Independent Financial Advisors

Sam (Tzu-Hsuan) Ling Michael Vallis Frank (Boquan) Wang Marina (Mengqi) Zhao

SUBJECTS

Our subjects are independent financial advisors affiliated with the local branch of a financial services company. Each employee is loosely associated with the company and is responsible for their own sales equipment and earnings, using multi-level network marketing tactics to obtain clients and recruits. They are not restricted to the use of company software, which gave us freedom for redesign.

Roles and Tasks

Recruitment involves finding new clients and subordinates from outside the company. Our subjects would recruit from their personal extended networks of friends and family. They prefer building their networks by word-of-mouth and face-to-face interaction and are averse to using online social networks for recruitment.

Training consists of group meetings followed by one-on-one mentorship with the client's recruiter. Group meetings are led by senior advisors and involve motivational speeches and product training. Mentorship training is where the subordinate is taught the skills of recruitment and sales through job shadowing and apprenticeship. There is no guarantee that knowledge will be shared between advisors with no relation to each other.

Advising changes as the subject interacts with the client. The first step involves meeting with the client to collect information. The subject fills out forms with the client to record the information. The subject then takes this collected information, decides which products to pitch to the client and creates reports on the products. The reports contain forecasts and information on the financial product and are generated by the program provided by the financial institution that sources the product. The subject then brings these reports to the next meeting with the client along with the forms required to authorize the transactions. The purpose of this second meeting is to sell the products to the client. After this meeting, the subject files all of the forms into their file cabinet and considers the case closed. At this point, the subject is responsible for creating reports that document the status of the clients' investments. When the

subject delivers the reports to the client, they use the opportunity to try and sell new or different products to the client. Another opportunity to sell to the client is presented in the annual reviews. The purpose of this meeting is to review the status of the client's portfolio, identify changes to the clients financial status, and discuss new product opportunities. Before the subject schedules an annual review with a client, they will review all information they have on the client to prepare. It is also possible for a new product to be introduced to the subject through product trainings. To find out if there are clients which can benefit from it, the subject must search through all of their records to find them.

Breakdowns

1. **Recruiting**: subjects self-identified this as the most time-consuming role in their job, however cultural restraints make it very difficult to introduce technology to help improve the process in any meaningful way.
2. **Knowledge transfer**: although the branch personnel works collaboratively to conduct training sessions, there is no standardized training plan for the one-on-one job shadowing and apprenticeship aspect of knowledge transfer. This especially results in inadequate and uneven knowledge in regards to software tools.
3. **Data entry**: repetitive, as each client has a separate account for each financial institution that they have purchased investment or insurance from.
4. **Records management**: paper based filing system. Requires manually searching through folders of documents and forms in filing cabinets. Requires a linear search when looking for clients that share a specific attribute such as employment status.

WORK REDESIGN

Record management was the breakdown picked to be the focus of work redesign.

Vision

- **Design Premise**: Paper forms provide benefits, are needed for compliance, and should be preserved; paper forms cannot be obviated.

- **Question**: If we want to create a system that allows for efficient retrieval, how do we bridge the physical-digital divide without increasing workload, such as more data entry, for the subject?
- **Solution**: Digitizing system + cloud-based organizer software system
  - Digitizing system: Anoto pen, scanner with OCR
  - Cloud-based software system: Evernote as inspiration
  - No additional data entry.
  - Text-recognition, tagging allows advanced searching and filtering.
- **Problems Solved**
  - Inefficient record retrieval.
  - Lack of on-demand record retrieval.
  - Lack of backups for records.
- **New Work Practice**
  - Fill out forms on paper.
  - Forms are digitized via Anoto pen or scanner.
  - Existing records can be digitized using scanner.
  - Use software system to populate metadata.
  - Use software system for record retrieval.
- **Use Cases**
  - For subject's advising and selling role, the software will make it easier to retrieve client records in preparation for meetings and annual reviews. The subject can find the most up-to-date information on the client.
  - For subject's selling role, the software will make it possible to filter clients by attributes. This is useful if new financial products are introduced to the subject by representatives from financial institutions and the subject would like to quickly see which clients they can sell it to.
- **Metrics for Success**
  - Efficiency.
  - Flexibility and portability.
  - Robustness and recoverability.
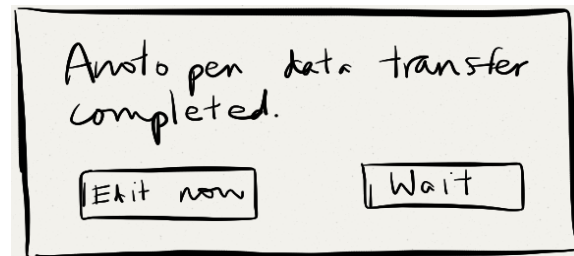
Low-fi Prototype

