

## **Final Case Study Document**

### **Türkiye's Digital and Sustainable Manufacturing Transformation**

**Reference: McKinsey & Company**

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#### **Introduction**

This document presents my analytical study of McKinsey & Company's case on how Türkiye is transforming into a digital and sustainable manufacturing hub. The initiative is led by MESS and supported by MEXT, with McKinsey providing structured frameworks and transformation expertise.

#### **Background**

Türkiye aims to strengthen its manufacturing competitiveness by scaling Industry 4.0 technologies, improving sustainability, and building future-ready workforce capabilities. Increasing global competition and environmental expectations have created urgency for transformation.

#### **Objective**

The transformation focuses on accelerating digital maturity, strengthening sustainable practices, improving productivity, and developing workforce capability at scale.

#### **Key Challenges**

Limited digital readiness, fragmented technology adoption, workforce skill gaps, rising sustainability expectations, and lack of structured transformation roadmaps.

#### **Approach and Methodology**

The initiative uses digital-twin simulations, real factory models, maturity assessments, capability academies, and cross-sector partnerships. McKinsey supports companies through structured frameworks, impact tracking, and implementation guidance.

#### **Impact**

Companies adopting the program saw improved productivity, reduced waste, increased operational reliability, and stronger sustainability performance. Workforce capability increased significantly through structured learning.

#### **Insights**

Transformation accelerates when ecosystems collaborate, sustainability is integrated early, and employees gain hands-on exposure to new technologies.

#### **Personal Learnings**

Digital transformation requires mindset change, structured capability-building, and national-level support systems. Türkiye's approach shows how emerging markets can become global leaders in advanced manufacturing.

**Summary**

Türkiye, supported by MESS, MEXT, and McKinsey & Company, is becoming a strong digital and sustainable manufacturing hub through capability-building, Industry 4.0 adoption, and structured transformation programs.

**Credit**

This analysis is based on the case study published by McKinsey & Company.