

Final Usability Results Review EFT User Experience (UX) Redesign

David McAlister
Sr. User Experience Designer

Agenda

• Welcome / Introductions	Janet Holtz	5 Minutes
• Project Overview	David McAlister	5 Minutes
• Our Process & Findings	David McAlister	90 Minutes
• Recommended Priorities (and “Quick Hits”), Project Recap	David McAlister	10 Minutes
• Next Steps	David McAlister	10 Minutes
• Workflow / Prototype Review	David McAlister	30+ Minutes
• Questions / Final Discussions	David McAlister	10 Minutes



Attendees

- **Vincent Fraker** Senior Vice President Product Management & Business Development
- **Allison Ellison** Product Management & Business Development
- **Janet Holtz** Product Manager, Card Services
- **Chuck Petters** Product Management & Business Development
- **Dmitry Gladstone** Technical IT Management
- **Ronald Drake** Technical Systems Analysis
- **Brian Fletcher** Technical Systems Analysis
- **Dipen Komar** IT Architecture
- **David Cox** Senior Vice President Product Management & Business Development
- **Peggy Britz** Product Management & Business Development
- **Jeff Zimmerman** Manager, User Experience Design
- **David McAlister** Sr. User Experience Designer



Project Overview



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Goals & Objectives

Problem

Our Client Central customers are frustrated with how cumbersome and difficult this product is to use.

Objective: Design Products People Want and Use

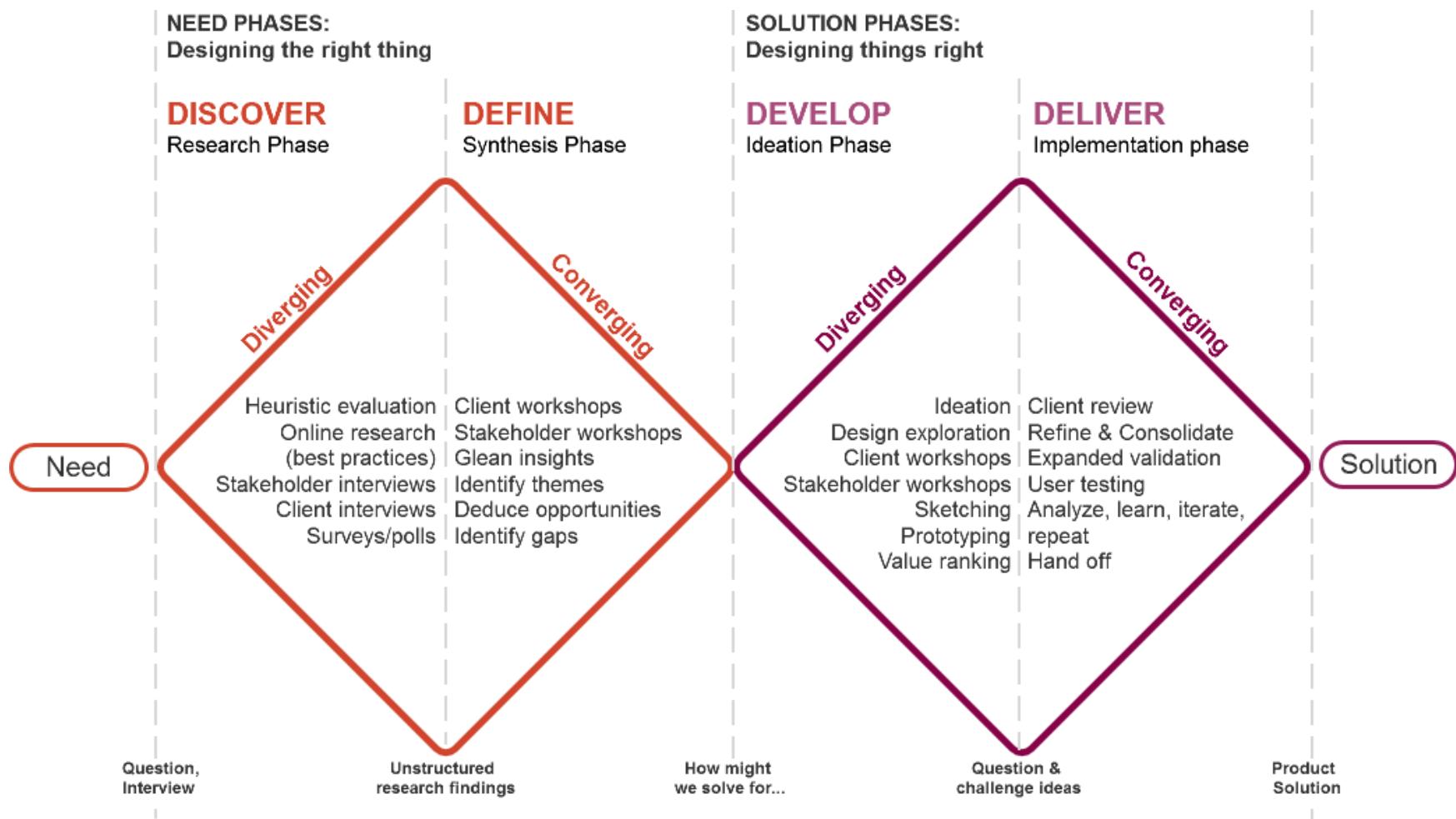
- Understand user's needs, goals, wish lists and pain points
- Provide solutions that incorporate actual user's tasks/workflows
- Simplify user interfaces through good information organization
- Test tasks with real users early on to significantly reduce costs
- Prevent errors by applying affective design
- Reduce training and support costs
- Increased user satisfaction
- Brand reinforcement through good user experience

“Provide the most effective toolset to make our clients successful in servicing their consumers.”



