

# Analysez des Données de Systèmes Educatifs

OPENCLASSROOMS



# **ENJEUX**

Expansion à l'international de l'activité d'Academy

Source : EdStats All Indicator Query (Banque Mondiale)

## **SOMMAIRE**

- ▶ Analyse pré-exploratoire
- ▶ Analyse Exploratoire
- ▶ Analyse Univariée & Scoring
- ▶ Sélection finale & Histogrammes &
- ▶ Analyses Prévisionnelle

# ANALYSE PRÉ-EXPLORATOIRE : PRÉSENTATION/FILTRAGE DES DONNÉES

## PRESENTATION

- ▶ Environ 4,000 variables
- ▶ 241 pays/territoires
- ▶ 7 régions géographiques
- ▶ 1970-2100
- ▶ 86% vide

## FILTRAGE

- ▶ 2000-2015
- ▶ Sélection de 11 Indicateurs
- ▶ Valeurs les plus récentes/indicateur/pays
- ▶ → 19% vide



# ANALYSE PRÉ-EXPLORATOIRE : SÉLECTION DES INDICATEURS

## EDUCATIF :

- ▶ Enrolment in secondary education, both sexes (number)
- ▶ Enrolment in upper secondary education, both sexes (number)
- ▶ Enrolment in tertiary education, all programmes, both sexes (number)
- ▶ Percentage of enrolment in secondary education in private institutions (%)
- ▶ Percentage of enrolment in tertiary education in private institutions (%)

## TECHNOLOGIQUE :

- ▶ Personal computers (per 100 people)
- ▶ Internet users (per 100 people)

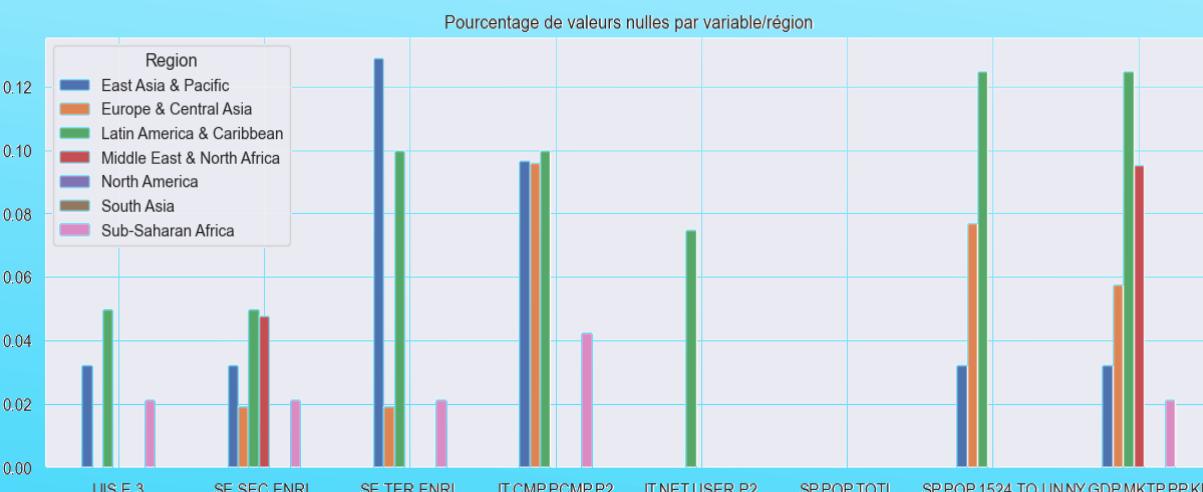
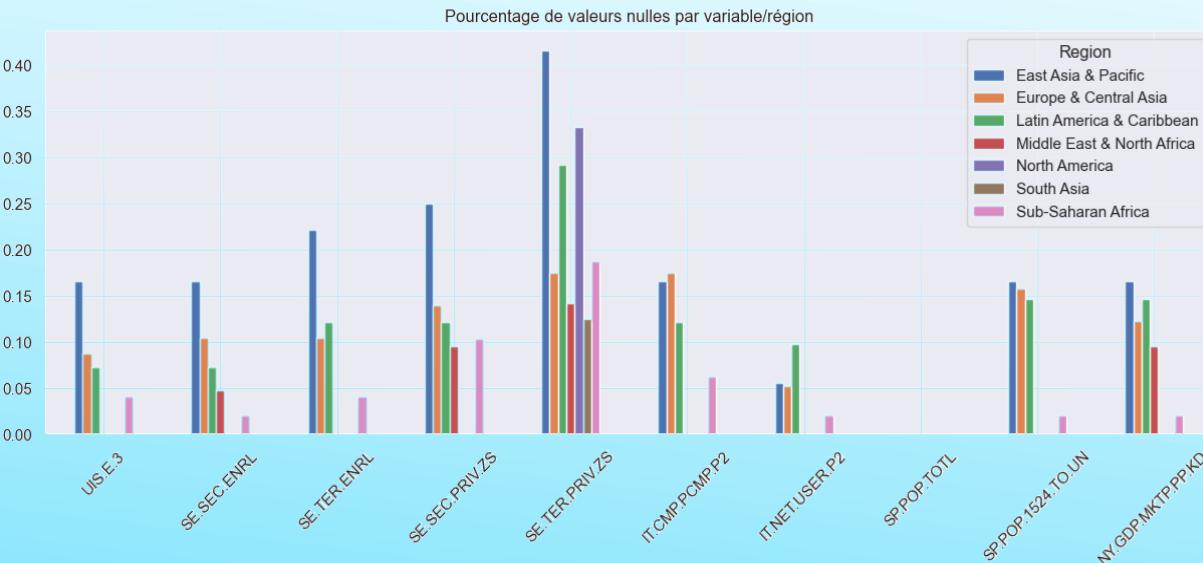
## DEMOGRAPHIQUE :

