UX & Usability

Agent Facing

Lessons Learned and Best Practices

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Purpose and Scope

This deck provides the UI, user experience and usability wherewithal to engage customers and potential customers and provide optimal **agent-facing** solutions: Presales, POC, Improvement, and Implementation.
It is based on a vast repository of customer engagements, design UX and usability work, which is best encapsulated in our success with **[CSP Name].**

In addition, a comprehensive map and links to training material is provided in the "Training and Reference Material" section while for convenience, a summary of UX/Usability activities and services is provided in the "UX Activities & Services" section

This deck is for purposes of awareness, reference and training

Contents

UX & Usability – Agent Facing

[Introduction and Background]

[Lessons Learned and Best Practices *(Focus on [CSP Name])*]

[UX Activities & Services]

[Training & Reference Material]

Introduction and Background

Congratulations, [CSP Name]!

[Solution Name] has now been rolled out to 14,000 agents, with a total of 22,000 agents expected to be using it within a year. AHT (Average Handle Time) is actually about 57 seconds better than they [Company Name] predicted it would be in their business case. (January 2012)

[Solution Name] is definitely a nuke for [CSP Name]and provides a quantum leap for our agents and customers
[CSP's CTO Name]

Note: 2015
The solution was productized and rolled out to tens of CSPs worldwide and used by > 500K agents. It is the baseline for the new version release

[Solution Name] – from [CSP's Name] Perspective

Agents are staying in [Solution Name] and are not automatically switching to [Old App Name] when they encounter new or difficult situations. **This is a good thing!** Agents are showing excitement as they use [Solution Name] and delight in discovering new functionality, actively sharing [Solution Name] stories and discoveries with each other

Actual agent quotes:

- ✓ Was this system designed by agents?
- ✓ iCare improves my performance by 220%
- ✓ The system is just wonderful
- ✓ …you could have not done it better
- ✓ Swaps are so easy
- ✓ Anyone can change a plan now
- ✓ I can't mess this up
- ✓ It does all the work for you
- ✓ It told me what to do next
- ✓ That WAS easy
- ✓ This is awesome (*completing a price plan change*)
- ✓ Do not make me go back into that dreaded [Old App Name]

[Solution Name] Results

- ✓ Improves the customer experience because agents can answer customer calls faster, resolve service issues on the first call and significantly reduce errors
- ✓ Provides a single and intuitive interface for managing all customer interactions
- ✓ Provides contact center agents with the right information at the right time
- ✓ Makes customer-facing process much more efficient and faster
- ✓ Improves efficiency of handset swap process by 68%, cutting screens by 50% from eight to four and clicks from 13 to 6
- ✓ Increases price plan change efficiency by 72%, cuts screen numbers by 50% from 10 to 5 and clicks from 27 to just 9

