*Analysis of Inquiry Handling to Reduce Lead Time at PT Bosch Rexroth*

**By Ulfa Puspita Sari**

## Abstract

*This study aims to analyze non-value-added activities and design process improvements to reduce lead time in the inquiry handling process. The methodology employed is the Six Sigma approach using the DMAIC (Define, Measure, Analyze, Improve, Control) framework, combined with the Value Stream Mapping (VSM) analysis tool. Data were collected through direct observation and internal interviews. The Current State Value Stream Map revealed that only 54.5% of the activities are classified as value-added, while the remaining consist of Non-Value Added (NVA) and Necessary Non-Value Added (NNVA) activities. The Future State Value Stream Map proposed improvements such as process digitalization, integration of information systems, and simplification of cross-functional communication. These improvements are projected to reduce the inquiry handling lead time by up to 84.34%. The study concludes that the integration of VSM and Six Sigma is effective in identifying waste and designing a more efficient process within the context of non-production administrative services.*

***Keywords:*** *Inquiry, Lead Time, Value Stream Mapping (VSM), Six Sigma, DMAIC.*

# Analisis Penanganan *Inquiry* untuk Mengurangi *Lead Time* pada PT Bosch Rexroth

**Oleh Ulfa Puspita Sari**

## Abstrak

Penelitian ini bertujuan untuk menganalisis aktivitas tidak bernilai tambah dan merancang perbaikan proses guna mengurangi *lead time* dalam proses penanganan *inquiry*. Metode yang digunakan adalah pendekatan Six Sigma dengan tahapan DMAIC (*Define, Measure, Analyze, Improve, Control*), yang dikombinasikan dengan alat analisis *Value Stream Mapping* (VSM). Data dikumpulkan melalui observasi langsung serta wawancara internal. Hasil pemetaan *Current State Value Stream Map* menunjukkan bahwa hanya 54,5% aktivitas yang tergolong bernilai tambah, sedangkan sisanya merupakan aktivitas *Non-Value Added* (NVA) dan *Necessary Non-Value Added* (NNVA). Perancangan *Future State Value Stream Map* menghasilkan usulan perbaikan berupa digitalisasi proses, integrasi sistem informasi, dan penyederhanaan komunikasi lintas fungsi. Usulan tersebut diproyeksikan dapat menurunkan *lead time* proses penanganan *inquiry* hingga 84,34%. Penelitian ini menyimpulkan bahwa integrasi VSM dan Six Sigma efektif dalam mengidentifikasi pemborosan dan merancang proses yang lebih efisien dalam konteks layanan administratif non-produksi.

**Kata kunci:** *Inquiry, Lead Time, Value Stream Mapping* (VSM), Six Sigma, DMAIC.