



UNITED ARAB EMIRATES
MINISTRY OF INDUSTRY
& ADVANCED TECHNOLOGY

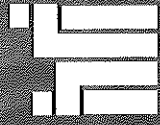


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Industrial Technology Transformation Index (ITTI)



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The Industrial Technology Transformation Index (ITTI) – an introduction

What is the ITTI?

The Industrial Technology Transformation Index is the first digital maturity tool in the MENA region, designed to measure the level of adoption of technology transformation and sustainable practices in the industrial ecosystem.

The index was created as part of the UAE Government effort to accelerate adoption of advanced technologies in the manufacturing enterprises, stimulate competitiveness and build an attractive business environment.

ITTI Vision

To uplift industrial productivity, efficiency, flexibility and sustainability by accelerating I4.0 technology adoption.

ITTI Mission

To guide manufacturers and other industrial ecosystem partners (e.g., policy makers, technology providers) in defining effective digital transformation initiatives for their enterprises.

The Industrial Technology Transformation Index (ITTI)

is a tool that aims to measure the digital maturity of manufacturing plants.

How is ITTI different?



The **first index of its kind** to integrate 4IR with sustainability

It considers dimensions across the **entire manufacturing value chain** yet keeping a modular approach to their evaluation

Only **qualified and certified assessors** can conduct the ITTI assessment.



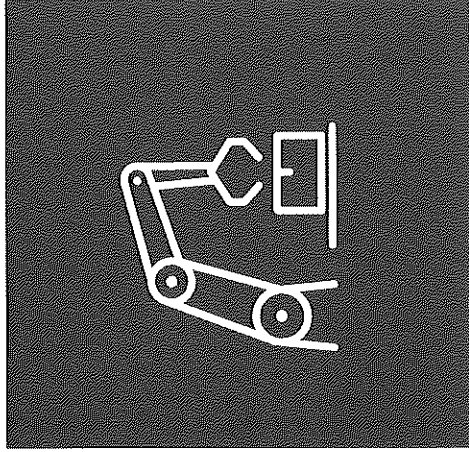
How will ITTI benefit the manufacturing sector?

Assessors develop a detailed report, providing recommendations on actions to help manufacturers identify areas of improvement.

Manufacturers are provided with recommendations on how and where to adopt technology and enhance their digital maturity.

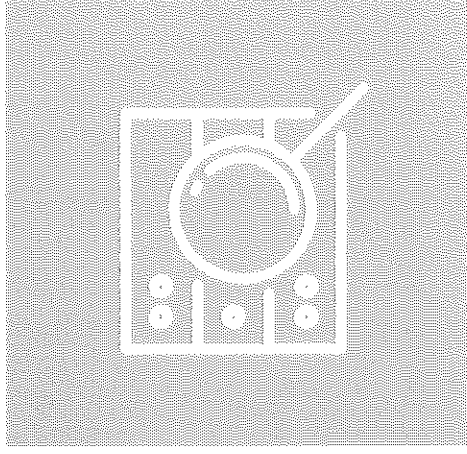


ITTI has 4 main goals.



