

## ABSTRAK

### IMPLEMENTASI BUKU PANDUAN DENGAN METODE PDCA UNTUK MENINGKATKAN PEMAHAMAN OPERATOR DAN MENURUNKAN DEFECT PRODUKSI SEKSI MASINAL

oleh

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Penelitian ini dilatarbelakangi oleh masih tingginya tingkat defect produk dan rendahnya pemahaman operator pada Seksi Masinal, Departemen Persiapan dan Cetak, SBU Non Uang, Perum Peruri. Kondisi tersebut disebabkan oleh belum adanya buku panduan teknis yang terdokumentasi, sehingga penerapan prosedur operasi standar (SOP) belum berjalan konsisten. Penelitian ini bertujuan untuk mengetahui efektivitas penerapan buku panduan teknis berbasis metode PDCA (Plan-Do-Check-Action) dalam meningkatkan pemahaman operator dan menurunkan tingkat defect produk. Metode penelitian menggunakan pendekatan kuantitatif dengan eksperimen terapan. Subjek penelitian terdiri dari 20 operator yang dipilih melalui teknik purposive sampling. Instrumen penelitian meliputi tes (pre-test dan post-test), observasi, serta data produksi. Analisis dilakukan dengan menghitung persentase peningkatan pemahaman dan penurunan tingkat defect produk. Hasil penelitian menunjukkan peningkatan rata-rata pemahaman operator dari 52,5% menjadi 84% (naik 60%) serta penurunan defect produk meterai dari 14,67% menjadi 8% (45,5%) dan paspor dinas dari 5,25% menjadi 2,37% (54,9%). Dengan demikian, penerapan buku panduan teknis berbasis PDCA terbukti efektif dalam meningkatkan kompetensi operator sekaligus menurunkan tingkat defect produk di lingkungan kerja Perum Peruri.

**Kata kunci:** PDCA, buku panduan teknis, operator, defect produk, Peruri

## ABSTRACT

### ***Implementing the Handbook with the PDCA Method to Improve Operator Understanding and Reduce Production Defects in the Masinal Section***

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*This research was motivated by the high level of product defects and the low understanding of operators in the Masinal Section, Preparation and Printing Department, Non-Currency Business Unit, Perum Peruri. This condition occurred due to the absence of a well-documented technical manual, resulting in inconsistent implementation of standard operating procedures (SOP). The purpose of this study was to determine the effectiveness of implementing a PDCA (Plan-Do-Check-Action)-based technical manual in improving operator understanding and reducing product defects. The research employed a quantitative method with an applied experimental approach. The subjects consisted of 20 operators selected using purposive sampling. Research instruments included tests (pre-test and post-test), observations, and production data. Data were analyzed by calculating the percentage increase in understanding and the decrease in defect levels. The results showed an increase in the average operator understanding from 52.5% to 84% (an increase of 60%) and a reduction in meter stamp defects from 14.67% to 8% (45.5%) and official passport defects from 5.25% to 2.37% (54.9%). Thus, the implementation of the PDCA-based technical manual proved effective in enhancing operator competence while reducing product defect levels within Perum Peruri's production environment*

***Keywords: PDCA, technical manual, operator, product defect, Peruri***