UPU POSTAL DATA HACKATHON 2023

UNLOCKING THE VALUE OF POSTAL DATA

BRIDGING THE DIGITAL DIVIDE



THE CHALLENGE

Bridging the digital divide



Common good objective



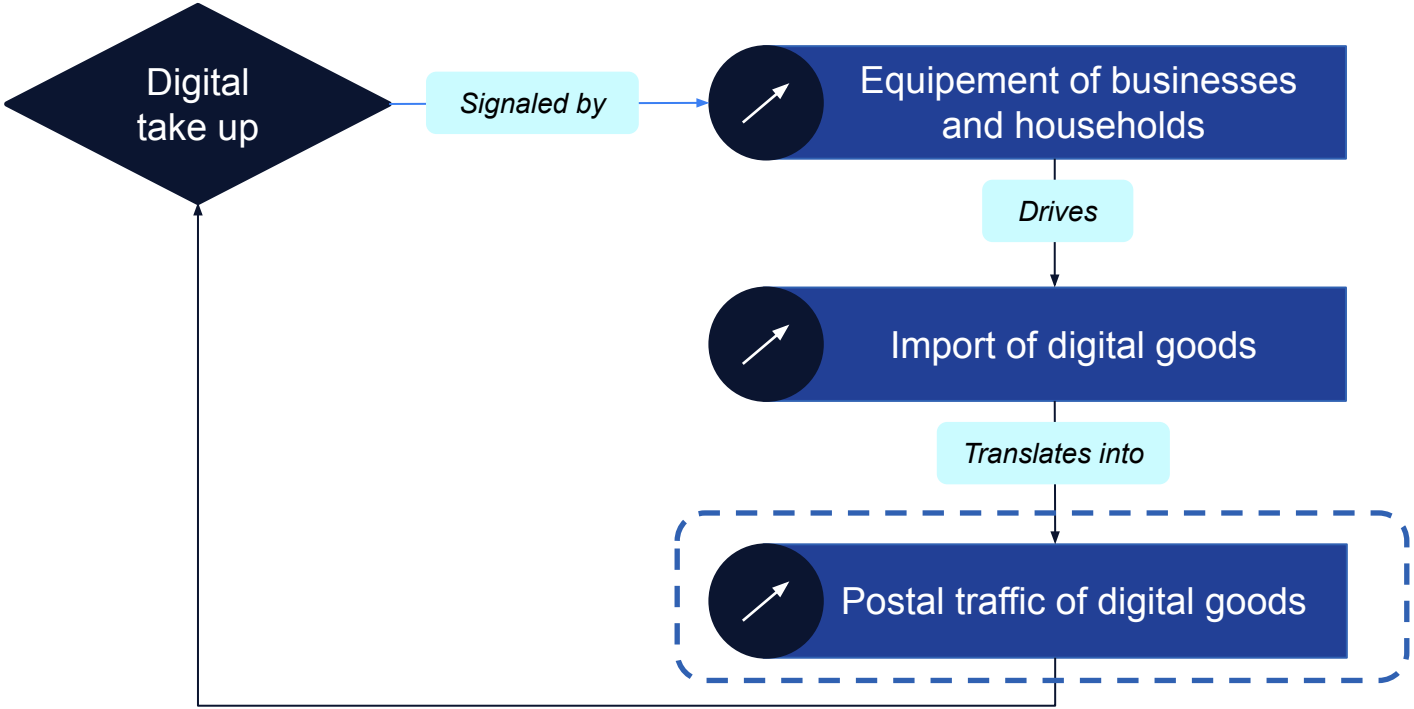
Business opportunity for postal operator – growing postal flow through e-commerce

USE CASE

Identifying determinants of digital take-up in order to:

- Encourage it through public policies
- Predict take-up to seize business opportunities early

