# **BIG DATA AND INNOVATION**

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The big data program is part of Analytics and Tools unit (DECAT) in the Development Economics Data Group. DECAT's goal is to enable and support evidence-based development policies and programs, by improving the quality, accessibility and use of development data through innovation, solid technical expertise and effective partnerships. The team build high resolution data products through predictive analytics, data fusion of traditional and new data sources and capacity development.

# **CAPACITY**

**TEAM** 

The innovations and big data team comprises of 5 staff and 2 consultants.

#### **WORKSHOPS/EVENTS**

The big data program delivers knowledge and capacity building activities ranging from major events to data science training.

#### **Data Science Workshops**

The trainings delivers modern methods in data science and machine learning to use admin, text and other data for better policy and service delivery insights.

### **Measuring Development Annual Conference**

Measuring Development showcases the use of cutting-edge tools and methods for predicting risk, measuring (and targeting) humanitarian response, and tracking recovery and resilience in the context of conflict and fragility.

#### **Big Data in Action for Development OLC**

Repository of several videos are stored in the Open Learning Campus bite-sized learning repository.

# SERVICES OFFERED

The main objectives of the team is to support WBG operations in the development of data projects, data science professional services and global public goods through capabilities in:

 Predictive analytics using machine learning and data science for new products and services



- Data fusion of traditional and new data sources (social, text, mobile) for high resolution data products
- Capacity development to use and sustain modern data products in operations and country systems (open code, capacity, communities)

## **PRODUCTS**

The big data program works in collaboration with ITS to sponsor technology tools and training to support data science. The big data program is a steward of several essential resources for Data Science.

**Big Data Science Community of Practice** 

Manage //bigdata; Data Science Lightening Talks; Big Data Methods BBLs

**Cluster/Cloud Computing** 

Business owner of high performance cluster computing environment

**Code Repositories** 

Manage WBG organization premium GitHub subscription

**Funding** 

**Support Data Innovation Grant Activities** 

Analytical outputs are as follows:

- Text/Social Based Measures of Labor Market Conditions
- High Resolution Economic Measurements
- Text-Base Predictors of leading macro-indicators
- High resolution proxies of economic activity/urbanization
- Mobility Patterns from mobile data
- Points of Interest Data
- Crisis related prediction models

#### **PARTNERSHIPS**

**External** 

UNSD, SDSN, GPSDD, FAO, UN Data Platform, AIMS, UNSIAP, BITSS, CEGA, Several Private Sector Vendors, Several Universities

### OTHER HIGHLIGHTS

To know more about the Big Data Program:

Open Learning Campus - Big Data in Action for Development
 The cases and interviews share results and lessons from the operational projects supported by the big data program

https://olc.worldbank.org/content/big-data-action-development

Now-Casting Economic Activity https://www.worldbank.org/en/country/malaysia/publication/malaysia-economic-monitor-june-2019-re-energizing-the-public-service

High Resolution Energy Access Estimates
 https://wbg-bigdata.github.io/global-nightlights-frontend/#/explore

 Timor-Leste, High Resolution Measures of Economic and Land Use https://wbdocs.worldbank.org/wbdocs/component/drl?objectId=090224b0870fa9b d&Reload=1596056158805& dmfClientId=1596056158806