCI)
 Mawenzi Regional Referral Hospital
 Muhimbi National Hospital
 Mirembe Hospital
 Mt. Meru Regional Referral Hospital
 National Institute for Medical Research (NIMR)
 Njombe Regional Referral Hospital
 Ocean Road Cancer Institute (ORCI)
 Songea Hospital



DEVELOPMENT PARTNERS GROUP & NGO's 05

Global System for Mobile Communication Association (GSMA)
 Information Systems Audit and Control Association (ISACA)
 Tanzania Internet Service Providers Association (TISPA)
 Tanganyika Farmers Association (TFA)
 Tanzania Education and Research Networks (TERNET)



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REGIONAL ADMINISTRATIONS & LOCAL GOVERNMENT AUTHORITIES

Arusha Regional Secretariat
 Dar es Salaam Regional Secretariat
 Dodoma Regional Secretariat
 Iringa Regional Secretariat
 Katavi Regional Secretariat
 Kilimanjaro Regional Secretariat
 Lindi Regional Secretariat
 Mara Regional Secretariat
 Mbeya Regional Secretariat
 Mtware Regional Secretariat
 Mwanza Regional Secretariat
 Njombe Regional Secretariat
 Pwani Regional Secretariat
 Rukwa Regional Secretariat
 Shinyanga Regional Secretariat
 Singida Regional Secretariat
 Simiyu Regional Secretariat
 Songwe Regional Secretariat
 Tabora Regional Secretariat
 Tanga Regional Secretariat
 Arusha City Council
 Dar es Salaam City Council
 Dodoma City Council
 Mbeya City Council
 Mwanza City Council
 Tanga City Council
 Kigamboni Municipal Council
 Kinondoni Municipal Council
 Morogoro Municipal Council
 Mpanda Municipal Council

Temeke Municipal Council
 Ubungo Municipal Council
 Tabora Municipal Council
 Singida Municipal Council
 Shinyanga Municipal Council
 Songea Municipal Council
 Sumbawanga Municipal Council
 Kahama Municipal Council
 Arusha District Council
 Babati Town Council
 Buhigwe Town Council
 Bukombe District Council
 Busokelo District Council
 Chunyu District Council
 Chalizine District Council
 Chato District Council
 Chemba District Council
 Hai District Council
 Handeni District Council
 Iringa District Council
 Ileje District Council
 Illemela District Council
 Itilima District Council
 Kilolo District Council
 Kibaha Town Council
 Kalambo District Council
 Kalua District Council
 Kilindi District Council
 Kishapu District Council
 Kongwa District Council
 Kyela District Council

Kyerwa District Council
 Longido District Council
 Ludewa District Council
 Mafia District Council
 Mafinga Town Council
 Magu District Council
 Malinyi District Council
 Makambako Town Council
 Masasi Town Council
 Mbarali District Council
 Mbanga Town Council
 Mbazi District Council
 Mbogwe District Council
 Mbuli Town Council
 Meru District Council
 Msalala District Council
 Misensi District Council
 Misungwi District Council
 Mkuranga District Council
 Melele District Council
 Muleba District Council
 Mlimba District Council
 Momba District Council
 Mpimbwe District Council
 Mtama District Council
 Mtwaro District Council
 Mvomero District Council
 Mwanga District Council
 Mwanza City Council
 Nanyamba Town Council
 Nkasi District Council
 Njombe Town Council

Nsimbo District Council
 Nyasa District Council
 Ngara District Council
 Ngorongoro District Council
 Nzega Town Council
 Pangani District Council
 Ruangwa District Council
 Rorya District Council
 Rungwe District Council
 Same District Council
 Sengerema District Council
 Siha District Council
 Sumbawanga District Council
 Tunduma Town Council
 Tanganyika District Council
 Newala District Council
 Lushoto District Council
 Urambo District Council
 Ussetu District Council
 Wanging'ombe District Council

List of Awards

1	Best Innovative ICT Student	Salome Mosha
2	Best Mobile Network	Vodacom Tanzania
3	Best Company Providing ICT outsourcing Services	Serensic Limited
4	Best Company in software Development	IPF Softwares
5	Best ICT Transformative Training Institution	The Open University of Tanzania
6	Best ICT Transformative Institutions on Provision of Health Services	Jakaya Kikwete Cardiac Institute
7	Best Financial Institution in using ICT	ABSA
8	Best Financial Technology Company	BCX
9	Best ICT Researcher	Dr. Alcardo Alex Barakabitze
10	Best Organisation in Digital Insurance	MyBima
11	Best Company in Farming	Agripoa
12	Best Journalist in using ICT for Development	Millard Ayo
13	Best Media House in using ICT for Development	Clouds Media Group
14	Best LGA in using ICT	Ubungo MC
15	Best Regional Secretariat in using ICT	Dar es salaam

TOP 3 OVERALL WINNER AWARDS

1st	Best ICT Incubation Hub	Apps and Girls
2nd	Best ICT Start-up	NALA
3rd	Best Ministry in ICT Integration in Sector's Policies Award	Wizara ya Fedha



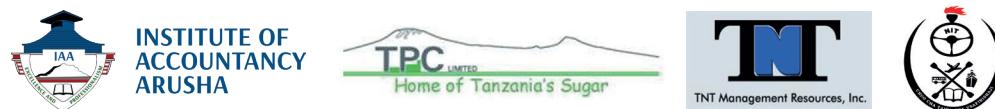




List of Conference Partners



Exhibitors



**MIINISTRY OF INFORMATION,
COMMUNICATION AND
INFORMATION TECHNOLOGY.**
Goverment City,
Mtumba area,Ujenzi Street
P.O.Box 677
40470 Dodoma - Tanzania
Email:dg@ict.go.tz

For more Details Please Contact:
ICT Commision:
P.O. Box 70479,
14 Jamhuri Street
11470 Dar es Salaam - Tanzania



ICT_commission