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## Quality Assurance (QA) Workflow: Development to Client QA and Production Release

This document outlines the comprehensive QA workflow from development through internal QA and client QA. The workflow ensures thorough testing, traceability, and successful software delivery to clients, minimizing issues post-release.

Another key procedure is that Mobilearth is developing an automated testing tool to continuously run regression tests on our base product suite. Most of the modules are set up, and we are currently writing test scripts. Also, we are exploring customization of our automated testing tool for each client to conduct additional tests. The timing for this will be determined after completing the first set of tests and analyzing the results.

New QA testing workflow:

### 1. Internal QA Process

#### Testing Cycles

Additional testing cycles: We have added more testing cycles. Originally, there was developer QA followed by functional QA. Now, our software will follow this path:

1. Developer QA,
2. Business Analyst review/testing of any enhancements to ensure they meet documentation specifications
3. Functional QA
4. Final QA by either Customer Service or an Analyst.

After final QA, the Systems Analyst will load the system to your QA area and perform one round of testing, providing their completed test script during handoff to our clients. Adding three additional testing cycles allows multiple reviews to minimize potential issues. We have hired an additional analyst to ensure each round of testing is done by new personnel.

### 2. Client QA Environment Release (2 Business Days)

We will conduct tests in your Client QA area once we deliver our software and before handing over the system to you. Access to the Client QA area is your decision; however, proper testing requires access. This ensures that your banking core responds as expected to our requests. Every QA release will be tested by our Systems Analyst before it is released to you.

Previously, we did not provide clients with test scripts for their testing. Now, we will provide you with our test scripts to demonstrate what we tested in your area and the results. This aims to increase client confidence in the testing completed in your area against your banking core, with successful results. We encourage you to write and use your own test scripts, but our scripts can serve as a basis for yours.

- **Deployment:** (0.5 day) System Analyst deploys the release to the Client QA environment.
- **Mobilearth Testing in Client QA:** (1.5 days)
  - Validates third-party integrations, reported issues, and system functionality.
- **Test Script Handoff:** Provides completed test scripts and results to the client.

Note: For institutions utilizing a memo-post banking system, please ensure that your system is on current date. Completion of the day-end process is required to facilitate testing in the QA environment.

### 3. Client QA Testing & Sign-Off (*Client-defined timeline*)

- **Client Testing:** Begins after Mobilearth's 2-day QA period.
- **Issue Resolution:** Any issues reported are scheduled for the next release cycle.
- **Sign-Off:** Provided upon successful Client QA completion.

### 4. Production Release Process (*3 Business Days*)

- **Final Verification:** (1 day) Pre-production checks to ensure readiness.
- **Production Deployment:** (1 day) Approved build is deployed. Production app builds will be available after the production update, subject to approval by Android, Apple, and Microsoft.
- **Post-Deployment Monitoring:** (1 day) System stability and performance monitoring.

Mobilearth will no longer provide patches for production. Patches may offer quick fixes but can cause long-term issues if some patches are not included in future releases and are overridden. All production updates will be scheduled using the form available on helpdesk, with no exceptions. Also, Mobilearth will no longer provide ad-hoc releases. Releases will now follow a set schedule.

The changes in QA work flows set out in this document will result in additional layers of testing at different stages of the software's journey to your production area. Our goal is ensure you have confidence in the software being provided to you and that you encounter minimal issues during testing.