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Usability Resources Inc

User Interface Design Portfolio

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Usability Resources Inc is SOWMBA certified as a woman-owned small business in Massachusetts

UI DESIGN CASE STUDY 1: Citrix Edgesight

I. PRODUCT - Citrix Edgesight – enterprise network management tool used by System Administrators, IT Help Desk, and IT management. Edgesight allows you to see all levels of a corporate enterprise from an overview of the entire network infrastructure to the CPU cycles on an individual user's laptop.

II. PROBLEM – Extremely sophisticated and stable technology. Product contained 350 reports to valuable summary and detailed data. Unfortunately, few customers were able to use Edgesight effectively because of its overly complex navigation structure. People could not find the reports they needed.

III. RESOLUTION – We redesigned the product's information architecture and navigation so it is easy to find the most frequently used reports. We also designed a "faceted" browse which allows you to select reports by attributes.

IV. CLIENT BENEFITS – Easy to understand user interface, reduced customer frustration, simplified training and customer support. Variety of end users can do complex browses with ease and find high-level status information on the enterprise as well as low level details on a particular system.

V. USABILITY METHODS –
Our work on this project consisted of user research and then user interface design.

1 – User Research: to learn how people were currently using EdgeSight, the tasks they perform, and how the product stacked up. We used the following two methods to gather insight:

a. Online interviews and observation (see description within "User Research" section of this portfolio) - Interviewed and observed end users as they performed their most common tasks with the product. The development team observed sessions via GoToMeeting.

b. *Online Card Sort* – 20+ system administrators, IT managers, and customer support representatives grouped 30 EdgeSight content items by how they would use the data.

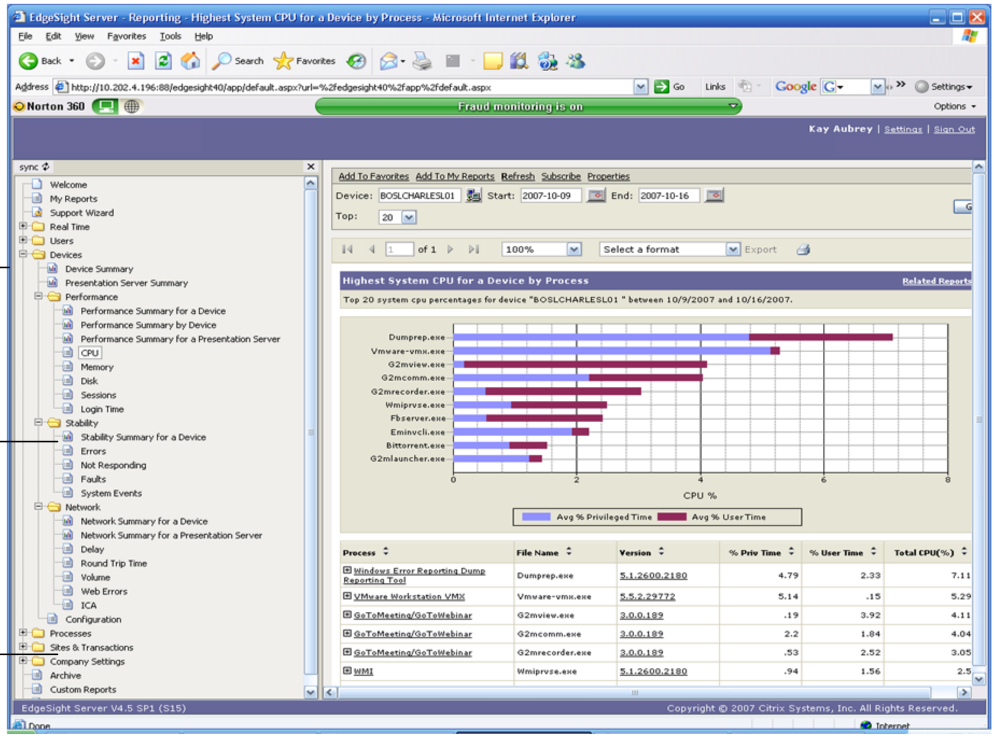
2 – User Interface Design: Created wireframes to depict new information architecture and navigation. Reviewed wireframes with development team and iteratively refined the design.