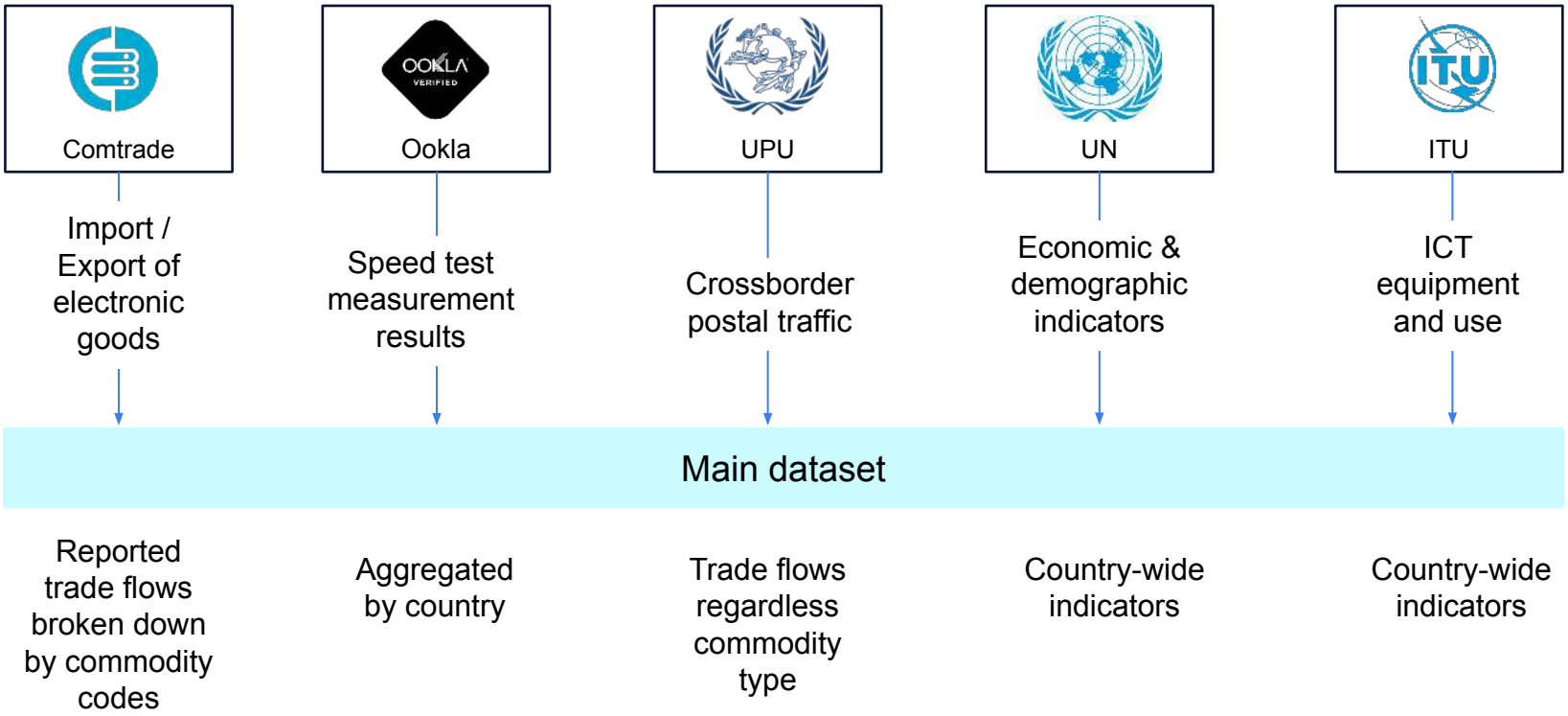
BUILDING A SENSING MODEL OF DIGITAL TAKE UP