Good Usability Is Good For Business

Today, we know what we assumed and suspected then…

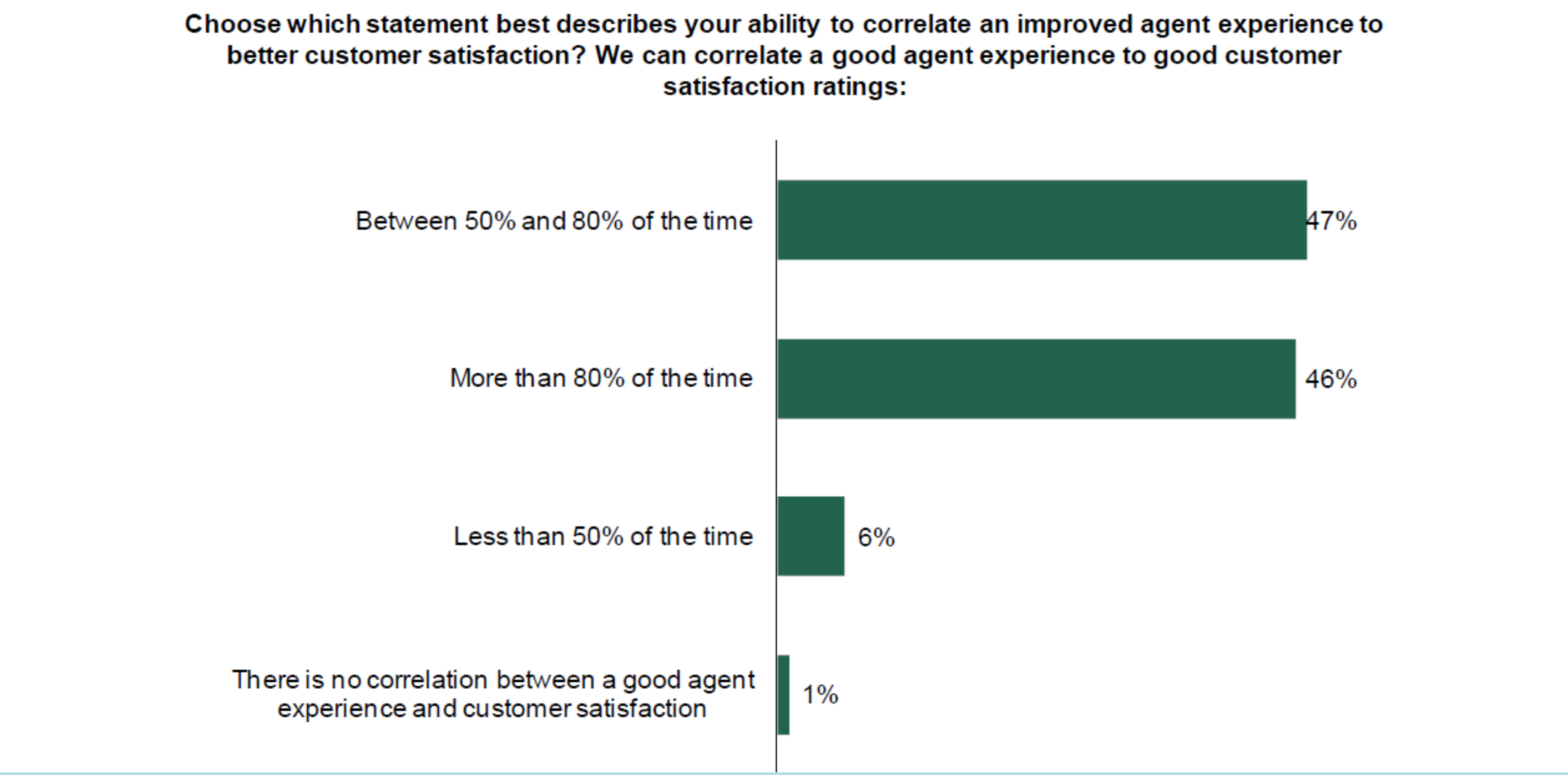
Customer Experience Depends On User Experience*

Usability improvements for internal applications correlate to improved business outcomes. We tested this correlation using a Forrester survey. Results showed that improving the customer service agent experience has a direct result on the service outcome:

- ✓ 46% of respondents said this correlation held true > 80% of the time
- ✓ 47% said that this correlation held true between 50% and 80% of the time
- ✓ 1% said that there was no correlation between a good agent experience and service outcome

* Forrester: Improving The Agent Experience Helps Move The Needle On Customer Satisfaction - 2011. **Study commissioned by Amdocs**

