Exploring New Digital Technologies Impacting Customs And The Use of Data – SARS Customs PICARD Conference 2022

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CONTENT







OVERVIEW: SARS Customs Administration





MANDATE

- Trade facilitation
- Revenue Collection
- □ Enforcing Compliance

STRATEGIC FOCUS

- Provide border control management, community protection and Industry protection
- Administer trade policy measures and industry schemes; and
- Collect revenue

- Customs reports to SARS under Ministry of Finance
- □ 64 Customs offices nationally
- □ Headcount of 2172 Customs officials
- Structure composition includes Air, Sea, and Land Modalities; Customs Audit, Excise Audit, Targeting and Operation Centre, Enforcement, and Stakeholder Engagements

MEMBERSHIP

- World Customs Organization
- World Trade Organisation
- Southern African Development Community
- Southern African Customs Union





Customs Modernisation Journey (1998-2024)

Manually intensive operations



SARS is progressing over time to arrive at extensively automated operations

SARS relies on complete and truthful declaration of financial transactional information by the entity.

No available information & data

SARS relies on data and requires no additional information to be declared or submitted by the entity. Perfect information & data availabl

Extensively automated operations







Customs Modernisation Highlights (1998 - 2021)





Customs Modernisation Programme (CMP) 2021 - 2024

Advance Import Payments (AIP)

Brings together data and processes from Authorised Dealers in foreign currency and exchange, SARS, and the South African Reserve Bank (SARB) to increase regulatory controls relating to advance foreign exchange payments in order to prevent Illicit Financial Flows, as well as duty and tax losses through customs undervaluation

Customs Cadet Programme

Aims to recruit, select, assess and enrol successful applicants in the Cadet Programme where the required technical, behavioural and transversal competencies will be developed through a blended learning approach

Cross-Border eCommerce

Aims to implement the provisions of WCO "Cross-Border eCommerce Framework of Standards" and the "Guidelines for the Immediate Release of Consignments by Customs" which provides member customs administrations with the global standards and best practices to manage crossborder eCommerce goods

Customs IT Connectivity

This concept enables live customs data exchange between the customs administrations on import and export

Valuation Database

Establish a valuation database to aid SARS in identifying instances of possible under-valuation. will be used to assess potential risk in terms of the accuracy of the declared Customs value on imported goods, with particular focus on clothing and textile, as well as other high-risk commodities

Registration, Licensing & Accreditation (RLA)

Automate the registration, licensing and accreditation processes for all customs and excise clients to enable taxpayers and traders to meet their obligations in a convenient a manner



Automated Bonds

Automate the bond process by leveraging an existing SAP functionality followed by internal case management and workflows for bonds and the digitisation of all face-value security documents

Automated Refunds and Drawbacks

Develop and implement an automated customs and excise refunds and drawbacks process that is capable of significantly reducing the risks of revenue loss to the fiscus. Current process is manual.

Air Passenger Tax

To develop and implement an automated licensing, return submission, and account management capacity for air passenger tax. SARS currently utilises a semi-automated, process to collect this tax, which is cumbersome, and impacts negatively on turnaround times and client service

Single Government Authorised Economic Operator

AEO programmes are widely acknowledged as a key driver for a solid Customs-to-Business Partnership, a secure, transparent and predictable trading environment, and, in a wider context, enhanced economic prosperity

Single Window

Single Window allows parties involved in international trade and transport to lodge standardised information and documents once at a single-entry point to fulfil all import, export, and transit-related regulatory requirements

SMART Borders

The concept allows Customs to automate all of ports of entry to a technology driven environment including automated gate management, in-line scanning, number plate recognition, in the tracking of goods





SARS CUSTOMS CHALLENGES

eCommerce

- Lack of efficiency in the facilitation of eCommerce
- No effective control over cross-border movement of goods
- □ Capacity constraints to facilitate volume of eCommerce
- High smuggling risks (illicit good smuggling through post offices, postal services)
- No coordinated approach with other stakeholders, i.e South African Post Office, Couriers, etc

Corruption

- Opportunities presented by weak, ineffective, fragile customs processes
- Manual processes and lack of segregation of duties in other functions contributes to corruption
- Corrupt activities reported in ghost exports, theft of detained goods, smuggling of illicit goods and other transgression such as behavioral misconducts



Illicit economy

- High smuggling of illicit cigarette and counterfeits at borders
- □ Lack of coordinated efforts with other government agencies such as South African Police Service, South African Defense Force
- Fragile border controls impacting on local industries, there is surge of illicit cigarettes, tobacco, counterfeits clothes, etc

Infrastructure, People, Systems and Processes

- Inadequate infrastructure to accommodate end to end customs processes
- Limited human capacity impacting operation
- □ Lack of skills to deal with valuation, tariffs, rebates, origin misuse, impacting revenue and protecting vulnerable industries
- Infrastructure not properly maintained (BMA Mandate)
- Manual and partially automated processes in critical operational areas causing strain on the already fragile system
- □ Lack of IT interconnectivity with OGA's to create seamless process on cross border clearance of goods and people





NEW DIGITAL TECHNOLOGIES AND THEIR POTENTIALS





WCO INSTRUMENTS RELATED TO DATA

Revised Kyoto Convention

The RKC promotes trade facilitation and effective controls through its legal provisions that detail the application of simple yet efficient procedures.



