

ABSTRAK

Bertambahnya sub terminal di Bandara Internasional Soekarno-Hatta menjadi permasalahan operasional dapat menyebabkan penumpang terlambat. PT XYZ melakukan inovasi pengembangan infrastruktur melalui proyek APMS, APMS adalah sistem layanan penunjang konektivitas antarmoda dan sub terminal, biaya investasi dan biaya operasional cukup besar. Hal ini menjadi permasalahan besar karena pembebanan biaya operasional tidak secara langsung melainkan dibebankan melalui pendapatan pelayanan jasa penumpang pesawat udara (PJP2U) / Passenger Service Charge (PSC) dengan besaran menggunakan 3 skema, yaitu pesimis 5%, moderat 6% dan optimis 7%. Penelitian ini bertujuan mengevaluasi aspek teknis dan ekonomi pasca proyek APMS pada masa operasional dan pemeliharaan, untuk mengetahui nilai manfaat dan mengidentifikasi faktor-faktor yang dapat mempengaruhi nilai tambah proyek. Penelitian menggunakan program SEM-PLS untuk mengetahui hubungan validitas dan reliabilitas keterkaitan antar variabel, Nilai *loading factor* > 0,5, Nilai *Iner Model 1*, *T value* > 1,96, dan *P Value* < 0,05, Nilai *Cronbach alfa* > 0,7, dan nilai *AVE* > 0,5. Pada aspek teknis penggunaan APMS dapat mengfisiensikan waktu sehingga membantu dalam hal konektivitas, pada aspek finansial hasil Perhitungan NPV adalah = Rp 2,268,332,591, BCR = 1,00, IRR = 6,01% > MARR 4,75%, hasil payback period = 15 tahun, hasil Return On Investment (ROI) sebesar 31%, dan nilai pertumbuhan sebesar 1 %

Kata Kunci: *Automated People Mover System, Net Present Value, Internal Return Rate, Benefit Cost Ratio, Pay Back Period, Return On Investment* dan SEM - PLS.



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ABSTRACT

The addition of sub-terminals at Soekarno-Hatta International Airport is an operational dilemma that rise the passenger delays. PT XYZ innovates infrastructure development through APMS project, APMS is a service system supporting intermodal connectivity and sub terminals, investment and operating costs are substantial. This is huge dispute cause of the operational cost imposition are not charge directly but through Passenger Service Charge (PSC) with the magnitude of using 3 schemes, namely pessimistic 5%, moderate 6% and optimistic 7%. This study aims to evaluate the techno-economics of post APMS projects during the operational and maintenance period, to determine the value of benefits and identify factors that can affect the added value of the project. The research used the SEM-PLS program to regulate the validity and reliability of the relationship between variables. Loading factor value $> 0,5$, Inner Model value 1, T value > 1.96 , and P Value $< 0,05$, Cronbach alfa value $> 0,7$, and AVE value $> 0,5$. In the technical aspect, the use of APMS can save time so that it helps in terms of connectivity, in the financial aspect, the results of the NPV calculation are = Rp 2,268,332,591, BCR = 1,00, IRR = 6,01% $>$ MARR 4,75%, payback period result = 15 years, Return of Investment (ROI) by 31%, and a growth rate of 1%

Keywords: Automated People Mover System, SEM PLS, Net Present Value, Internal Return Rate, Benefit Cost Ratio, Pay Back Period, Return On Investment, and SEM - PLS

