

PROCESS IMPROVEMENT PADA PROSES UPLOAD E-KATALOG MENGGUNAKAN BOT PYTHON DAN ANALISIS BEBAN KERJA ADMIN DENGAN METODE FULL TIME EQUIVALENT DI PT SARILING ANEKA ENERGI

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Abstrak

Proses upload produk ke E-Katalog Inaproc di PT Sariling Aneka Energi masih menghadapi kendala berupa tingginya kegagalan upload, kurangnya transparansi laporan error, serta besarnya intervensi manual admin dalam memeriksa dan memperbaiki data produk. Penelitian ini bertujuan untuk mengoptimalkan proses upload E-Katalog melalui penerapan Process Improvement berbasis bot Python serta menganalisis perubahan beban kerja admin menggunakan metode Full Time Equivalent. Data penelitian diperoleh dari log eksekusi bot, laporan harian admin, pencatatan operator, dan observasi langsung pada data produk kategori cat sebanyak 1.853 produk. Pengolahan data dilakukan dengan membandingkan kondisi sebelum dan setelah optimasi berdasarkan waktu proses, success rate, error rate, throughput, serta nilai FTE. Hasil penelitian menunjukkan bahwa jumlah produk berhasil diunggah meningkat dari 1.388 produk menjadi 1.784 produk, sedangkan error rate menurun dari 25,09% menjadi 3,72%. Total waktu proses upload menurun dari 347,58 menit menjadi 157,87 menit, dengan throughput meningkat dari 240 produk per jam menjadi 678 produk per jam. Nilai FTE admin juga menurun dari 1,72 menjadi 0,47. Dengan demikian, optimasi bot Python mampu meningkatkan akurasi, mempercepat proses upload, dan mengurangi beban kerja manual admin secara signifikan.

Kata Kunci : Beban kerja, *E-Katalog*, *Full Time Equivalent*, *Python*, *Process Improvement*

***E-CATALOG UPLOAD PROCESS IMPROVEMENT USING A
PYTHON BOT AND ADMINISTRATOR WORKLOAD ANALYSIS
WITH THE FULL-TIME EQUIVALENT METHOD AT PT
SARILING ANEKA ENERGI***

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Abstract

The product upload process to the Inaproc E-Catalog at PT Sariling Aneka Energi still faced several problems, including a high upload failure rate, limited error report transparency, and substantial manual intervention by administrators in checking and correcting product data. This study aimed to optimize the E-Catalog upload process through the implementation of Process Improvement using a Python bot and to analyze changes in administrator workload using the Full Time Equivalent method. The research data were obtained from bot execution logs, daily administrator reports, operator records, and direct observations of 1,853 paint-category product data. Data processing was conducted by comparing conditions before and after optimization based on processing time, success rate, error rate, throughput, and FTE value. The results showed that the number of successfully uploaded products increased from 1,388 to 1,784 products, while the error rate decreased from 25.09% to 3.72%. The total upload processing time decreased from 347.58 minutes to 157.87 minutes, while throughput increased from 240 products per hour to 678 products per hour. The administrator FTE value also decreased from 1.72 to 0.47. Therefore, the optimized Python bot improved upload accuracy, accelerated the upload process, and significantly reduced manual administrator workload.

Keywords : *E-Catalog, Full Time Equivalent, Python, Process Improvement, Workload*