- ▶ Population, ages 15-24, total
- ▶ Population, total

## ECONOMIQUE :

- ▶ GDP, PPP (constant 2011 international \$)
- ▶ Income Group

# ANALYSE EXPLORATOIRE : FILTRAGE DES PAYS/TERRITOIRES



## SUPPRESSION DE 5 INDICATEURS :

- ▶ Percentage of enrolment in secondary & tertiary education in private institutions (%) → incomplets
- ▶ Population (non-necessaire)
- ▶ GDP, PPP (non-necessaire)
- ▶ Enrolment in upper secondary education (non-necessaire)
- ▶ + Pays/territoires dont la somme des valeurs nulles parmi les 9 indicateurs restants > 5

## RESULTAT FINAL :

- ▶ → 6 indicateurs
- ▶ → 202 pays/territoires
- ▶ → 2% vide

# ANALYSE EXPLORATOIRE : OUTLIERS

 United States

 Indonesia

 Philippines

 Germany

 Turkey

 Brazil

 Egypt

 Bangladesh

 Pakistan

 China

 Japan

 France

 Russia

 United Kingdom

 Mexico

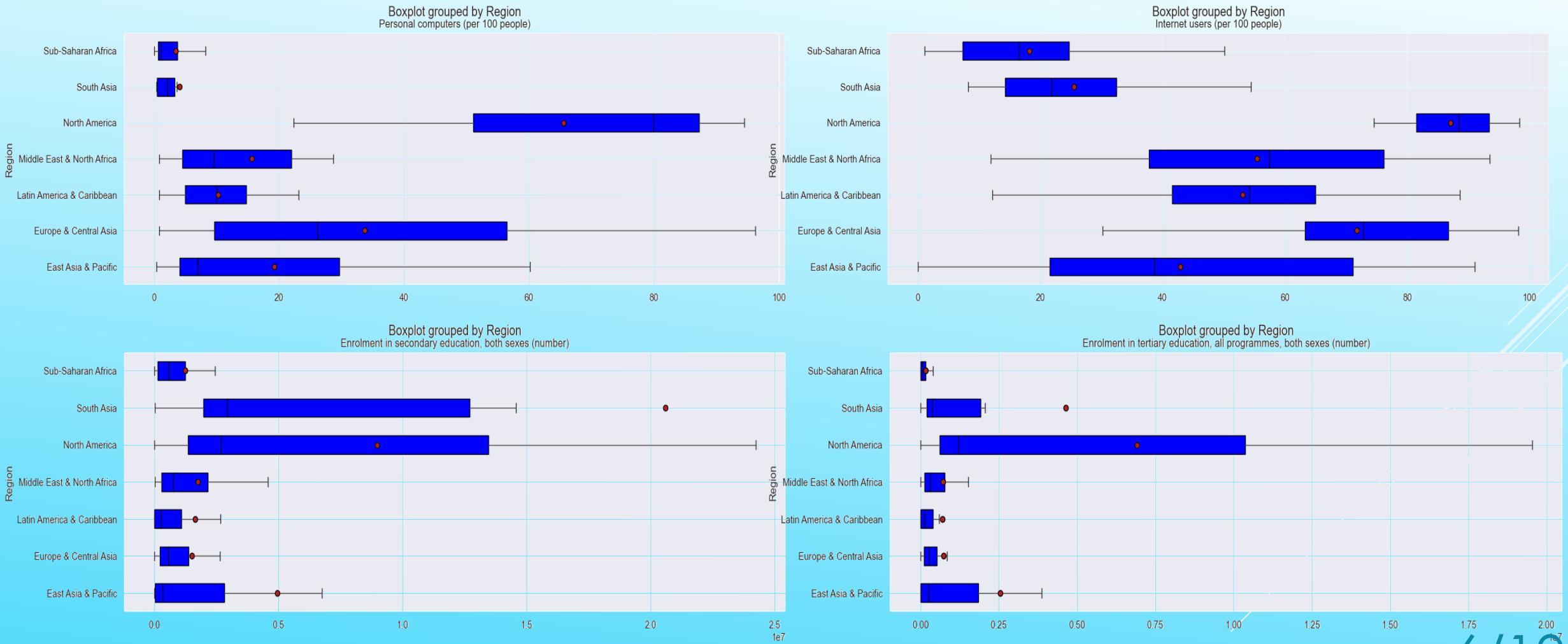
 Iran

 India

 Nigeria

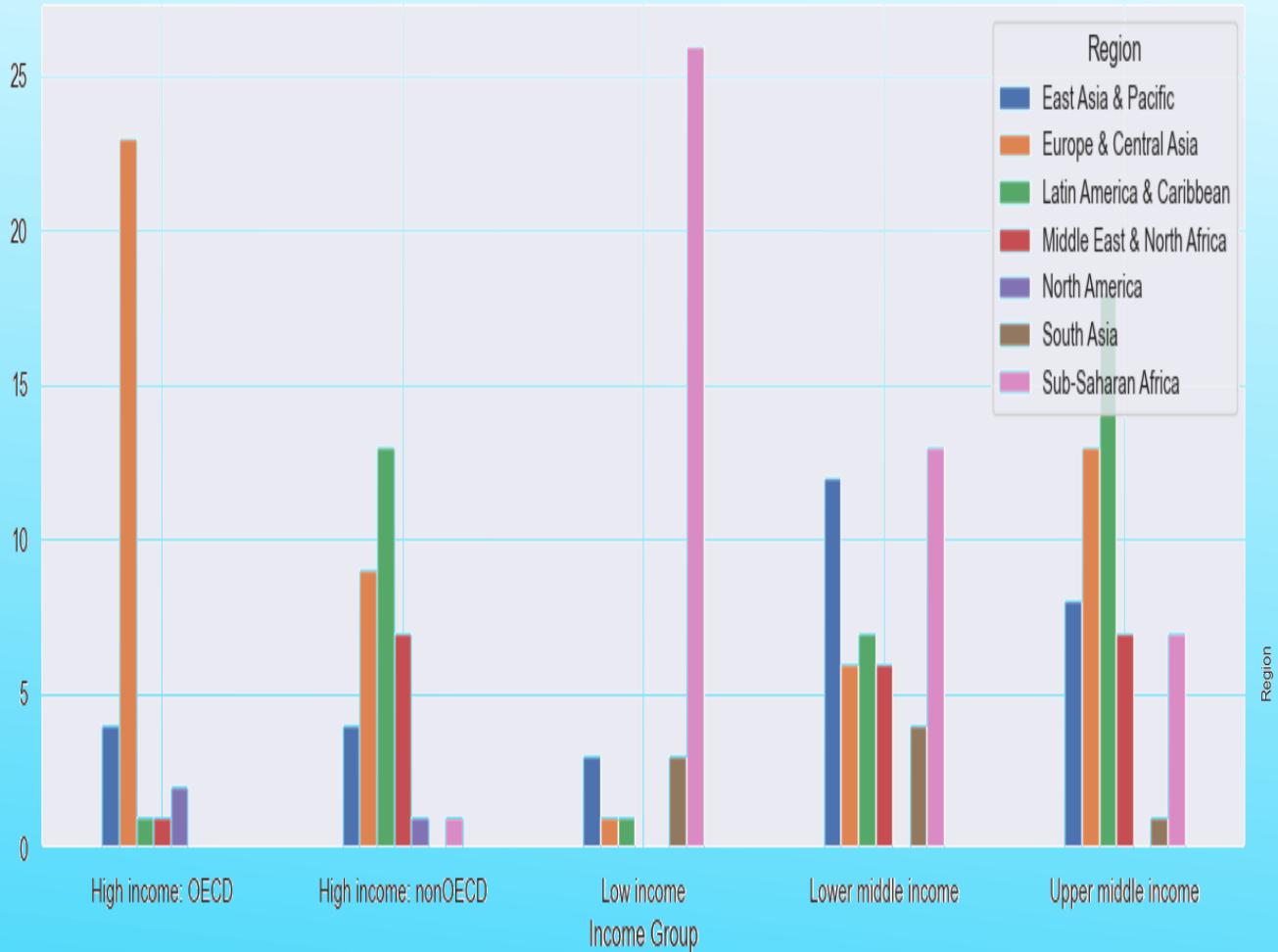
Region	Secondary Enrolments	Tertiary Enrolments	PC owners (%)	Internet users (%)	15-24 Population
East Asia & Pacific	5	8	5	NaN	5
Europe & Central Asia	6	9	15	NaN	2
Latin America & Caribbean	3	6	NaN	NaN	2
Middle East & North Africa	2	4	2	NaN	2
North America	1	2	2	NaN	1
South Asia	3	3	NaN	NaN	3
Sub-Saharan Africa	3	1	NaN	NaN	3