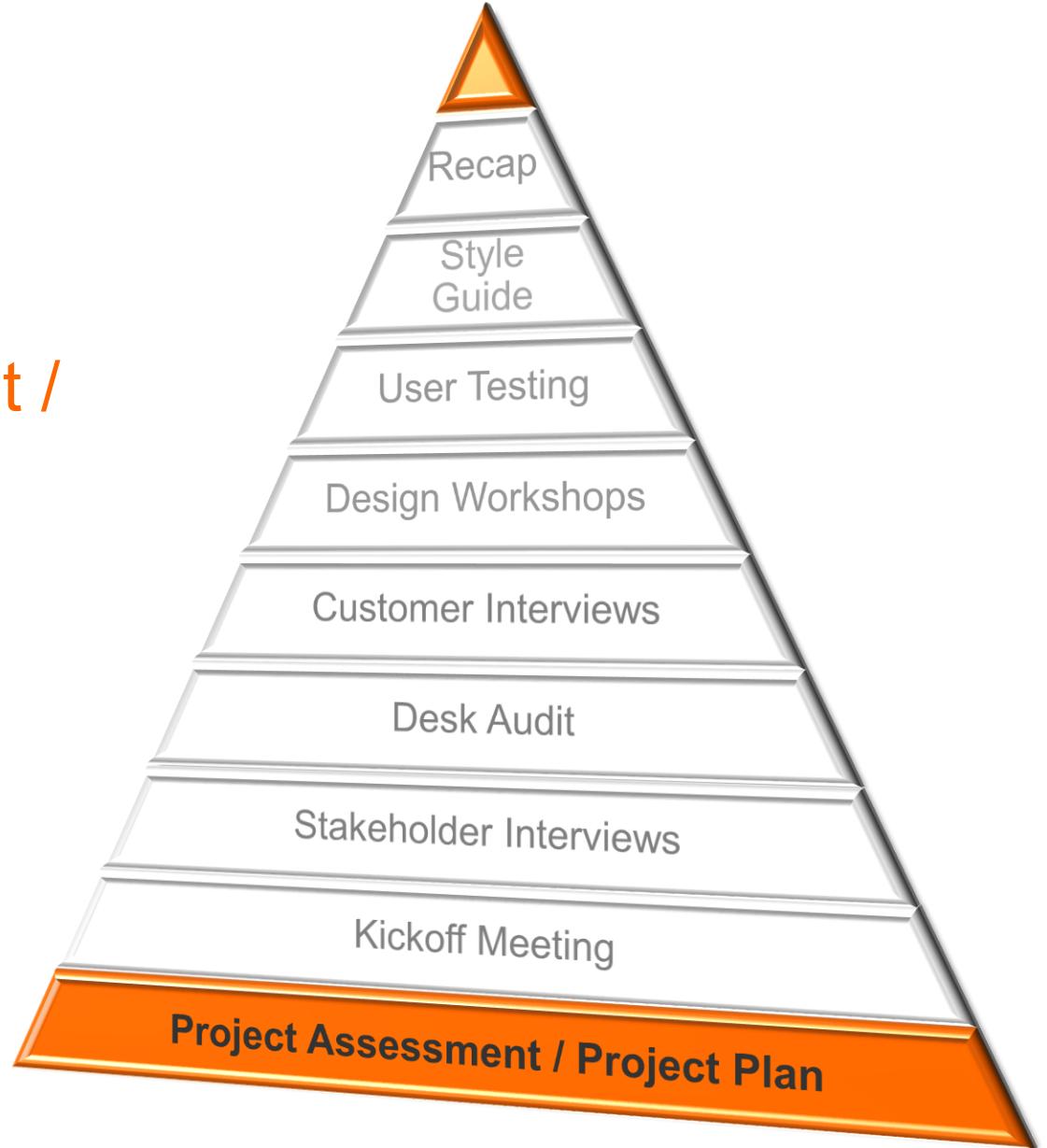
My Standard UX Process*

Based on Double Diamond Standard

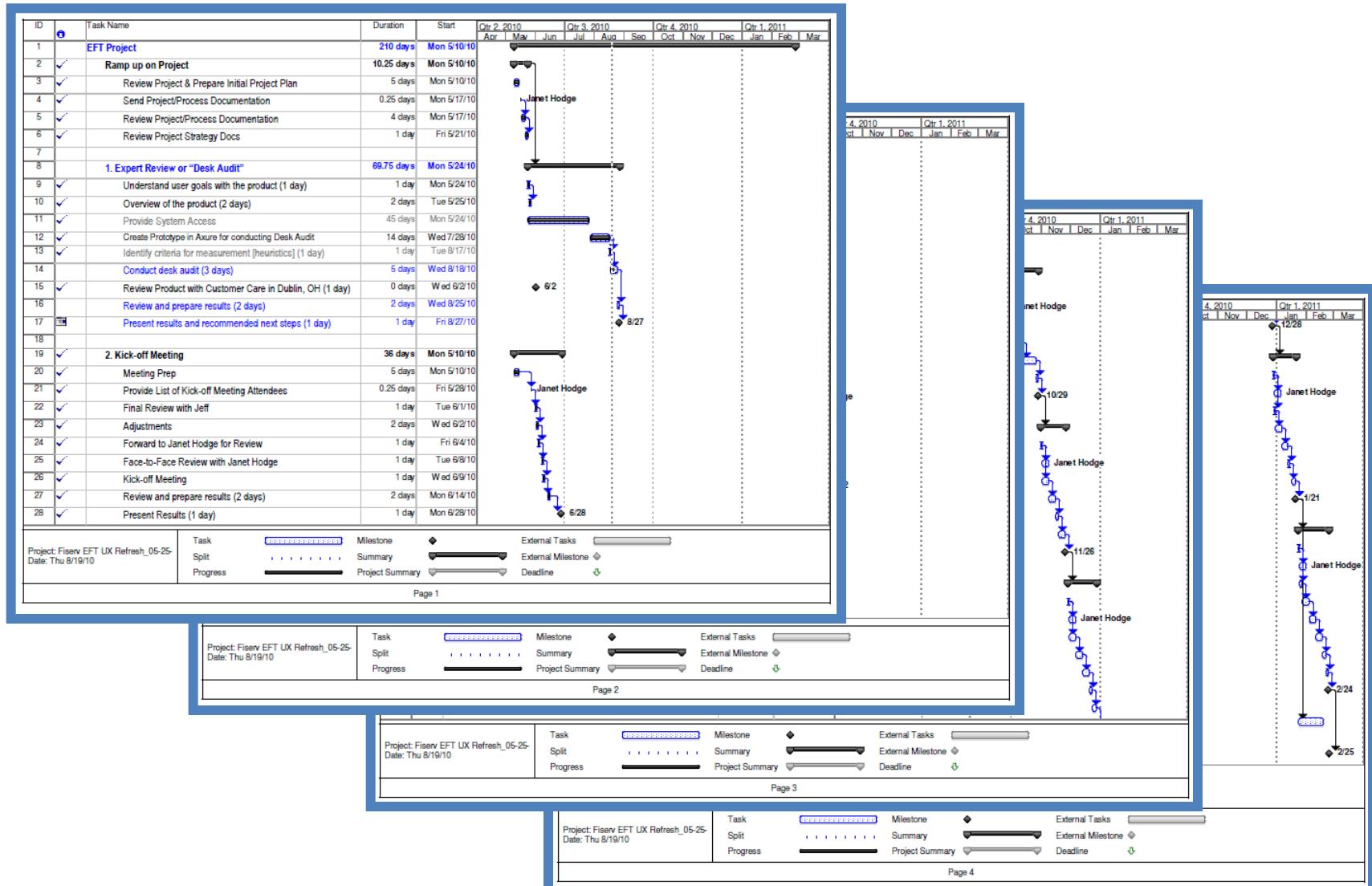


*Depending on
Project Scope & Timeline

Project Assessment / Project Plan



Project Assessment / Project Plan

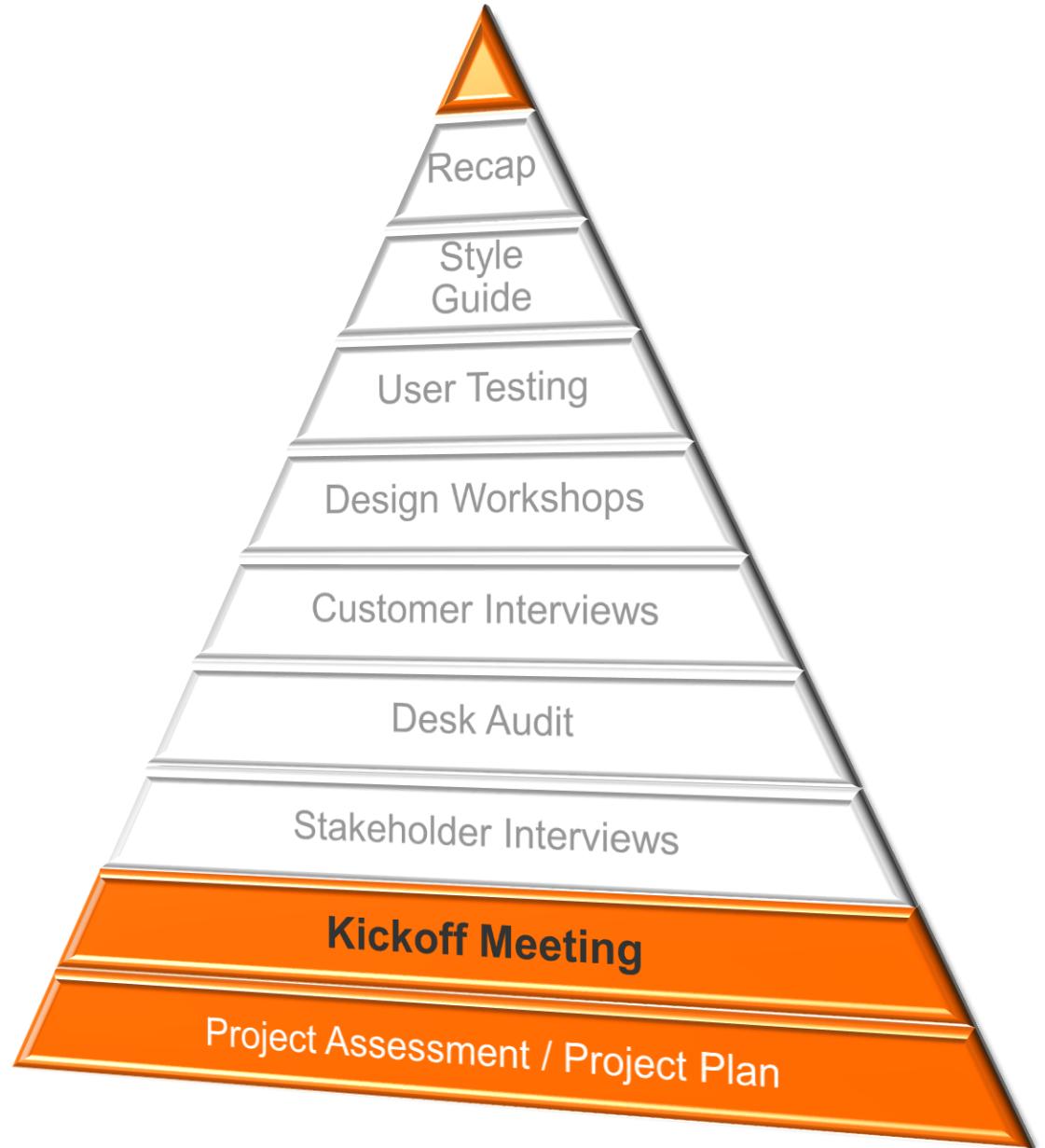


[View Project Plan](#)



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Kickoff Meeting



Kickoff Meeting

Attendees

- Cross-functional group from multiple disciplines, including:
 - Product Management
 - Business Development
 - Technology
 - User Experience

Objectives/Agenda

- User Experience (UX) Professional Services at Fiserv
- Project Plan
- Working Session
- Next Steps



Stakeholder Interviews



Interview Participants

- **Vincent Fraker** Senior Vice President Product Management & Business Development
- **Denise Kudlow** Business Analysis
- **Allison Ellison** Product Management & Business Development
- **Elizabeth Brock** Product Management
- **Alberto Montero** Product Management & Business Development
- **Yosepha Swanson** Product Management & Business Development
- **Sharon Zinken** Product Management & Business Development
- **Christina Meyers** Product Management & Business Development
- **Anita Walch** Product Management & Business Development
- **Sarah Jacobson** Training
- **Catherine Derrickson** Technical Client Services
- **Ray Presley** Technical Client Services



Stakeholder Interview Recap

What We Did

- Interviewed 12 employees spanning multiple roles and departments.
- Each participant discussed likes and dislikes of the current state of Client Central, and verbalized what different users need to know, do, and accomplish on the future redesigned Client Central.
- Discussion topics included:
 - Mission Statement
 - Goals and Objectives
 - Critical success factors (CSF)
 - Users
 - Pain Points
 - Description of Current and Redesigned Applications
 - Competitors and Best-in-Class Applications
 - Internal/External Project Challenges



Stakeholder Interview Recap

What We Learned

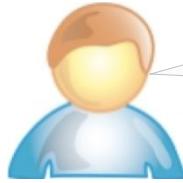
- Everyone had strong opinions about the existing Client Central toolset – and the direction it should be taken.
- Most felt that overall, Client Central provides a lot of value to our clients; however, everyone felt that significant improvements in usability must be achieved in order to improve client satisfaction – and ultimately increase sales.

Comments

- Captured approximately 175 stakeholder comments
 - Provided tremendous insight into participants' thoughts and priorities
 - Reviewed, validated and referenced throughout the project
- Several categories identified throughout this process,
- Grouped together by key categories or “themes”
- Details (*Tabs: Comments by Question; Comments by Category; Stakeholders Interviewed*)



Key Category :: Vision



Provide the most effective toolset to make our clients successful in servicing their consumers.



It's all about the user... there's nothing else.



Provide an efficient tool for the user – to allow them to do what they need and do it as quickly as possible.



Key is making our clients successful in servicing their customers.

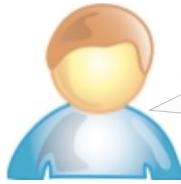


Our existing clients should really like and acknowledge that we made a significant improvement. Get customer agreement that the proposed changes are the right changes for them.



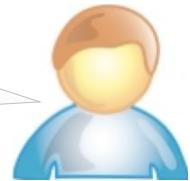
Translating our investments into sales/ability for users to service their customers better.

Key Category :: Navigation/Information Architecture

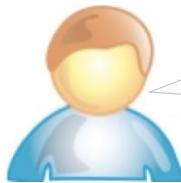


Logically organize the entire site.

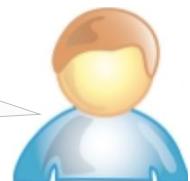
- Allow me to get to specific content from multiple places – especially key information from where I'm at.
- Group like applications within the same tabs.



There is a lot of information in there, but it's not laid out well. We need to take the user into consideration.



Provide a more holistic view of the cardholder, in case cardholder asks a question about a fraudulent charge. Hooking demographic to activity to adjustments would be very critical.

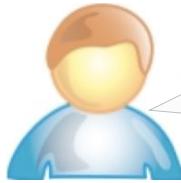


Why can't I get the Terminal documentation while I'm in Terminal? Why should I have to leave Terminal to find its documentation?



Rollovers are KEY! When users mouse over a particular field, users can get field-specific information. Brings a lot of information directly to the users.

Key Category :: General User Experience



Instead of saying that I'm in application "A" which means I can only do "x" functions; we need to look at it as: I have several things to do to help the customer on the phone. How can I easily service this customer from where I am at?



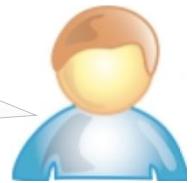
Shouldn't have to be trained on it.



We keep enhancing our systems, which is nice, but they are not always cohesive or designed the best way.



Lack of speed and transmission time an issue with going between apps. Case Tracker is now integrated into one window with Card Management which is much easier.

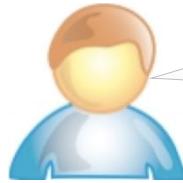


Minimize the copying/pasting from one application to another.

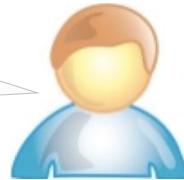


Enter data, enter it once, not have to toggle... zoom from one field to another to the next.

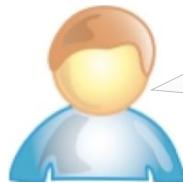
Key Category :: Work Flows



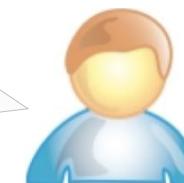
Our systems and corresponding documentation must work in a workflow process.



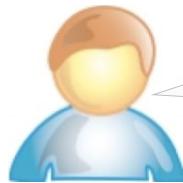
Product should function the way I service my customers, not the way a system is bolted together.



Streamline many of our applications and actions. The Cardholder Record should be the central application for any user. From this application you should be able to easily: Order a card, status a card, view transactions, submit corrections.



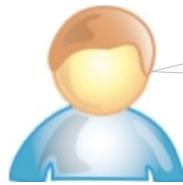
Each user(s) has their own tasks to do. Why can't we have multiple workflows based on what they need to accomplish instead of a common workflow? We can determine what those key workflows are and one person may only need to use two of these workflows, where someone else may need to use all of them.



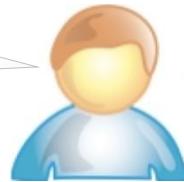
Improve the charge-back process (look at transactions, going in and out of applications and ultimately creating a chargeback.)