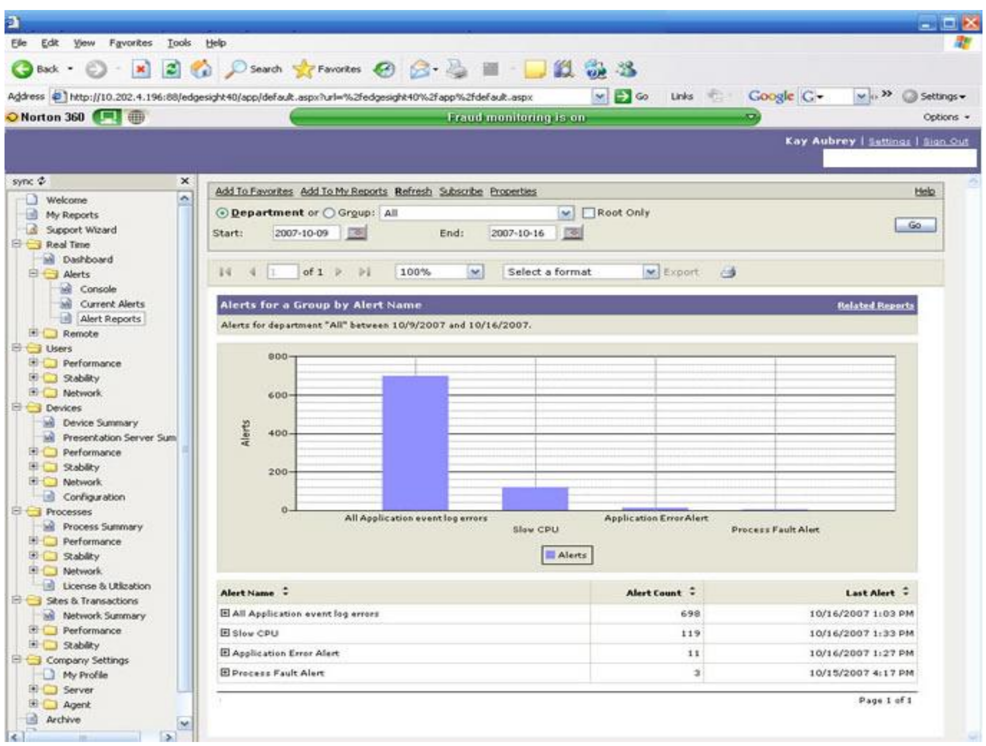
BEFORE

Navigation was via folders.

