



Session 2: Data for Effective Border Management

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Big Data

- **Data - A Strategic and Economic Asset**
- **Data Analysis for Effective Border Management**
 - » Enhanced facilitation
 - » Effective Risk Management
 - » Efficient allocation of resources
 - » Improved revenue collection
- The WCO theme of 2017: “Data Analysis for Effective Border Management.”
- The WCO theme of 2016: “Digital Customs: Progressive Engagement”





2018 WCO Theme

- **“A secure business environment for economic development.”**
 - » Enabling environment
 - » Safe environment
 - » Fair and sustainable environment





Data Analytics – what's new

- Digitalization of data - easy access, capture, aggregation, and analysis
- Structured and unstructured data – Customs, PGAs, other stakeholders, public domains
- Predictive analytics, artificial intelligence, machine learning
- New tools and algorithms
 - » **Text analytics** - The capability to extract data from text files in an automated fashion can unlock a massive amount of data that can be used for transaction monitoring.
 - » **Web analytics and Web-crawling** - These tools can systematically scan the web to review shipment and Custom details and compare them against corresponding documentation.
 - » **International trade and country profiling analytics** - Analysis of publicly available data may establish profiles of the types of goods that specific countries import and export that might indicate security risks.
 - » **Geospatial analytics** - Applying statistical analysis and other analytic techniques to data which has geographical or spatial aspects in the form of coordinates, address, city, or ZIP code to gain insights into flows and abnormal patterns.
 - » **Networks (relationship) analytics** : Analysis of network (relationships and business partners) can help identifying hidden relationships in data between and among trade partners in the supply chain.

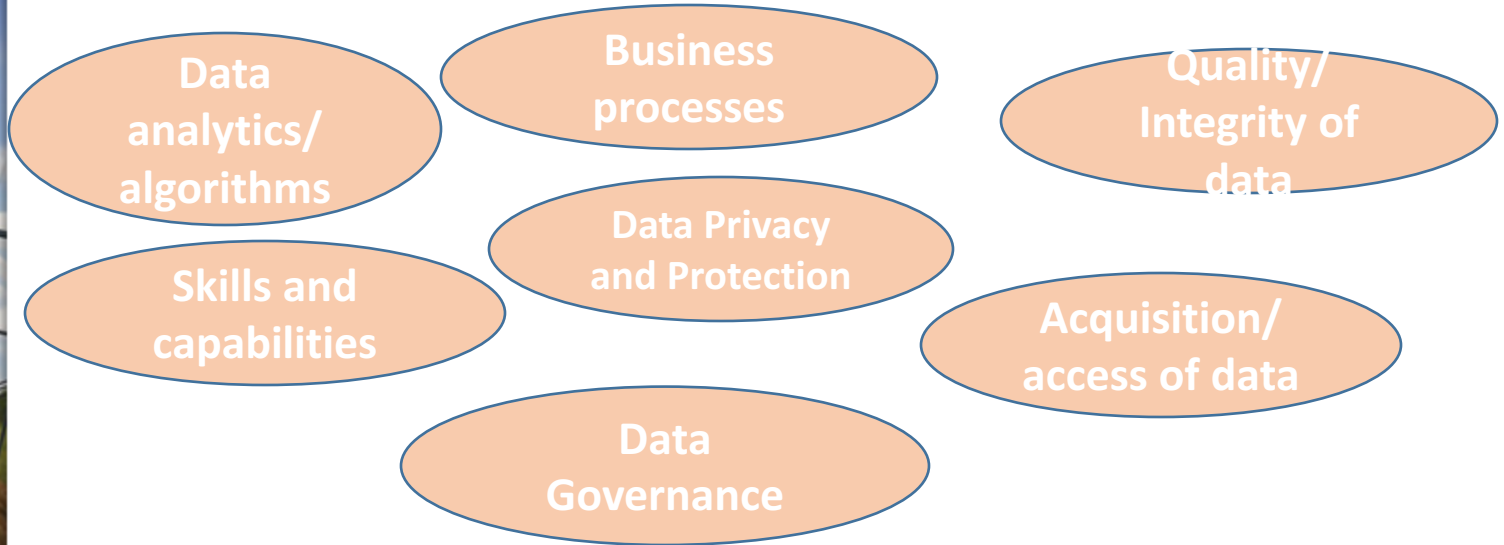
Data powered - Use Cases

- Trend monitoring
- Risk targeting –latent risks
- Integrated risk management in SW environment
- Prediction of threats
- Management of trusted operators programmes (e.g., AEOs)
- Performance management



Big Data

- Critical success factors





Data from e-Commerce Industry for efficient border procedures

- Risk based approach based on data

- New approach to Risk Management and trade facilitation
 - » New actors in the e-commerce chain
 - » New data sources
- Advance Data Exchange between Post and Customs
- Advance Data Exchange between Express industry and Customs
- Direct Data Exchange between e-platforms and Customs
 - » Order data
 - » Payment data
 - » Shipping data
- Data with e-platforms/stakeholders
 - » Supplier's name and address
 - » Buyer's name and address
 - » Place of delivery
 - » Description of goods
 - » Value of goods
 - » Weight of goods
 - » Number of pieces
 - » Origin
 - » Delivery mode and tracking data (including consignment identifier/tracking number and carrier/postal operator)



Digitally connected supply chain

Data Pipeline-Interconnectivity & Interoperability

- Globally Networked Customs
 - » Mutual Recognition of Control
 - » AEO Mutual Recognition
 - » Re-usable or Prepopulated Regulatory data (My Export as your Import)
 - » Transit
- Interoperability of IT Systems – Single Windows
 - » Data exchange
 - » e-LPCO exchange
 - » Connecting other stakeholders
 - » Provenance of data
 - » New technologies - Blockchains



Thank you

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