

**APPLICATION OF VALUE ENGINEERING METHOD FOR COST
OPTIMIZATION IN THE CONTINUATION PROJECT OF PLUT
BUILDING IN PASURUAN**

DENI AGUSTIN
(212322201038)

ABSTRACT

The construction of the Integrated Business Service Center for Cooperatives and micro small and medium enterprises in Pasuruan City is a strategic step by the government in supporting micro small and medium enterprises. However, the project was halted for five years due to a corruption case, causing the building to be abandoned and causing state budget losses. From this background, The application of the Value Engineering method can help identify alternative architectural and material work in the continuation project of the PLUT Building construction and cost savings that can be achieved through the application of the Value Engineering method in the project.. The objectives of the research are to analyze the application of the Value Engineering method in determining alternative work and more economical material replacement without reducing the function and quality of the project, and Calculating the potential cost savings that can be obtained through the application of the Value Engineering method in the continuation project of the PLUT Building construction.

The research used is empirical juridical using secondary data analysis such as the Cost Budget Plan and Work Unit Price Analysis. The analysis was carried out through systematic stages of Value Engineering, starting from the information stage (Pareto analysis and Breakdown Cost Model), creative stage, analysis, to the cost comparison recommendation stage. The results of this study indicate that the abandonment of the project from 2018 to 2025 resulted in cost escalation due to inflation of Rp 321,067,459 and asset depreciation of Rp 219,581,300. The application of Value Engineering resulted in more efficient material alternatives, such as the use of 3" aluminum frames and gypsum boards for ceilings. This recommendation succeeded in reducing the cost of architectural work to Rp. 622,155,307.53. Savings of Rp. 4,647,795.87 or 0.74% proves that Value Engineering can provide efficient technical solutions and is feasible to be applied to government construction projects.

Keywords: Value Engineering, Cost Optimization, Construction Project, Architectural Work, PLUT-KUMKM.

**PENERAPAN METODE VALUE ENGINEERING UNTUK
OPTIMALISASI BIAYA PADA PROYEK LANJUTAN PEMBANGUNAN
GEDUNG PLUT PASURUHAN**

DENI AGUSTIN
(212322201038)

ABSTRAK

Pembangunan Pusat Layanan Usaha Terpadu Koperasi dan UMKM di Kota Pasuruan merupakan langkah strategis pemerintah dalam mendukung UMKM. Namun, proyek terhenti lima tahun akibat kasus korupsi, menyebabkan gedung terbengkalai dan menimbulkan kerugian anggaran negara. Penerapan metode Value Engineering dapat membantu mengidentifikasi alternatif pekerjaan arsitektur dan material pada proyek lanjutan pembangunan Gedung PLUT dan penghematan biaya yang dapat dicapai melalui penerapan metode Value Engineering pada proyek tersebut. Tujuan penelitian yaitu menentukan alternatif pekerjaan dan penggantian material yang lebih ekonomis tanpa mengurangi fungsi dan mutu proyek, dan menghitung potensi penghematan biaya yang dapat diperoleh melalui penerapan metode Value Engineering pada proyek lanjutan pembangunan Gedung PLUT.

Penelitian yang digunakan berupa yuridis empiris menggunakan analisis data sekunder seperti Rencana Anggaran Biaya, dan Analisis Harga Satuan Pekerjaan. Analisis dilakukan melalui tahapan sistematis Rekayasa Nilai, mulai dari tahap informasi (analisis Pareto dan Breakdown Cost Model), tahap kreatif, analisis, hingga tahap rekomendasi perbandingan biaya. Hasil dari penelitian ini menunjukkan bahwa akibat terbengkalai proyek dari 2018 hingga 2025 menimbulkan eskalasi biaya akibat inflasi sebesar Rp 321.067.459 dan penyusutan aset sebesar Rp 219.581.300. Penerapan Rekayasa Nilai menghasilkan alternatif material yang lebih efisien, seperti penggunaan kusen aluminium 3" dan papan gypsum untuk plafon. Rekomendasi ini berhasil menurunkan biaya pekerjaan arsitektur menjadi Rp. 622.155.307,53. Penghematan sebesar Rp. 4.647.795,87 atau 0,74% membuktikan bahwa Rekayasa Nilai dapat memberikan solusi teknis yang efisien dan layak diterapkan pada proyek konstruksi pemerintah

Kata Kunci: *Value Engineering*, Optimalisasi Biaya, Proyek Konstruksi, Pekerjaan Arsitektur, PLUT-KUMKM.