Mortgage Cadence Platform UI/UX Overview and Process

MCP Application Redesign Problem Statement

MCP's competitors struggle to create a digital mortgage UX experience that is up to the challenge of making a complex process simple and self-evident to execute. Replacing the current ELC UI layer with HTML5 may indeed simplify the conversion for these ELC clients, but it is unlikely that the UX will be wholly unaffected by the UI change.

The importance of UX, as perceived by existing clients and prospective new ones, cannot not be overestimated in the LOS/POS space. Competitors in both the LOS and POS spaces have struggled to create a digital mortgage UX experience that is up to the challenge of making a complex process simple and self-evident to execute. UI and UX design for the best of breed in mortgage technology have not been "overnight success stories." To the contrary, they have typically taken many iterations and years to get right, especially in consumer self-service POS venues.

Mortgage Cadence Response Summary

Replacing the UI layer of the ELC will indeed affect the UX of the application, to update the UI without also addressing the UX would be a missed opportunity. Creating best-of-breed UX solutions for the mortgage industry is no easy task. It is, in fact, a very difficult and complex process that has taken Mortgage Cadence many years to craft.

The MCP project has been a very deliberate redesign effort aimed at not only updating the frontend technology from Silverlight to a modern web technology stack but also to improve and update the overall user experience of the application.

From project inception through to delivery, Mortgage Cadence has put design and, more importantly, its customers at the center of our process. We audited our existing application and queried internally and externally to find out what people liked and disliked. We painstakingly identified key focus areas that could benefit the most of a redesign and gave those additional time and design consideration. We then iteratively reviewed and validated our solutions with customers and end-users to ensure that what we deliver will meet the goals of our customers, will help to simplify the complex business of mortgage origination and processing, and will empower our users to customize their experience to fit the unique needs of their niche of the process.

The two sections that follow will help to explain our process and approach to this redesign effort and highlight some key UI/UX improvements to the application.

MCP Process and Approach UI/UX Redesign

MCP Project Kickoff

From the start of the MCP project, in addition to simply moving off Silverlight, we decided there was an opportunity to improve the product.

We set out with the following six overarching UI/UX goals for the MCP:

- Improve and simplify the user experience
- Update and unify the look and feel of the user interface *(flat UI, better user feedback, etc.)*
- Make the ELC responsive *(Usable for people on any device: Mobile, Tablet, Desktop, and Larger)*
- Simplify the icons, page layout, and navigation
- Improve the discoverability of features and functionality
- Update the front-end tech *(Bootstrap, SVG Icons, Angular6+, HTML5/Sass, TypeScript, etc.)*

Requirements Gathering / Business Needs Identification

With the above goals in-mind, UI/UX, Architecture, and Product Management teams identified a set of **high-value pages** and **key functionality** that could benefit the most from a redesign.

These include the following:

- Total redesign of the application UI / global navigation / info architecture
- Total redesign of the Screen Builder *(now called UI Designer)*
- Updates to Doc Tracking, Products and Pricing, Comments / Messaging, Fees
- Total redesign of landing pages / dashboards *(Pipeline, Tasking, and Department Home)*
- Improvements to user assistance and accessibility
- Improvements to the loan/data entry pages

Grooming and Prioritization of Business Requirements

From that large list, the Project Management team stack ranked, prioritized the list, and delegated ownership of each item to one or more PM representatives. Together, we (UI/UX, Architecture, Product Management) are now working through those items in Design Sessions.

Design Session Format:

- Run through functional demos *(of current ELC functionality)*
- Brainstorm new ideas and improvements
- Note and discuss all customer feedback *(from the PM Reps and SMEs)*
- Create/iterate through UI designs/comps

Design/Solution Validation – Development: We then validate these designs,

requirements, and solutions with our customers to ensure end-user engagement, gather direct customer feedback, and further iterate on our designs and workflows, based on **user focus groups**, **surveys**, **customer presentations**, **and user testing.**

Overview of the Key UI/UX Improvements in MCP

Application Chrome

Starting with the **Application UI** or "**Chrome**," we have completely redesigned the outer shell of the application. **Made up by the navigation, header bars, Favorites Drawer, and the Footer**. It is the scaffolding that defines the "information architecture," and it includes a total redesign of the tools and navigational elements that enable the user to interact with the system. **Dashboards are taking a very prominent role in our NEW application experience.** The UX centers around a hub-and-spoke model of informing the user then driving them into the loans and data they need.

Platform-Level Dashboards

Introducing the concept of tabs for our redesign of the landing pages, these are system-level dashboards, available on log in, designed to inform the user of important information at a system or department-level and drive the user into loans.