Figure 2.2.1 - Login Screen
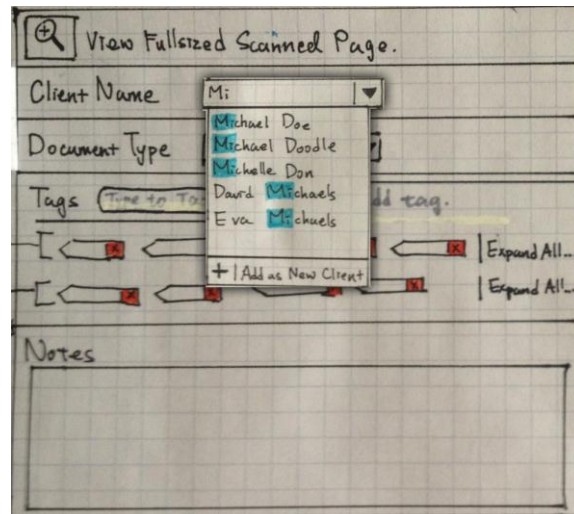

Figure 2.2.2 - Call to Action for Input Screen

Figure 2.2.3 - Input Screen

Figure 2.2.4 - Retrieval Screen

PROTOTYPE ITERATIONS

Version 1 (Paper)

Subject was presented with a walkthrough of the low-fidelity paper prototype. The following interaction problems were noted:

- Flow between login, input, and retrieval screens was unclear.
- Meaning of "tag" caused great confusion; the purpose and usage of tags were also unclear.
- Choice of language on login screen was unfamiliar to the subject, who was used to seeing "submit".

Version 2 (Balsamiq Mockups)

Changes made since version 1:

- In response to feedback, the language and usage of "tags" was changed to "attributes", to better reflect the application's domain.
- The "call to action" window (purpose was to alert the user that new imports were available) was redesigned into a queue that slides up from the bottom of the main application window; inspired by Google Chrome's downloads bar.

Figure 3.2.1 - Login Screen

Figure 3.2.2 - Retrieval Screen
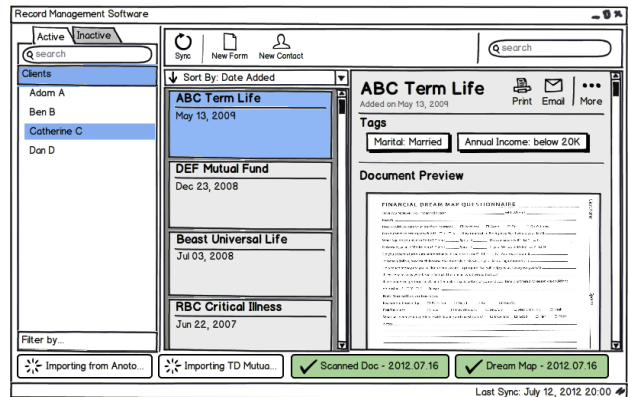
Figure 3.2.3 - Retrieval, with queue of document imports.
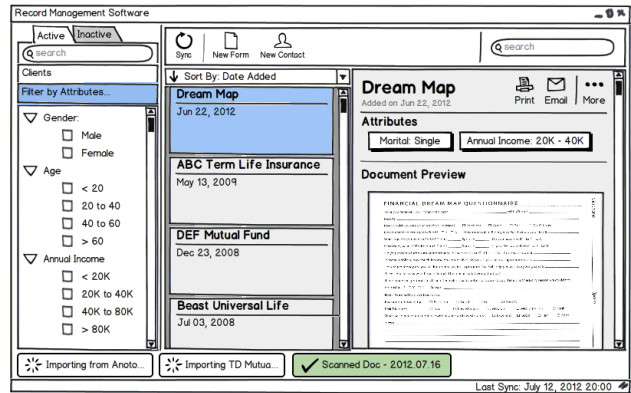
Figure 3.2.4 - Retrieval, with filtering.