SAFE Framework of Standards

This Framework sets forth the principles and the standards and presents them for adoption as a minimal threshold of what must be done by WCO Members

Risk Management Compendium

Provides an overview of core aspects of modern Customs risks management practice and assists Customs administration and cooperation among them



WCO Data Model

Developed as a compilation of clearly structured, harmonized, standardized and reusable sets of data definitions and electronic messages, to meet operational and legal requirements of cross-border regulatory agencies, including Customs, which are responsible for border management

BENCHMARKING: TECHNOLOGY AND DATA

Zambia Customs

IoT: Zambia uses IoT to facilitate online acquittal of transits through QR codes. **United States Customs Border Protection** BIO: Is utilised to improve the efficiency of the Dubai Customs current criteria for travel. AI: In 2018, Dubai Customs decided to Drones: Are used to patrol the border, conduct leverage AI to develop a tool that would surveillance for investigations, conduct disaster enable it to observe work data and employee damage assessments, and respond to officer behaviour as a means of identifying ways to safety scenarios reduce the time required to undertake a task while improving quality and maximizing staff productivity. **Nigerian Customs Service** □ AI: Nigeria launched The Nigeria *▲* Integrated Customs Information System Virtual, Augmented, and Mixed Reality Technology; SARS Customs has not (NCIS) which is an AI/ML technology implemented these and 3D Printing Technology designed to conduct risk assessments technologies except for AI Currently within the international customs (scanners) activity when it comes to huge amount of community there is no record of any administration data in a quickest possible time that has adopted these technologies for their

Taiwan Customs

□ B: Established Blockchain to enhance international trading competitive edge and to build a friendly customs clearance environment for the entire trade community; in particularly for the Free Trade Agreement (FTA) transactions between Singapore and Taiwan as well as between New Zealand and Taiwan

Increased Use of Data

Korea, CBSA, USCBP, New Zealand Customs Service, and Hong Kong China Customs, have launched big data initiatives to harness the power of analytics, ensure the accuracy of data (regarding cargos, shipments, and conveyances) for analytical purposes.

operation





RECOMMENDATION: DIGITAL TECHNOLOGIES

BENEFITS FOR SARS CUSTOMS

- □ Artificial Intelligence: Will assist Customs in identifying and detecting patterns more precisely than humans can detect, enabling more informed decisions and data insights. SARS Customs to prioritise the deployment of more scanners (inline, baggage, cargo) at key ports of entry and inspection facilities (contracted depos) to introduce detecting technologies at their facilities, assisting with curbing of illicit economy.
- □ Blockchain: Will connect all supply chain participants (i.e., Customs, carriers, freight forwarders, importers, exporters, port authorities, terminal operators, depot operators) together into a single, secure data-sharing and collaboration platform, further enhancing cross-border interactions, and assist SARS Customs with eCommerce challenge.
- □ Drones: Can be used to monitor the SARS customs areas through surveillance and limit the amount of illicit goods being trafficked across borders and monitoring corrupt activities. The deployment of these technology requires Border Management Agency mandate considering various stakeholders within border environment.
- □ VAR: There appears to be limited information on customs administration that has used this technology, however *it is ideal in expanding detecting capacity, inspectors can conduct inspection wearing virtual glasses complimented by inspector body cameras.* Documentary Inspectors at SARS Compliance Centers will also be able to visually observe inspections, if wearing virtual glasses. Training of Customs Officers at their respective ports wearing glasses instead of travelling to designated training locations.
- □ IoT: SARS Customs may benefit from eSeals and monitoring movement of goods through satellite in the National Targeting and Operations Centre (NTOC)
- □ **Biometrics:** Will significantly improve security at all entry points (land, sea, and air), and aid in identification of drivers on cargo declarations in arrival and exit management process (SMART Border Initiative).
- **3D Printing:** Due to the limited information available on the benefits that 3D printing presents to the customs environment, more research can be undertaken to enable SARS Customs to make an informed decision on when to explore 3D Printing Technology







RECOMMENDATION (DATA): BENEFITS FOR SARS CUSTOMS







CONCLUSION: DIGITAL TECHNOLOGIES AND DATA

DIGITAL TECHNOLOGIES

- □ SARS Customs to take lessons from the USCBP, KCS, Dubai Customs, Taiwan Customs, Nigerian Customs Service, CBSA, Zambia Customs, etc that have already implemented some of these technologies or are at an advanced level of implementation to improve efficiency
- □ Take advantage of the current Customs Modernisation Programme undertaken 2021-2024 to implement some of these technologies
- Strengthen interagency collaboration leveraging on Border Management Agency (BMA) to partner with other government agencies within border control environment; and customs to customs collaboration to implement some of these technologies
- □ Consider engaging critical stakeholders such as WCO, World Bank, to expedite funding opportunities to realise the benefit of these technologies (Funding Model)

INCREASED USE OF DATA

- □ SARS Customs to continue aligning to the WCO instruments related to data, e.g WCO Data Model; SAFE Framework of Standard; Revised Koyto Convention; Risk Management Compendium to realise the benefit of data ecosystem
 - Leverage on technology used by other government agencies to obtain data on traders, i.e South African Department of Home Affairs, verification of passport detail of Truck drivers/Travellers; Department of Transport (NATIS), verification of ownership/registration data of vehicles and registration of foreign vehicles, etc...
 - Develop the essential skills to work with data and support automation.
 - Leverage on platforms such as IT Connectivity, Single Window, Advanced Import Payment to enhance data exchange which presents an opportunity to align on the future Customs and its processes





CLOSING REMARKS

- □ The adoption of technologies and increased use of data is aligned to SARS commitment as part of Vision 2024 in serving a higher purpose of enabling government to build a democratic state that fosters sustainable economic growth and social development in the interest and well being of South Africans.
- □ Furthermore, SARS commitment is advocated in the 9 strategic objectives that strive towards unquestionable integrity that can be trusted and admired by government and the public.





Thank you Re a leboha Re a leboga Ndza Khensa Dankie Ndi a livhuwa Ngiyabonga Enkosi Ngiyathokoza



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