

CHAPTER 3

IMPLEMENTING TOTAL PRODUCTIVE MAINTENANCE: A CASE STUDY IN KONYA INDUSTRY

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INTRODUCTION

In today's competitive manufacturing environment, companies focus on optimizing production by improving cost efficiency, quality, delivery, and flexibility (Enaghani et al., 2009). Rapid technological and market changes require reducing costs and enhancing resource utilization. Many production systems suffer from underutilization, low productivity, and high costs (Lazim and Ramayah, 2009). To stay competitive, organizations must be adaptable, cost-effective, and capable of delivering world-class products (Chan et al., 2005). Total Productive Maintenance (TPM) is a company-wide methodology aimed at improving production efficiency and productivity by addressing maintenance and production issues. It reduces costs and enhances efficiency to adapt to changing market conditions. Park and Han (2001) examined key factors for successful TPM implementation and its impact on company competitiveness. They outlined four stages: preparation, pre-implementation, implementation, and stabilization, providing a checklist for readiness. Cultural change, awareness, coordination, communication, and collaboration were discussed with five model companies, and the results were summarized. Sun et al. (2003) piloted TPM in a Hong Kong manufacturing company, addressing employee reluctance by applying it to an advanced model machine. The success demonstrated TPM's suitability, boosting staff confidence. A 6-point statement highlighted key success factors. Thun (2006) analyzed TPM's dynamic requirements, evaluating reactive and preventive maintenance impacts on OEE.

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