Big Data

Big data refers to the large volume of information that is passively collected in real time from our daily interactions with digital products or services, including mobile devices, credit cards, and social media. The information generated is so vast that it cannot be analyzed by the conventional data management tools. On social media sites, for instance, we have 2 billion Facebook users, 1 billion on YouTube, and 1 billion on Instagram and Twitter. The volume of data that is generated on these platforms is vast so traditional analytical tools like databases and excel sheets will be ineffective. Big data relies on 3 Vs and they are volume, velocity, and variety. The volume refers to the amount of data generated which according to the UN, continues to increase exponentially with nearly 90 percent of the data in the world generated in the last 2 years. This figure is projected to increase by 40 percent on an annual basis. Velocity refers to the speed at which the data is generated. Records show that every minute, 100 hours of videos are being uploaded on YouTube, 200 million emails are sent, around 20 million photos are viewed, and almost 2.5 million searches are conducted on Google. Big data also comes in various forms and these include images, texts, network data, geographical data, maps, computer generated simulations, etc. Information is at the heart of decision making so businesses, governments, NGOs as well as financial and academic institutions can leverage trends and patterns from big data analytics to arrive at efficient and evidence based decisions which are crucial to achieving the 2030 SDG Agenda.

Big Data for Sustainable Development:

- Data generated from mobile money services can provide insight into spending and saving habits across sectors and regions.
- Tracking the prices of food listed online can help monitor food security in real-time.
- Studying and mapping the movement of mobile phone users can help predict the spread of infectious diseases and facilitate targeted interventions.
- By monitoring social media platforms, real-time data on victims if any, location, and severity of a situation can support disaster management.
- Online search patterns can reveal the pace of transition to energy efficient products.
- By analyzing interactions, patterns, and trends within an industry, innovations and new product creation can be fostered.
- Data from maritime vessel tracking can assist in identifying illegal marine activities.
- Data-driven insights from GPS devices can be used to control traffic and to improve public transport systems.
- Analyzing information on social media can reveal public opinion on effective governance and public service delivery.

Harnessing the power of big data for development:

- A global collaboration to harness the power of data for better lives: Learn more
- Big data for development: Learn more
- Using Big Data to help Retailers improve their business: Watch now