Key Category :: Visual Design

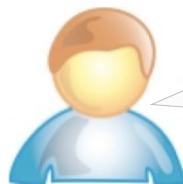


Condensing the screens... make them more concise.

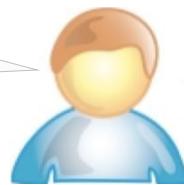


Minimize the amount of white space and use larger, more crisp fonts.

Major Category :: Technology



Tokens. What the heck do I need this for? Key for dual authentication, but there are non-physical solutions. They want Transaction Journal to be at every teller, so they don't want to put up with the token.

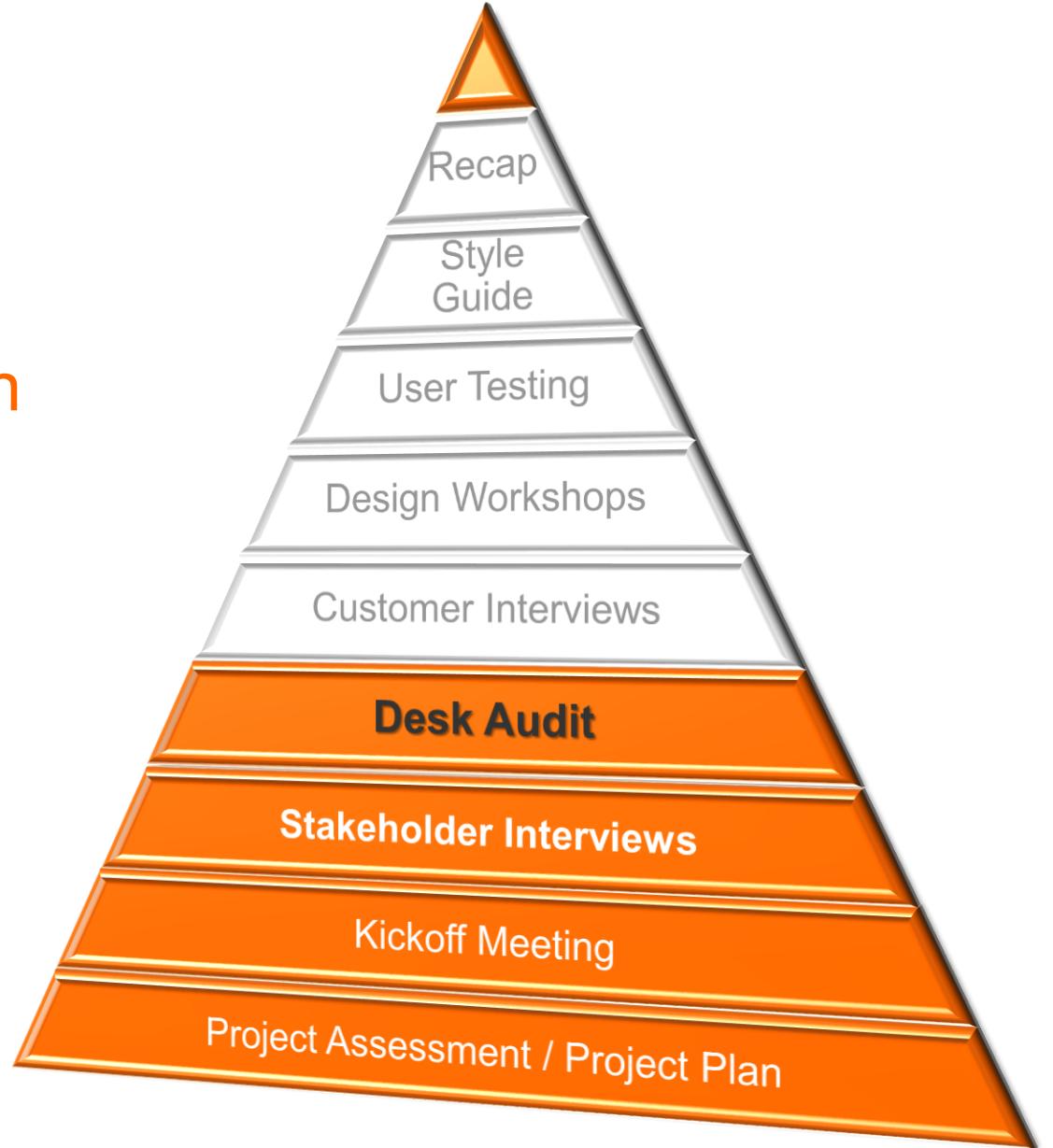


Timeouts. Can we have different timeouts for internal vs. external?

Persona/Workflow Matrix

Who are our users and how important is each workflow to each persona?
(Note: Highest priority personas/workflows are highlighted in the matrix below)

Heuristic Evaluation / Desk Audit



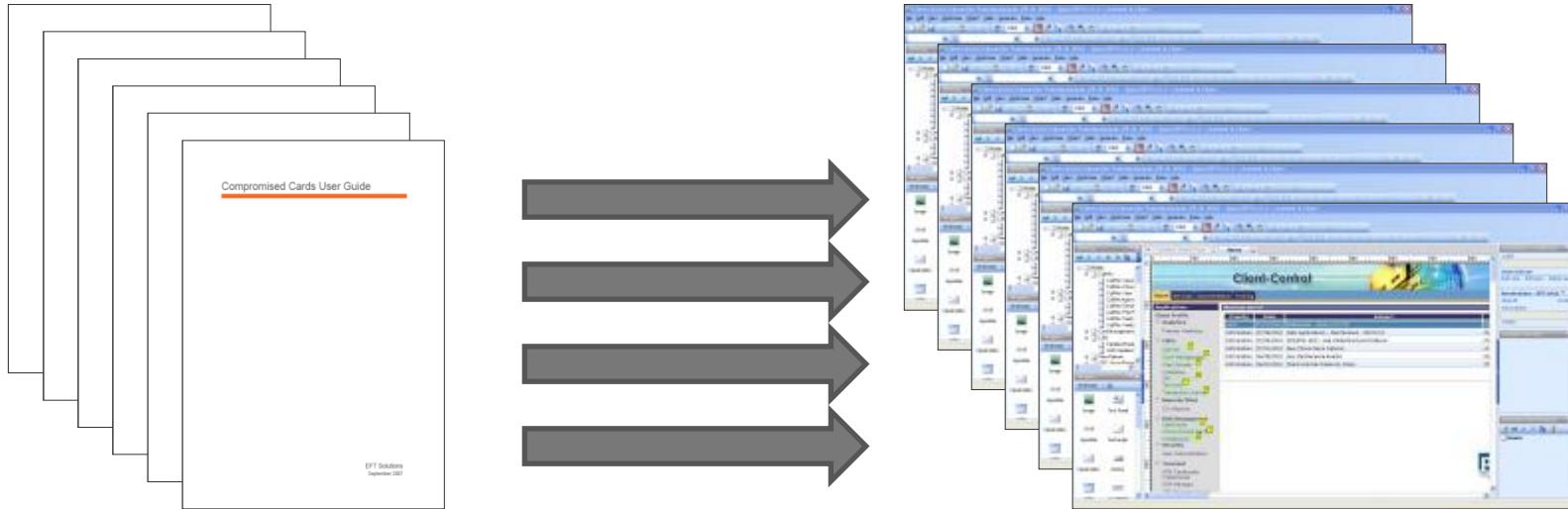
Expert Review – Desk Audit

Initial Challenge

No access to any of the 15 existing products.

Solution

Recreated all products in Axure based on the images and training instructions in their existing training manuals. This process also enabled me to became a subject matter expert.



Process

- Analyzed each key application from a user perspective to determine what changes should be considered to streamline/simplify each application and corresponding process.
- Developed ideas/recommendations throughout the entire iterative design process – and incorporated during design workshops.

High Level Findings/Recommendations

-  Group, organize and display content elements throughout Client Central – and each corresponding page – in a way that is intuitive to users and streamlines their tasks/workflows.
-  Users must have the ability to easily move between applications with all appropriate user and cardholder parameters passed from one application to another.
-  Provide more integration of data/functionality between applications.
-  Provide hovers whenever possible. This not only quickly bubbles data to the user but provides us an excellent way to translate codes into English/user-centric information.
-  Provide date ranges with date pickers whenever possible.
-  Utilize layers when appropriate, as this can provide advantages in many areas.
-  Allow users the ability to click on items within a search results page when appropriate, instead of having to select an item then clicking an action button at the bottom of the page.
-  Extend/eliminate the 90-day rule in TranBlocker.
 - Because of the large number of rules and corresponding expiration dates, many users track/manage these expiration dates in their personal Outlook calendar.
 - Allowing a date to expire by mistake can be a huge financial liability for the FI.
-  Allow users to change the expiration date in TranBlocker instead of having to create a new rule/copy an existing rule.



Customer Interviews



Customer Interviews

Customers that matched our profile

- **First Bank:** Large Bank in St. Louis, MO
- **Service Credit Union:** Medium Credit Union in Rochester, NH
- **Clear Mountain Bank:** Small Bank in Bruceton Mills, WV

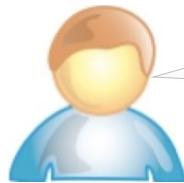


Interviews

- Conducted 10 interviews with 3 financial institutions within a 7-week timeframe.
- Most felt that overall, Client Central provides a lot of value to them. However:
 - Everyone felt that improvements in usability and functionality must be made in order to better meet their needs.
 - Everyone also had strong opinions about the existing Client Central toolset – and some of the changes they would like to see.
- Began to socialize/obtain feedback on some of the initial concepts being considered.



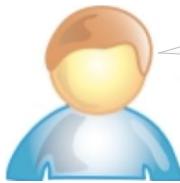
Customer Interviews :: General Functionality



We need the ability to easily interact between applications.



Allow users to go from app to app without having to re-enter card numbers.



I would like to be able to specify my own date range to search.



Minimize having to click from here to there to find the information you need.

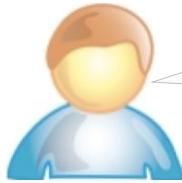


We HATE these tokens! We like the MC tokens, where you don't have to enter a code to get a code.

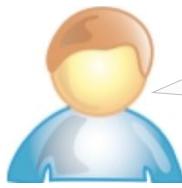


Why can't we double-click a row within a table to go to that record?

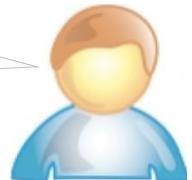
Card Management



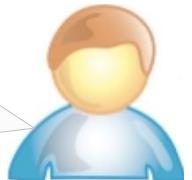
I would like to be able to view and update Names, Addresses, Accounts and all other key information directly on the Details page. That would save me several clicks.



I would really like to have access to recent transactions from Card Management.

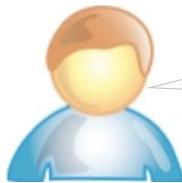


When I go to Card Management for additional information, I must reenter all cardholder information again. Why couldn't Card Management open with this cardholder's information already pre-populated?



Why isn't there navigation throughout all of the pages in Card Management? If I'm looking for specific information, but not sure where to find it – or if I need to go from page to page to obtain information – I must continually open a page, cancel out, and then click on the next page. This is very unnecessary and time consuming.

Terminal

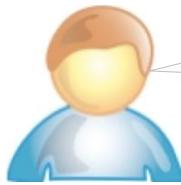


I wish it could go back more than four days – especially during holidays. Six or seven days would be ideal.