User would need to drill 3-4 levels deep to find a report

To find a particular report they would need to know which folder to click on





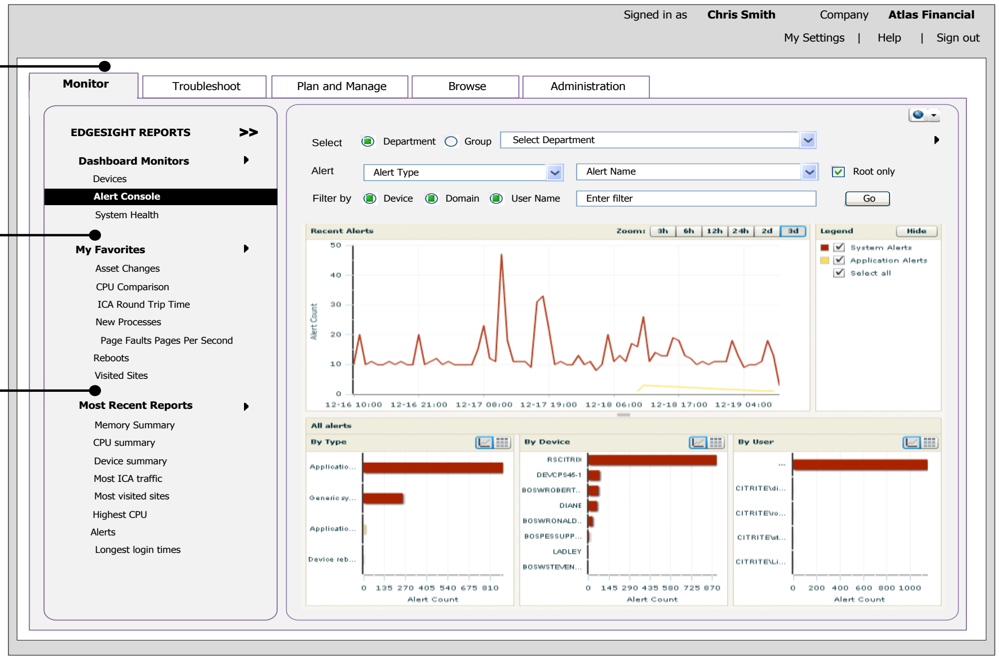
AFTER

Monitor

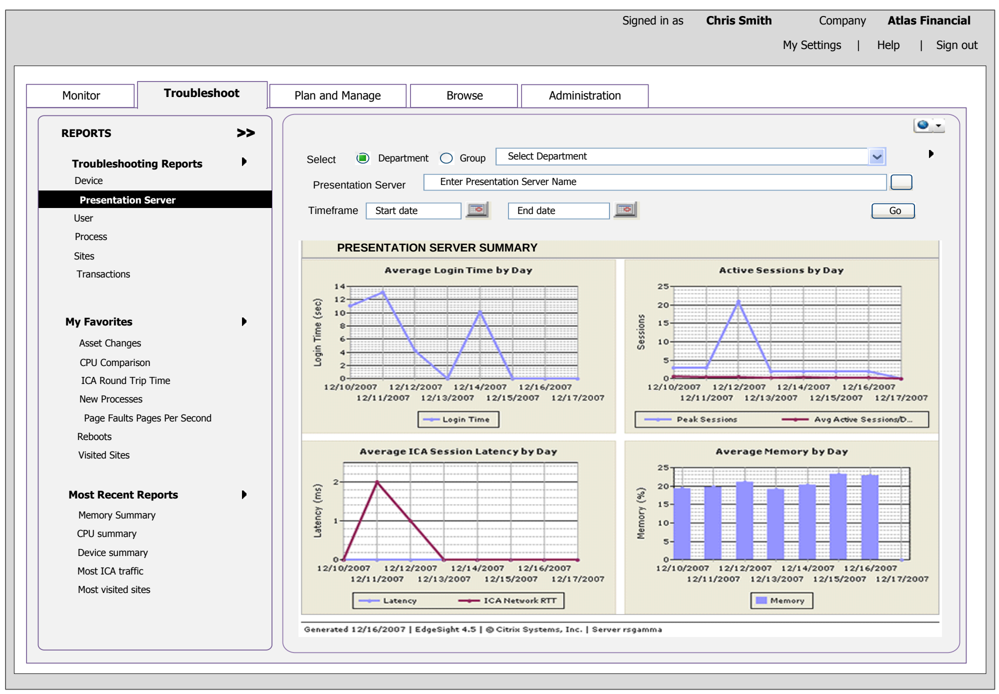
One-click access to reports that deal with Monitoring, Troubleshooting, and Plan & Managing

Users wanted access to "My Favorites"

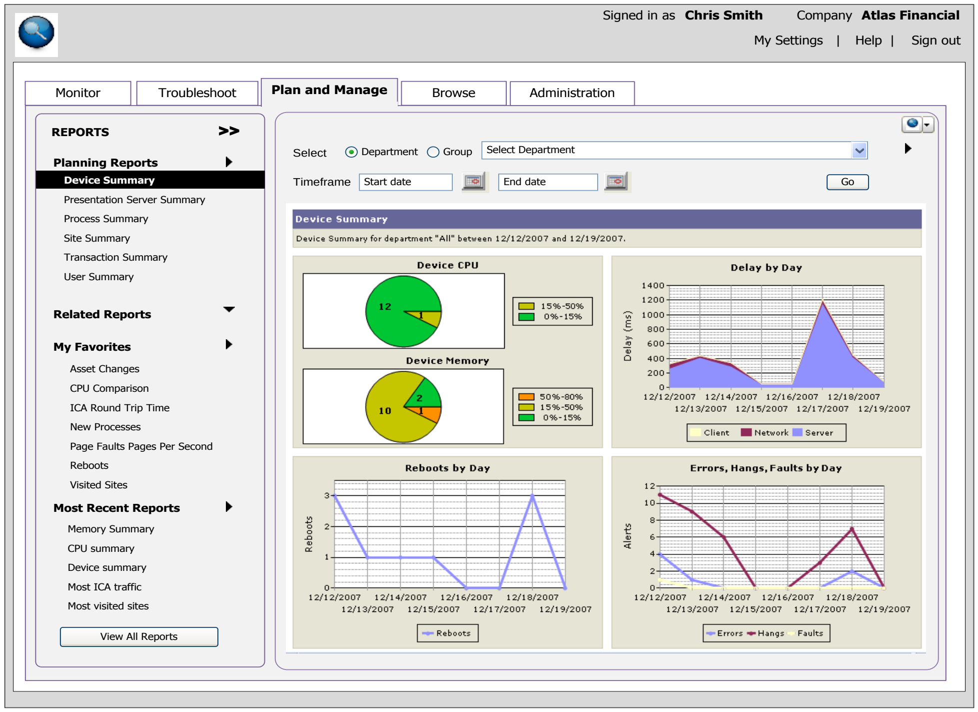
They could also access their most recently viewed reports