Second Best
Monitoring trade data to predict digital development

First Best
Monitoring postal data to predict digital development

SO MUCH DATA... SO LITTLE TIME



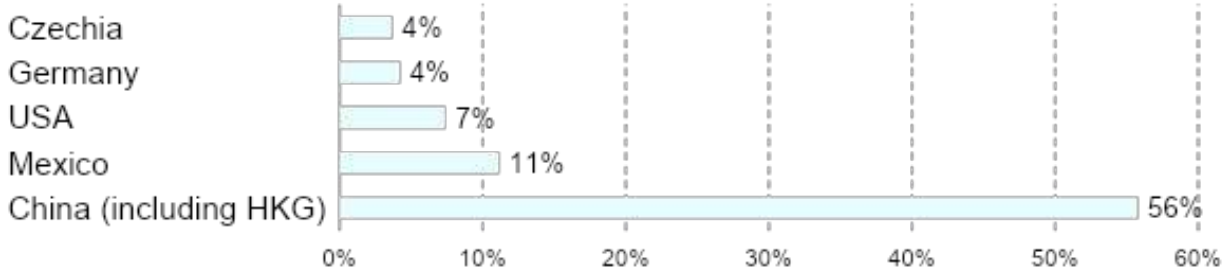
ROADBLOCKS & LESSONS LEARNED

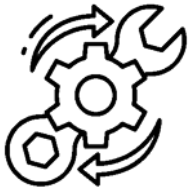


- **Short data span** - no possible predictions based on time series
- **Limited postal data on countries implies massive exporters (China,USA) are missing** – lack of strong signal regarding import of digital goods through postal channel – implementation of the fallback option

Share of export of computers in 2022

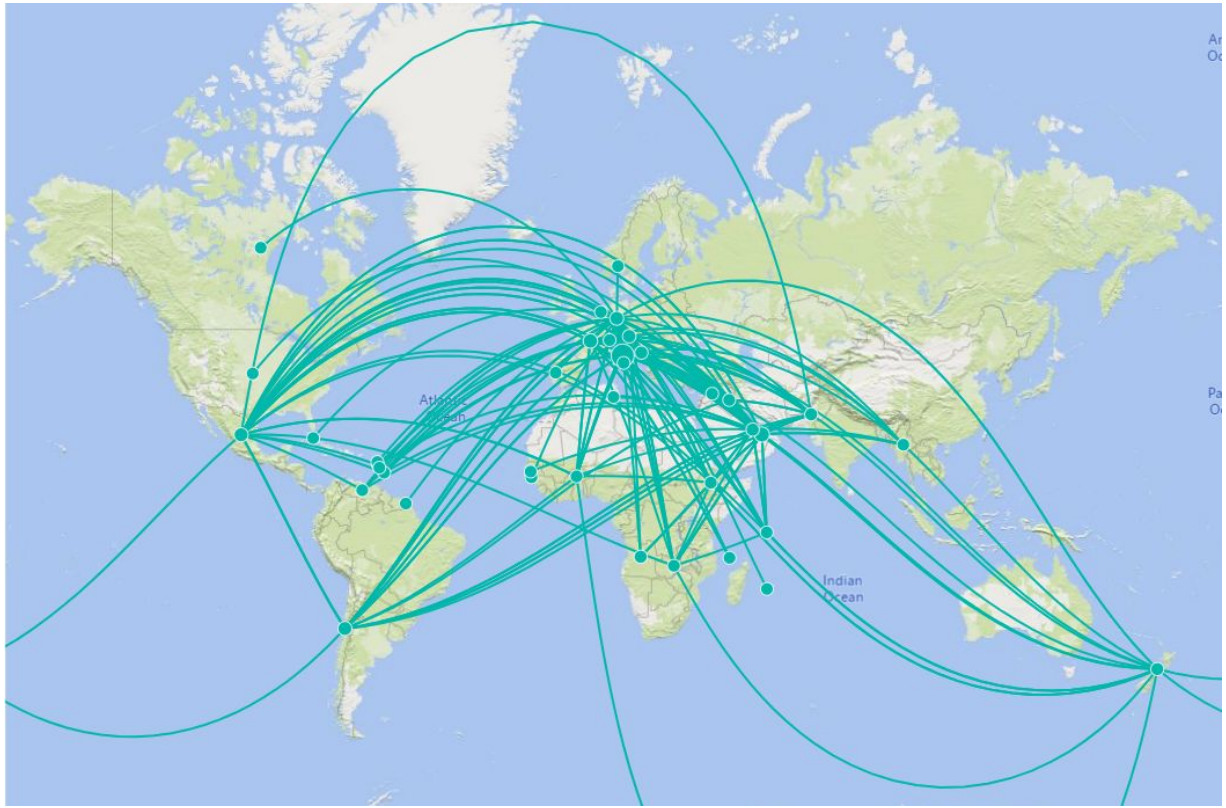
(HS 8471)