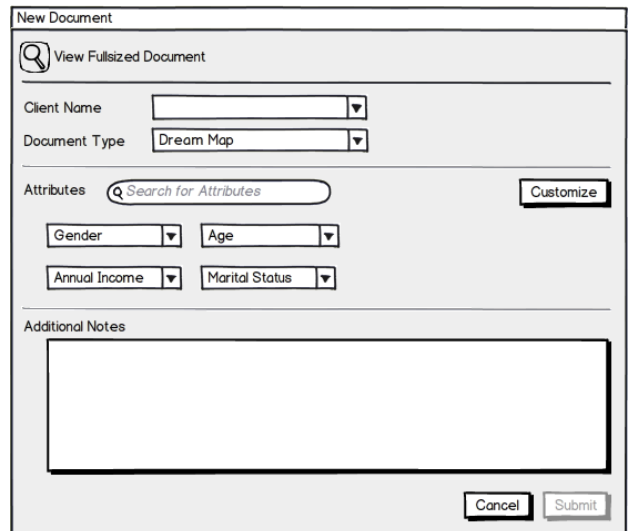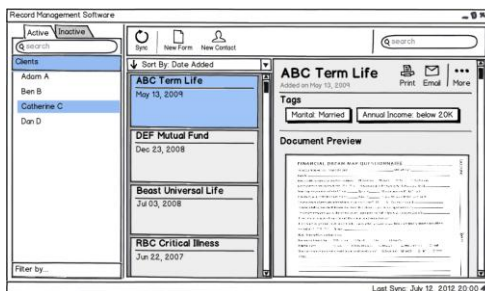**Figure 3.2.5 - Add New Document**

Version 3 (Balsamiq Mockups)

Changes made since version 2:

- Conceptually, attributes have been separated into "client attributes" and "document attributes," since it does not make sense to have client attributes (i.e. age, gender, marital status) attached

to every document. This change also allows the subject to easily update client attributes.

- In the application, this change is reflected in the new client information module in the main application (highlighted in Figures 3.3.1, 3.3.2), the updated Add New Document window (Figure 3.3.3), and the new Edit Client Information window (Figure 3.3.4).
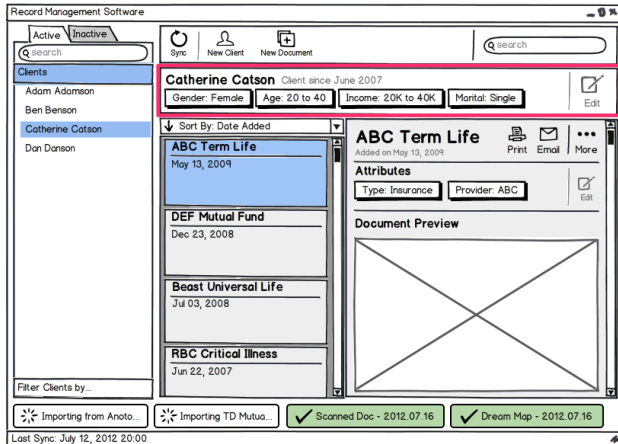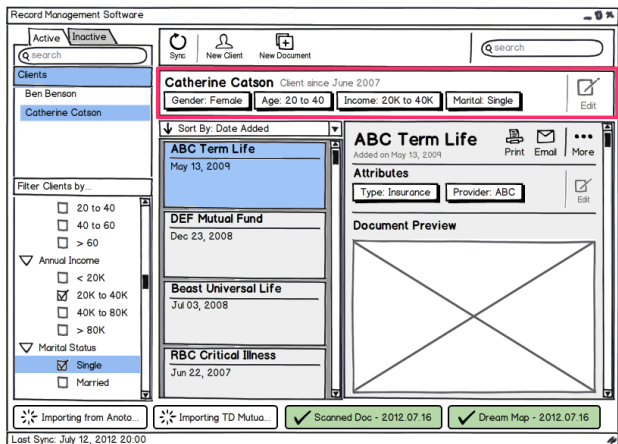