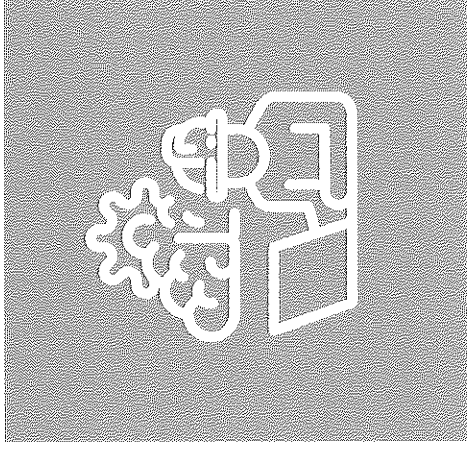
IMPROVE

industry competitiveness
through technology adoption



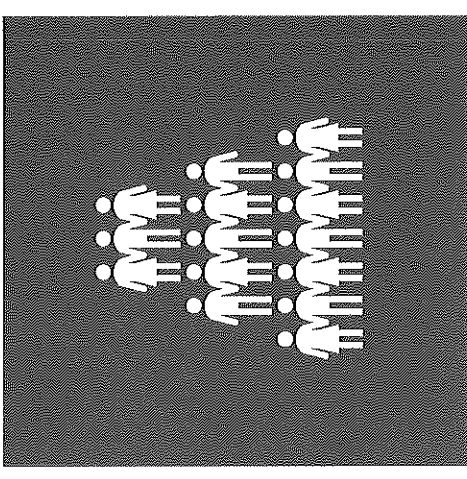
ENABLE

evidence-based industrial
policy making



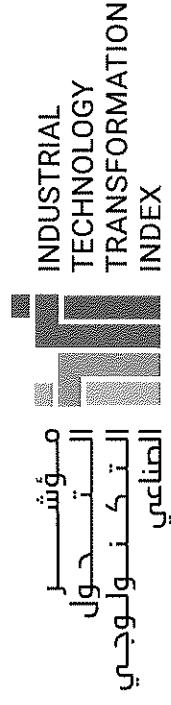
ACCELERATE

innovation in the
manufacturing community



PROMOTE

sustainability and efficient
resource management



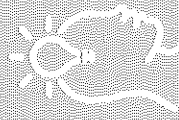
Index Design and Assessment Journey

Five principles have informed the design of ITTI.



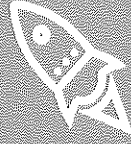
Intuitive

Easily
understandable
& explainable



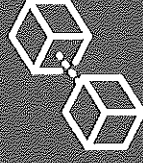
Insightful

Offers a
meaningful view of
current maturity



Forward Looking

Incorporates latest
I4.0 trends



Modular

Assesses relevant
categories



Swift

Does not disrupt
company operations

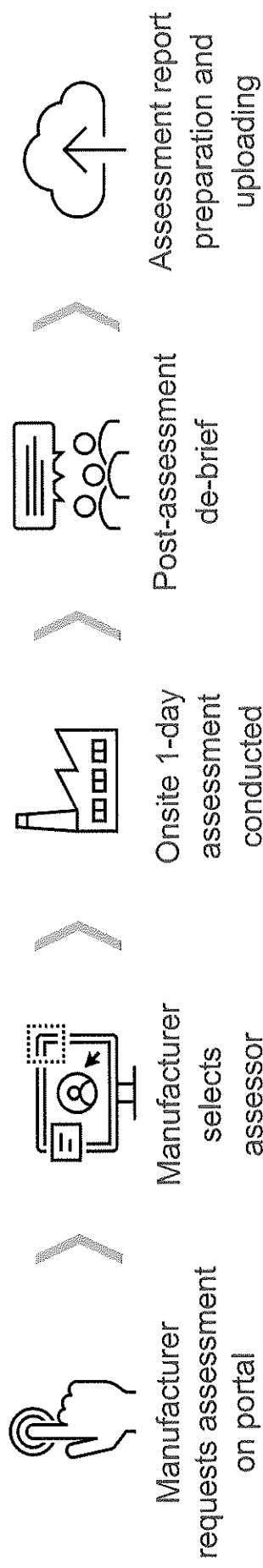
ITTI framework and assessment dimensions.

The ITTI framework reflects on 20 dimensions across the entire manufacturing value chain. Only the relevant dimensions are considered for assessment (index modularity).

R&D and Engineering	Marketing and sales	Supply Chain Management (inbound)	Manufacturing / Production	Supply Chain Management (outbound)	Customer Service
D1. Product Lifecycle Management	D2. Marketing and Sales	D3. Supply Chain Planning D4. Sourcing and Procurement D5. Warehouse Management D6. Logistics Management	D7. Production Planning and Scheduling D8. Production Execution D9. Utilities Management D10. Quality Management D11. Maintenance	D3. Supply Chain Planning D5. Warehouse Management D6. Logistics Management	D12. Customer Care and Service
Enterprise Administration	D13. Business Processes and Intelligence			D14. Technology Management	
Strategy and Organization	D15. I4.0 Strategy and Governance			D16. Digitally Fit Organization	
Sustainability	D17. Sustainability Strategy and Governance	D18. Material Circularity	D19. Water and Wastewater Management	D20. Emissions Management	

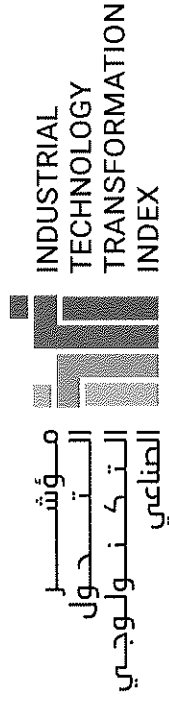
ITTI assessment process.

