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Data Analysis: Leveraging the Big Data Revolution

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I- What is Big data?

• Ongoing data revolution characterized by Big Data and the increasing role of machines in decision making
• Big Data is high-volume, high-velocity and/or high-variety information
• Demands innovative forms of information processing that enable enhanced insight and decision making
• Customs administrations already use data for a multitude of purposes: risk management, performance measurement, monitoring transit, intelligence and policy analysis…..
• Big Data and algorithms are indisputably providing new technological opportunities for data use by Customs
• Customs should leverage on Big Data to enhance decision making and performance
II- Implementing a data strategy in Customs

1. Making data part of the Customs culture
   • Internalization: Customs officers should be empowered to use data techniques through training
   • Centralization: creation of a data laboratory that could be mobilized for all kinds of data investigations and analysis

2. Leveraging Open Source Software and open datasets
   • The best data science tools are open source and free: QGIS, R, Python etc.
   • Customs can use open sources of data, like UN COMTRADE, IMF and World Bank datasets, but also geodata (OpenStreetMap)

3. Internal governance and sharing of Customs data
   • IT security policies to address risks of data leakages, thefts and hacking
   • Raise awareness of Customs officers on the accuracy of all data collected during Customs processes
   • Taking data protection requirements into consideration
III- WCO initiatives

• Given the importance of data analytics, the WCO has made numerous efforts to promote data analytics within Customs over the past few years. These initiatives include:
  ✓ Disseminating the use of mirror analysis for fraud detection
  ✓ The use of transaction-level data extracted from IT Customs systems to combat bad practices and corruption
  ✓ Using geodata and spatial analysis for border surveillance: Within the framework of the SPC++ initiative (launched by Nigeria, Niger, Cameroon, Chad, Central African Republic, Mali and Burkina Faso)
IV- What capacity building strategy for WCA Customs on data analysis?

• Customs administrations of the WCA region should join the Big Data revolution to add value to their decision making processes including risk management and performance measurement.

• Failure to do so may give the leeway for inspection companies to come back through the back door.

• A possible strategy for creating a strong data analysis culture within our administrations could be as follows:

  ✓ Organise an experience sharing, and awareness raising regional workshop to produce a data analytics « Champion » for each administration.

  ✓ Organise national support workshops to train young, motivated and high potential Customs officers on data analysis.

  ✓ Participate in the future WCO online community of Customs data experts to facilitate collaborative research and support experts in learning from each other.
FIN

Je vous remercie pour votre bienveillante attention

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