Figure 3.3.1 - Retrieval
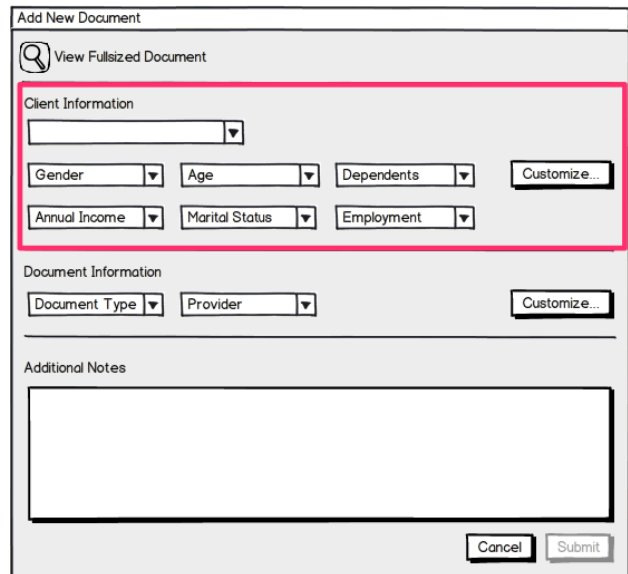

Figure 3.3.2 - Retrieval, with Filtering Widget

Figure 3.3.3 - Add New Document
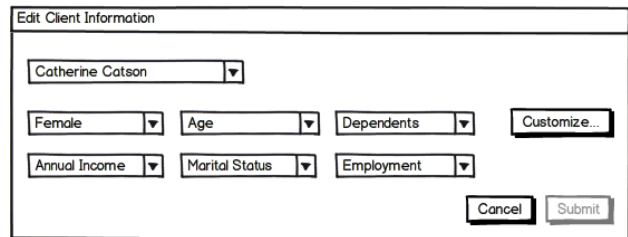
Figure 3.3.4 - Edit Client Information

Version 3 User Testing

The subject was presented with a walkthrough of the version 3 prototype and provided the following feedback:

- Acknowledges that using search would be much more efficient than current work practice of searching through filing cabinets.
- Does not see an immediate need to filter clients due to having a small client base, however can see the usefulness if client base was larger.
- Asked if the client name can contain foreign language characters (such as Chinese), since many clients are immigrants and have multiple names (legal, English, etc.).

FINAL PROTOTYPE

The final high-fidelity prototype is largely unchanged from version 3. In response to comments mentioned by the subject during the user testing session for version 3, support for non-ASCII language characters was added to core features of the application.
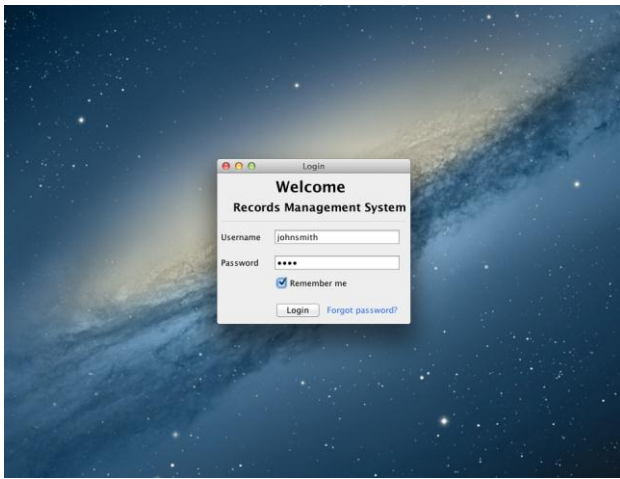
Figure 4.1 - Login

Figure 4.2 - Main Application

The dashboard centralizes all information relating to each client, including the basic status and all products the client possesses. The dashboard provides the user several ways to retrieve stored information, such as searching, filtering, and sorting.