# ANALYSE UNIVARIEE

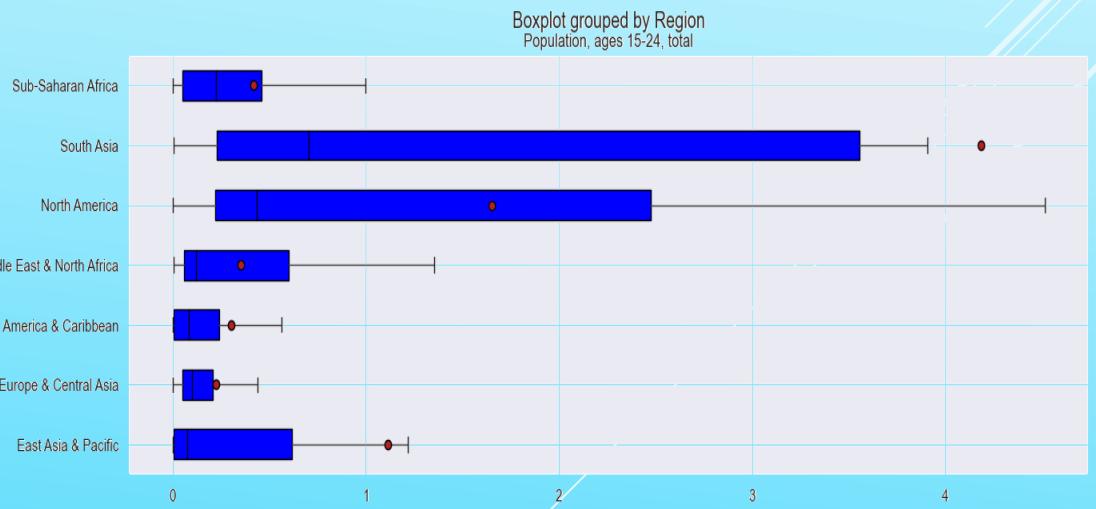


# ANALYSE UNIVARIEE & SCORING

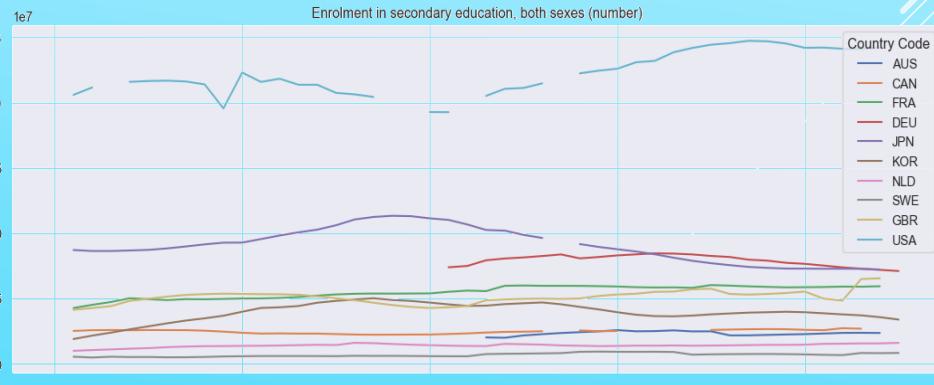
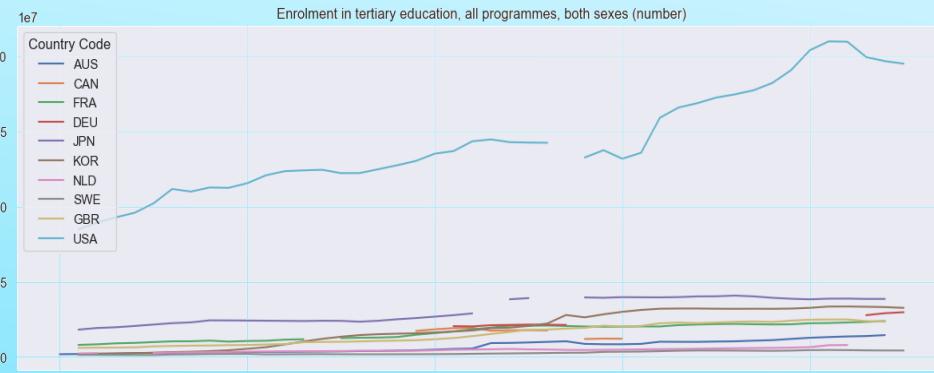
