



COCOMO II - Constructive Cost Model

Model(s)
COCOMO and COQUALMO

Monte Carlo Risk

Auto Calculate

Software Size

Sizing Method

| | <u>SLOC</u> | % Design Modified | % Code Modified | % Integration Required | Assessment and Assimilation (0% - 8%) | Software Understanding (0% - 50%) | Unfamiliarity (0-1) | Size Probability Distribution | Software # | Distribution Type |
|----------|-----------------------------------|--------------------------------|--------------------------------|--------------------------------|---------------------------------------|-----------------------------------|----------------------|-------------------------------|------------|-------------------|
| New | <input type="text" value="1200"/> | | | | | | | | | |
| Reused | <input type="text" value="50"/> | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="0"/> | <input type="text" value="0"/> | | | | | |
| Modified | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | | | |

Iterations

Software Equivalent Size (KSLOC)

Software Scale Drivers

| | | | | | |
|-------------------------|--|--------------------------------|---|------------------|------------------------------------|
| Precedentedness | <input type="button" value="Nominal"/> | Architecture / Risk Resolution | <input type="button" value="Nominal"/> | Process Maturity | <input type="button" value="Low"/> |
| Development Flexibility | <input type="button" value="Very High"/> | Team Cohesion | <input type="button" value="Extra High"/> | | |

Software Cost Drivers

Product

| | |
|--|--|
| Required Software Reliability | <input type="button" value="High"/> |
| Data Base Size | <input type="button" value="Nominal"/> |
| Product Complexity | <input type="button" value="Nominal"/> |
| Developed for Reusability | <input type="button" value="Low"/> |
| Documentation Match to Lifecycle Needs | <input type="button" value="High"/> |

Personnel

| | |
|---------------------------------|--|
| Analyst Capability | <input type="button" value="Very High"/> |
| Programmer Capability | <input type="button" value="Very High"/> |
| Personnel Continuity | <input type="button" value="Very High"/> |
| Application Experience | <input type="button" value="High"/> |
| Platform Experience | <input type="button" value="High"/> |
| Language and Toolset Experience | <input type="button" value="High"/> |

Platform

| | |
|---------------------|--|
| Time Constraint | <input type="button" value="Nominal"/> |
| Storage Constraint | <input type="button" value="Nominal"/> |
| Platform Volatility | <input type="button" value="Nominal"/> |

Project

| | |
|-------------------------------|---|
| Use of Software Tools | <input type="button" value="Nominal"/> |
| Multisite Development | <input type="button" value="Very Low"/> |
| Required Development Schedule | <input type="button" value="Very Low"/> |

Maintenance

Software Labor Rates

Cost per Person-Month (Dollars)

Defect Removal Practices

Automated Analysis Peer Reviews Execution Testing and Tools

Results

Software Development (Elaboration and Construction)

Effort = 2.4 Person-months
Schedule = 3.3 Months
Cost = \$23724

Staffing Profile

Your project is too small to display a staffing profile due to truncation.

Total Equivalent Size = 1200 SLOC

Acquisition Phase Distribution



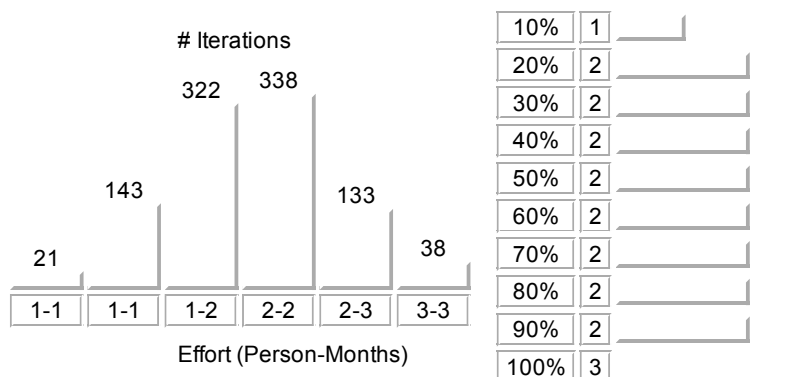
| Phase | Effort (Person-months) | Schedule (Months) | Average Staff | Cost (Dollars) |
|--------------|---------------------------|----------------------|------------------|-------------------|
| Inception | 0.1 | 0.4 | 0.4 | \$1423 |
| Elaboration | 0.6 | 1.2 | 0.5 | \$5694 |
| Construction | 1.8 | 2.0 | 0.9 | \$18031 |
| Transition | 0.3 | 0.4 | 0.7 | \$2847 |

Software Effort Distribution for RUP/MBASE (Person-Months)

| Phase/Activity | Inception | Elaboration | Construction | Transition |
|----------------|-----------|-------------|--------------|------------|
| Management | 0.0 | 0.1 | 0.2 | 0.0 |
| Environment/CM | 0.0 | 0.0 | 0.1 | 0.0 |
| Requirements | 0.1 | 0.1 | 0.1 | 0.0 |
| Design | 0.0 | 0.2 | 0.3 | 0.0 |
| Implementation | 0.0 | 0.1 | 0.6 | 0.1 |
| Assessment | 0.0 | 0.1 | 0.4 | 0.1 |
| Deployment | 0.0 | 0.0 | 0.1 | 0.1 |

Acquisition Monte Carlo Results

Software Effort Distribution Function Software Effort Confidence Levels



Requirements Defects

Introduced

| | |
|-----------------------|--|
| Ambiguity/Testability | |
| Completeness | |
| Consistency | |
| Correctness | |

Removed

| | |
|-----------------------|--|
| Ambiguity/Testability | |
| Completeness | |
| Consistency | |
| Correctness | |

Remaining

| | |
|-----------------------|--|
| Ambiguity/Testability | |
| Completeness | |
| Consistency | |
| Correctness | |

Design Defects

Introduced

| | |
|----------------------------|--|
| Checking | |
| Class/Object/Function | |
| Data Values/Initialization | |
| Interface | |
| Method/Logic/Algorithm | |
| Timing | |

Removed

| | |
|----------------------------|--|
| Checking | |
| Class/Object/Function | |
| Data Values/Initialization | |
| Interface | |
| Method/Logic/Algorithm | |
| Timing | |

Remaining

| | |
|----------------------------|--|
| Checking | |
| Class/Object/Function | |
| Data Values/Initialization | |
| Interface | |
| Method/Logic/Algorithm | |
| Timing | |

Code Defects

Introduced

| | |
|----------|--|
| Checking | |
|----------|--|

Removed

| | |
|----------|--|
| Checking | |
|----------|--|

Remaining

| | |
|----------|--|
| Checking | |
|----------|--|

| | |
|----------------------------|--|
| Class/Object/Function | |
| Data Values/Initialization | |
| Interface | |
| Method/Logic/Algorithm | |
| Timing | |

| | |
|----------------------------|--|
| Class/Object/Function | |
| Data Values/Initialization | |
| Interface | |
| Method/Logic/Algorithm | |
| Timing | |

| | |
|----------------------------|--|
| Class/Object/Function | |
| Data Values/Initialization | |
| Interface | |
| Method/Logic/Algorithm | |
| Timing | |

Your output file is http://csse.usc.edu/tools/data/COQUALMO_January_16_2014_10_28_09_200362.txt

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