

GenAl for Trade Facilitation: Future of Trade and Customs Services

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Key questions addressed

- What specific needs can (and does) generative AI address in customs?
- What is the difference between generative AI and predictive AI, from a customs administration perspective?
- Is generative AI an opportunity to leapfrog, and what are the challenges for customs?

AI in customs administrations

Continuity from digitization to data and Artificial Intelligence (AI)

- automation was the reform in the 1990s'
- b data became the resource in the 2010s'

▶ since 2020: AI

- Focus on the detection of non-compliant activities ("targeting", "risk analysis", ...)
 - ▶ from expert systems to analytical/statistical models, and now to AI.

General assumption: Al will be at the core of the administration's functioning

- ► a virtuous reform cycle: automate digitize analyze
- ▶ being "data-driven" and "evidence-based"

GenAl: new uses

- GenAl current uses in use in some customs and tax administrations
 - chatbots
 - preprocessing of communication with taxpayers
 - classification and summarization of legal documents
 - classification of goods.
- GenAl as an individual assistant
 - writing and project assistant
- GenAl as the portal to data and information
 - for risk analysis (segmentation of traders, exploration of data by analysts)
 - Agentic AI (LLMs, SQL, trained for customs data embedding ML)

GenAl: a conceptual shift for the users

Predictive AI (Machine Learning)

- generates scores / probabilities
- focused on a single task (risk analysis)
- integrated into decision-making (selectivity)
- relies on structured data
- has measurable error rates
- trained on data collected automatically during administrative procedures

Generative AI (LLMs...)

- generates text, images, sound, etc.
- eclectic but customizable (fine-tuning)
- "agentic", can handle AI systems
- processes structured and unstructured data
- makes unpredictable errors
- trained on human-curated information

GenAl and Predictive Al: key differences

Predictive AI (Machine Learning)

- no major change in the administration's organization
- human-machine interaction limited to data specialists
- training corpus relatively easy to obtain

Generative AI (LLMs...)

- broad applications to assist civil servant
- interaction with all civil servants (and the public)
- training corpus is more critical than ever

GenAl: consequences and challenges for customs

- Democratization of Data Access
- Leapfrogging to GenAI as a holistic reform?
 - Al becoming the administration's memory (ingestion of textual data, fraud reports, internal notes...).
 - Establishing the truth. Need to select and classify the information that becomes part of the AI training corpus ("the truth").
 - Making administration more consistent. To standardize customs processes across the organization (example of valuation).
 - **Re-organization of work.** Need to define what constitutes a successful AI implementation. AI is only effective if accompanied by a reorganization of work.

GenAl: consequences for customs

Practical questions for customs

- ► What is the future of data analysis? Where to invest?
 - Many customs are transiting to provide data analytics skills to analysts and investigators
 - Going directly to genAl can also be a trap if poor knowledge of domain data
- ▶ What is the future of training?
 - Provide managers with more knowledge on technologies
 - Minimal knowledge in coding, maximal capacity for critical thinking

Additional AI-related questions – conceptual but impacting customs

- Does genAl challenge open governance policies?
- ▶ To what extent must AI be explainable?
- ▶ How can we ensure the neutrality of the training corpus?

Thank you

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