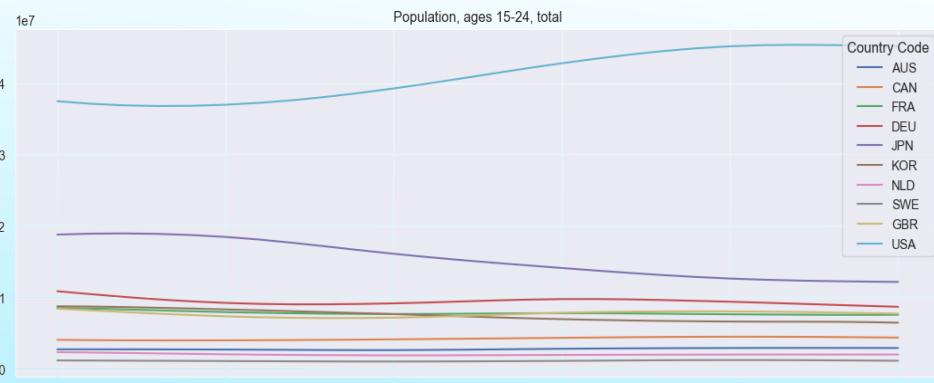
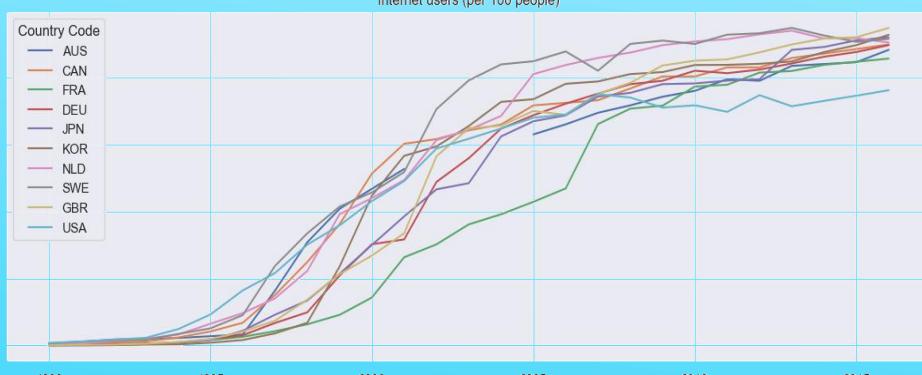
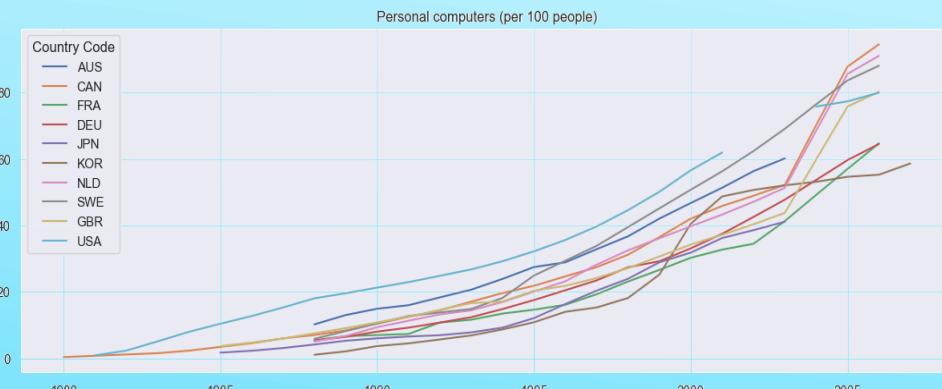
Répartition des pays par région/groupe de revenus



