

**A Diagnostic Perspective of the ICT Practice within
the Public Entities in Tanzania – A case of Tanzania
Ports Authority (TPA)**

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OUTLINE

Sensory Organs Opener

The Diagnosis

The Targeted bull

Odessa File and Prescription

Sensory Organs Opener

- **Tanzania 2025 Vision:**
 - Tanzania aims to become a semi-industrialized country by 2025
 - Contribution of manufacturing to the national economy must contribute heavily to the GDP.
- **Tanzania Government's Priority:**
 - ***Industrialization*** is a key priority to the government
 - TPA will take part substantially in the industrialization process.
 - Industrialization to be a function of a level of ICT development

Sensory Organs Opener....contd

- **Real life ICT applications in Tanzania**
 - Tanzania's ICT sector has rapidly expanded, such as in mobile phone communication and ATM banking and became strong pillars for the social and economic development
 - It is now impossible to separate ICT including the two pillars and the ***"Industrialization"*** vision for the country,
 - According to Tanzania Communications Regulatory Authority (TCRA) Report for 2016, number of mobile subscriptions has increased from 25million in 2011 to 40million in 2016, which in an increase of 60%
 - ATM and SIM Banking have further revolutionized the social economical life of a regular citizen in Tanzania and Africa.

Sensory Organs Opener....contd

- **ICT and industrialization role of the Public Sector**
 - Public Entities are obliged as a matter of responsibility to carry forward the country industrialization policy
 - Public entities include, Central Government ministries and Independent Departments; Local Governments and Public Corporations and Authorities
 - TPA is a public entity positioned to support the industrialization in Tanzania through facilitation and revenue generation
 - The ports in Tanzania are key in supporting transactions related to trade and businesses as well as social needs
 - These transactions can only be efficiently and effectively conducted through proper utilization of ICT.

Sensory Organs Opener....contd

- **Community Expectations on Public Entities**
 - Public Entities including TPA are expected to facilitate and deliver services timely and at lower cost
 - TPA operations have a lot of impact in enabling a conducive business environment
 - TPA has opened its '**sensory organs**' and noted the vital geographic position of Tanzania, which provides a comparative advantage in the shipping and port operations
 - If the geographic position advantage is properly exploited through use of ICT, TPA stands to contribute more than 67% of Government revenue.

THE DIAGNOSIS

- From Independence Public Entities had no emphasis on ICT applications
- Investment in ICT was minimal up to early 90's
- From mid 90's, few computers were purchased and used as mere typewriters
- Report on development of IT in Tanzania indicates that first computer ICT 1500 was purchased by MoF in 1965
- The same report shows by 1986, there were less than 500 microcomputer, 50 minicomputers and 25 mainframe computers

THE DIAGNOSIS.....ctd

- Late 90's saw an increase of personal computers utilization within the public sector
- Demand called for initiating computer training courses at all levels
- TPA begun to develop and use information systems in 1974 by introducing COBOL for its office applications and port billing, when it was EAHA then THA
- In 2000's more systems were introduced such as, Terminal Operating System(TOS) in 2006 upon TPA establishment

THE DIAGNOSIS.....ctd

- Other systems are being established since 2010
 - Integrated Electronic Payment System (lePS) in 2014
 - Integrated Security Systems in 2010 and utilization started in 2016
 - Flow Meter system in 2014 and utilization started in May 2015
 - Generalised Audit Software (GAS) in 2015 and its utilization will begin in November 2017
 - First ERP known as Epicor failed in 2010 as it was rejected by TPA internal users as it didn't meet user requirements.
 - Second SAP ERP failed to take off due to management changes
 - Third SAP ERP is currently under development since 2015, and is nearly going live with some modules. It will fully operational by mid 2018
 - Port Operating System is at the procurement stage since 2017, and it is expected to fully operational by end 2019.
 - Systems for other operations such weight scales/weighbridges and scanner are yet to be developed, while other operations are manual

THE DIAGNOSIS.....ctd

- Current situation and challenges
 - Uncoordinated TOS components
 - Flat and obsolete system of Cobol
 - Unintegrated systems
 - Unplanned procurement procedure based on vendor pressure and not locally tailored
 - Lack of standardization design and specifications as well as user needs
 - Hesitation by end users to utilize systems
 - Lack of systematic service, maintenance, repair and rehabilitation programs
 - ICT staff with inadequate number, commitment and skills
 - Insufficient alignment of ICT Policy and Corporate Strategy leading to minimal participation of top management

TARGETED BULL

- Public Entities including TPA should target at tackling all the challenges and transform
- Some Public Entities complains about budget constraints but forget the opportunity cost incurred for lack of ICT
- TPA has recently done the following
 - Developed a proper aligned ICT policy
 - Reorganized the ICT structure in 3 sections, recruited 38 new staff with right skills and placed them in their skilled job areas, hence a total of 79 staff
 - Establishing detailed ICT requirements that will drive towards procurement of suitable ICT solutions for various systems
 - Begin integrated and take ownership of all systems independent of vendors
 - Conducting special training for ICT staff according to respective systems need, for selected champions and to end users on proper usage of systems
 - Develop a program for Regular service, Maintenance and Repair to the systems
 - Upgrading its infrastructure and network to be able to run all the current and upcoming applications efficiently and effectively
- Once achieved the target is have a top notch state of the art ICT environment

THE “ODESSA FILE” PRESCRIPTION

- Where should we learn from and benchmark?
 - Available international and national experience
 - Detailed study of the situation through process mapping to identify needs and develop appropriate tailored solutions
 - Develop sound ICT policies and strong and appropriate organization structure, increase management commitment towards ICT and undertake appropriate procurement processes
 - Building a strong ICT professional and networking associations for knowledge sharing and experience

Thanks for listening

“Working in ICT is like playing in a team, therefore teamwork and objectivity should be prioritized and be practiced throughout the course of the work. Doing so, will enhance productivity that would translate into results that benefits the organizations and the entire nation of Tanzania”