Troubleshoot

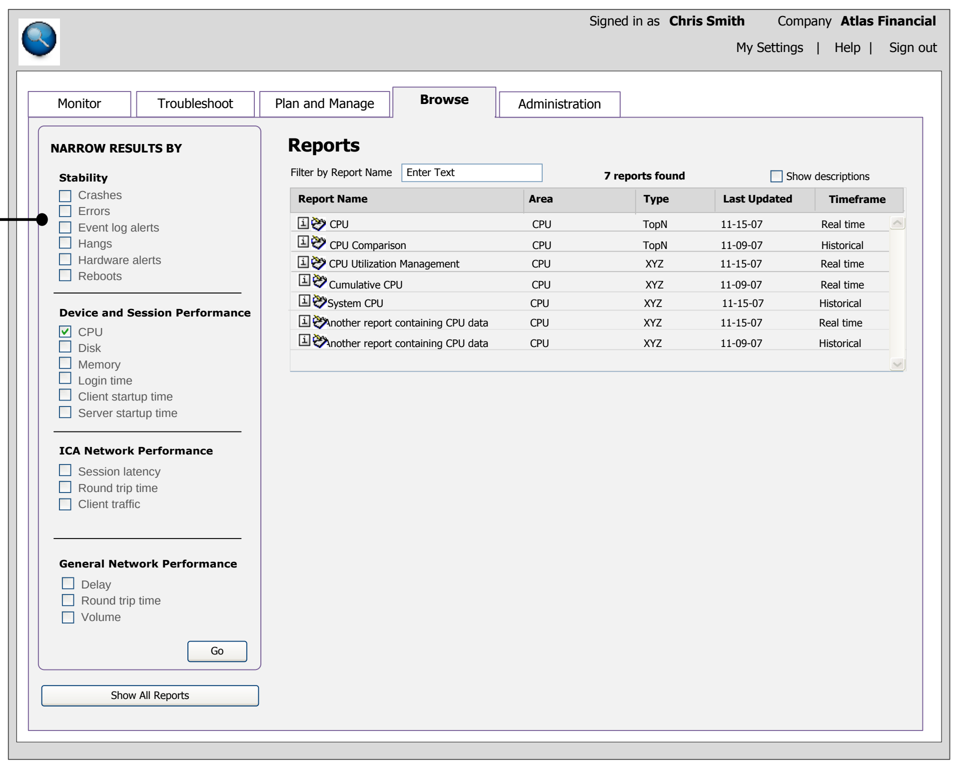


Plan and Manage



Flexible faceted browse

A faceted browse allows for finding reports that meet specific criteria



CASE STUDY 2: Memento Security

I. PRODUCT - Memento Security is a pioneer in proactive risk, fraud, and compliance management solutions. They asked me to help them create a Web-based version of their product's Trace tool, which enables fraud investigators to analyze financial transactions.

II. PROBLEM – Memento needed to port the Trace to from a thick to a thin client. They also wanted to redesign the Trace and Reporting functions to be easier for average business users to learn and use.

III. RESOLUTION – We designed a Web-based version the Trace and Reporting features. Part of our work involved creating UI conventions the Memento team could apply to subsequent web-based development projects. On the user research front, We developed accurate personas to represent their most important users: fraud investigators, fraud analysts, and administrators.

IV. CLIENT BENEFITS – Enhanced ease of use, reduced training and customer support issues, product is easier for Memento engineers to maintain, more satisfied customers – fraud investigators and analysts are able to more easily monitor, detect, and report on fraudulent activities within their banks.

V. USABILITY METHODS –
Our work on this project consisted of user research, navigation design, user interface design, and usability testing.

1 – User research - We used the following techniques to help the team gain insight into their users, and to ensure the new design would work for them:

a. *Online user interviews and observations* (see description in this packet) - Interviewed and observed end users as they performed their most common tasks with the Trace Tool. The development team observed sessions via GoToMeeting.

b. *Paper prototype usability testing* – We ran online usability testing sessions with fraud analysts and fraud investigators, using electronic paper prototypes of the proposed system design.