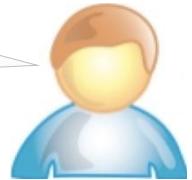


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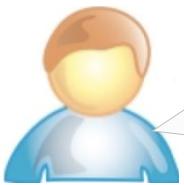
Transaction Journal / SPC



It would be very helpful to have date ranges in TJ and SPC for searching.



It would be great to use hovers to let users know what specific fields mean.



Is there a way to display the information that I need, where I want it – and in a human readable format?

(To determine why a transaction is denied, I must scroll to the right in the search results screen to find the “response code”. I then need to translate this code, using reference chart on my cube wall, which contains a legend of response codes. There has to be a better way!)



The Customized Column view isn't always permanently saved.

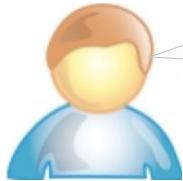


I would like my staff to be able to add/remove fields to reports on the fly as we run reports. This way, they can add a field, select that updated view and their current report would reflect this change.

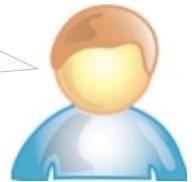


The new design which allows chaining is a great concept, BUT the way it works is very confusing – and hard to use!

TranBlocker



Why are we only limited to 25 Merchant IDs? Because of this limit, we always have unnecessary exposure. We would like to have over 100 rules.



The 90 Day Rule limit is a major pain point for us. I must keep track of all the rule expiration dates in Outlook to make sure a rule doesn't expire – which would be disastrous.

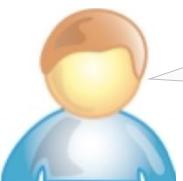


Would it be possible to extend dates instead of creating new rules?



Is it possible to get a Warning that a rule is expiring – with an option to renew from this warning. (Do you want to Renew? Y/N)

CaseTracker



It would be great if we could have access to at least six months – or even a year.



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Workflow & Conceptual Design Workshops



Workflow/Conceptual Design Workshops

Workshop Information

- Bridge between the Discovery and Design Phases
- Conducted over 40 cross-functional design workshops
- Validated/modified key workflow list
- Defined requirements needed within each workflow to make them as effective and intuitive as possible for all users
- Defined all content elements, pages and general layout required for each workflow (as well as non-workflow tasks)
- Effectively grouped/displayed all content on each page

Critical Success Factors for these workshops

- Organize the data elements in such a way as to:
 - Make it intuitive for all users
 - Minimize the number of clicks/pages required to accomplish each key workflow
 - Integrate functionality between applications as appropriate



Key Workflow List (Focused on 28 of 34 Key Workflows)

CM2 and Legacy Card Management

- View Cardholder Record
- Add Cardholder Record
- Copy Cardholder Record
- Status Cardholder Record
- Force Activate
- Maintenance
- Reset PIN tries
- Order Replacement Card
- Cancel Order
- View Order History

Terminal

- View Details
- Balance Mid-Point Adjustment

TranBlocker

- View a Rule
- Add a Rule
- Edit a Rule
- Copy a Rule
- Delete a Rule
- Setting Defaults

Transaction Journal

- Research Capabilities

SPC

- View Financial Transactions
- Initiate Financial Transactions
- Dispute/Adjust Financial Transactions
- Enter Chargebacks / Representments
- Enhanced Chargeback Service

Case Tracker

- View Case (EnFact/InFact)
- Tracker::Update Case
- Manage Record Button (Card Mgmt)

Compromised Cards

- View/Status Compromised Cards

Not in Scope for This Project

- Premier Analytics
- Call Me
- Files Refresh
- Institution
- Client View Internet (CVi)
- User Administration

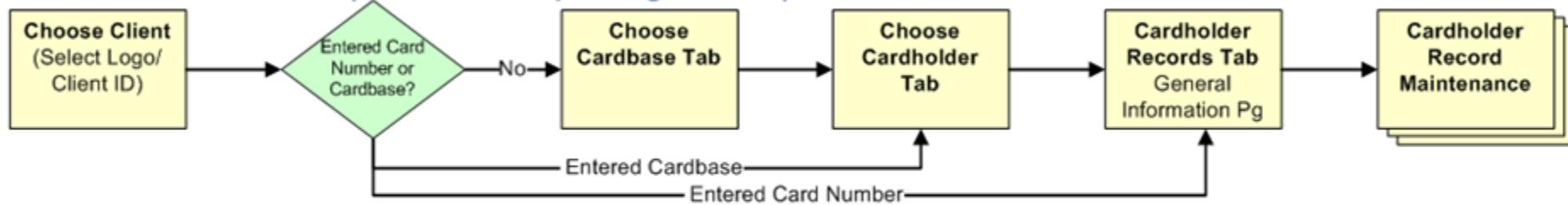


Review Existing and Proposed Workflows

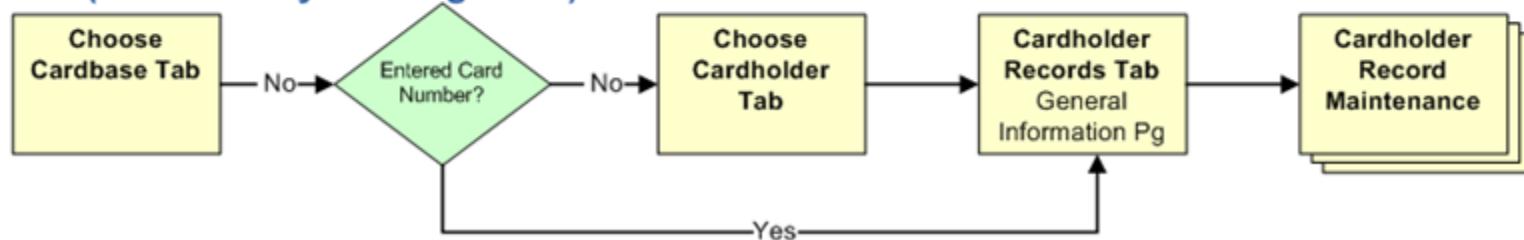
Card Management Workflows::

Finding an Existing Cardholder Record; Adding a New Cardholder Record

Find Cardholder Record (If FI has multiple Logos/FIDs)



Find Cardholder Record (If FI has only one Logo/FID)

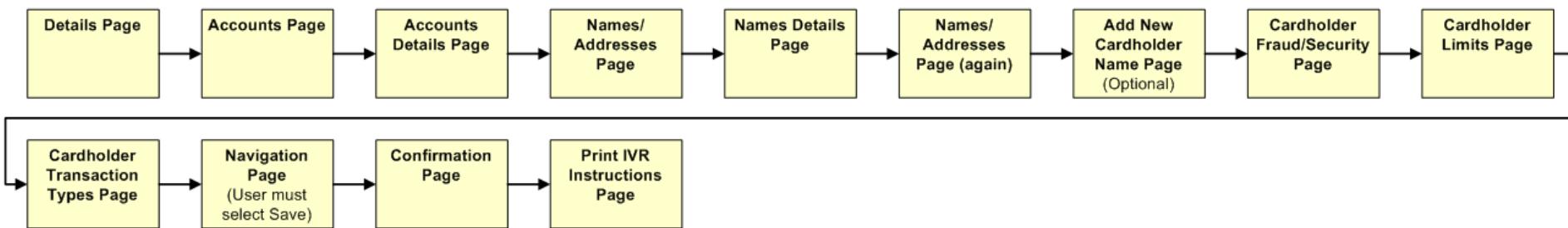


Review Existing and Proposed Workflows

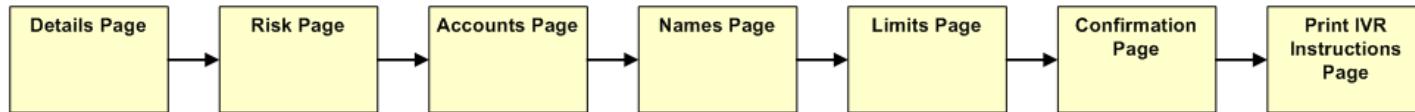
Card Management Workflows

Add Cardholder Record (Using Wizard Pages)

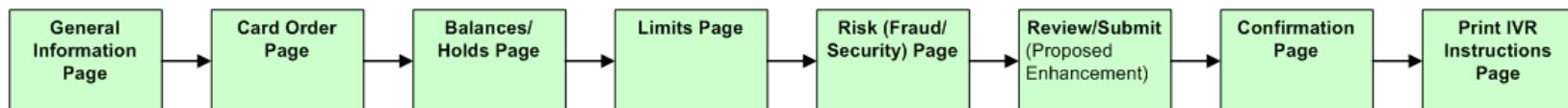
Current Legacy Workflow (13 Pages)



Current CM2 Workflow (7 Pages – but Missing Some Card Ordering and Balances Functionality)



Proposed Workflow (8 Pages – which includes a Review Page)



Workshop Tasks

Define all content elements, pages and general layout

- What content is needed?
 - What existing content elements (information, functionality, buttons, navigation, etc.) should be grouped together into a single “bucket”, to help us simplify/streamline this workflow as much possible.
 - What new content must be incorporated into these buckets?
 - What existing content is no longer required?
- Which pages should be created based on these buckets/groupings.
 - Should multiple buckets/groupings be merged together to create one page?
 - Should this bucket be a page of its own?
 - Should this bucket be divided onto multiple pages?
- How should the content on each page be arranged?

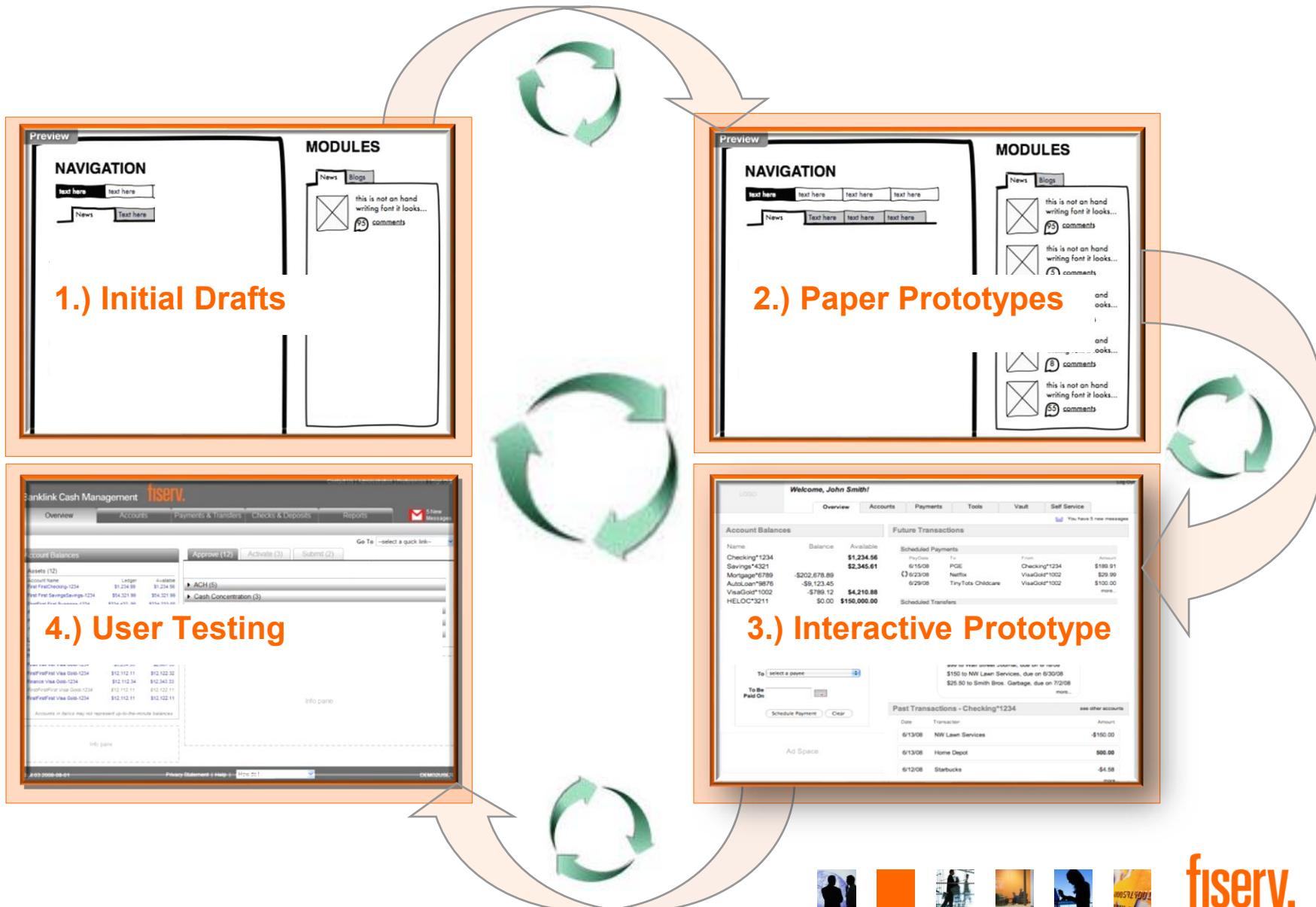


Enter the new contact information below for your appointment(s).
This information does not affect current contacts.