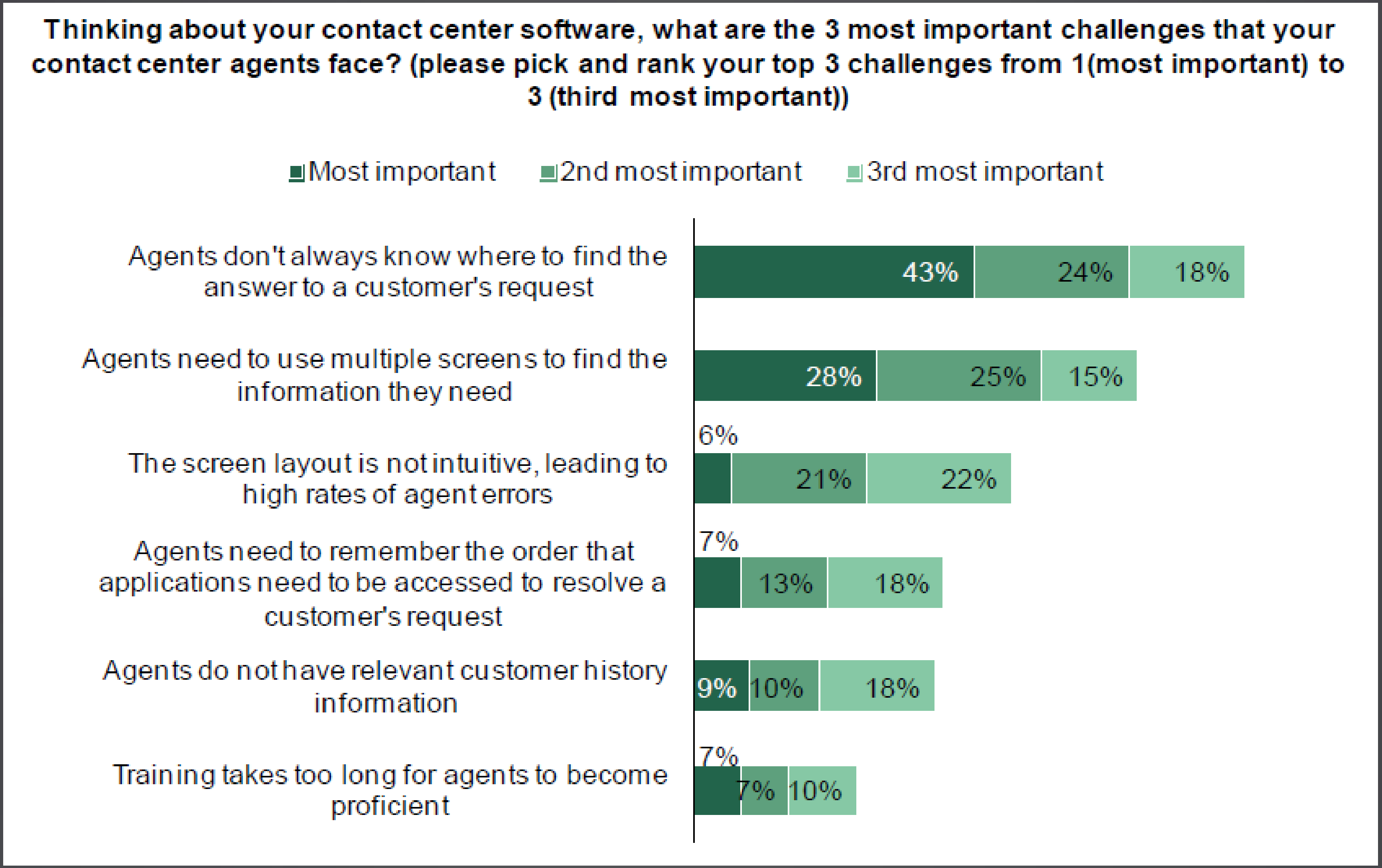
Correlation between Agent Experience and Customer Experience



This correlation is important and drives quantifiable business results that explain why companies are focusing on improving the agent experience as one of their top goals for contact centers to move the needle on the overall customer experience

Forrester: Improving The Agent Experience Helps Move The Needle On Customer Satisfaction - 2011

Contact Center Agents – Major Challenges



Forrester: Improving The Agent Experience Helps Move The Needle On Customer Satisfaction - 2011

Some History… Where it all began

In April 2009, [CSP Name] were very unhappy with [Company Name]…

- [CSP Name] agents were using [Old App], which was a customized CRM for web client (CRM 6.0). It was slow, cumbersome and unintuitive!
- Most of the agents' work was being performed in [Old App] which was launched in context from [Old App]
- Agents would typically have multiple applications running simultaneously – even up to 23 applications! 'Bouncing around' between apps and copy/paste was the order of the day. And these apps weren't even in synch with each other!
- Complex flows like price plans swaps for multiple subscribers were error prone and were labor intensive requiring a steep learning curve
- Money was being lost in unnecessary high average handling times, many call transfers instead of high first call resolution, lack of integration, too complicated, lack of system guidance & automation, high training costs, dissatisfied agents and an outdated user interface