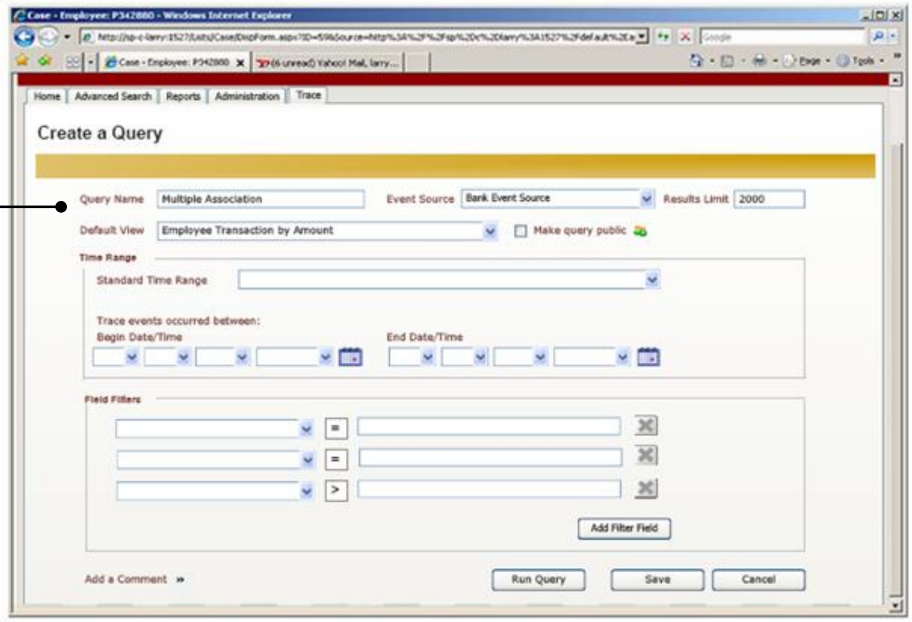
2 – User Interface Design – Created wireframes for new product designs incorporating insights gained through our user research. Reviewed wireframes with development team and iteratively refined the design.

TRACE FUNCTION

We designed 15+ unique screens for this function. Here is a sample from one screen flow – “run a trace”.

