Loading and unloading activities at the Port of Banjarmasin increase as the economic developments, that Berth Occupancy Ratio (BOR) reach 70.2% who already use patterns of 24-hour operations (3 shifts) and already use equipment that work 4 units of Container Crane. Under these conditions, carried out research aimed to analyze the effectiveness of the use of Wharfs Container Port of Banjarmasin. Based on the decision of the Director Jenderal Perhubungan Laut Number: UM.002 / 38/18 / DGLT-II dated December 5, 2011 about
Port Operational Performance Standards Service that for BOR Banjarmasin region maximum is 70%.

From these parameters, indicating that the condition of the wharf already exceeds the maximum limit. However, in wharf area still has the potential to be developed. The development with the construction of the new wharf which the investment analysis obtained IRR = 17.5046% and payback period is 14 years, so that the addition of investment is feasible, while the new equipment additions (container cranes) obtained IRR = 24.0048% and Payback Period is 4 years so the addition of this equipment is a feasible investment.

Key Word : Berth Occupancy Ratio (BOR), Container Wharf, Payback Period, Internal Rate of Return (IRR)