Contact Record	
Key Information	
First Name	Last Name
Address	
Line 1	Line 2
City	State
Zip	Phone
Email Address	
Fax Number	
Find Program Information	
Participation	From Date (Select)
Registration Date	

Transaction Num:	<input type="text"/>
Card Issuer:	<input type="text"/>
Terminal Owner:	<input type="text"/>
Response Code:	<input type="text"/> APPROVED - BOTH BALANCES PROVIDED (012)
Transaction Date:	<input type="text"/> 09/16/2004 00:00:25
Journal Date (ETL):	<input type="text"/> 09/16/2004 00:00:25
Message Type:	<input type="text"/> 018
Retrieval Reference Number:	<input type="text"/> 0148994054010
System Trace Audit Number:	<input type="text"/> 000444442
Sequence Number:	<input type="text"/> 010919
Deposit Type Indicator:	<input type="text"/> 010919
Deposit Link:	<input type="text"/> A
Amount 1:	<input type="text"/> 0.00
Amount 2:	<input type="text"/> 0.00
Cashback Amount:	<input type="text"/> 0.00
Surcharge Amount:	<input type="text"/> 0.00
Surcharge Reversal Amount:	<input type="text"/> 0.00
Currency:	<input type="text"/> 014 (USD)
Conversion Rate:	<input type="text"/> 0.8024000000000001
Response Sub Code:	<input type="text"/> A
Card Logo:	<input type="text"/> VISA
Card Client ID:	<input type="text"/> 01345678
Card Number:	<input type="text"/> 0000001234567890
Member Number:	<input type="text"/> 0
Authorization Code:	<input type="text"/> 12345678
To Account:	<input type="text"/> 00000000000000000000
Hold on Funds Amount:	<input type="text"/>
Card Posting Date:	<input type="text"/> 09/16/2004 00:00:25
Card Country:	<input type="text"/> USA
Card Country:	<input type="text"/> 004 (US-USA)
Card State:	<input type="text"/> PA
Expiration Date:	<input type="text"/>
From Account:	<input type="text"/> 00000000001111111111
Acquirer Trace Data:	<input type="text"/>
Transaction Description:	<input type="text"/>
Network Large Private Data:	<input type="text"/>
Card Holder Address:	<input type="text"/>
AVS Indicator:	<input type="text"/>
POS Geographic Data:	<input type="text"/>
Merchant Advice Code:	<input type="text"/>
Transaction Processing Code:	<input type="text"/> DEPOSIT FROM MONEY MARKET TO CHECKING (002300)
Reversal Code:	<input type="text"/> DEPOSIT OUT OF BALANCE/REFUSED (007)
Point of Service:	<input type="text"/> PAN AND EXPIRATION DATE, NO TRACK2 (009)
Terminal Logo:	<input type="text"/> ABCD
Terminal Client ID:	<input type="text"/> 010919
Terminal ID:	<input type="text"/> 01MED01-POS
Retailer Type:	<input type="text"/> RETAIL
Merchant Identifier:	<input type="text"/> FRANCHISE
Reg E Street:	<input type="text"/> 123 ANY ROAD
Reg E City:	<input type="text"/> ANYWHERE
Reg E State:	<input type="text"/> NY
Acquirer Posting Date:	<input type="text"/> 09/16/2004 00:00:25
Terminal Country:	<input type="text"/> USA
Terminal State:	<input type="text"/> NY
ATM Terminal Country:	<input type="text"/>
Merchant Identification Value:	<input type="text"/>
Local Amount 1:	<input type="text"/> 0.00
Local Amount 2:	<input type="text"/> 0.00
Network ID:	<input type="text"/> 00000000
BCI - Credit MasterCard:	<input type="text"/>
BCI - Visa:	<input type="text"/>
Timestamp:	<input type="text"/> 0000000000
Issuer's PNC:	<input type="text"/> 000
Acquirer's PNC:	<input type="text"/> 000
Network Indicator:	<input type="text"/> 00
PTZ Data:	<input type="text"/>
Network Posting Date:	<input type="text"/> 09/16/2004 00:00:25
Reference Number:	<input type="text"/>
Debit MasterCard Acquirer Reference Number:	<input type="text"/>
Fee Program Indicator:	<input type="text"/>
Payment Phone Number:	<input type="text"/>
AVV:	<input type="text"/>
Transaction Log Address:	<input type="text"/> 00000000

Prototype Design Process



Design Changes

The diagram illustrates several design changes across different sections of the Client WorkStation application. The changes are represented by curved arrows pointing from the original design to the revised design.

Card Management - Cardholder Details: The original design shows a cardholder form with fields for Cardholder ID, Cardbase, Member Status, Cardholder Information, and Cardholder Record Information. The revised design shows a more detailed cardholder form with additional fields like Card Type, ZIP Code, Retain Card, Card Exp. Date, Old Card Exp. Date, On-Us Surcharge Override, Last Hot Carding Date, and Time.

Card Management - General Information: The original design shows a general information form with fields for Date Created, Priority, Type, Created By, and Notes. The revised design adds fields for Card Number, Client ID, Logo, and Branch, and includes sections for Key Information, General Information, and Risk / Limits / Balances & Holds.

SPC - Retrieve and Select Transaction: The original design shows a transaction search form with fields for Institution, Date and Time, and Search Criteria. The revised design adds a Contact Info section and a more detailed Search Criteria section with additional fields like Response Code, Sequence Number, Transaction Code, and Additional Criteria.

Accounts: The original design shows a list of accounts with columns for Card Number, Transaction Date, Transaction Net Amount, Network ID, Transaction Code, and Message Type. The revised design adds a Search Results section with a table showing the same information, including rows for 4086049013903333 and 4086049013903333.

Transactions: The original design shows a list of transactions with columns for Card Number, Transaction Date, Transaction Net Amount, Network ID, Transaction Code, and Message Type. The revised design adds a Search Results section with a table showing the same information, including rows for 4086049013903333 and 4086049013903333.

Key Customer Issues/Pain Points

Top three customer Issues/Pain Points

- ⚠ Provide the ability for users to easily move between applications with all appropriate user and cardholder parameters passed from one application to another.
- ⚠ Provide more integration of data/functionality between applications.
- ⚠ Group, organize and display content elements throughout Client Central – and each corresponding page – in a way that is intuitive to users and streamlines their tasks/workflows.

How did we address these issues?

- Global Hidden Navigation (Global)
- Integration of data between applications (Card Management Compromised Cards)
- Completely changing the information architecture (Card Management) (Customer Comment)
- Provide hovers whenever possible (Card Management Terminal CaseTracker)



Other Key Changes

General

- Hidden Left Navigation (TJ/SPC)
- Multi-select preview (TJ/SPC)
- Hovers (Card Management, Terminal, CaseTracker)
- Sortable Headers in most tables (TJ/SPC)
- Single-Click with color changes (TJ/SPC)
- Multiple Customizable Column Views (with drag 'n drop creation) (TJ/SPC)
- Pagination (TJ/SPC)

Card Management

- Add Name & Optional ZIP Code Search
- Key Links
- Recent Transactions
- Multi-select preview within the Transaction Activity
- Link to Transaction Journal (View this list of transactions in TJ)
- Maintenance History



Other Key Changes (Continued)

SPC

- Date Range Option with Date Picker
- Image/Doc Upload Management

Compromised Cards

- View/print Risk Alert information
- Ability to Status one or all cards in one action
- Ability to Reissue one or all cards in one action
- Ability to View one or all cards in Card Management in one action

TranBlocker

- Summary Page with Edit Links
- Ability to extend a rule by just changing the end-date
- Ability to create/update rules with an extended/without an expiration date
- Defaults displayed on each (Countries, MCC and Card Acceptor IDs) page
- Ability to change multiple rows at once (matching changeable defaults)
- Ability to add more rows (as many as they need) dynamically that can match changeable defaults



User Stories

User Story #1 [Click Reduction of 93.7% – for a very common workflow]

(Reduction of clicks from 1003 to 63)

- Beth is a supervisor at a large bank who is training an employee how to use Compromised Cards. They received an e-mail from Fiserv that a compromise has occurred.
- They view the severity of the compromise, and which cardholders are affected and see that the severity level is 1. Consequently, they decide to status all cards within this alert as “Stolen” and reissue cards for all cards that they are statusing.

Legacy system (50 Cards = 1003 Clicks to status & reorder every card)

Compromised Cards

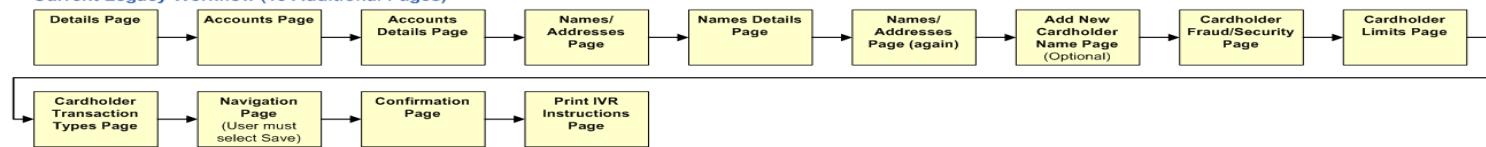
1. **Select Institution Page:** Enter the Logo or Client ID
2. **Card Alerts Page:** Enter criteria and select Search
3. **Card Alerts Page-Search Results:** Select Alert, then either View Cards or Download Card Numbers to determine which card numbers are impacted in this alert

Card Management

1. **Select Client ID/Logo Page:** Enter cardbase of the first impacted card number
2. **Choose Cardholder Page:** Enter the first card number
3. **Selected Cardholder/Navigation Page:** Select Details from the navigation
4. **Details Page:** Status the first card number
5. **Selected Cardholder/Navigation Page:** Select the Update button
6. **Select Client ID/Logo Page:** Enter cardbase for new cardholder record
7. **Choose Cardholder Page:** Select the Add button

Add Cardholder Record (Using Wizard Pages)

8. **Current Legacy Workflow (13 Additional Pages)**



Each subsequent card: Repeat Card Management Steps 1-8 (20 pages per card)



User Stories

User Story #1 (Continued)

New system (50 Cards = 63 clicks to status & reorder every card*)

Compromised Cards

1. **Select Institution Page:** Select or Enter Logo/FIID
2. **Card Alerts Page:** Enter criteria and select Search
3. **Card Alerts Page-Search Results:** Select Alert, then either View Cards to see the actual alert and which card numbers are impacted in this alert
4. **Alerts Details Page:** Select All (or specific cards to be statuses)
5. **Compromised Cards – Status Cards layer:** Select the “Select All Card Numbers (or specific cards to be statused) and the “Automatically reissue new cards” checkboxes

***Optional validation in Card Management:** If users want to view each cardholder record for validation, they can select the “View Updated Cards in Card Management” link to view/rotate through each of the 50 cardholder records.

