UNIVERSITAS
GADJAH MADA
Strategi Transformasi Digital Dalam Meningkatkan Efisiensi Di Industri Manufaktur PT EMI
Mohammad Sayeed Mauluddin Chohan, Ertambang Nahartyo, Dr., M.Sc., CMA., Ak., CA.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

ABSTRAK

Penelitian ini bertujuan untuk menganalisis arah, kondisi aktual, dan prioritas strategi transformasi digital PT EMI dalam meningkatkan efisiensi manufaktur pada industri kendaraan listrik roda dua. Penelitian ini dilatarbelakangi oleh meningkatnya tuntutan efisiensi, kualitas, kecepatan respons, dan daya saing di tengah pertumbuhan pasar kendaraan listrik yang semakin kompetitif. Dalam konteks tersebut, transformasi digital dipandang bukan hanya sebagai adopsi teknologi, melainkan sebagai proses strategis yang perlu diselaraskan dengan kebutuhan operasional, kapabilitas organisasi, tata kelola data, dan tujuan bisnis perusahaan.

Penelitian ini menggunakan pendekatan kualitatif dengan desain studi kasus deskriptif. Data diperoleh melalui wawancara semi-terstruktur dengan informan kunci, observasi, serta telaah dokumen internal dan eksternal perusahaan. Analisis dilakukan secara bertahap melalui pengodean tematik, analisis VRIO untuk mengevaluasi kapabilitas internal, PESTEL dan *Porter's Five Forces* untuk memetakan lingkungan eksternal, serta SWOT, IFE, EFE, IE, dan QSPM untuk merumuskan dan menentukan prioritas strategi transformasi digital yang paling relevan bagi PT EMI.

Hasil penelitian menunjukkan bahwa PT EMI telah memiliki fondasi transformasi digital melalui ERP QAD, sistem produksi berbasis waktu nyata, Andon, *Quality Inspection System, Warehouse Management System, Product Lifecycle Management*, tata kelola digital, dan roadmap transformasi. Namun, peningkatan efisiensi belum sepenuhnya optimal karena integrasi *end-to-end*, standardisasi data, kesiapan sumber daya manusia, dan disiplin eksekusi masih perlu diperkuat. Skor IFE sebesar 2,53 dan EFE sebesar 3,39 menempatkan PT EMI pada Kuadran II Matriks IE, yaitu posisi Strategi Pertumbuhan. Strategi prioritas berdasarkan QSPM meliputi integrasi sistem end-to-end, peningkatan skala smart manufacturing, integrasi Digital Quality dan Traceability dengan layanan purnajual, serta penguatan tata kelola manufaktur berbasis data. Penelitian ini berkontribusi secara akademik melalui integrasi kerangka VRIO-SWOT-QSPM dan secara praktis melalui penyusunan rekomendasi strategi transformasi digital yang kontekstual bagi manufaktur kendaraan listrik di Indonesia.

Kata kunci: transformasi digital, efisiensi manufaktur, kendaraan listrik (EV), PT EMI, VRIO, SWOT, QSPM.

UNIVERSITAS
GADJAH MADA

Strategi Transformasi Digital Dalam Meningkatkan Efisiensi Di Industri Manufaktur PT EMI
Mohammad Sayeed Mauluddin Chohan, Ertambang Nahartyo, Dr., M.Sc., CMA., Ak., CA.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

ABSTRACT

This study aims to analyze the direction, current condition, and strategic priorities of PT EMI's digital transformation in improving manufacturing efficiency within the two-wheeled electric vehicle industry. The study is motivated by the increasing demands for efficiency, quality, responsiveness, and competitiveness amid the increasingly competitive growth of the electric vehicle market. In this context, digital transformation is viewed not merely as the adoption of technology, but as a strategic process that must be aligned with operational needs, organizational capabilities, data governance, and the company's business objectives.

This study employs a qualitative approach with a descriptive case study design. Data were collected through semi-structured interviews with key informants, observation, and a review of the company's internal and external documents. The analysis was conducted in stages through thematic coding, VRIO analysis to evaluate internal capabilities, PESTEL and Porter's Five Forces to map the external environment, as well as SWOT, IFE, EFE, IE, and QSPM to formulate and determine the most relevant digital transformation strategy priorities for PT EMI.

The findings indicate that PT EMI has established a foundation for digital transformation through QAD ERP, real-time production systems, Andon, Quality Inspection System, Warehouse Management System, Product Lifecycle Management, digital governance, and a transformation roadmap. However, efficiency improvement has not yet been fully optimized, as end-to-end integration, data standardization, human resource readiness, and execution discipline still need to be strengthened. An IFE score of 2.53 and an EFE score of 3.39 place PT EMI in Quadrant II of the IE Matrix, which reflects a Growth Strategy position. Based on the QSPM analysis, the priority strategies include end-to-end system integration, scaling up smart manufacturing, integrating Digital Quality and Traceability with after-sales services, and strengthening data-driven manufacturing governance. This study contributes academically through the integration of the VRIO-SWOT-QSPM framework and practically through the formulation of contextual digital transformation strategy recommendations for electric vehicle manufacturing in Indonesia.

Keywords: digital transformation, manufacturing efficiency, electric vehicle (EV), PT EMI's, VRIO, SWOT, QSPM.