What is COINCOMO?

The current version of COINCOMO, version 2.0, is a multi-platform software cost estimation application (tool) which supports in one tool, the cost estimation models of COCOMO, and COPSEMO with future iterations extending to include CORADMO, COSECIMO and/or COCOTS, and be extensible to support additional models. The tool will allow users to do cost estimation of systems of systems and multiple subsystems, where each subsystem could have multiple builds.

Vision for COINCOMO II

The vision behind the development of the COINCOMO Tool has been to build a base to integrate all of the components of the Constructive Cost Model (COCOMO) "suite" of software development estimation tools, including the Constructive Phased Schedule and Effort Model (COPSEMO), Constructive Security Cost Model (COSECIMO), Constructive Rapid Application Development Model (CORADMO), Constructive COTS Model (COCOTS), the systems engineering extension Constructive System Engineering Cost Model (COSYSMO) and Constructive System-of-Systems (SoS) Integration Cost Model (COSOSIMO). In addition, COINCOMO must 1) cover all software development activities included in multiple, full WinWin Software Development Spirals (corresponding to all four phases of MBASE/RUP development life cycle; see Fig. 2), each producing field-able software; and 2) accommodate the multiple (from different organizations), builds (or deliveries) and systems.

The element relationship diagram in Figure 5 shows the primary entities involved with the COINCOMO 2.0 system. The user interacts with the system by providing inputs based on the use of multiple cost models. The cost models are database-driven and interact with the users input via the database. Outputs are put back to the database. Then, the outputs are retrieved and displayed back to the user.
COINCOMO II

CENTER FOR SYSTEMS AND SOFTWARE ENGINEERING
COINCOMO II PRODUCT SHEET

PRODUCT

2.3 REQUIREMENTS

Minimum Requirements:
IBM/IBM-compatible PC.
700 MHz Intel or equivalent microprocessor.
512 MB RAM.
1 GB hard disk space.

Recommended Requirements:
IBM/IBM-compatible PC.
1 GHz Intel or equivalent microprocessor.
1 GB RAM.
2 GB hard disk space.

2.4 CONTACT

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COINCOMO II Features

The tool will also support estimation of individual and multiple builds of a single subsystem; where estimates across builds take into account overlapping MBASE/RUP phases of builds that are being developed concurrently. Final estimation results will be reported in a properly organized CSV file, generating a spreadsheet with the estimation totals as well as overlapping MBASE/RUP phases of builds along with the estimation results of each phase. The tool also supports reporting of the estimates in both XML and HTML formats.

In order to meet resource contention and portability capability goals and requirements, a client-server separation of the UI, import/export, and format translation from the model calculations and database access logic was used. A Java based client UI and JDBC-compatible server-based RDBMS was used to ensure portability among the required platforms. The RDBMS-centric design inherently supports extensibility, as methods for extending 3NF schemas are well known. In addition, the design supports multiple open-source database vendors for flexibility. An XML-based formatting system allows translation of estimation data to and from multiple formats, as well as direct data transfer between databases.