“I like that you actually put the details of the alert in Compromised Cards. Before I would just get the case number, then I’d have to go out to MasterCard, pull up that case number, figure it out what details are at risk.”

Provides more integration of data/functionality between applications.



User Stories

User Story #2 [Click Reduction of 77.8% – for another common workflow]

(Reduction of clicks from 90 to 20)

- Sara, an administrator at a medium-sized credit union, received a call from a member stating that she just got married and would like to change her name, address and phone number.
- Sara would like to be able to do this as quickly and easily as possible – for the sake of both her and the member.

Legacy system (90 Clicks to accomplish task)

1. **Select Client ID / Logo page:** Enter the member's cardbase
2. **Choose Cardholder Page:** Enter the member's card number
3. **Selected Cardholder/Navigation Page:** Select Details from the navigation
4. **Details Page:** Change name
5. **Selected Cardholder/Navigation Page:** Select Names & Addresses from the navigation
6. **Names & Addresses Page:** Change address
7. **Selected Cardholder/Navigation Page:** Select Risk from the navigation
8. **Risk Page:** Change phone number
9. **Selected Cardholder/Navigation Page:** Select the Update button

(Another Pain Point: without selecting the Update from the final Navigation page, none of these changes would be saved.)

New system (20 Clicks to accomplish task)

1. **Select Client ID / Logo page:** Enter the member's card number
2. **General Information Page:** Change the members name, address and phone number, then select the Save button (at the top or bottom of the screen)

Grouped, organized and displayed content elements throughout Client Central – and each corresponding page – in a way that is intuitive to users and streamlines their tasks/workflows.



Conceptual Design :: Technical Review

(Review with Development and QA)

Project Overview

- Project Objectives
- Completed Tasks

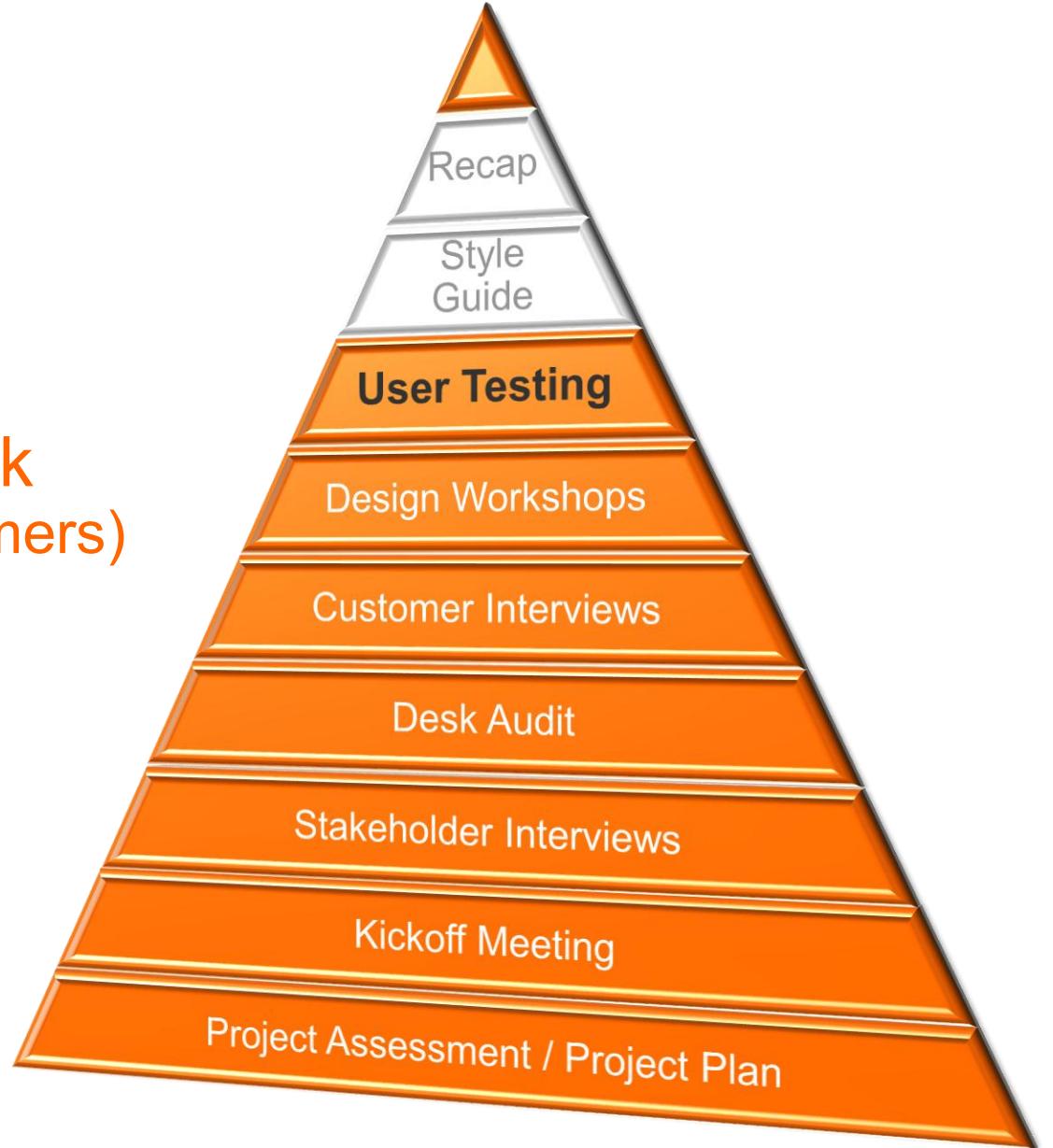
Project Status “Where we are now?”

Key Technology Recommendations

- High-Level Discussion
- Prototype Walkthrough and Discussion
- Recap/Q&A



User Testing & Customer Feedback (From External Customers)



User Testing & Customer Feedback

Provides Critical User Feedback

- Establishes how user-friendly each of the redesigned application is to understand, navigate and use
- Allows us to better understand how participants/users try to accomplish each task
- Uncovers any key pain points that still may be associated with each application
- Allows us to discuss with each participant during or after the test
 - What did & did not work well for them
 - What they liked & disliked about each applications (or the suite as a whole)
 - Recommended changes



User Testing & Customer Feedback

What We Did

- Conducted 9 user testing/customer feedback sessions with external customers
- Included 13 participants spanning multiple roles and departments
- Sessions were based on each participant's understanding/knowledge of a particular application.

Applications & Discussion Areas (Covering 28 of the 34 Key Workflows)

- Card Management (8 Tasks/10 key workflows)
- SPC/TJ (4 Tasks/ 6 key workflows)
- CaseTracker (3 Tasks/ 3 key workflows)
- Compromised Cards (2 Tasks/ 1 key workflow)
- TranBlocker (6 Tasks/ 6 key workflows)
- Terminal* (2 Tasks/ 2 key workflows)
- General Functionality Recommendations (Review & Rate)

** We were to test the Terminal application with First Bank; however, they ultimately decided not to participate in this application.*



Participants

External Customer Participants

- **First Bank; Missouri**
 - **Group participation** Chris Kennedy (VP),
Betty Walz, Amber Abrahams, Stephanie, Virginia Wolf
- **Clear Mountain Bank; West Virginia**
 - Traci Samson
 - Sharon Hope
- **Service Credit Union, New Hampshire**
 - Audrey Miller
 - Bobbi Larson
- **Vystar Credit Union, Florida**
 - Christina McDonald
 - Julie Brice
 - Leah Mason
 - Maria Britz



Key Tasks/Workflows

Card Management

- Viewing and Modifying an Existing Cardholder Record
- Reset PIN Tries
- Status a Cardholder Record as “Lost”
- Copy a Cardholder Record
- Add New Cardholder
- Order a Replacement Card
- Cancel a Card Order
- Card Activation

SPC/Transaction Journal

- Review a Transaction
- Initiate and dispute this transaction
- Initiate (and Dispute) a Financial Transaction
- Change Your Column View Settings

CaseTracker

- View Case
- Update a Case
- Manage Record (Link to Card Management)



Key Tasks/Workflows

Compromised Cards

- View/Status Compromised Cards
- Validate Changes in Card Management (Link to Card Management)

TranBlocker

- View a Rule Set
- Edit a Rule Set
- Add a Rule Set
- Copy a Rule Set
- Delete a Rule within a Rule Set
- Setting Rule Defaults

Terminal*

- View Details
- Balance/Midpoint Adjustment

(*No user testing was completed for this application)



Key Findings

General Comments

- All tasks throughout the user testing process were accomplished relatively quickly. There were some areas that caused hesitation for participants, but these issues were addressed and tested well with subsequent participants.
- Everyone really liked our proposed changes to the entire Client Central suite of applications! They feel we've been able to focus on the areas that were important and significantly streamline/improve these applications.
- Those who participated in the Customer Interviews felt that we listened to what they said and were able to significantly improving this toolset in a way that makes them far more effective – and successful – in servicing their customers.
- We received a lot of comments, such as:
 - “This all looks great, it’s much easier to use!”
 - “I really like everything you’ve done!”
 - “We currently could not utilize some of the functionality being proposed [in the new prototype]; however, we may try to come up with a way to do this type of processing via Client Central instead of our [internal] CVS system.”
Chris Kennedy, VP First Bank
- Overall – great customer user testing results – and **Excellent** response to the new prototype!

Key Findings

Card Management

- Most participants had never attempted to complete some of these tasks before; however, nearly all completed these tasks quickly.
 - There were a couple of areas that caused some hesitation; but were modified and tested well with subsequent users.
- Most participants took time to study many of the pages, especially the General each page; however, they all really liked the content and overall design.
- Nearly everyone commented that these changes would significantly streamline their ability to service their customers.
 - “You have everything encapsulated on this one page...I like being able to do so much from this page.”
 - “We change a lot of names. Before we had to click an additional tab in order to do this and there would be a delay to get to that screen. So it would be great if the names can be changed from this [General Information] screen!”
 - “I like all of the changes, including the updated General Information page design!”
- The “Recent Transactions” tab was another HUGE hit and was rated consistently as one of the top proposed improvements to Client Central.
- Key Links was also highly rated.

Key Findings

SPC/Transaction Journal

"This seems a lot better than what we currently have. Not saying that what we have is bad in any way, but this is much more user-friendly."

- Two of the four participants were new SPC/TJ users and one was a RAS user; however, most tasks were completed relatively quickly.
 - Like many of the applications, there were a couple of areas that caused hesitation; but were modified and tested well with subsequent users.
- Top Rated Enhancements
 - The start and end dates
 - Hovers
 - Single-click selection with color change
 - Multi-select preview
 - Sortable headers
 - Image/document upload management process
- *"This is MUCH Better! The file management is one of the best screens I've seen and will save me a lot of time!"*
- *"Wow!" She really likes the doc upload management functionality. "This seems very user-friendly from what I've been trained on. I do like this, very much."*



Key Findings

CaseTracker

- Everyone completed these tasks quickly.
- Most participants commented that they like the fact that the system will now automatically update Card Management without having to do this manually.

