

# Iterative Development

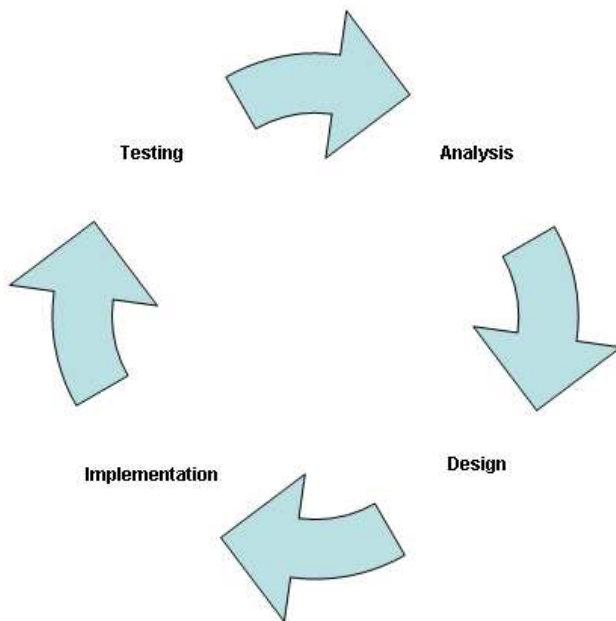
Steven Bucksbaum, February 5, 2011

## Software Evolves, It Is Not Written

**Iterative development** recognizes that creating software is an evolutionary process. Software evolves and improves over time as both the customer and the developers better understand the problem set.

Building software is difficult. Customers have to communicate to the development team but often conclude, “Yes, that what I asked you to build, but that is not what I want.” The coder is struggling to understand both the business customer and the business rules.

Get something coded, the user interface, the business logic and the database. Then work with the business customer to improve the software through another cycle of development.



This approach calls for **cycles of development**. Software development does not stop with the delivery of the system. But continues with another iteration to improve the software system. Here is brief explanation of each step:

**Analysis:**

Here, the requirements are captured from the customer. Verification and validation of the user requirements may be via a throw-a-way prototype. Based on the requirement complexity, a cost and duration calculation is on man-hour. Use Case diagrams are done.

**Design:**

In this phase, the Architectural Design is made, based on the requirements and the quality features required by the software.

**Implementation:**

The segment in the model when the program code is written. The requirements are implemented in the target platform, using state of the art tools.

**Testing:**

Different types of tests are performed, such as Unit Tests, Functional Tests, System Tests, User Acceptance Tests, Regression Tests and Performance / Stress Tests, as needed.

**Change Requests:** Change Requests are part of improving the software system. They occur because business rules change, business rules are better understood or business priorities change. Reasons also include technical road-blocks. Building software is about dealing with “CHNAGE”. Change happens, deal with it.

Software development works in iterations to enhance the software. Software evolves from a simple program to a complex and powerful tool via iterative cycles of development.