- Visualization of what could have been
- Finding in the data weak signals of digital development in trade data

MAPS - UPU DATA



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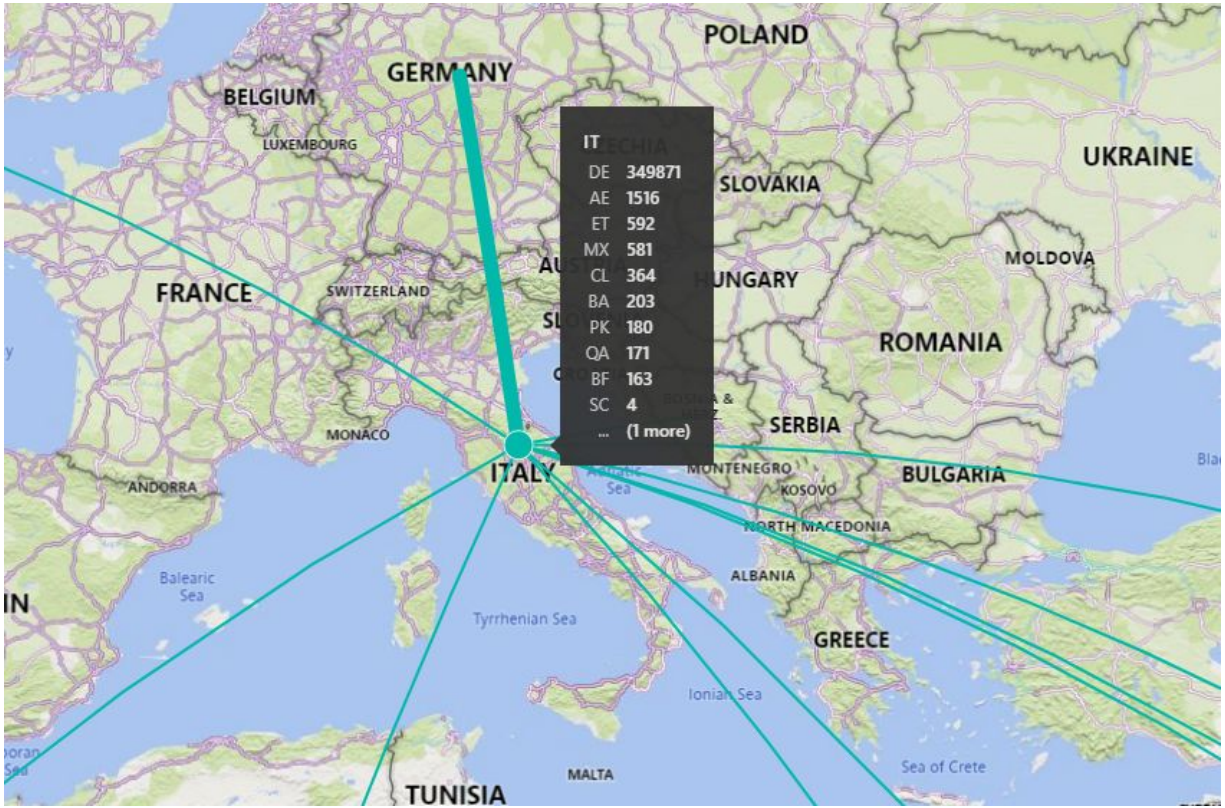