Compromised Cards

- Everyone completed these tasks quickly; however, I made several enhancements as a result of participant feedback.
- All participants were thrilled with the changes in this application – from limited read-only functionality to a tool with significant integration with Card Management.

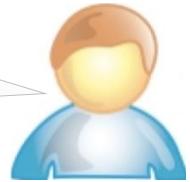
TranBlocker

- Most participants completed these tasks quickly.
- Like many of the applications, there were a couple of areas that caused hesitation. These areas were modified and tested well with subsequent users.
- Top Rated Enhancements:
 - Ability to extend a rule by just changing the end-date
 - Ability to create/update rules with an extended/without an expiration date
 - Ability to change multiple rows at once (matching changeable defaults)
 - Ability to add more rows (as many as they need) dynamically that can match changeable defaults

Customer Feedback (Click Icons for Sound Bites)



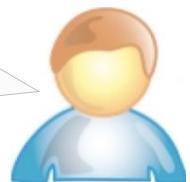
Hidden Navigation: We can tell you right now, that we rank that as a number one. No questions asked...
...This has been the number one usability frustration that we have.



Hidden Navigation: Oh, that's awesome! Because it automatically copies this information to the next screen... I absolutely love that!



Sortable Headers: I like that. I really do. Because we have a difficult time in trying to see all of the transactions for this particular person that are in (code) 5542, the gas station... Oh, That would be great!



Cross Application: The few things that I've seen, and I've heard from people are really the cross-application movement. Not having to re-key somebody's card number or data ranges multiple times between applications. (huge) I just think its a lot friendlier. It's viewing things more dynamically than it was before... Good direction, I like it.



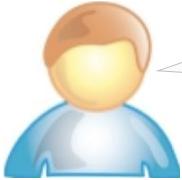
Single Click: I would rank that as phase 1.



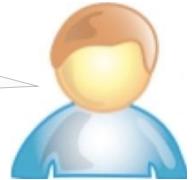
Color Change (from single click): I do, I like that a lot. Because that way when you've clicked on something, it's like I've already gone to that one then I can go on to the next one.



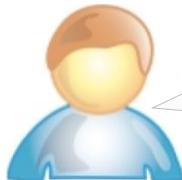
Customer Feedback (Click Icons for Sound Bites)



Cross Application: Out of anything I've seen, the one thing that is the most dynamically necessary is being able to move from application to application without having to exit entirely. That really is primary.



Recent Transactions: Oh wow... That would be top of the list!



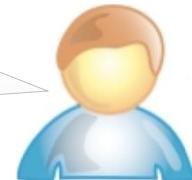
General Information Page: We change a lot of names. Before we had to click an additional tab in order to do this and there would be a delay to get to that screen. So it would be GREAT if the names can be changed from this [General Information] screen!



Wizard Arrows: I did like how you have the progression arrows at the top, so you can see where it was going to Risk then to Limits...



General Layout Design: It gives a little bit more of a point and click feel, where you can see something. click right on it rather than having to go back. In the current system it feels like you have to go tab to tab... I think this would be more user-friendly for the staff in trying to do some of the things they do.



Date Range: Oh my gosh. Yes, that's very important. It's really difficult for us search the transactions without that. I have to click one by one. That would be really important for me.



More Feedback



General

- Single Click/Color Change
- Hidden Navigation
- Hovering, Hidden Navigation, Date Ranges

SPC

- Document Management
- More than 100 Transaction

Compromised Cards

- Alert Details
- Hovers

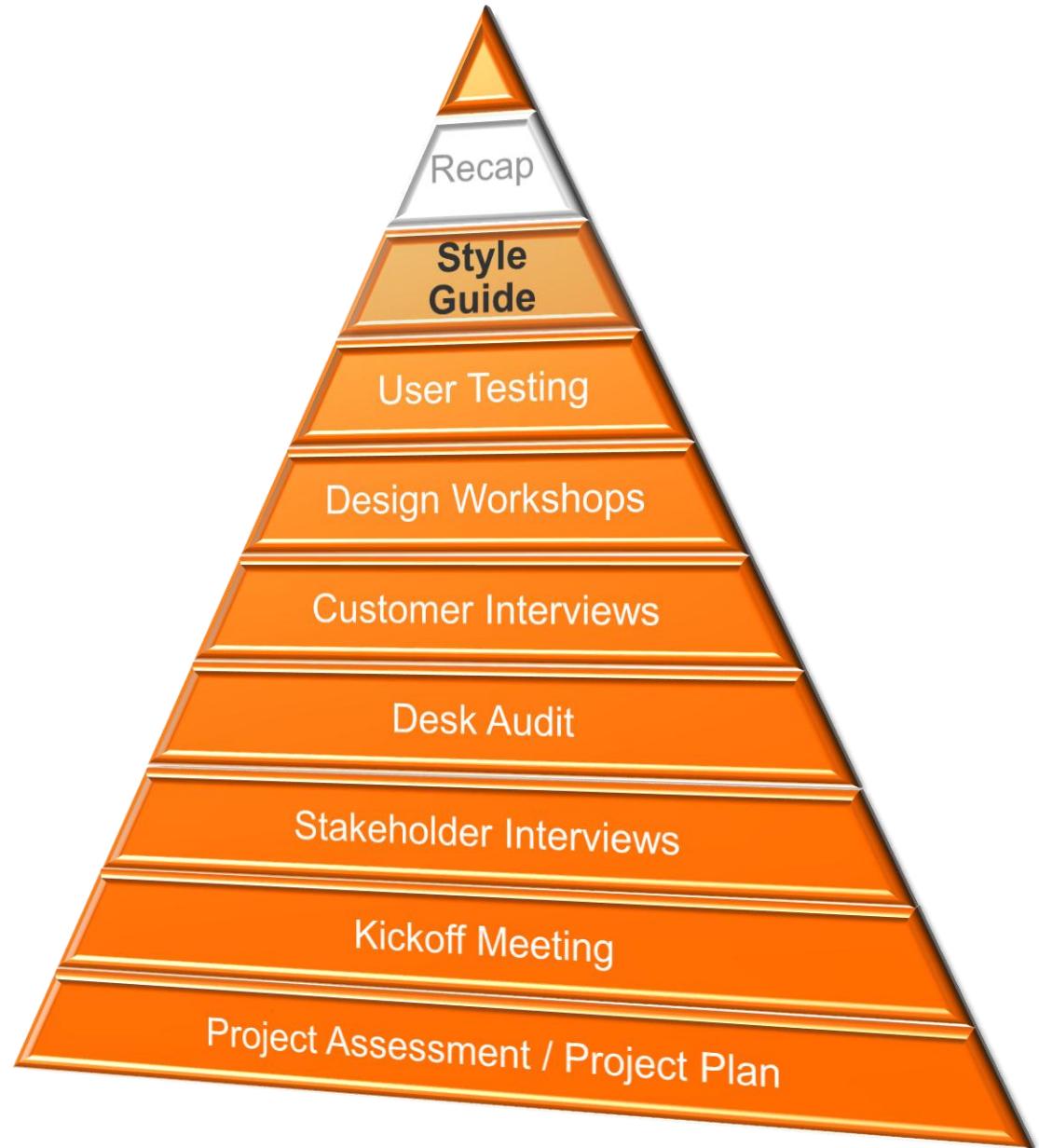
TranBlocker

- Extended – or No Expiration Dates
- Customer Feedback
- Multiple MCCs
- Summary Page with Edit Links



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Style Guide



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Client-Central

Home Services Documentation Training

Welcome Janet! | Log off

Applications

Client Profile

Analytics

Premier Analytics

CWSi

Call Me

Card Management

Files Refresh

Institution

SPC

Terminal

Transaction Journal

Reports/Files

CVi Reports

Risk Management

CaseTracker

Compromised Cards

TransBlocker

Security

User Administration

Terminal

ATM Cardholder

Preferences

ATM Manager

ATM Marketer Inquiry

Message Board

Priority	Date	Subject	Category	From
Alert	07/27/2010	Settlement - Work of 07/23	Operations	EFT
Information	07/26/2010	Web Applications - Maintenance - 08/21/10	Operations	EFT
Information	07/09/2010	UPDATE: SPC - Fee Collection/Fund Disburs.	Announcements	EFT
Information	07/01/2010	New Phone Menu Options	Announcements	EFT
Information	06/28/2010	July Maintenance Events	Operations	EFT
Information	06/01/2010	Client-Central Inactivity Policy	Other	EFT

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Home Services Documentation Training Cardholder

Applications

Analytics

Premier Analytics

CWSi

Call Me
Card Management
Files Refresh
Institution
SPC
Terminal
Transaction Journal

Reports / Files

CVi Reports

Risk Management

Case Tracker
Compromised Cards
TransBlocker

Security

User Administration

Terminal

ATM Cardholder
Preferences
ATM Manager
ATM Marker Inquiry

Message Board

Priority	Date	Subject	Category	From
Information	11/19/2010	Client Central Inactivity Policy	Other	EFT
Information	11/05/2010	UChoose Rewards Website Maintenance	Announcements	EFT

Class and Event Reminder

[Launch Register Me](#)

You are not currently registered for a training session.

Open Applications

Card Management
Compromised Cards
User Administration



Contact Us ATM Locator ACCEL / Exchange Privacy Statement Terms of Use FAQs

Client WorkStation

Card Management - Cardholder Details

Choose Client | Choose Cardbase | Selected Cardbase | Card Class | Order History | Cardholder | **Selected Cardholder**
 Details | Risk | Accounts | Holds | Names | Orders | Limits | Usage | Activation | Print Record

Key Information
 Logo: CCTG Client ID: 87654321 Card Number: 2086030000009993 Member: 1

Cardholder
 Card Number: 2086030000009993 Member: 1
 Card Class: VISA DEBIT (VSCK) Expiration Date: 08/13
 Status: Active Old Expiration Date:
 Reason: None Member Since: 08/10

Name(s)
 Name (Last, First M) Suffix Additional Emboss Line Plastic ID
 TEST, DOCUMENTATION 000

Total Names: 1

Address
 Line 1: 1234 MAIN ST
 Line 2 (optional):
 City: DOCUMENTVILLE State: OR ZIP Code: 97110
 Country: UNITED STATES (USA)

Account(s)
 Account Number Type Description Status Primary Restrict Transactions to
 123456789 Checking 123456789 Active Yes No Restrictions

Total Accounts: 1

Default Account Types

ATM: Checking POS: Checking

Card
 Order Type: N/A Reissue: Yes Cardholder Fees: No
 CardTracker Severity: None

Pin Information
 PIN Offset: 0000 Phone PIN Reference: Indicator: N

Activation
 Status: Card Not Activated Force Activate Card:
 VRU Activation Type: Social Security Number VRU Activation Value: 1234
 ATM/POS Activation Type: Not Applicable

History
 Opened: 08/16/2010 First Used: 00/00/0000
 Last Card Order: 08/16/2010 Last Used: 00/00/0000
 Last PIN Order: 08/16/2010 Status Changed: 00/00/0000
 PIN Offset Changed: 00/00/0000

Last Maintenance
 Date: 08/16/2010 Time: 19:21:43 By: CU

Update Copy Cardholder VbV/MSC Reset Change Card Class Previous Record Next Record

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Card Management - Cardholder General Information

Choose Client | Selected Cardbase | Card Class | Order History | Cardholder | **Selected Cardholder**
 General Information | Risk | Limits & Usage | Balance & Holds | Orders | Print Record | Transaction Activity

