

The Software Development Life Cycle Understanding the CU*Answers Development Factory

What is the SDLC?

The SDLC documents rules and procedures for approving, tracking and communicating the status of software development as it moves through the CU*Answers production "factory" – from initial request all the way through to final implementation for clients.

- The SDLC allows us to respond more quickly and more effectively on how CUSO resources should be spent for software development.
- We welcome the scrutiny and responsibility that comes with our transparent approach.
- A proven set of guidelines allows us to say 'no' if a decision does not make sense for a project. That said, just because a decision does not fit in the moment, it doesn't mean we cannot revisit it in the future.
- The same due diligence is applied to formal decisions and off-the-cuff decisions.



General Goals

- Record software warranty issues and provide resolution in a timely manner.
- Obtain approval of development projects that will assure prudent and consistent management of software.
- Provide communication between CU*Answers teams to report software issues and provide feedback on management decisions.
- Provide a researchable database for development projects in progress.
- Assure that proper billing for custom projects is completed accurately and in a timely manner.
- Make a promise to our clients and the marketplace about our overall approach to software development.

Who Manages Our Assembly Lines?

- The Product Team meets on a regular basis to discuss project status, deadlines and contractual commitments.
- Quarterly Strategic Planning sessions are held on a quarterly basis, with a focus on reviewing priorities and status for current and upcoming quarters.
- Day-to-Day Administration ensures that status reports on any individual projects are readily available to CU*Answers staff. This is facilitated through special tracking software referred to as Track*IT.

The "Life Cycle" Part of the SDLC



PROJECT CREATION/SUBMISSION

- Project is created in the Track*IT system, which initiates the SDLC workflow.
- Projects can be created by most data center employees.

PROJECT APPROVAL

 The submitted project is approved by one or more authorized staff, flowing through a standard approval matrix according to project type.

DESIGN SPECIFICATIONS

If necessary, project specifications ("specs") are written, explaining the enduser requirements for the project and as much technical detail as appropriate to explain the desired technique and outcome.

The "Life Cycle" Part of the SDLC



DEVELOPMENT

• A programmer or other technical resource works on coding the software changes.

QUALITY CONTROL TESTING

 Software changes are tested to ensure they match against the original project intent and follow current development standards.

SLATING FOR RELEASE

 A decision is made on a date when the project will be moved from a development environment and become part of live production.

The "Life Cycle" Part of the SDLC

Request Approval Design Development Testing Slate for Release Beta Documentation Implementation

BETA TESTING IN THE FIELD

 Software changes are deployed in a limited, controlled environment to selected clients, who agree to work with our teams and give feedback on the enhancements

DOCUMENTATION/CLIENT COMMUNICATION

• Documentation is written to explain the changes to clients and support staff.

IMPLEMENTATION/FINAL RESOLUTION

• Software is moved from the development or beta test environment into production.

Project Classifications



Guidelines for Making Approvals

- **Program Modifications and Warranty Adjustments**: With the exception of fast-tracked projects already described, to get a yes it must be realistic that the work can begin within the next 12 months after the project is approved.
- Software Enhancements and Architectural Changes: Initial approval is based on our estimate that it is feasible for preliminary research and/or design work to be completed within 18 months of project approval.
- Custom and Conversion Projects: Initial approval is based on separate client approval and contractual agreement processes.

Project Requests: Where Do the Ideas Come From?

BUSINESS DRIVERS

- Xtend SRS Bookkeeping
- AuditLink
- Lender*VP
- Xtend
- Earnings Edge
- Imaging Solutions
- SettleMINT EFT
- OpsEngine

EVENT DRIVERS

- Leadership Conference
- CEO Strategies
- Focus Groups

CLIENT DRIVERS

- Industry and regulatory directives
- Sales contracts and contractual obligations
- Custom work
- Changes by third-party vendors
- Direct requests from clients

Tracking Progress

- The primary method for tracking projects through the SDLC is the Track*IT tool. As projects move through various stages, they are marked in Track*IT with a status code.
- <u>The Release Schedule</u> compiles major projects being slated for specific releases. A PDF copy is posted weekly on the Release Planning page of the CU*Answers website.
- During Quarterly Strategic Planning sessions, each programming team leader summarizes their team's current activities, as well as upcoming and outstanding projects.
- Track*IT monitoring reports and tools are utilized to keep an eye on project progress and investment, especially when it comes to allocation of programming resources.
- <u>Owner's View</u> is an online resource that allows clients to review the current of all projects currently in the pipeline.



Additional Resources

CU*Answers Kitchen Page The Programming and Quality Control Nucleus Pages Latest Release Schedule The Idea Form: An Online Suggestion Box