United Nations
Economic Commission for Africa

Concept note

Expert Group Meeting

on

Fostering African Private Sector in the

Big Data Era

Date: 3 to 6 December 2019

Venue: Yaoundé, Cameroon

Fostering African private sector in the big data era

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1. Introduction

In this globally networked world, people, objects and connections are producing data at unprecedented rate, both actively and passively. This phenomenon not only creates large volumes of data but also distinctive streams of data that have been termed 'big data'. Big data refers to emerging technological capabilities in solving complex tasks which is considered a new frontier for innovation, competition and productivity. Big date is characterized by the four 'Vs', namely, the *volume* that systems generate, ingest, process and disseminate, the *variety* and complexity of datasets that originates from both individuals and institutions at multiple points in the data value chain, and the *velocity* of data streaming in and out of the systems in real time and finally the *veracity* of data that refers to the uncertainty due to bias, noise or abnormality in data.

According to Ericsson, more than 50 billion devices will be connected by 2020 irrespective of what and where they are, enabling an Internet of Things (IoT) and Places. These devices are there to measure, sense, generate and communicate data of some size and structure. ITU estimates that there are almost 7 billion mobile-cellular subscriptions worldwide, and each of them is both a data creator and consumer. Currently over half of the world's population use the Internet and mobile-broadband subscriptions. Each of these users contribute to the data revolution, with SMS, calls, photos, videos and messages posted on social media sites, e-mails, searches, clicks on links and ads, online shopping and mobile payments, or location traces left from GPS-enabled smart phones and WiFi network logins.

Researches show that there are several benefits associated with Big Data initiatives particularly in the context of private sector ranging from better, fact-based and fast decision making to improved customer experience, increased sales, new product innovations, reduced risk, more efficient operation and higher quality products and services. As with the case of business intelligence (BI) initiatives, Big Data systems have been used for two purposes, namely, human decision support and decision automation. In this regard, the private sector holds data with a potential impact many times that of government data. Retailers, financial organizations, telecommunications companies, social network providers and other online platforms (such as search engines) hold much bigger, diverse and deeper datasets. Indeed, many of these are referred to as 'Big Data', requiring different data analysis tools and skills, whose potential for public good is seemingly unlimited. The issue therefore has been with the appropriate use of the data which led to the evolvement of the 'responsible data' movement that discusses issues of guidelines and frameworks to ensure ethical principles for data sharing.

In this regard, the use of data collected by the private sector for the public good is being practiced. For instance, Orange's 'D4D challenge' using real CDR data (mobile phone Call Detail Records) from Cote d'Ivoire and Senegal are some of the examples in this context. The D4D Challenge for Senegal, for example, demonstrated how CDR could be used in a range of sectors such as agriculture (4 use cases), energy (1), health (12), national statistics (9), transportation and urbanization (22) and eight other use cases. Such a practice is called data

philanthropy, although it also encompasses the practical and technical support needed for data analysis. The debate of using private data for public good has been on the public arena with issues such as the use or not of CDRs for tracking the origin and spread of Ebola, etc. To this end, there is a need for further examination of the issue of privacy, intellectual property and legal and regulatory frameworks with access and use of data which is one of the key issues to be considered in this study.

Furthermore, several cases have been cited that show emerging private sector led Big data initiatives such as the Uber's releasing of traffic data for selected cities currently include Cairo, Nairobi, and Johannesburg/Pretoria[1]. In Nigeria, a centralized biometric identification also called the bank verification number (BVN) initiative was launched in 2014 which helps enhance security and efficiency of the system and curbing illicit financial flows by providing a unique identity number to all bank customers that can be verified across all the Nigerian banks. The International Data Corporation, a market intelligence firm predicted that in 2018 revenues from big data and analytics operations will increase by 11 percent in Africa and the Middle East to reach USD $ 2 billion which is forecasted to grow at the about the same rate for the next few years. Banks and financial institutions have started racing to embrace to use the data generated by their customers. According to the Pricewater house African banking report for 2016, about 85 percent of African banks surveyed in their report are using big data to improve security, while 77 percent are using it to improve their customer service.

However, there are several challenges ranging from the lack of awareness of the big data momentum on the demand side of the data ecosystem to the lack of well-defined performance metrics to measure the success of open data initiatives on the supply side mostly the public sector. Furthermore, problems are also being observed with open data platforms with regard to paucity of data, inclusiveness and correctness with poorly updates available. In addition, the legal and regulatory frameworks and those issues associated with privacy, intellectual property, etc. would be some of the challenges that need to be further investigated and addressed.

In this context, at UNECA, the Green Economy and Technology Section, as part of its policy research activities, aims to explore the trends in growth of the 'Big Data' phenomenon in Africa with particular focus on the role of the private sector in the generation, use and dissemination of data for the socio-economic transformation of the continent. To this end, the UNECA will commission a study on the topic 'fostering the private sector in the big data era' and will organize a meeting and facilitate discussion among key stakeholders to explore the potential impact of Big Data at the ICT meeting to be held in **Yaoundé, Cameroon** from 3 to 6 December 2019.

2. Objective of the meeting

The general objective of the meeting is to review an issue paper on the theme of the expert group meeting. The document assesses the broad concept and characteristics of big data, trends in the development and challenges for Africa of potential impact of big data with particular focus on fostering the role of the private sector in realizing the potential of big data for socio-economic growth of the continent.

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[1] African Data Revolution Report 2018: Status and Emerging Impact of Open Data in Africa. UNDP, UNECA, World Wide Web Foundation (WF) and Open Data for Development Network (OD4D).

The following are the specific objectives:

a) Explore the potential of big data in accelerating innovation for the socio-economic development of the continent
b) Assess the current status and challenges (socio-economic, technological and scientific, legal and ethics) in the development of Big Data in Africa
c) Provide policy recommendations for consideration by African policy- and decision-makers for the development of the private sector in realizing the big data opportunities for Africa's transformation and meeting the 2030 UN Agenda for Sustainable Development Goals and the AU Agenda 2063;

1. Expected outcomes

The key expected outcomes of the meeting are as follows:

a) Improved understanding of the role of Big Data in fostering the private sector and for the structural transformation of Africa's economies;
b) Created awareness on the potential contribution of Big Data applications in fostering and promoting new growth for start-ups across the region;
c) A set of policy recommendations (produced and shared) for consideration and adoption by Governments of Africa, Africa's continental and regional organizations, the private sector and other stakeholders in Africa's development that guarantee the generation and responsible use of Big Data

2. Date, venue and participants

The meeting will take place from 3 to 6 December in **Yaoundé/Buea, Cameroon**.

The meeting will be attended by policymakers, ICT and private sector experts and startups, representatives of regional economic communities and intergovernmental organizations, representatives of regional and international organizations; also included are telecommunications operators and individuals representing the private sector, the civil society, academic and research institutions.

3. Outputs

The outputs: a meeting report, which will serve as an input into the finalization of the policy report on 'fostering the private sector in Africa in the Big Data era'; and a policy brief on the role of the private sector in the African Big Data ecosystem and the African Data Revolution.

4. Working languages

English and French are the working languages of this meeting.

5. Contact

For further information, including registration information, please contact:

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