Key Information
 Cardholder Name: SMITH, JOHN Logo: BDFN Card Number: 1234567890123654
 Client ID: 99999999 Member: 1 BIN: ###

eNotes
 Date Created Type Created By Restrict Transactions
 09/05/2010 Priority kreddy01 Upcoming trip to South Africa 10/15/2010-11/30/2010
 08/07/2010 Permanent kreddy01 Pronunciation of first name ah-beh-GOON-dey

[+ Add a Note](#) [Manage a Note](#)

Cardholder Record Information

Card Number:	Phone PIN Ref:	Card Status:	Not Active
Card Type:	PIN Offset:	Retain Card:	Not Active
Expiration Date:	Failed PIN Tries:	Reason Code:	
Old Exp Date:	Activation Status:	Member Since:	
Good From Date:		Branch:	

Key Links
[Reset PIN Tries](#)
[Force Activate](#)
[Copy Cardholder](#)
[Card Deactivate](#)
[3-D Secure Reset](#)

Names
 Mbr Name (Last, First, M) Suffix Additional Embossed Line Plastic Type Order Type Apply IVR PIN Order Date Order Status
 1 Smith, John, D

[+ Add Another Name](#)

Addresses
 Line 1 Line 2 (Optional) City State ZIP Code Country
 1 123 Main St Carlsbad CA 92008
 2

[+ Add Another Address](#)

Contact Information
 Home Phone: Mobile Phone: Work Phone:
 Home Phone 2: Mobile Phone 2: Work Phone 2:
 Preferred Contact: Mobile Phone 1 Alternate Contact:
 Method:

Misc Contact Information
 Contact Detail: Document Exchange:

Accounts

Account Number	Type	Description	Status	Primary	Restrict Transactions
0123456789101112	Not Active		Not Active	Yes	No Restrictions
0123456789101112	Not Active		Not Active	Yes	No Restrictions

[+ Add Another Account](#)

Last Maintenance Date: 10/15/2010 Time: 11:19:23 By: 0255/0070

[Save](#) [Cancel](#)

The screenshot shows the Client Central interface. At the top, there's a navigation bar with links for Home, Services, Documentation, Training, and Cardholder. Below this is a sidebar with sections for Applications (Analytics, Premier Analytics, Card Management, ATM Management, Terminal Journal, Reports / Files, CVV Reports, Risk Management, Cardholder Management, Security, User Administration, Terminal, ATM Controller, ATM Processor, ATM Manager, ATM Hosted Reply), and a Footer with links for Connect Us, ATM Locator, ACCEL Exchange, Policy Statement, Terms of Use, and FAQs. The main content area has sections for Message Board, Class and Event Reminder, and Open Applications. The Message Board table has columns for Priority, Date, Subject, Category, and From. The Class and Event Reminder section shows a message about not being registered for a training session. The Open Applications section lists Card Management, Compromised Cards, and User Administration. A PCI DSS logo is in the bottom right corner.

Client WorkStation *i*
Card Management - Cardholder General Information

Choose Client
Selected Cardtype
Card Class
Order History
Cardholder
Selected Cardholder

General Information
Card Order
BN
Balance & Points
Links
Final Record Review

Key Information
Cardholder Name: SMITH, JOHN
BN#
Card Number: 1234567890123456

Client ID: 99999999
Logo Member
BN#:
###

[Save](#)
[Cancel](#)

eNotes 1

Date Created	Type	Created By	Recent Transactions
09/05/2010	Priority	lkeydash01	Upcoming trip to South Africa 10/15/2010-10/30/2010
08/07/2010	Permanent	lkeydash01	Pronunciation of first name ah-beh-GOON-ey

[+ Add a Note](#) [Manage a Note](#)

Cardholder Record Information

Card Number:
PIN Reset:
Card Status:

Card Type:
PIN Offset:
Reason Code:

Expiration Date:
Activation Status:
Member Since:

GeoID From Date:
Branch:

Names

General Information	Card Order	Risk	Balance & Holds												
Key Information <table border="1"> <tr> <td>Cardholder Name:</td> <td>SMITH, JOHN</td> <td>Logo:</td> <td>BDFN</td> </tr> <tr> <td>Client ID:</td> <td>99999999</td> <td>Member:</td> <td>1</td> </tr> </table>		Cardholder Name:	SMITH, JOHN	Logo:	BDFN	Client ID:	99999999	Member:	1						
Cardholder Name:	SMITH, JOHN	Logo:	BDFN												
Client ID:	99999999	Member:	1												
eNotes i <table border="1"> <thead> <tr> <th>Date Created</th> <th>Type</th> <th>Created By</th> <th>Details</th> </tr> </thead> <tbody> <tr> <td>09/05/2010</td> <td>Priority</td> <td>kreddy01</td> <td>Upcoming trip to South Africa</td> </tr> <tr> <td>08/07/2010</td> <td>Permanent</td> <td>kreddy01</td> <td>Pronunciation of first name</td> </tr> </tbody> </table>				Date Created	Type	Created By	Details	09/05/2010	Priority	kreddy01	Upcoming trip to South Africa	08/07/2010	Permanent	kreddy01	Pronunciation of first name
Date Created	Type	Created By	Details												
09/05/2010	Priority	kreddy01	Upcoming trip to South Africa												
08/07/2010	Permanent	kreddy01	Pronunciation of first name												

Style Guide

Style Guide

Colors Usage

#c1c1c1

#aaaaaa

#777777

General Information

Card Order

Task

Balance & Hold

Key Information

Cardholder Name: SMITH, JOHN

Card ID: 99999999

Logo: Member

BOFN: 1

#777777

#ffffff

#fefef

#555555

#bdbdbd

eNotes

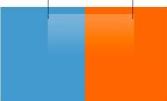
Date Created	Type	Created By	
09/16/2010	Priority	kreddy11	Upcoming trip to South Af
09/17/2010	Permanent	kreddy11	Pronunciation of first name

+ Add a Note Manage a Note

#6699cc

Image Usage

Below is an example of how the overlay.png image is used as a background image to create gradients over any color. It is a semi-transparent white image that is tiled horizontally over the width of the element. Anywhere that a gradient is used in the mockup, this approach is used.



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te view details

Name (Last, First, M)	Suffix	Additional Embossed Line	Plastic Type	Order Type	Apply I/M P/M	Order Date	Order Status
John D				Cart X P/M			Open

WorkStation*!*

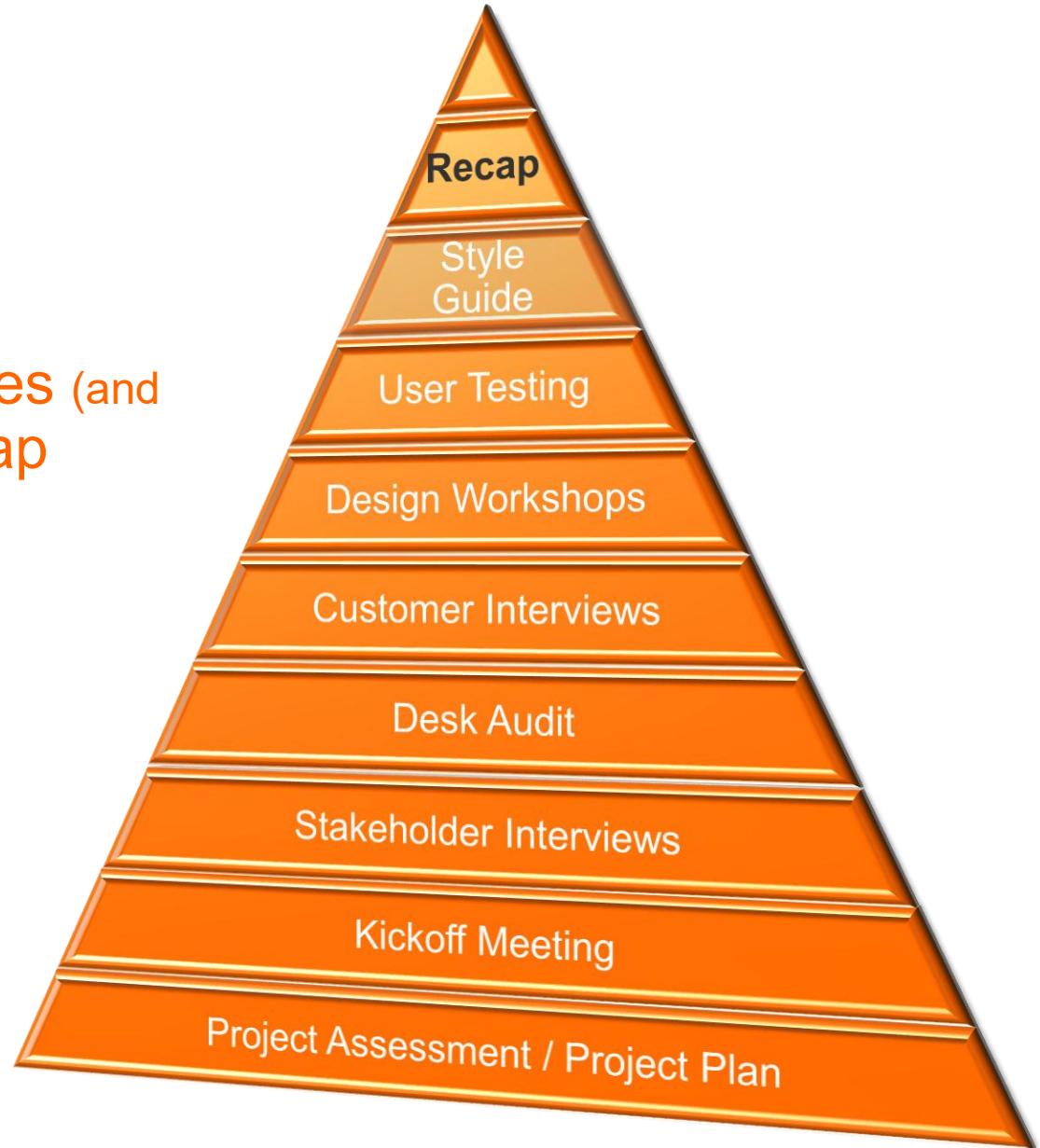
ard Number: 1234567890123654
IN: ##

[View Detail](#) [Open SPC](#)



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Recommended Priorities (and “Quick Hits”), Project Recap and Recommended Next Steps



Recommended Priorities and “Quick Wins”



fiserv.

Customer Priorities

General

- 5: Information Architecture Redesign
- **5: Hidden Left Navigation**
- 5: Multi-select preview
- **5: Hovers**
- **5: Sortable Headers in most tables**
- **5: Single-Click with color changes**
- 3: Multiple Customizable Column Views (with drag 'n drop creation)
- 3: Pagination

Card Management

- 3: Add Name & Optional ZIP Code Search
- **5: Key Links**
- **5: Recent Transactions**
- **5: Multi-select preview within the Transaction Activity**
- **5: Link to SPC (View this list of transactions in SPC)**
- 4: Maintenance History

Rating Scale 1-5: 1 is Low Importance 5 is High Importance
Bold are “Quick Hits”



Customer Priorities(Continued)

SPC

- **5: Date Range Option with Date Picker**
- 4: Image/Doc Upload Management

Compromised Cards

- **5: View/print Risk Alert information**
- 4: Ability to Status one or all cards in one action
- 4: Ability to Reissue one or all cards in one action
- **5: Ability to View one or all cards in Card Management in one action**

TranBlocker

- 3: Summary Page with Edit Links
- **5: Ability to extend a rule by just changing the end-date**
- **5: Ability to create/update rules with an extended/without an expiration date (huge win)**
- 4: Defaults displayed on each (Countries, MCC and Card Acceptor IDs) page
- 4: Ability to change multiple rows at once (matching changeable defaults)
- **5: Ability to add more rows (as many as they need) dynamically that can match changeable defaults**



Project Recap