Figure 4.3 - Search client list.

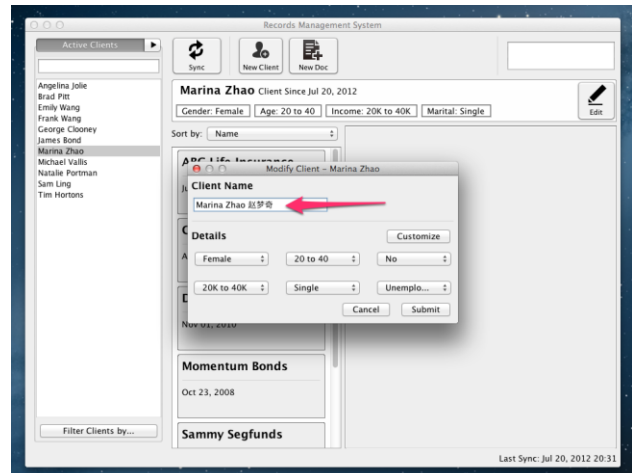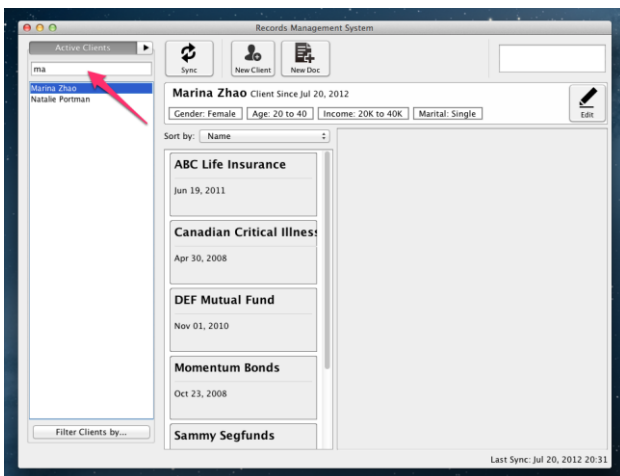Typing in the search box will have immediate effect on the client list. The list will display only clients whose names contain the strings in the search input.
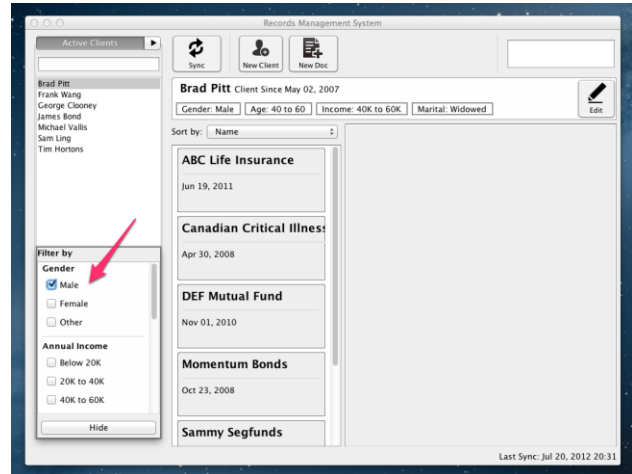
Figure 4.4 - Filter client list by attributes.

The user can also narrow the list down by selecting attributes to filter with. These list of attributes can be customized to meet the user's needs.

Figure 4.5 - Application supports UTF-8.

