

Sabtu, 23 Oktober 2021

No. _____

Date

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Prodi : Manajemen

1. Aliran Kas

$$\begin{aligned}T_0 &= \text{biaya investasi} + \text{modal} \\ &= -(10.000 + 200) \\ &= -10.200\end{aligned}$$

$$\begin{aligned}T_1 &= 7000 - 2000 - 250 \\ &= 4.750\end{aligned}$$

$$\begin{aligned}T_2 &= 7000 - 2000 - 3000 \\ &= 4.700\end{aligned}$$

$$\begin{aligned}T_3 &= 7000 - 2000 - 200 \\ &= 4.800\end{aligned}$$

$$\begin{aligned}T_4 &= 7000 - 2000 \\ &= 5.000\end{aligned}$$

2. metode NPV

bunga = 22%

$$\begin{aligned}NPV &= \left[\frac{4.750}{1+(0,22)^1} + \frac{4.700}{1+(0,22)^2} + \frac{4.800}{1+(0,22)^3} + \frac{5.000}{1+(0,22)^4} \right] - 10.200 \\ &= [3.894 + 4485 + 51749 + 4980] - 10.200 \\ &= 10.116 - 10.200 \\ &= 7.916\end{aligned}$$

Karena nilai NPV positif maka investasi tersebut berhasil/layak

- Metode IRR

$$22\% \times 7.916 = 1.742$$

$$25\% \times 7.916 = 1.979$$

$$\text{IRR} = \frac{1.742}{1.979} \times 25\%$$

$$= 0,22$$

Maka:

$$10.200 \rightarrow \left[\frac{4.750}{1+(0,22)^1} + \frac{4.700}{1+(0,22)^2} + \frac{4.000}{1+(0,22)^3} + \frac{5000}{1+(0,22)^4} \right]$$

$$10.200 \rightarrow 18.116$$

Karena hasil metode IRR lebih besar dari investasi awal. Maka investasi tersebut layak.