

# PROJECT NOTIFICATION

Ref. No.: 20-IN-98-GE-WSP-B-529

Date of Issue	19 November 2020
Project Code	20-IN-98-GE-WSP-B
Title	Workshop on Data Analytics and Machine Learning for Productivity
Timing and Duration	16–18 December 2020 (three days)
Hosting Country	Philippines
Modality	Digital Multicountry (DMC)
Implementing Organization(s)	Development Academy of the Philippines (DAP) and the APO Secretariat
Participating Countries	All Member Countries
Overseas Participants	19
Local Participants	12
Closing Date for Nominations	4 December 2020

## 1. Objectives

- a. To equip participants with knowledge of data analytics and related tools for business strategies and operations to support digitization in SMEs;
- b. To raise awareness of the importance of data and the implications for SMEs; and
- c. To develop an understanding of big data and machine learning in the context of SME digital upgrading.

## 2. Background

The foundation of Industry 4.0 is built on digitization and connections among devices, humans, and the Internet. Therefore, collecting data and understanding them is crucial for any organization. However, for many organizations, particularly SMEs, it is challenging to effectively make use of the potential of data.

Understanding how to gather and interpret data from in-house operations, market demand, and human behavior is thus the first step toward digital upgrading and improved business operations. Another equally important step is properly handling and analyzing data. A maturing technology to handle big data is machine learning, which uses algorithms and inflows of data to strengthen computer's capability in analyzing data and produce predictive analysis. It has been widely utilized in detecting defects and analyzing market demand and can support SMEs in optimizing their production and marketing strategies.

This workshop aims to provide fundamental knowledge on collecting and analyzing data. It will also explore the benefits of technical applications such as machine learning to improve productivity and decision making in SMEs. It will therefore support member countries in digital upgrading of industries to meet the UN Sustainable Development Goals (SDGs), specifically SDGs 8.2 and 8.3 (decent work and economic growth), 9.5 and 9.b (industry, innovation, and infrastructure), and 12.a (responsible consumption and production).

## 3. Modality of Implementation

- a. This workshop will be conducted online by using videoconference applications.
- b. The resource speakers and participants will participate in the workshop virtually by using their own devices, applications, and Internet connections.
- c. The duration of each day's session will be up to three hours.
- d. The APO Secretariat will inform the resource speakers and participants of the applicable videoconference application and link to the virtual sessions.
- e. The videoconference link will be provided exclusively to resource speakers and participants in this workshop and should not be shared.

## 4. Scope and Methodology

The workshop will consist of interactive lectures, case studies, and discussions. The tentative program is given below:

Day/Date	Activity
Wednesday, 16 December 2020	<ul><li>Presentations</li><li>Data, digitization, and Industry 4.0</li><li>Data science meets lean manufacturing</li></ul>
Thursday, 17 December 2020	<ul><li>Presentations</li><li>Data, productivity optimization, and smart manufacturing</li><li>Basic data analysis and basic analytic tools</li></ul>

Friday, 18 December 2020	<ul> <li>Presentations</li> <li>Data analytics, deep learning, and machine learning: Implications for SMEs</li> </ul>
	<ul> <li>Case studies: Leveraging the power of data</li> </ul>

## 5. Qualifications of Candidates

Present Position	Government officials and policy researchers involved in industrial policy, development strategies for the SME and manufacturing sectors, and productivity improvement initiatives; industry representatives with experience in digitization of business operations; and consultants and productivity practitioners supporting digital industrial upgrading.
Work Experience	Three years of experience or more in the position described above.
Education	University degree or equivalent qualification from a recognized university or similar tertiary institution.
Computer Literacy	Familiarity and competency in connecting to virtual meetings, including independently undertaking troubleshooting in the event of poor or lost connections.
Language	Proficiency in English, both written and spoken. Participants will be required to make presentations and engage in discussions.

#### 6. Requirements

- a. Have necessary devices comprising a computer, web camera, microphone, and speaker or headphones.
- b. Access to Internet connections suitable for videoconferencing. Stable, wired LAN connections are preferred.
- c. Follow the instructions of the moderators/presenters in asking questions, joining discussions, and answering questions.
- d. Participate in the entire workshop.

## 7. Financial Arrangements

- a. The APO will meet the assignment costs for international resource persons.
- b. The host country will meet the assignment costs of local resource persons and for a virtual site visit(s), either broadcast live or recorded as applicable.

## 8. Actions by Member Countries

- a. Each participating country will nominate three or more candidates in order of preference.
- b. Self-nominations will not be accepted.
- c. All nominations must be endorsed by an APO Director or Alternate Director and submitted by a Liaison Officer or designated officer.
- d. Each nomination must be accompanied by the APO biodata form and uploaded to the APO Document Management System (DMS)/Fleekdrive by the NPO. The biodata form is available

on the APO website.

- e. Late nominations will not be accepted. When a nomination requires the approval of higher authorities and requires a longer time, the member country concerned should send the name(s) of the nominee(s) before or by the deadline, indicating that approval will follow.
- f. If a selected participant becomes unable to participate, the NPO concerned should inform the APO Secretariat and the host country promptly.

## 9. Actions by the APO Secretariat

- a. Selection of candidates will be at the discretion of the Participant Selection Committee of the APO Secretariat.
- b. Selection of candidates will be completed and announced three weeks prior to the start of the project.
- c. Slots that become available due to withdrawal of a selected candidate(s) or lack of nominations by a member country may be filled by alternates to be selected on a merit basis.
- d. The APO Secretariat will inform NPOs of the final program, platform, and link of the virtual meeting, as well as the schedule for technical coordination when applicable, two weeks prior to commencement of the workshop.

#### 10. Dress Code

Participants are required to wear appropriate business attire during the workshop.

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Dr. AKP Mochtan Secretary-General