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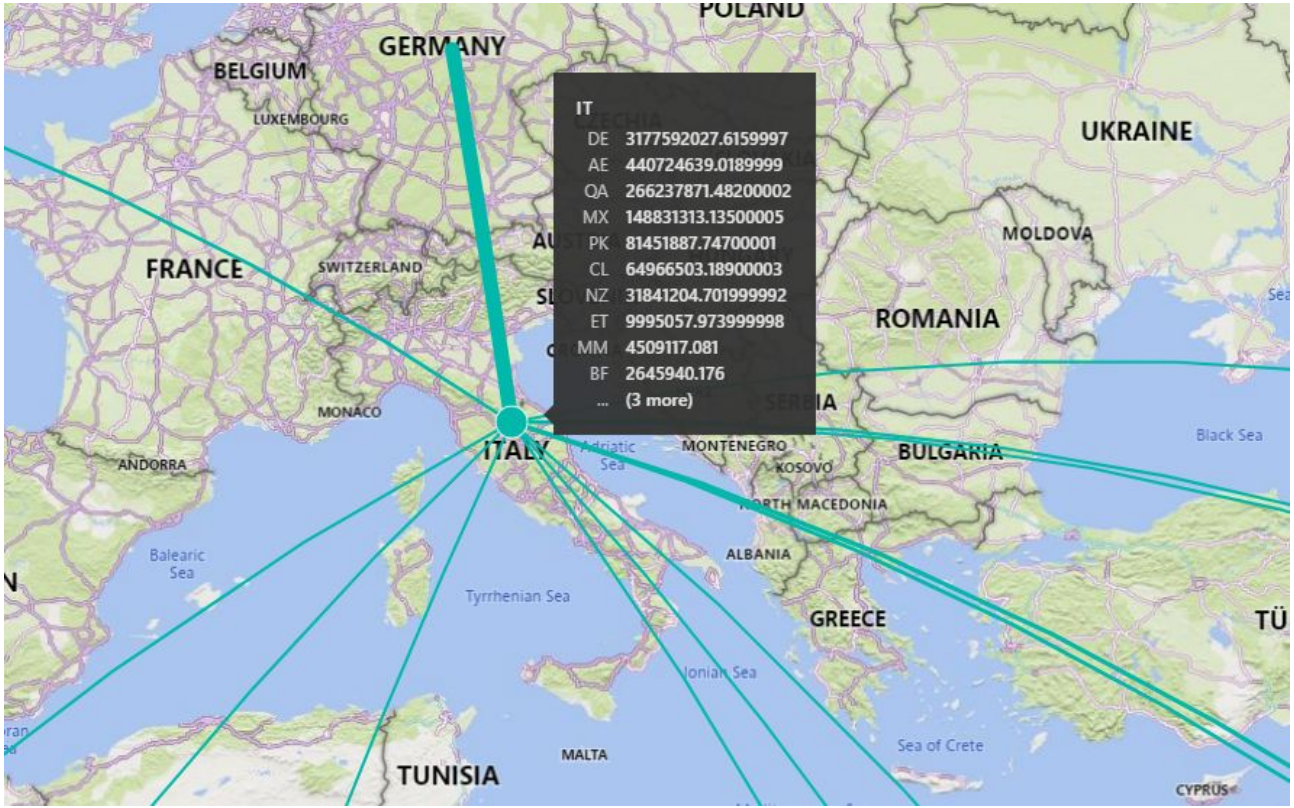
MAPS - COMTRADE DATA