The ITTI assessment consists of 4 simple steps.



The steps are designed for a swift assessment process, to maximise manufacturers' insight of 4IR concepts and to foster discussion on focus areas of development.

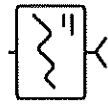
Post-assessment debrief and the report will focus on the overall digital maturity of the firm and will also deep dive in the main focus areas of development in tandem with manufacturer's need and KPI



Global Certification Program

MoiAT launches the Global ITTI Certification training

The global certification programs has 5 main objectives:



To develop a robust understanding Industry 4.0 concepts and technologies.



To develop ambassadors for Industry 4.0 and sustainability in the country.



To standardize assessment practices in line with global benchmarks –
to aid government policy making.



To facilitate an advisory ecosystem in the country to encourage technology adoption.



To promote international collaboration and dialogue on global 4IR challenges.

Assessor eligibility criteria

The training is dedicated to all the industrial professionals whose profile has the following criteria:

Academic qualifications

- Relevant degree, including but not limited to
- Mechanical engineering
- Electrical engineering
- Chemical engineering
- Computer and communication engineering
- Industrial engineering
- Civil engineering
- Electronics engineering
- ...



Professional experience

- Advisory experience ¹⁾ with a minimum of 3 years as a full-time consultant, involved in digital transformation projects and delivering presentations to leadership
- AND
- Manufacturing expertise with a minimum of 7 years of experience



Documents to be provided

- Academic degree certificate
 - Latest resume with recent job scope and responsibilities
- Short interviews may be conducted for selected candidates to verify credentials prior to enrollment in assessor training program*

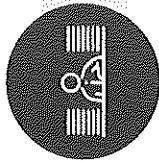


1) The assessor company can be a consultancy or technology provider with sufficient experience in manufacturing operations, factory digitalization, and/or I4.0 concepts and technologies

Assessor Training Program Agenda (conducted in person)

Date	Day 1	Day 2	Day 3
Day	Day 1	Day 2	Day 3
8:30 – 9:00			
9:00 – 9:30	Session 1: Introduction and training overview		
9:30 – 10:00	Session 2 : I3.0 concepts and technologies	Session 6 : • Recap of Day 1 • D5: Warehouse Management	Session 10 : • Recap of Day 2 • D17: Sustainability Strategy • D18: Material Circularity Management
10:00 – 10:30		Breakfast	
10:30 – 11:00	15min break	15min break	15min break
11:00 – 11:30	Session 2 (continued) : I4.0 concepts and technologies	Session 7 : • D9: Utilities Management • D10: Quality Management	Session 11: • Prioritization Methodology Overview
11:30 – 12:00			
12:00 – 12:30			
12:30 – 13:00			
13:00 – 13:30	Session 3 : ITTI Design and Methodology		
13:30 – 14:00	Session 4 : • ITTI Dimensions Overview • D1: Product Lifecycle Management	Session 8 : • D11: Maintenance • D12: Customer Care & Service • D13: Business Process and Intelligence • D14: Technology Management	Session 12: • Case Study Discussion
14:00 – 14:30			
14:30 – 15:00			
15:00 – 15:30		Coffee Break + Checking emails (15:00-15:30)	
15:30 – 16:00	Session 5 : • D2: Marketing and Sales • D3: Supply Chain Planning • D4: Sourcing and procurement	Session 9 : • D15: I4.0 Strategy & Governance • D16: Digitally Fit Organization	Session 13: • Assessment Logistics • Professionalism and Ethics
16:00 – 16:30			
16:30 – 17:00			

Certification exam format (conducted online)



Written Exam:

- Total **40 questions** to be attempted in **75 mins**
- Closed book exam
- Following are the question types:
 - Multiple choice
 - True/ False
 - Match the following
- Questions have varying levels of difficulty
- All questions carry equal weightage
- Total score should be **at least 60%** to qualify



Case Interview:

- A client situation would be given to the interviewee
- **Total duration:** 1 hour with breakup as follows:
 - 10 mins to read the case
 - 50 mins for case discussion with interviewer
- Candidates would be scored on the following 5 criteria on a scale of 1 to 5 (5 being highest)
 - Confidence and conduct
 - Clarity on program and index
 - Understanding of client situation
 - Accuracy of assessment
 - Recommendation framing
- Total score should be **at least 60%** to qualify

➤ To qualify as a certified assessor, a cumulative score of at least 70% is required across exam and case interview