- ▶ **High income (OECD & non-OECD)**
- ▶ → **66 pays/territoires**
- ▶ **Scoring : 1-10**
- ▶ **Moyenne scoring > 7 = 10 pays finalistes**

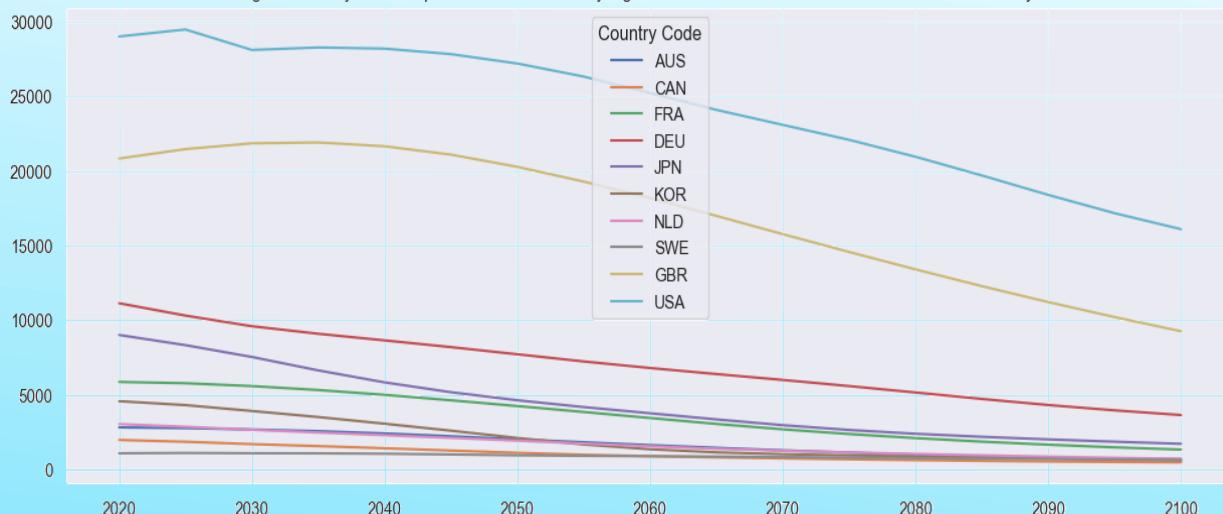


# SELECTION FINALE & HISTOGRAMMES

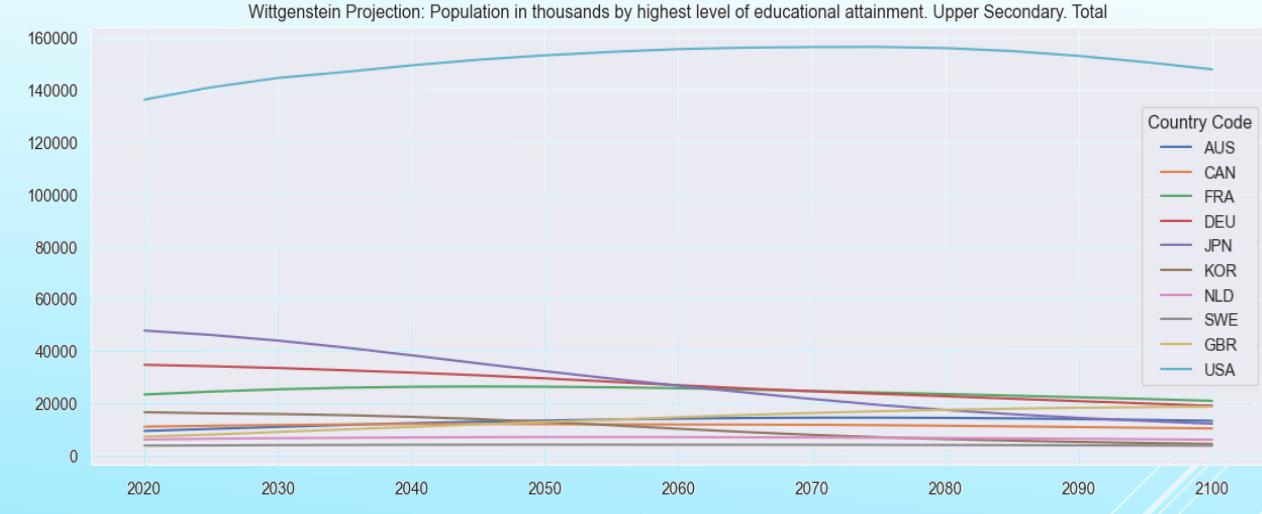


# ANALYSES PREVISIONNELLES

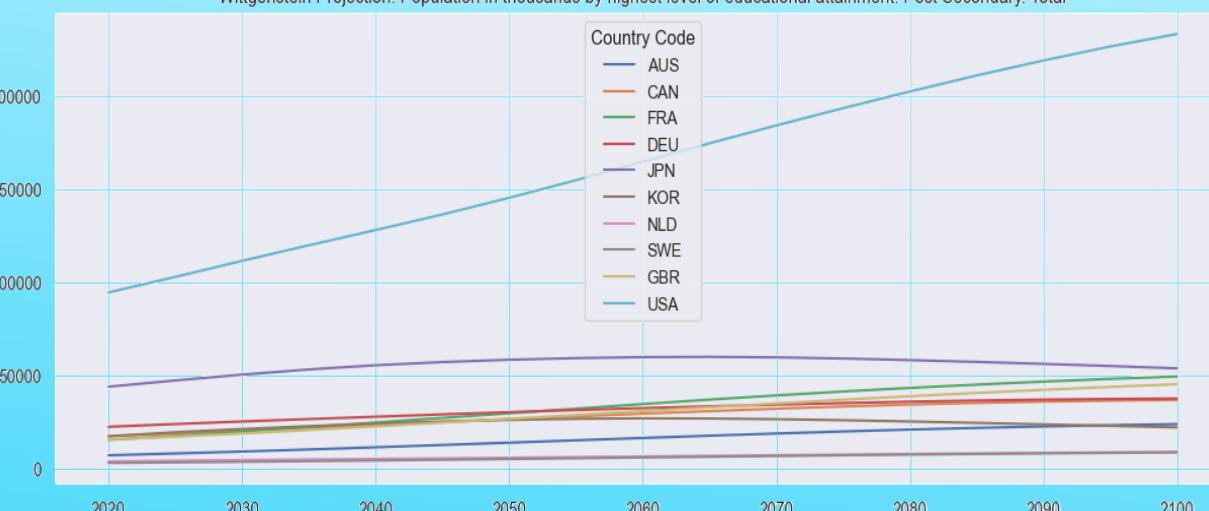
Wittgenstein Projection: Population in thousands by highest level of educational attainment. Lower Secondary. Total



Wittgenstein Projection: Population in thousands by highest level of educational attainment. Upper Secondary. Total



Wittgenstein Projection: Population in thousands by highest level of educational attainment. Post Secondary. Total



# RESULTAT FINAL



## ETATS-UNIS :

- ▶ +

Pays de très loin le plus important en termes de chiffres brut

Indicateurs de projection positifs

- ▶ -

Présence d'instabilités dans l'évolution des chiffres



## JAPON :

- ▶ +

2<sup>ème</sup> pays le plus important de la liste en termes de chiffres brut

Performances éducative parmi les plus élevées du monde

- ▶ -

Crise démographique



## ALLEMAGNE :

- ▶ +

Fait partie de l'espace économique Européen

Similitudes avec la France dans les chiffres & leurs évolutions

- ▶ -

Marché intérieur nettement inférieur aux 2 autres pays

**Merci pour votre  
attention**