

TABLE : For Screens

No. of views contained	# and sources of data tables		
	Total<4 (<2 server ,3 client)	Total<8 (2-3 server, 3-5 client)	Total 8+ (>3 server >5 client)
<3	Simple	Simple	Medium
3-7	Simple	Medium	Difficult
>8	Medium	Difficult	Difficult

TABLE: For Reports

No. of sections contained	# and sources of data tables		
	Total<4 (<2 server ,3 client)	Total<8 (2-3 server, 3-5 client)	Total 8+ (>3 server >5 client)
<3	Simple	Simple	Medium
3-7	Simple	Medium	Difficult
>8	Medium	Difficult	Difficult

Step 3: Assign complexity weight to each object:

Weight reflect the relative effort req to implement an instance of that complexity level

<i>Object Type</i>	<i>Complexity Weight</i>		
	<i>Simple</i>	<i>Medium</i>	<i>Difficult</i>
Screen	1	2	3
Report	2	5	8
3GL Component	—	—	10

Step 6: Calculation of productivity Rate:

Productivity Rate PROD = NOP / person-month

Table: Productivity Rates for Object points

<i>Developer's experience & capability; ICASE maturity & capability</i>	<i>PROD (NOP/PM)</i>
Very low	4
Low	7
Nominal	13
High	25
Very high	50

Step 7: Compute the effort in person –months

Estimated effort in PM = NOP / PROD

Example: 4.9

Consider a database application project with the following characteristics:

- I. The application has 4 screens with 4 views each and 7 data tables for 3 servers and 4 clients.
- II. The application may generate two report of 6 sections each from 07 data tables for two server and 3 clients. There is 10% reuse of object points.

The developer's experience and capability in the similar environment is low. The maturity of organization in terms of capability is also low. Calculate the object point count, New object points and effort to develop such a project.

Solution

This project comes under the category of application composition estimation model.

Number of screens = 4 with 4 views each

Number of reports = 2 with 6 sections each

From Table 9 we know that each screen will be of medium complexity and each report will be difficult complexity.

Using Table 10 of complexity weights, we may calculate object point count.

$$= 4 \times 2 + 2 \times 8 = 24$$

$$\text{NOP} = \frac{24 * (100 - 10)}{100} = 21.6$$

Table 11 gives the low value of productivity (PROD) i.e. 7.

$$\text{Efforts in PM} = \frac{\text{NOP}}{\text{PROD}}$$

$$\text{Efforts} = \frac{21.6}{7} = 3.086 \text{ PM}$$