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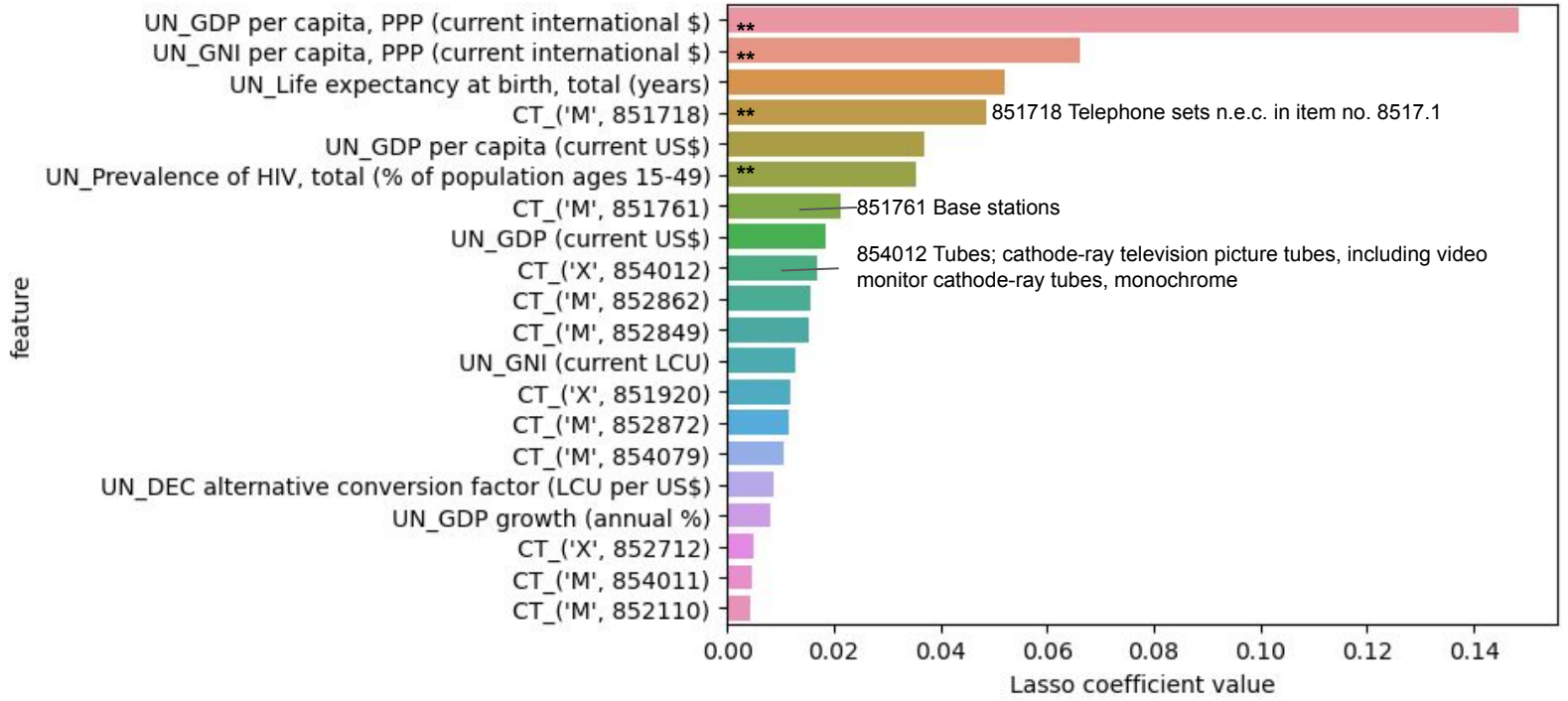
REGRESSION MODEL: RELEVANT PARAMETERS

Explained variable : number of active mobile broadband subscribers relative to population number



