

Coco model calculator used from <http://www.cms4site.ru/utility.php?utility=cocomoi>

The model required that we input how many lines of code that we thought, which we believed to be around 8,000. Also it required an input of the pricing per hour. We believed that to be around 20 dollars an hour. Due to the complexity of the project we thought 20.00 per hour was appropriate.

Team Skills	Project Complexity										
	-8	-6	-4	-2	0	2	4	6	8	10	12
4	12.8 6.6	13.3 6.7	13.9 6.8	14.5 6.9	15.1 7.0	15.7 7.1	16.4 7.2	17.1 7.4	17.8 7.5	18.6 7.6	19.4 7.7
3	14.9 7.0	15.5 7.1	16.2 7.2	16.9 7.3	17.6 7.4	18.4 7.6	19.1 7.7	19.9 7.8	20.8 7.9	21.7 8.0	22.6 8.2
2	17.0 7.3	17.8 7.5	18.5 7.6	19.3 7.7	20.1 7.8	21.0 7.9	21.9 8.1	22.8 8.2	23.8 8.3	24.8 8.5	25.8 8.6
1	19.2 7.7	20.0 7.8	20.8 7.9	21.7 8.1	22.6 8.2	23.6 8.3	24.6 8.4	25.6 8.6	26.7 8.7	27.9 8.9	29.1 9.0
0	21.3 8.0	22.2 8.1	23.1 8.2	24.1 8.4	25.2 8.5	26.2 8.7	27.3 8.8	28.5 8.9	29.7 9.1	31.0 9.2	32.3 9.4
-1	23.4 8.3	24.4 8.4	25.5 8.6	26.5 8.7	27.7 8.8	28.8 9.0	30.1 9.1	31.3 9.3	32.7 9.4	34.1 9.6	35.5 9.7
-2	25.6 8.6	26.6 8.7	27.8 8.8	29.0 9.0	30.2 9.1	31.5 9.3	32.8 9.4	34.2 9.6	35.6 9.7	37.2 9.9	38.7 10.0
-3	27.7 8.8	28.9 9.0	30.1 9.1	31.4 9.3	32.7 9.4	34.1 9.6	35.5 9.7	37.0 9.9	38.6 10.0	40.3 10.2	42.0 10.3
-4	29.8 9.1	31.1 9.2	32.4 9.4	33.8 9.5	35.2 9.7	36.7 9.8	38.3 10.0	39.9 10.1	41.6 10.3	43.4 10.5	45.2 10.6

8,000 Source Lines Of Code

1.0 Team Skills

1.12 Project Complexity

20.00 Pricing Per Hour

25.2 Person-Months

503 Person-Days

4,025 Person-Hours

80,496 Total Price

10.06 Price Per Line

16 Lines Per Day/Person

0.7 Duration Years

8.5 Duration Months

170 Duration Days

1,362 Duration Hours

3.0 Average Staffing

We also decided to test on another calculator that asked for more input, to test if this would affect the results at all. We used the model from

http://sunset.usc.edu/research/COCOMOII/cocomo81_pgm/cocomo81.html

We found these two to give very different results. We believe that this second model worked much better, because it asked for more details and could get a better idea of the project rather than just the lines of code and pricing per hour.

Software Product Size

The model uses a product size expressed in source lines of code (SLOC). The bigger the size the larger the effort and the longer the schedule.

Please enter the size in SLOC: 8000

Software Development Mode

The software project needs to be described with one of three development modes. These modes range from the familiar to the ambitious, tightly constrained development projects.

- Choose **Organic** for relatively small teams developing software in a highly familiar, in-house environment.
- Choose **Semi-Detached** when the team members have some experience related to some aspects of the system under development but not others and the team is composed of experienced and inexperience people.
- Choose **Embedded** if the project must operate within a strongly coupled complex of hardware, software, regulations, and operational procedures, such as real-time systems.

Choose one: Organic Semi-Detached Embedded

There are four categories of cost drivers that are found significant performance predictors for a software development project. Each category has several cost drivers. Each driver has a possible rating from Very Low (VL) to Extra High (XH). The ratings are used in the model to adjust the baseline development effort estimation up or down.

For **HELP** on each cost driver, select the driver name.

Product Attributes

- VL L N H VH XH : Required Reliability
VL L N H VH XH : Database Size
VL L N H VH XH : Product Complexity

Computer Attributes

- VL L N H VH XH : Execution Time Constraint
VL L N H VH XH : Main Storage Constraint
VL L N H VH XH : Virtual Machine Volatility
VL L N H VH XH : Computer Turnaround Time

Personnel Attributes

- VL L N H VH XH : Analyst Capability
VL L N H VH XH : Applications Experience
VL L N H VH XH : Programmer Capability
VL L N H VH XH : Virtual Machine Experience
VL L N H VH XH : Programming Language Experience

Project Attributes

- VL L N H VH XH : Modern Programming Practices
VL L N H VH XH : Use of Software Tools
VL L N H VH XH : Required Development Schedule

Results:

Effort = 89.20 Person Months

Schedule = 13.77 Months

You submitted the following name / value pairs:

- size = 8000
- mode = 1.05
- rely = 1.40
- data = 1.16
- cplx = 1.30
- time = 1.30
- stor = 1.06
- virt = 1.30
- turn = 1.07
- acap = 1.00
- aexp = 1.00
- pcap = 1.00
- vexp = 1.00
- lexp = 1.00
- modp = 0.82
- tool = 0.91
- sced = 1.04

Thank you for your interest in this model.