RISK ANALYSIS FOR BETTER INSPECTION: EXPERIENCE FROM NIGERIA

Presented

At

The Regional Working Group (RWG) on IT Meeting, Dakar Senegal 2019.

Theme:
WHICH COMPUTER MECHANISM FOR THE REINFORCEMENT OF ANTICIPATED INSPECTIONS IN ORDER TO SECURE THE REVENUE AND ACCELERATE CUSTOMS CLEARANCE.

OUTLINE

• Brief Background
• Customs Control & Risk Management
• Experience from Nigeria Customs Service
• Challenges & Going Forward
• Conclusion/Recommendation
Brief Background

Advancement in Technology and Trade liberalization have led to:

- Increased trade volume.

Given:
- Limited resources &
- Need for prompt clearance

This has become a challenge to Modern Customs Administrations worldwide.

Approximately 750 million containers were shipped worldwide in 2017, translating to about 24 per second (UNCTADSTAT, 2018).

THE CUSTOM’S CHALLENGE
THE CUSTOM’S DILEMMA

Trade Facilitation & Revenue Collection
- Clearance
- Economic Development
- Foreign Direct Investment
- Revenue collection
- Etc.

Border Security & Integrity
- Regulatory Enforcement
- Inspection & audit
- Etc.

Balance National Priorities

Customs Control & Risk Management.
- **CUSTOMS CONTROLS**: processes and procedures used by Customs to ensure compliance with her laws and regulations.

- **RISK**: Chance that Customs controls may be circumvented.

- **RISK AREAS**: trade & Customs procedures which present a risk to Customs controls.

- **RISK MANAGEMENT**: systematic application of management procedures to identify, analyze, assess and take action to minimize or eliminate risks.

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**RISK MANAGEMENT PROCESS**

1. **ESTABLISH THE CONTEXT**
   - Define Assessment criteria
   - Decide Structure
   - Record Intelligence
   - Access external systems

2. **IDENTIFY RISKS**
   - What
   - Why
   - How

3. **ANALYSE RISKS**
   - Determine Controls
   - Determine likelihood & consequence
   - Establish levels of risk

4. **ASSESS & PRIORITISE RISKS**
   - Assess against pre-established criteria
   - Create Risk Profiles

5. **ADDRESS RISKS**
   - Accept & Monitor low priority risks
   - Identify & evaluate treatment options
   - Prepare & implement plan

6. **MONITOR & REVIEW**

7. **COMPLIANCE MEASUREMENT**
   - Evaluate & review strategy
   - Monitor & test risks
   - Identify new risks
   - Retire risks
   - Access various info sources

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*World Customs Organization, 2003 \("Risk Management Guide\)
BENEFITS OF RISK MANAGEMENT

- Faster clearance of goods
- Identification of high risk cargo, passengers and conveyances
- Proper utilization of scarce resources

Experience from Nigeria Customs Service
EXPERIENCE FROM NIGERIA CUSTOMS SERVICE

• In-line with the Global best practice, NCS has deployed intelligence based Risk Management at the Four Major levels of Customs Control.
  - Level One: Pre-Clearance
  - Level Two: Main Clearance
  - Level Three: Post Clearance
  - Level Four: Investigation

LEVEL ONE: PRE-CLEARANCE

• In 2013, NCS introduced the Pre-Arrival Assessment Report application
• The PAAR application provides timely risk analysis at the Pre-shipment stage of Customs clearance.
PRE-ARRIVAL SYSTEM

PRE-ARRIVAL ASSESSMENT REPORT

- conduct documentary examination before the arrival of goods
- Notified the importer whether documentary examinations, scanning or physical inspections are required or not before the arrival of goods
- Facilitated release of goods for those not requiring examinations/inspections upon arrival

Pre-arrival Assessment Report

Pre-arrival Document Submission → PAAR Issuance By Customs → Regular Import Declaration (SGD)

Arrival at Nigerian Port → Departure Oversea Port

LEVEL TWO: MAIN CLEARANCE

NICIS CLEARANCE PROCESS

Agent registers SGD/Assesses SGD
Agent makes e-payment at Bank
Automatic 'selection' once payment registered

TRADER ZONE

Risk Management Outcome

Green Lane: Doc Check, Physical Exam
Blue Lane: Doc Check, Physical Exam
Yellow Lane: Doc Check, Physical Exam
Red Lane: Doc Check, Physical Exam
Maroon Lane: Query, Scanning, Fast Track
Orange Lane: Query, Scanning, Fast Track

CUSTOMS ZONE

e-Release and physical exit of goods

Importer/Agent, Other Government Agencies
LEVEL TWO : CLEARANCE PROCESS

- The Clearance Risk Engine does the following;
  - Synchronizes Risk engine with existing risk criteria from PAAR, Trader risk profile data & External risk data sources.
  - Perform random selection.
  - Historization/Memorization of multiple examiner risk analysis report and updates accordingly.
  - Defines selectivity lanes for SGD through risk assessment.
  - Reroute SGD to different risk lane based on risk criteria change.
  - Keeps risk score cards for transactions evaluation.
  - Incorporate trader’s compliance history in risk process.

LEVEL THREE: POST CLEARANCE

- Monitor & Review
  - Evaluate & review strategy
  - Monitor & test risks
  - Identify new risks
  - Retire risks
  - Access various info sources

Revised Kyoto Convention
### LEVEL FOUR: POST CLEARANCE INVESTIGATION

- Post-Clearance Investigation is done following an interdiction or findings of wrongdoing in a post-clearance audit.

- Importer or agent is invited to closely review the level of infraction or otherwise.

- Sanction is applied according to the level of infraction.

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### Challenges & Going Forward
CHALLENGES

- With complexity in the trade supply chain and the massive volume of data churned out today (Big-Data), Rule-Based (qualitative) Risk Management are becoming unwieldy and inefficient.

- Risk management systems may be susceptible to manipulation.

- Non-availability of reliable database of infractions to form bases of prediction.

- Most importers/traders do not have a standard accounting or record keeping system to enable Customs carry out proper PCA.

GOING FORDWARD

The target is to have Machine Learning Risk Management System that, learns from example, experience and makes accurate predictions!
• We have tried to look at Risk Analysis in Customs Clearance process. The Customs Challenge, Customs Control and the compelling need for the deployment of Risk Management mechanism to ensure less inspection was presented.

• The experience of Nigeria of how risk management has been applied at several levels to ensure efficient control was discussed and the plan to migrate to full Machine Learning risk management system was mentioned.
RECOMMENDATION

• A hybrid solution to Risk Management should be implemented to ensure, higher efficiency and less inspections.

• Customs Administrations should leverage on the availability of Big-data, to eventually migrate to Machine Learning risk management systems.

• A reliable Database of Customs infractions should be built by, employing both internal and external means i.e. using mirror data comparism and third party valuation sources .

• Importers/Traders should be encouraged to adopt standard book-keeping practice, through necessary incentives like the Authorized Economic Operator (AEO) mechanism.

THANK YOU FOR LISTENING!