

Constructive Cost Model (Cocomo)

We can classify our software developer project into 3 category.

- Organic
- Semi detached
- Embedded

b 2	b 1		a 1	a 2
0.38	2.5	Organic	2.4	1.05
0.35	2.5	Semi detached	3.0	1.12
0.32	2.5	Embedded	3.6	1.20

For,

Organic Effort = $2.4(\text{KLOC})^{1.05}$ PM

Semi detached= $3.0(\text{KLOC})$ PM

Embedded = $3.6 (\text{KLOC})^{1.20}$ PM

Time of development:

Organic= $b1(\text{Effort})^{b2}$ Month

Semi detached= $b_1(\text{Effort})^{b_2}$ Month

Embedded= $b_1(\text{Effort})^{b_2}$ Month

**Our Fire Fighter service is an organic type software product has been estimated to be almost 2,000 lines of source code. Our average salary of software engineers be 15,000/- per month.

Now, here we determine the effort required to develop the software product and the nominal development time.

$$\begin{aligned}\text{➤ Effort} &= 2.4(\text{KLOC})^{1.05} \text{ PM} \\ &= 2.4*(2)^{1.05} = 5 \text{ PM}\end{aligned}$$

$$\text{➤ Nominal development time} = 2.5*(5)^{0.38} = 5 \text{ Months}$$

$$\text{➤ Cost required develop the product} = 5*15000=75,000/=$$