Applied Data Science Project

L4 - SGDs and data science project examples

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Impact and Values

Develop a project that generates value considering the above 3 dimensions

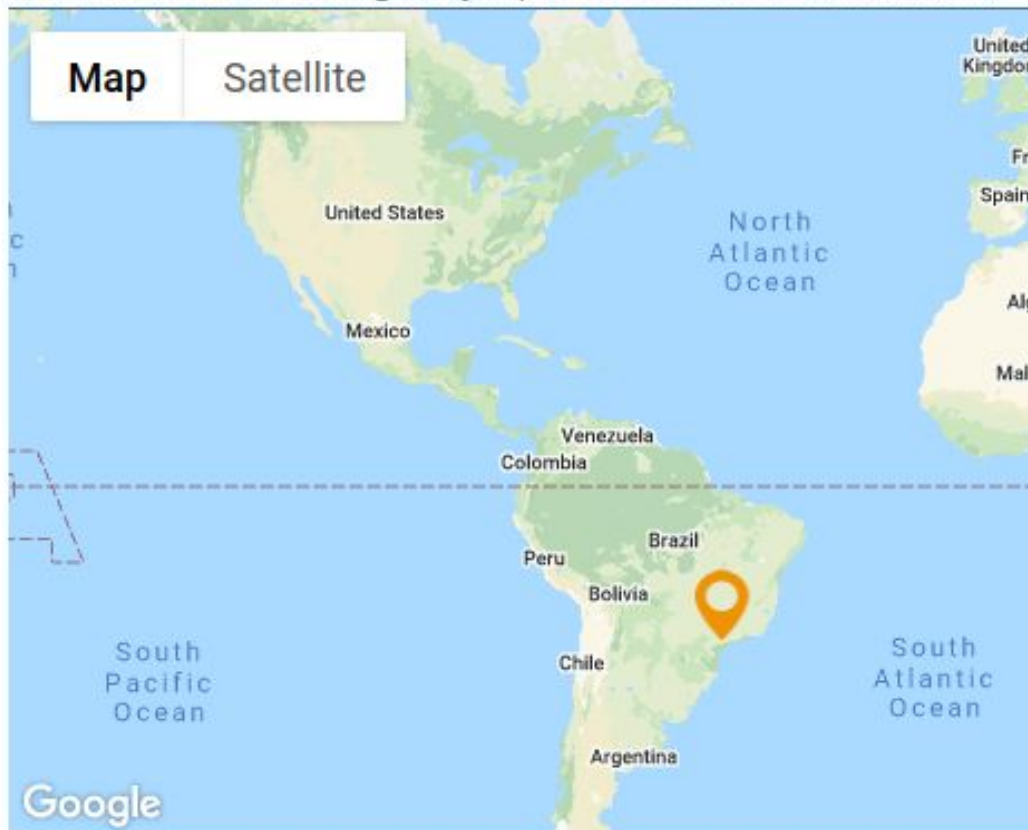# United Nations Sustainable Development Goals

SDG 1: No Poverty

Spending patterns on mobile phone services can provide proxy indicators of income levels

SDG 2: Zero Hunger

DOMESTIC PRICE WARNINGS

Countries where prices of one or more basic food commodity are at abnormal high levels in main markets (identified by the Indicator of Price Anomalies), which could negatively impact access to food at national level
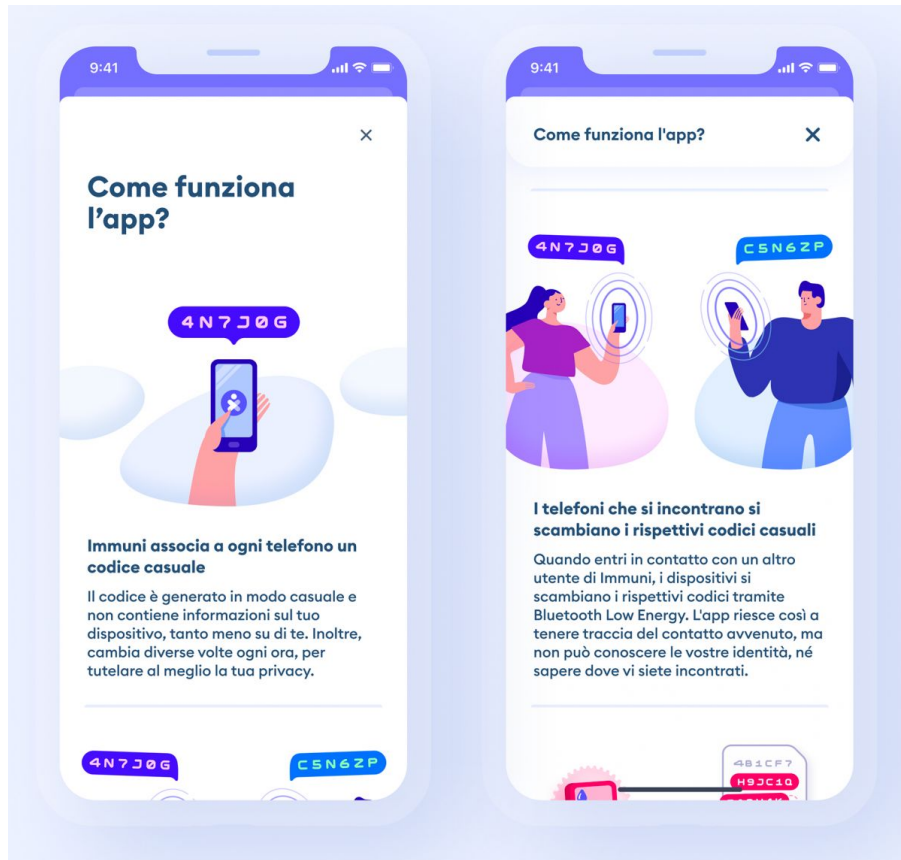