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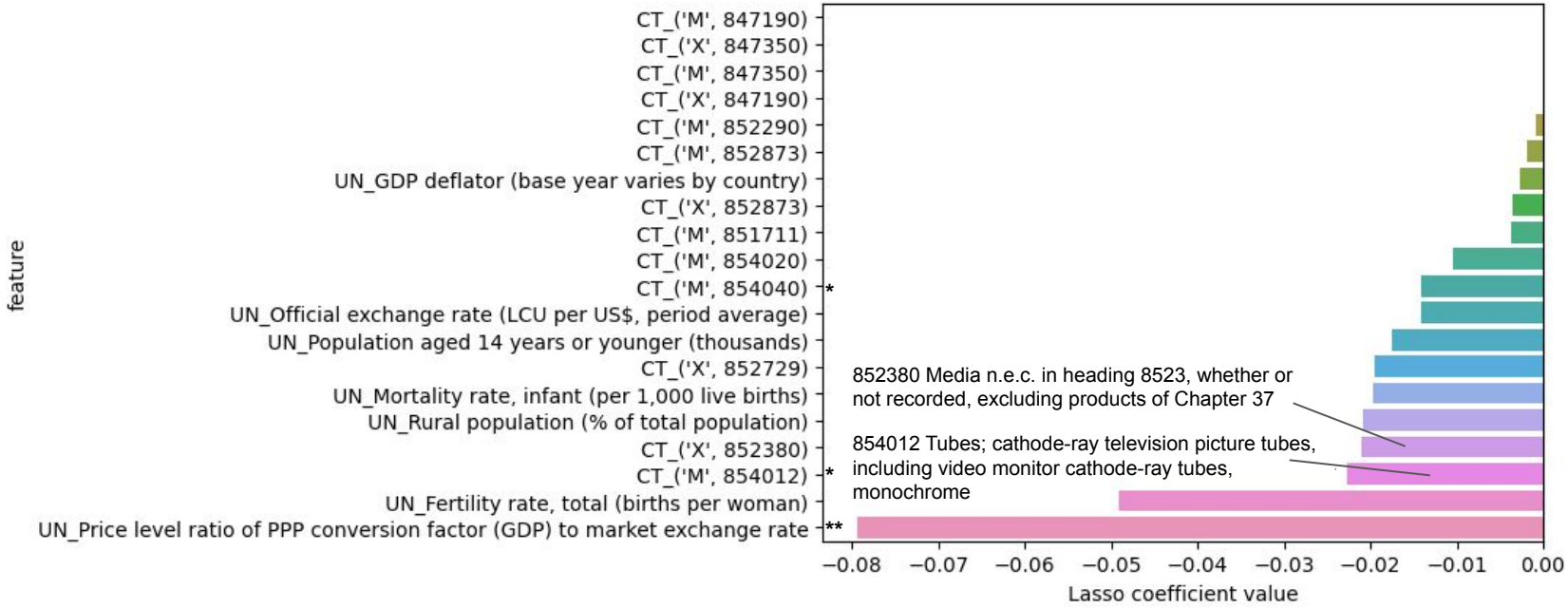
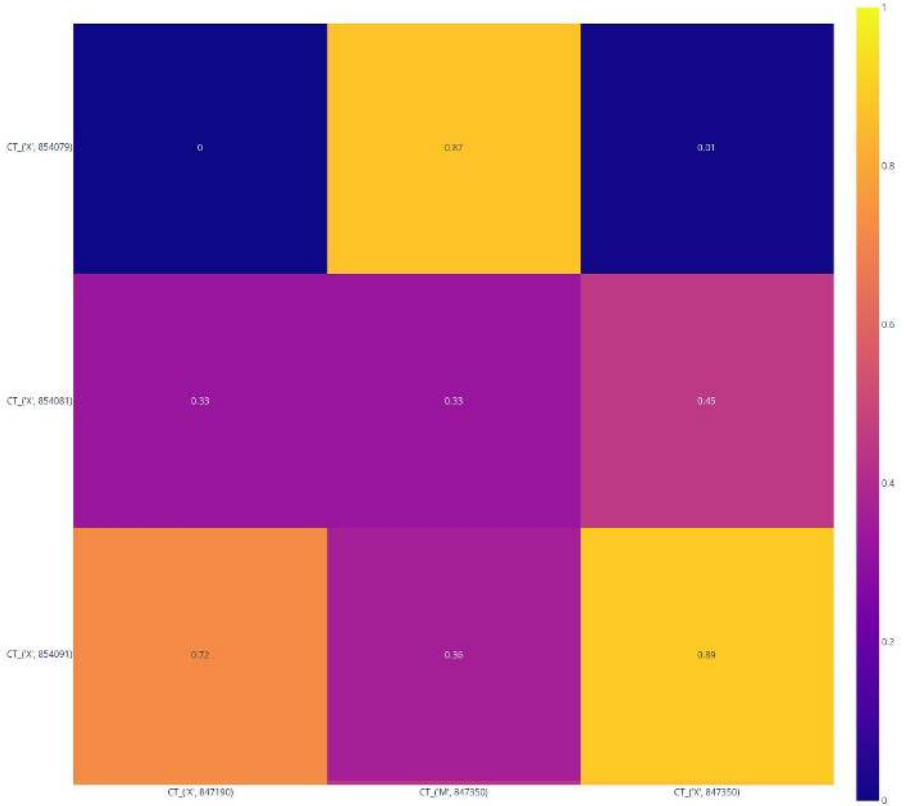


