

WCO
2019

ACCELERATING SECURE TRADE

Exploring the potential of machine learning, the benefits of centralized NII image interpretation and the human competencies to unleash the full potential of technology

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Challenges in Machine Learning

Data, Data, Data

More innovation will come
as more data is available:

- Customs data is information from inspection equipment and databases
- Capturing all data through a central platform facilitates algorithm application and machine learning
- ‘Learning’ requires a human feedback loop

Centralized Image Analysis

More data = better decisions

Combining data and image interpretation delivered to analysts at the remote center provides the 'whole picture' to an adjudication:

- Algorithm application
- Management and reporting
- Ongoing skills assessment

Ongoing Training

Critical components of operational excellence

- Image analysts remain critical to finding threats and contraband in a changing environment
- In the remote center the centralizing platform should be monitoring and reporting on analyst's skills
- The analyst's adjudications should be contributing to the risk engine

Fundamentals of a Data-Centric Inspection Operation



INFRASTRUCTURE



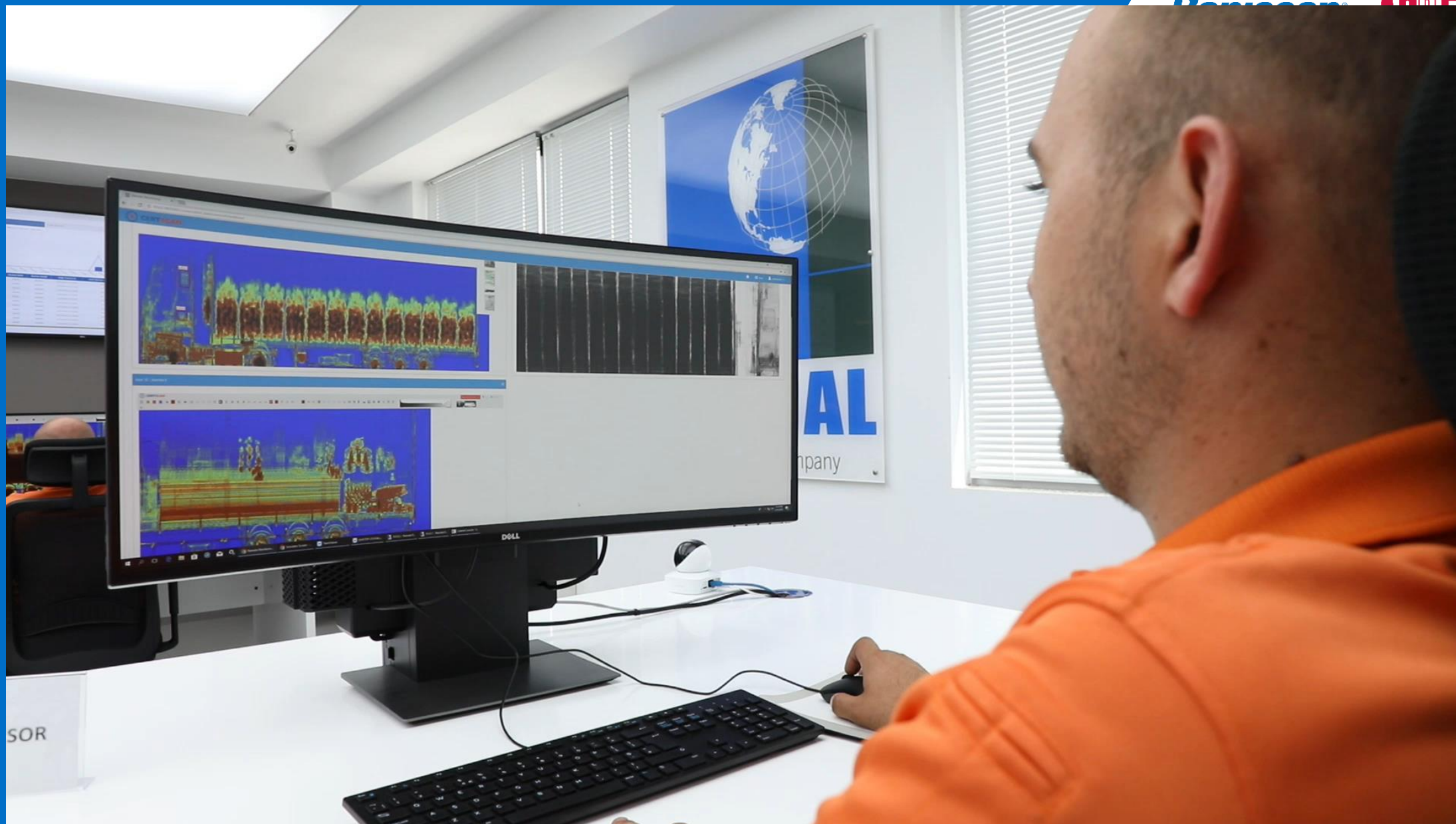
**COMMON
VIEWER**



**DATA
TRANSFORMATION**



**ONGOING
TRAINING**





Key Takeaways

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- Data capture is critical to unleashing the power of technology
- Data is crucial when adjudicating from a remote location
- Machines can augment, but skilled human adjudication is valuable and needed