Price warning level: 🔴 High 🟠 Moderate [Based on GIEWS analysis]

Crowdsourcing or tracking of food prices listed online can help monitor food security in near real-time

SDG 3: Good Health and Well-Being

Mapping the movement of mobile phone users can help predict the spread of infectious diseases

SDG 4: Quality Education

Citizen reporting can reveal reasons for student drop-out rates

SDG 5: Gender Equality

Analysis of financial transactions can reveal the spending patterns and different impacts of economic shocks on men and women
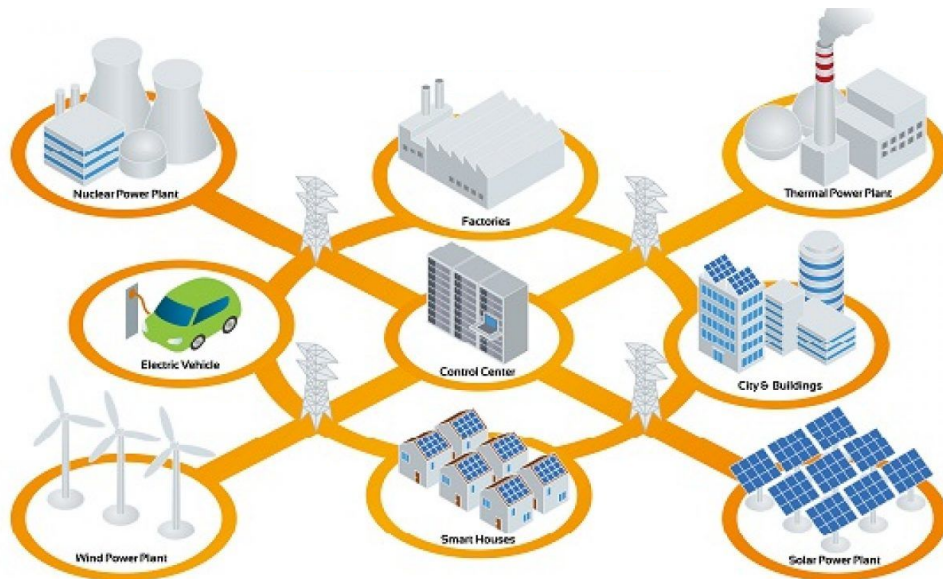
SDG 6: Clean Water and Sanitation

Sensors connected to water pumps can track access to clean water

SDG 7: Affordable and Clean Energy

Smart metering allows utility companies to increase or restrict the flow of electricity, gas or water to reduce waste and ensure adequate supply at peak periods

SDG 8: Decent Work and Economic Growth

International inbound and outbound postal traffic, letter mail and parcel services