LOTS OF CORRELATIONS IN CONSOLIDATED DATASET

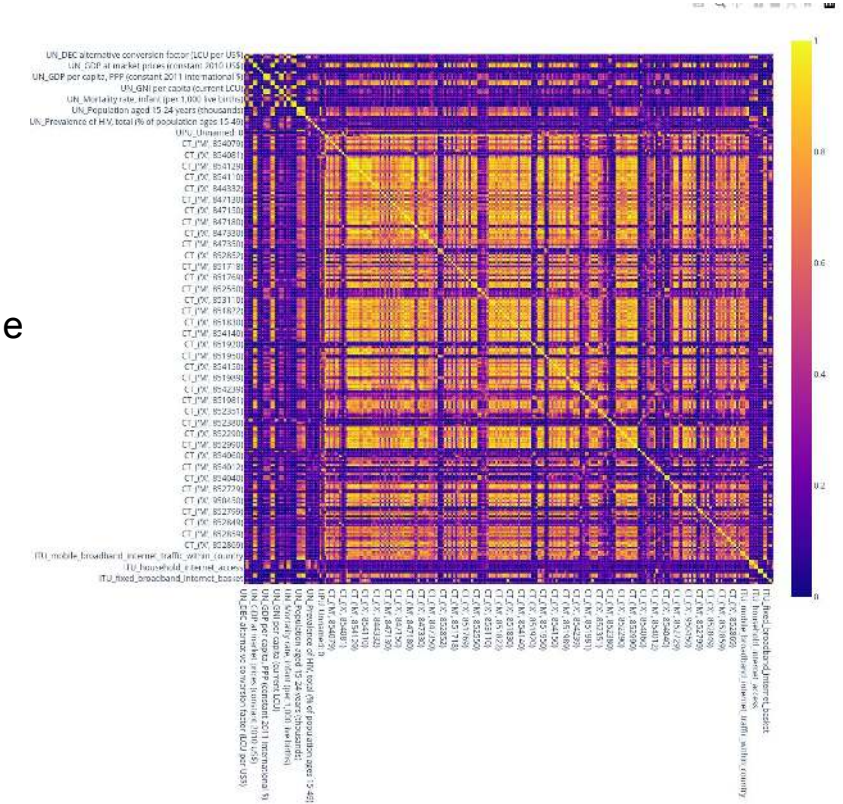


LOTS OF CORRELATIONS IN CONSOLIDATED DATASET

UN

Comtrade

ITU



NEXT STEPS

1. For the model:
   - introduce lags in some data to take into account delayed effects
   - procure larger datasets to allow for prediction

2. For the data, study conditions for provision of utilized data (UN, Comtrade, ITU, Ookla) to assess whether it is possible to offer our database as open data

THANK YOU FOR YOUR ATTENTION

SPECIAL THANKS TO THE MENTORS AND ORGANIZERS, AS WELL AS THE OTHER PARTICIPANTS, FOR MAKING THIS EVENT GREAT!