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Title of Paper - Software Project Management

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Using COCOMO II Model,
Effort Required to build software that
produce 12 screens, 10 reports & will
require 80 3GL components.

The Complexity is difficult with weights as
3, 8, 10 respectively & productivity rate = 13

Object	Count	Complexity	Weight factor	Total Objects
Screen	12	Difficult	3	36
Reports	10	Difficult	8	80
3GL Components	80	Difficult	10	800

∴ Total Objects = 916

30% of the components can be reused

Object points can be computed as :

$$\begin{aligned} \text{NOP} &= (\text{Object points}) \times [(100 - \% \text{ reuse}) / 100] \\ &= 916 \times [(100 - 30) / 100] \\ &= 916 \times \frac{70}{100} \end{aligned}$$

$$= 916 \times 0.7$$

$$NOP = 641.2 \text{ Object points}$$

Also,

$$\text{Productivity Rate} = 13$$

$$\therefore \text{Estimated Effort} = \frac{NOP}{13}$$

$$= \frac{641.2}{13}$$

$$= 49.323$$

Hence, the required effort = 49.32 person-months