EU institutions data

Publisher: Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs
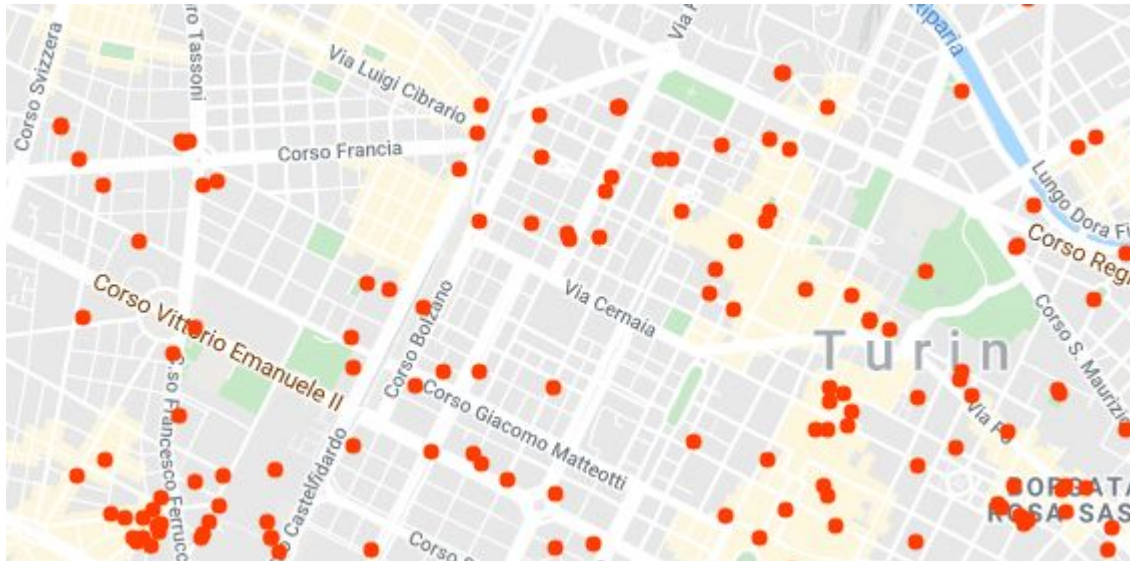
Updated: 04.03.2021

International postal traffic is the sum of intra-EU traffic, and traffic with third countries. Inbound refers to incoming traffic, and outbound refers to outgoing traffic from the country of reference. Domestic postal traffic is not included.For more information on the definitions of letter mail and parcel services see here

Patterns in global postal traffic can provide indicators such as economic growth, remittances, trade and GDP
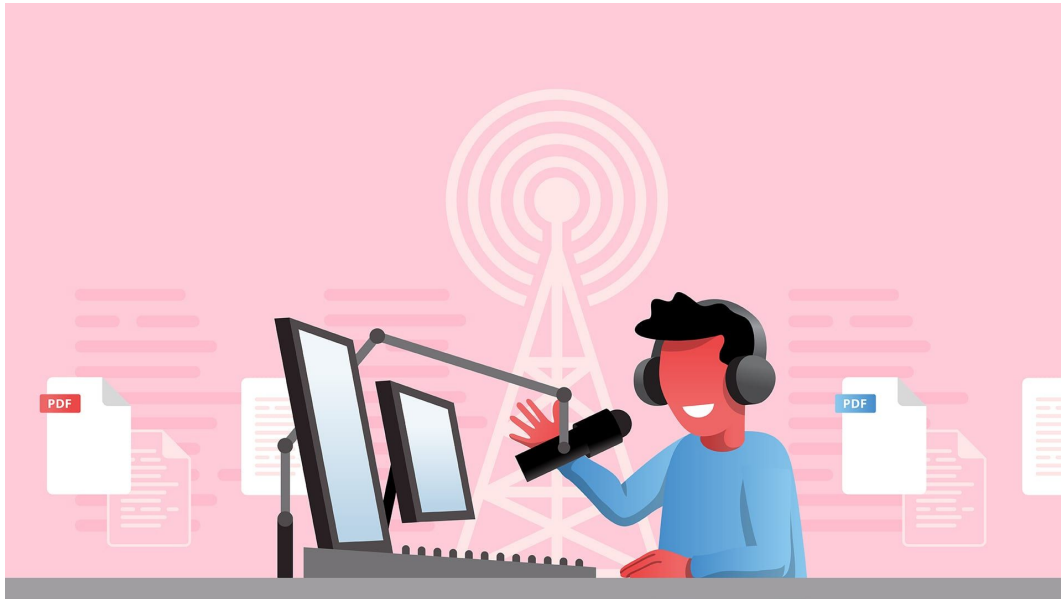
SDG 9: Industry, Innovation and Infrastructure

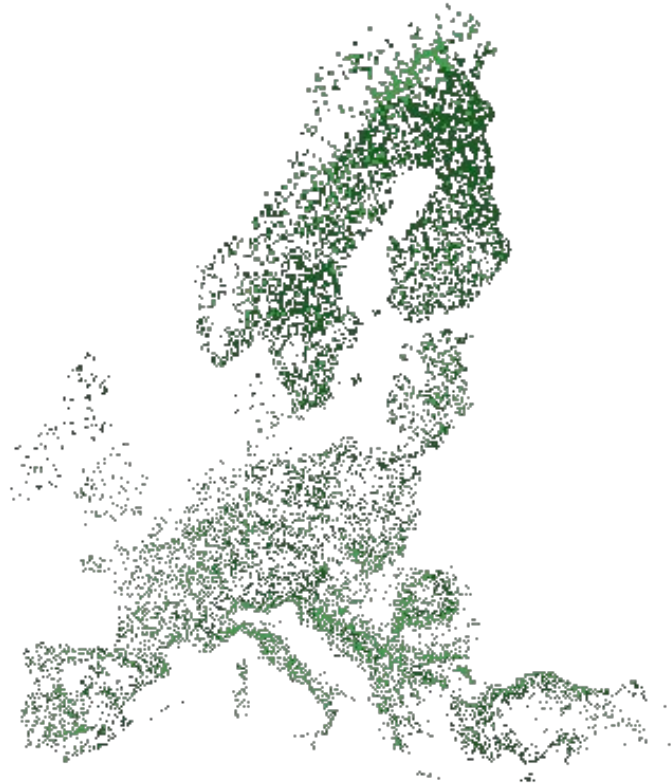Data from GPS devices can be used for traffic control and to improve public transport