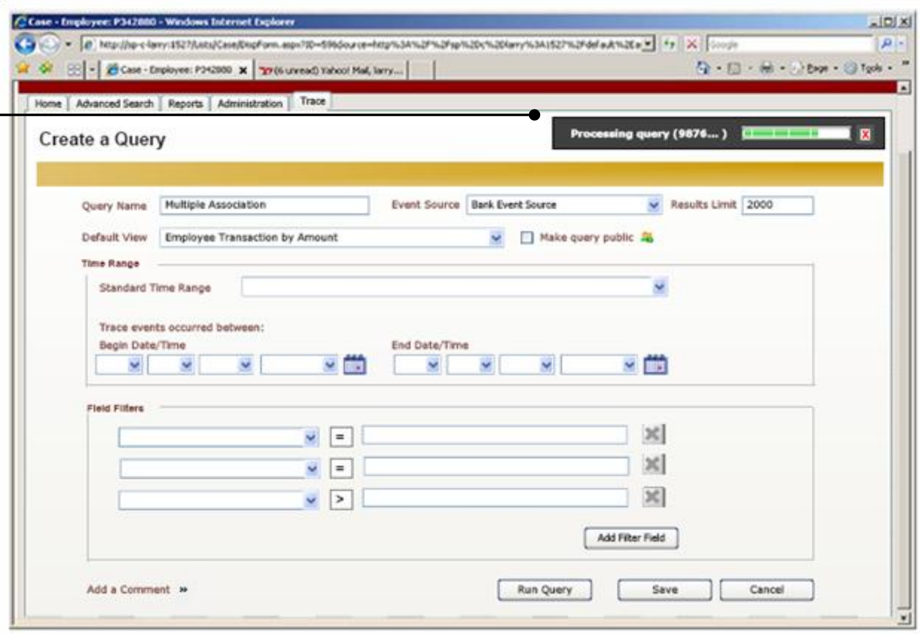
1. Enter search criteria

Enter criteria to search against transaction logs to uncover unsavory activity



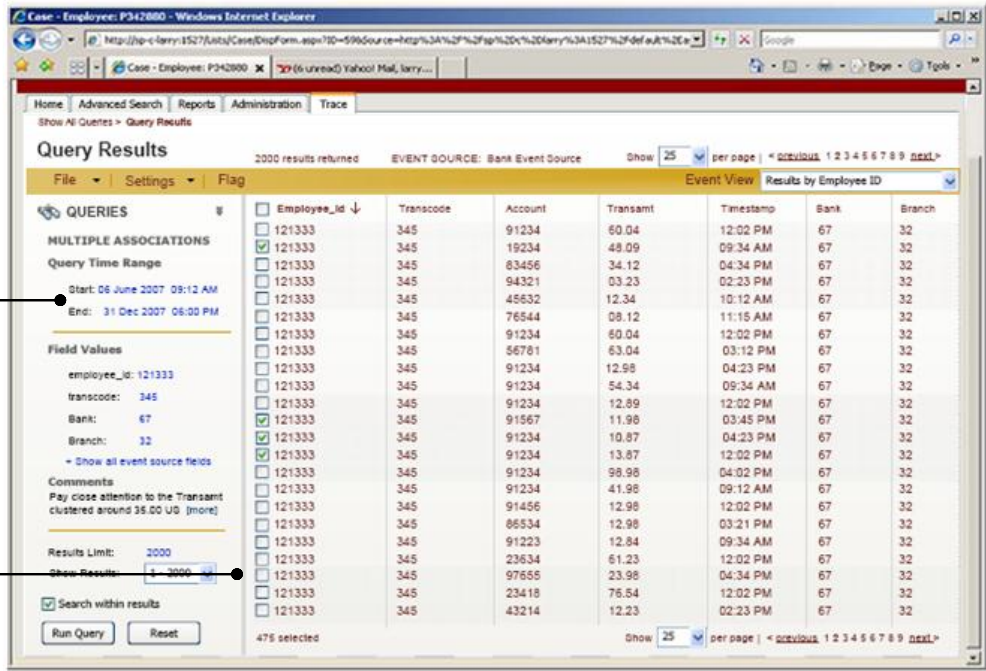
2. Run the query

Run the query



3. View results, modify search criteria and re-run the trace

View results – specific transactions from log files. Modify criteria interactively and re-run query.

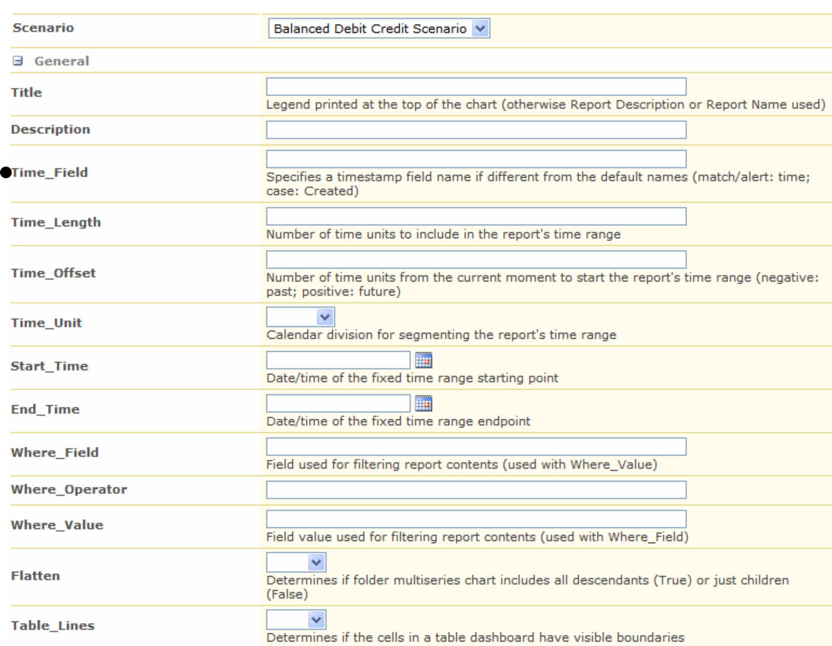


Flag results to share with colleagues or store in case file.