The subjects expressed concerns in processing clients whose legal names are not English. Immigrants from other countries typically use the translation of their names to apply for legal documents, and these names can be difficult to memorize. In the final prototype, we added the ability to manipulate and display UTF-8 characters. Users can populate the information using the names they are familiar with, while preserving the legal names bound to each document.
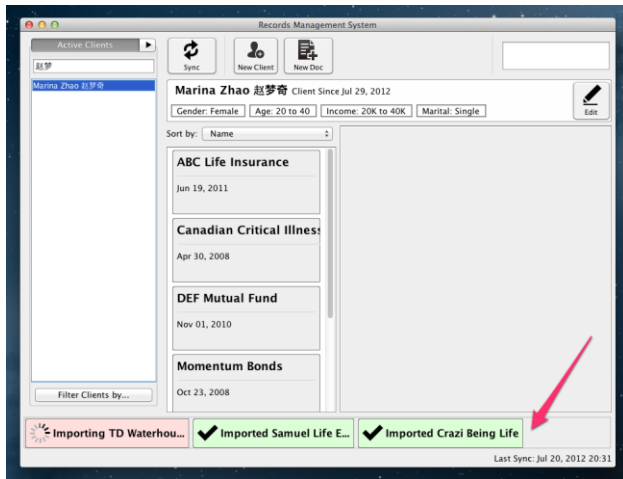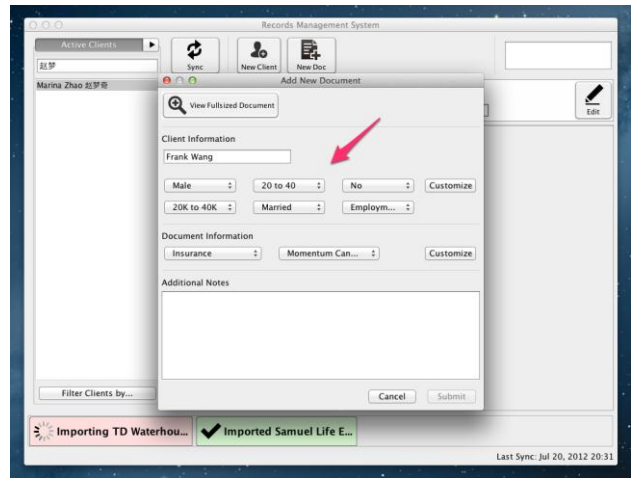
Figure 4.6 - Queue of documents being imported.

The subjects expressed concerns in processing clients whose legal names are not English. Immigrants from other countries typically use the translation of their names to apply for legal documents, and these names can be difficult to memorize. In the final prototype, we added the ability to manipulate and display UTF-8 characters. Users can populate the information using the names they are familiar with, while preserving the legal names bound to each document.
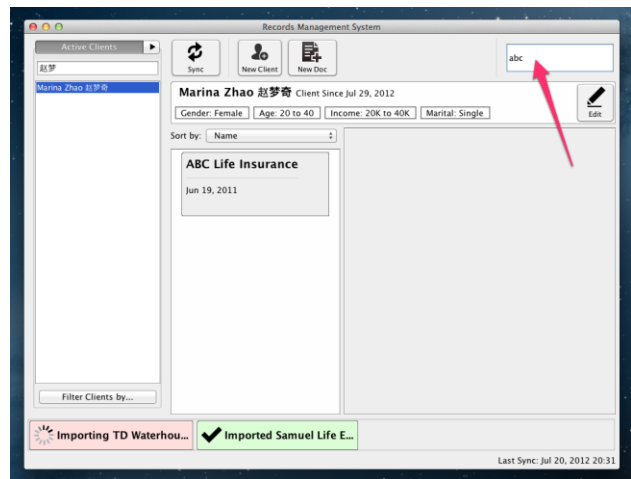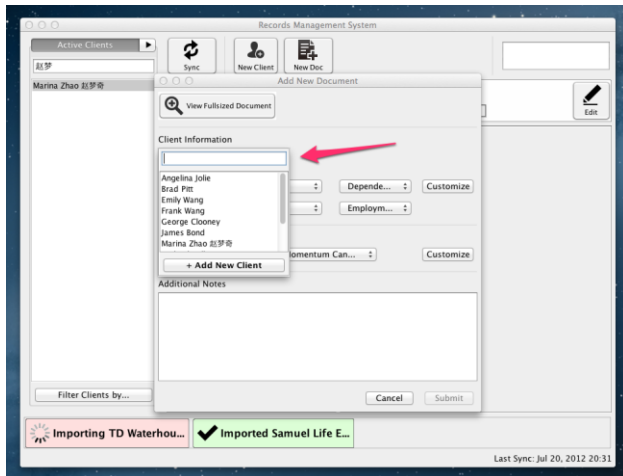

Figure 4.7 - Add New Document: Associate document with existing client via dropdown.

Figure 4.8 - Existing client's information is auto-filled.

Figure 4.9 - Document Search