SDG 10: Reduced Inequality

Speech-to-text analytics on local radio content can reveal discrimination concerns and support policy response
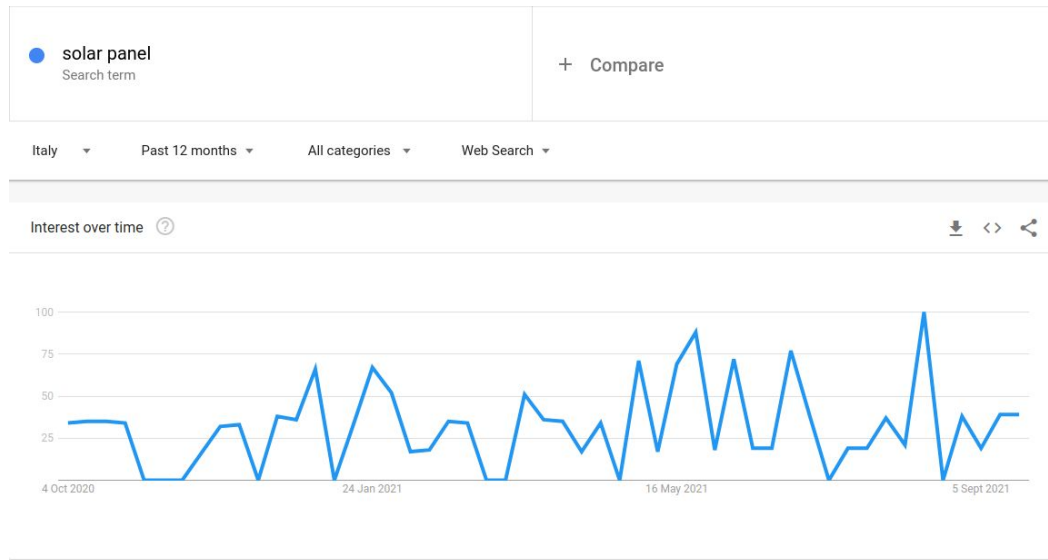
SDG 11: Sustainable Cities and Communities

Satellite remote sensing can track encroachment on public land or spaces such as parks and forests
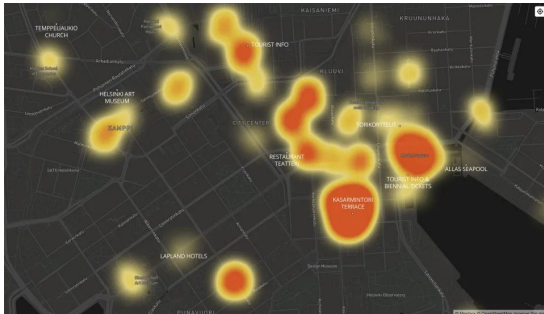
SDG 12: Responsible Consumption and Production

Online search patterns or e-commerce transactions can reveal the pace of transition to energy efficient products

SDG 13: Climate Action

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Combining satellite imagery, crowd-sourced witness accounts and open data can help track deforestation

SDG 14: Life Below Water

Maritime vessel tracking data can reveal illegal, unregulated and unreported fishing activities

SDG 15: Life on Land

Social media monitoring can support disaster management with real-time information on victim location, effects and strength of forest fires or haze

SDG 16: Peace, Justice and Strong Institutions

THE RISE OF
SOCIAL MEDIA
IN POLITICAL PARTICIPATION

Sentiment analysis of social media can reveal public opinion on effective governance, public service delivery or human rights

SDG 17: Partnerships for the Goals

Partnerships to enable the combining of statistics, mobile and internet data can provide a better and real-time understanding of today's hyper-connected world

Enablers for sustainability

The examples we listed in this presentation are taken from
https://www.un.org/en/global-issues/big-data-for-sustainable-development

Think of any further project that concerns an application of data science as falling into the scope one of these 17 goals

It is a valid exercise to understand the value of the project and its need (if it can be linked to one of those goals, then you have one greenlight)

Further references

Find out more about https://www.globalgoals.org

Be inspired by the targets that each goal brings, for instance https://www.globalgoals.org/1-no-poverty and many others

Thank you for your attention.

Questions?

CONTACTS

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