<u>REPORTING FEATURE</u>

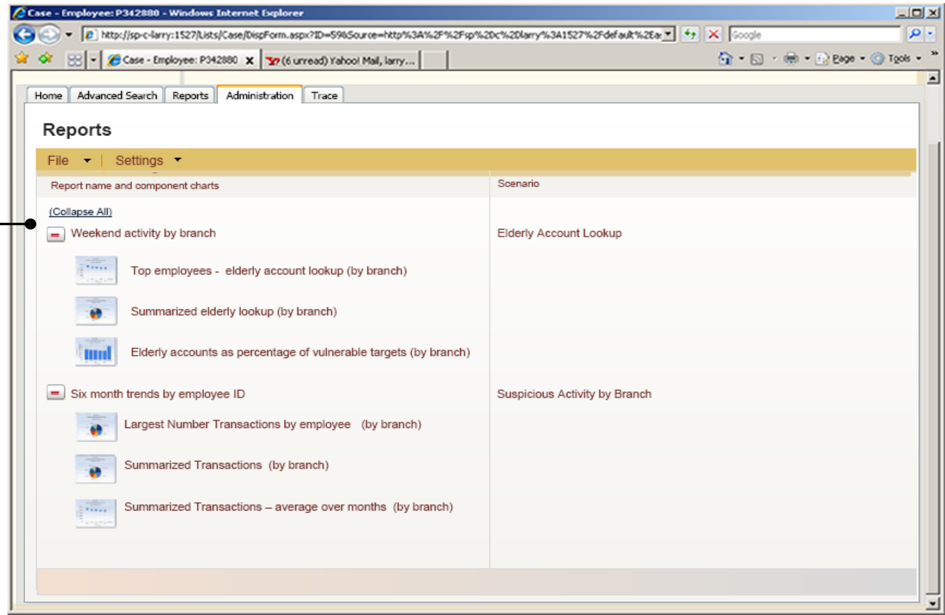
<u>BEFORE</u>

Report generation was tedious and difficult. Tool did not indicate how fields inter-related.



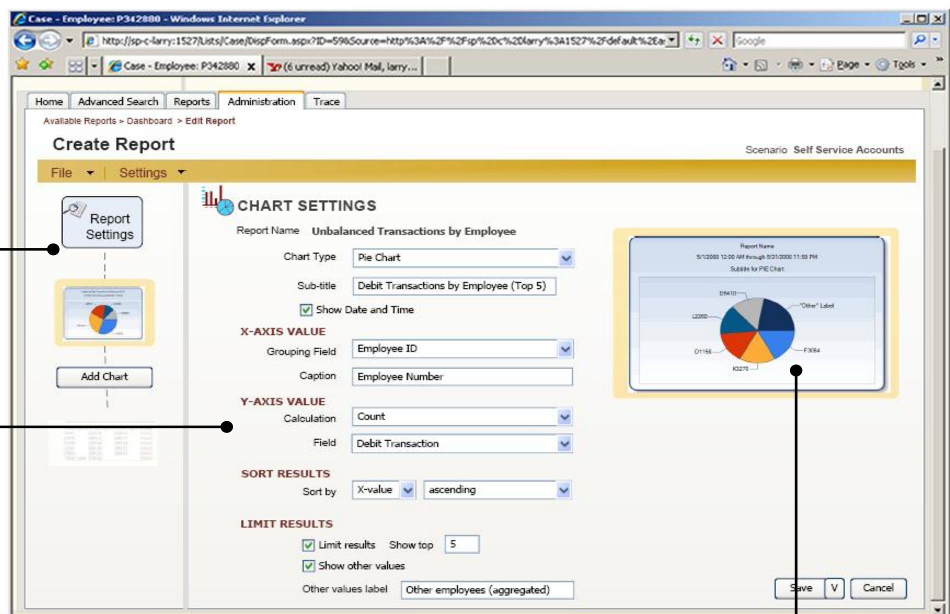
<u>AFTER</u>

Select existing report or create a new one. Report thumbnails provide visual guidance.



User is visually guided through report creation steps

Fields names are in plain English and are logically grouped



User sees visual feedback on the chart and report they are creating

CASE STUDY 3: IPHONE APP FOR EDUCATIONAL MARKET

I. PRODUCT – Mobile application that allows mentors for the Strong Women Strong Girls organization to easily take attendance at their sessions. Application also integrates with social media, providing an additional fundraising channel.

II. PROBLEM – The mission of Strong Women, Strong Girls is to utilize the lessons learned from strong women throughout history to encourage girls and young women to become strong women themselves. By building communities of women committed to supporting positive social change, Strong Women, Strong Girls works to create cycles of mutual empowerment for women and girls.

The organization, which operates within inner-city schools systems in several US cities needed to provide their mentors with an easy and secure way to record attendance at their sessions. SWSG also wanted a means to leverage social media to expand its fundraising. Usability Resources joined forces with MobiFlex Inc to design and develop a mobile application to meet these requirements.

III. RESOLUTION – Usability Resources created an attendance taking application that allows the mentor to log into her account, read her roster, and record the attendance. Once complete she has the option to create a posting to her Facebook wall to notify her friends that she has begun her Strong Women Strong Girls session. Included with the notification is a link asking the reader to sponsor her session. When the friend clicks the link, the friend will be brought to the SWSG donation page.

IV. CLIENT BENEFITS – SWSG now has a mobile app that can be used by their mentors to take attendance. This direct & real-time update capability greatly simplifies administrative burden. App also publishes SWSG to the world via Facebook and serves as another potential channel for donors.

