

IMPLEMENTATION PROCEDURES
CAPACITY-BUILDING PROGRAM ON THE APO INDUSTRY 4.0 AND ARTIFICIAL INTELLIGENCE
FRAMEWORK
APO CENTER OF EXCELLENCE ON IT FOR INDUSTRY 4.0

About the COE on IT for Industry 4.0

The APO COE on IT for Industry 4.0, hosted by the National Productivity Council (NPC), India, supports productivity-led digital transformation across APO member economies. The COE promotes the adoption of Industry 4.0, AI, and related digital technologies through awareness creation, capacity building, research, knowledge dissemination, and collaborative partnerships. It places special emphasis on strengthening digital transformation capabilities and addressing barriers to responsible adoption of Industry 4.0 technologies, particularly among MSMEs.

1. Objective and Background

The APO COE on IT for Industry 4.0, established in 2017, has progressively expanded its activities including developing the COE roadmap, assessing Industry 4.0 readiness among MSMEs, formulating digitalization strategies, building expert networks, implementation of demonstration projects, and documenting good practices in manufacturing transformation. Building on these initiatives, the COE opted for developing the APO Industry 4.0 and Artificial Intelligence (I4AI) Framework in 2025, together with the Need and Readiness Self-assessment (NRSA), Diagnostic Assessment Framework, training manual, assessment toolkit, and online platform to provide a structured approach to responsible digital transformation.

Under the annual action plan for 2026–27, the COE will focus on promoting and disseminating the APO I4AI Framework through a series of complementary activities, including online awareness and capacity-building programs, demonstration pilot projects, sectoral research studies, development of reference materials, and international outreach initiatives. These activities are designed to strengthen APO members' capacity, generate practical implementation experience, develop knowledge resources, and expand international collaboration. The first initiative in 2026 is the online capacity-building program on the APO I4AI Framework, which aims to disseminate the framework and its associated tools among APO member economies.

The objectives of the program are to:

- a. Enhance awareness, dissemination, and understanding of the APO I4AI Framework among APO member economies;
- b. Strengthen the institutional capacity of NPOs and partner organizations to promote the responsible adoption of Industry 4.0 and AI;
- c. Equip participants with knowledge of the structure, key components, diagnostic methodology, and practical application of the APO I4AI Framework;
- d. Introduce the Need and Readiness Self-assessment (NRSA) and Diagnostic Assessment Framework for assessing organizational readiness for Industry 4.0 and AI adoption;
- e. Enable participants to identify organizational strengths, capability gaps, and opportunities for adopting Industry 4.0 technologies;
- f. Support APO member economies in initiating follow-up awareness, capacity-building, diagnostic, and pilot initiatives using the APO I4AI Framework; and
- g. Contribute to APO Vision 2030, particularly Pillar 3: Capacity Empowerment, by developing a pool of practitioners capable of promoting the APO I4AI Framework.

2. Modality of Implementation

The activity will be implemented in the online modality. The program will consist of up to five training batches between 24 August 2026 and 10 December 2026.

Each batch will comprise 25 participants, including 19 international and six local participants. Each training day will consist of three hours of online sessions, tentatively from 14:00 to 17:00 Indian Standard Time (IST), subject to finalization by the APO Secretariat in consultation with the COE and

participating NPOs. Any adjustment to the number of batches or participant composition will be made by the APO Secretariat in consultation with the COE.

Appendices 1 and 2 provide the implementation timeline for each batch and the indicative program schedule, respectively.

Scope

The program will focus exclusively on the wider dissemination and promotion of the APO I4AI Framework for responsible adoption of Industry 4.0 and AI. It will enhance participants' understanding of the framework and its assessment methodologies. It will also provide participating organizations with an initial appraisal of readiness for adopting I4AI tools and technologies.

The training will cover:

- a. Fundamentals of Industry 4.0 and AI
- b. Responsible AI in manufacturing
- c. APO I4AI Framework
- d. Need and Readiness Self-assessment (NRSA) and Diagnostic Assessment Framework
- e. Individual and group-level readiness assessments
- f. Case studies and discussions
- g. Group exercises and presentations
- h. Development of actionable recommendations.

Methodology

The program will adopt an interactive online learning approach to promote knowledge sharing and practical application of the APO I4AI Framework combining the following:

- a. Expert presentations: Overview of key topics
- b. Guided assessment exercises: Step-by-step application of NRSA and Diagnostic Assessment Framework to evaluate organizational readiness and interpret results
- c. Case studies and discussions: Analysis of practical examples and experience sharing
- d. Collaborative group activities: Group exercises, presentations, and development of actionable recommendations
- e. Program documentation: Consolidation of batch outputs, participant feedback, lessons learned, and submission of implementation reports.