DOCKLAB

BUILDING EFFICIENT, COMPLIANT AND RESILIENT SUPPLY CHAIN?

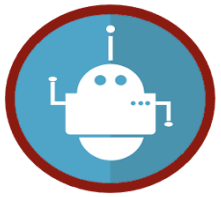
AS EASY AS ABC!

PLEASURE TO EMEET!

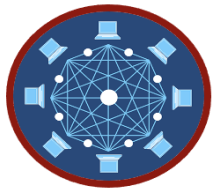
- CTO Docklab
- > 25 years of experience in IT and SC
- UNECE Trade Facilitation & eBusiness Expert
- Co-author "Blockchain and the Supply Chain"
- Lecturer at the University of Southern California (USC) / Marshall School of Business: DSO-548 Emerging Technologies and the Supply Chain

DOCKLAB

- Founded in 2017 as an emerging technology R&D lab with 2FTE
- Subsidiary of the Port of Rotterdam
- Cutting edge R&D with 2 patents granted, 1 pending
- Our mission is co-creating digital solutions that help accelerate the energy transition and make supply chains faster, more efficient and more resilient
- Currently 30 software developers and domain experts split between Rotterdam and Salem, India
- Venture builder since 2022, with a portfolio of 7 spin-outs



Artificial Intelligence



Blockchain Technologies

Connected Devices (Internet of Things)

EMERGING TECHNOLOGIES ABC

AI

- Obliterate "machine-to paper-to machine" processes that are so prevalent in logistics and supply chains, but without the inflexibility of Optical Character Reading (OCR) and inflexible workflows
- Processes such as:
  - Generating customs declarations
  - Order entry
  - Incoming invoice matching with accruals
  - Basically any
- The upshot?
  - 70% time savings
  - 85% less errors

BLOCKCHAIN

- Ever increasing compliance requirements….and not only in the EU!
  - US tariffs now require you to provide information about the origin of the raw materials in imported finished products
  - California, the CTSCA
  - In the EU the list of acronyms is mindboggling, ESPR, CSDDD, CSRD…
- Ecodesign for Sustainable Products Regulation (ESPR) has identified various product categories that require a Digital Product Passport (DPP)
- A blockchain token can contain digital anchors to the required data that make up the DPP, makes it transferable between parties and allows for the modelling of input -> transformation -> output processes
- AI speeds up onboarding of long-tail suppliers without alterations in the way-of-working

CONNECTED IOT

FROM

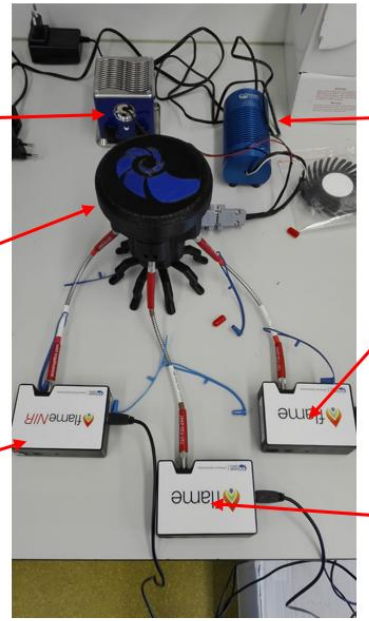
TO

Spectroscopic set-up: three sensors

Fluorescence light
385nm
Power supply

"Octopus"
Petri dish sample
Holder & light shade

NIR sensor
926 – 1650 nm
Ca. 150 variables
(General fingerprint)



VIS & NIR light power supply

VIS sensor
350 - 1029 nm
Ca. 1500 variables
(Colour deviations)

FLUO sensor
350 - 1029 nm
Ca. 1500 variables
Large slit for better sens.
(Specific substances)