V. USABILITY METHODS – We gathered requirements by going directly to the mentors and then worked with MobiFlex and the SWSG technical team to devise a simple and straightforward user interface that translates to Android, iPhone, and Windows platforms.

> **1 – Focus group moderation:** We ran a focus group with mentors to learn how they ran their sessions and the workflow around attendance taking. The mentors provided rich ideas for Version 1 of this product (which is depicted in this case study) and for how it might be developed in the future.
>
> **2 – Mobile User Interface Design:** We worked closely with our client, their technical staff, and MobiFlex to learn the technical constraints and used these constraints as parameters to arrive at a simple and functional design that will require just a few touches to accomplish the task.

__Screenshot Mockups__
Here is a visual depiction of how the application will function for the iPhone.

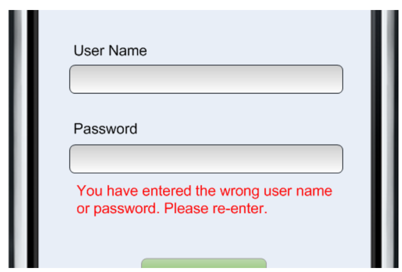
SWSG LOGIN PAGE

FIELDS
User Name: Text Field, accepts the same user name the SWSG mentor uses to log into her Web-based account.

Password: Encrypted password field, accepts the same password the SWSG mentor uses to log into her Web-based account.

BUTTON
Login: Pressing logs the mentor into her SWSG account where she can access her roster.

ERROR
"Wrong user name or password" (display in red text below the password field)



ROSTER PAGE

FIELDS
Name of School: Display text – name of the school where the mentor is running her session.

Day and Time: Display text – day and time of the current session.

Student Member Names: A scrollable list of the names of the students in the mentor's session.

Checkbox: The mentor touches the name of each student who is in the class. A check box appears next to this student's name, to indicate they are present. To deselect, she touches the name again.

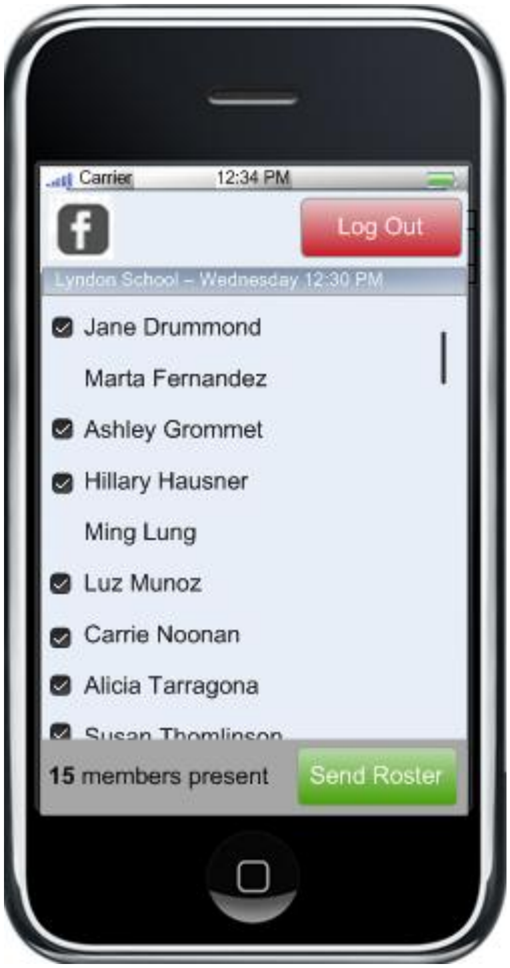
Total Students Present: A counter keeps track of the number of students marked as present. The total present appears in the status area. This number is incremented and decremented as the mentor selects and deselects student names.

BUTTONS
Facebook Button: Pressing the Facebook button automatically sends a notice to the mentor's Facebook Wall, announcing she has begun her session and asking Friends to sponsor it. Once the notification is sent, a message "Notification sent" appears in the status area.

Log Out: Once she completes her attendance and Facebook update, the mentor presses "Log Out" to leave the system.

Send Roster: Pressing this button sends the roster to the SWSG data base for update. A status message appears to indicate successful (or unsuccessful) transmission.

ROSTER PAGE – ROWS SELECTED AND STATUS



- Student names are selected
- Total number of students present displays in status area

- "**Roster saved**" message in status area appears after pressing "Send Roster" and indicates data has been successfully transmitted
- "**ERROR – Roster not saved**" message appears in status area if the transmission was unsuccessful
- "**Notification sent**" message in status area appears after mentor presses the Facebook icon