MCP will ship with the following three department-specific platform-level dashboards:

- **Home Dashboard:** Provides users with department and user-specific information.
- **Pipeline Dashboard:** A classic Pipeline with the added benefits of custom platform-level widgets/panels, user-driven and reusable custom search, and filter capabilities.
- **Tasking Dashboard:** Our classic Tasking functionality with the added benefits of custom platform-level widgets/panels, user-driven and reusable custom search, filter capabilities, quick actions, data export, and more.

Quick Loan Search

Can't find the loan you need, or know exactly what loan you want to load? We updated all search functionality within the system to use type-ahead, predictive search. Search by name, loan ID, or property address. Access user-driven saved loans, and a set of the last 10 most recent loaded loans. **Once a loan is loaded, a dynamic Loan Tab displays and drops the user on the Loan Summary Dashboard.**

Loan-level Dashboards: These are loan-level landing pages, available once a loan has been loaded. These are designed to inform the user of deeper into the parts of the loan or system that they need to do their job.

Favorites Drawer: This dynamic panel opens from the left and enables the user to customize the UI and navigation in a way that fits their individual needs and workflow.

The Favorites Drawer has two panels:

- **Favorites:** Enables the user to quickly add or remove and organize the pages they use most often into a primary navigation of their choosing.
- **Loan Info Panel:** Enables the user to add or remove and color-code high-level loan info that helps them do their jobs.

The Footer: Even the Footer adds value. A set of UI toggles that enable the user to turn certain UI elements on and off and offers a quick-reference sheet of all available key commands (shortcuts).

- **Key Commands / General Accessibility Improvements:** We have greatly improved accessibility for screen readers, painstakingly ensured full-keyboard accessibility throughout the app, and added a robust set of key commands.

Mega Menu: This is an admin-defined set of pages and workflows designed to be organized by department. This new dropdown allows the company to define a recommended workflow by department and arrange pages in a clean and intuitive way.

- **Dynamic Page Search:** (Again a type-ahead, predictive search) that allows users to search for and load any published screen they have security privileges to access. Also, an easy to find **Site Map** that list every Page a user has security privileges to view.

Which brings us to one of our MANY data entry pages and the UI Designer.

Optimized Four-Column Layout: The four-column, responsive grid layout was very much a user-center design decision aimed at improving and simplify the user experience of MCP. (UX research consistently shows that multiple column layouts on form pages increase cognitive load, decrease speed at which data can be entered and/or gleaned, and often result in higher numbers of errors or missed fields per page.)

- **For Admin Users:** This means quick and easy turnaround of fully responsive layouts, without any additional effort on the part of the admin. All user-facing pages will adapt to the available width of the browser window. From our base four columns down to two on tablets, and finally one column on small mobile phones.

- **For Front-End Users**: This means improvements to readability and comprehension on any size device large or small. By stacking the label above the field and reducing the maximum number of columns displayed across the screen we improve the user's ability to scan the page when they first load the blank form but also after they fill it out. This layout also reduces visual clutter, makes the most efficient use of our screen real estate, and again improve the user's ability to scan the page for errors.

Loan Drawer: Like the Favorites Drawer, this panel can be toggled on or off and opened or closed. The Loan Drawer, which opens from the bottom of the page, allows the user a contextual view of both loan-specific tasks and comments.

- **Contextual Comments:** Enables the user to view, respond to, and add new comments to the loan all while staying on the current dashboard or data entry page. The design also enables sort and search by way of system-level categories, and user-level via keywords.
- **Loan Tasks:** With the same contextual focus as comments, loan tasks enable users to view and work tasks while remaining on the current dashboard or data entry page. Loan Tasks also adds in-task navigation via links so a user can quickly navigate to the pages they need to access directly from the task itself.

Workflow Collections and Wizards: Two powerful workflow management tools.

- **Workflow Collections:** Act as a "suggested workflow" and enable the admin to group sets or collections of pages together in a way that guides their users through a recommended process without preventing them from jumping ahead working the collection in an order that the user sees fit. Workflow collections do not lock the user into a step by step workflow, however, do allow for the hide and show of pages in the collection based on ACE Rules and allow the user to manually bookmark their progress via page status indicators.
- **Wizards:** Take this guided process approach a step further by enabling admins to impose Required Fields that lockdown progress through the collection until all required fields have been satisfied. Wizards also take guided workflow a step further by encapsulating the pages within a popup that can be canceled at any time, imposing an all or nothing approach to the guided workflow that ensures completion in a prescribed manor.

SignalR: Exciting piece of "invisible" technology that keeps the systems in-sync across multiple browser windows without the need for users to refresh. This empowers users to work seamlessly across multiple monitor displays.

UI Designer: This, *What You See is What You Get* (WYSIWYG) style editor, is the tool used to create all our **dashboard**, **data entry**, and **service submission pages.** It uses a drag-and-drop library of Common Controls, Layout Controls, and Advanced Controls that enable an admin user to quickly and easily create and publish fully responsive layouts, in a very short period, without any advanced knowledge of an SDK or other coding skills.