They needed to move forward "ahead of the pack", but were losing faith…

FIX IT! - The Business Imperative

- ✓ Navigation is not intuitive: *data driven and not task driven*
- ✓ Cumbersome UI, expensive to train and maintain
- ✓ Automating complex business processes cost prohibitive
- ✓ Lack of automation negatively impacted call center KPI's
- ✓ Outdated UI not considered appropriate platform
- ✓ High rep turnover and training costs
- ✓ Expensive to change and maintain
- ✓ Cluttered screens (Visual "noise", extraneous information, not scannable)
- ✓ User experience is not a simple, uniform, seamless, integrated experience

7 Important Lessons Learned

✓	LL 1	**Be Prepared!**	UX Infrastructure
✓	LL 2	**First impressions open the door!**	Business PoC
✓	LL 3	**UX “Tiger Team”**	“Peopleware”
✓	LL 4	**Presale Activities**	Presale
✓	LL 5	**Usability metrics driven business case**	Business Case
✓	LL 6	**Users: the highest authority on application usage**	Site Visits
✓	LL 7	**Design & Usability Integrity and Validation**	Design

#1: Be Prepared

- ✓ When first engaged, we decided to use a high-frequency, existing end-to-end (E2E) flow - ***Swap Equipment***, and demonstrate our proposed solution in the form of a detailed proof-of-concept

  Scenario-driven: The E2E flow is the unit of measure (UX perspective)

- ✓ 'CRM Usability' was product managed by CM PdM (*Mark Weinberg*) and a **CRM Usability PRD** including **Design Strategy**, **Framework** and the desired end-state was complete

- ✓ **Design and UX methodology** for improvement projects was also in place including applicable design processes and artifacts: deliverable templates, tools, stencils, references, etc.

#1: Be Prepared – Usability Goals

Usability Goals reflect the tagline:

Meaningful Actions in Context

1. **Context - Customer Centric**
   Agents must focus on customers and customer requests
   \- not on applications
2. **Action Driven**
   It should be obvious to agents what to do, and how to do it, in order to address customer requests to the satisfaction of customers
3. **Simple and Intelligent**
   The FE solution should be as simple as possible
   Which would imply that it be as intelligent as possible

#1: Be Prepared – UX Strategy

Design/usability strategy in support of goals

- Frequency of Use
  - ✓ Design for the probable case of use; Provide for the possible case of use
- Simplicity
  - ✓ Most direct, obvious, intuitive customer interactions (optimal visual affordance)
  - ✓ What You See Is What You Need (WYSIWYN) – where and when you need it!
- Knowledge in the System & Automation
  - ✓ Use knowledge of customers ; their equipment, history, usage, behavior patterns, needs and expectations to anticipate and offer agents appropriate and relevant responses and choices
  - ✓ Represent business priorities and rules as part of a "built-in" solution
- Encapsulate the Real World
  - ✓ Approximate/Validate the needs & expectations of real customers
  - ✓ Real-world scenarios and most frequent/important flows
- Flexibility, Resilience & Scalability
  - ✓ Reuse of framework, structure, components and patterns

#1: Be Prepared – UX Tactics

Strategy to tactics

UI Framework	Actions In Context
Visual Enhancements	Information Architecture
Structural Enhancements	Customer Centric (Toolbar2Toolbox)
Navigation Optimization	Task Driven (Reason1/2 Optimization)
Desktop Consolidation	Guided and Optimized Flows

#1: Be Prepared – UI Framework

CONTEXT: Customer Centric Information Panels

Probable
Actions
In Context

The 'Heart' Of The Paradigm:

Customer Centric Context

Interacting with

Action Driven Navigation

#1: Be Prepared – UX Improvement Process

1.Observe
- Elicit Information
- Survey & Study
- Needs & Requirements

2. Analyze
- Identify Issues
- Identify Opportunities
- Establish Business Case
- Abstract Prototype

3. Improvement Plan
- Best Practices
- Innovation

4. Design
- UI Design
- Interaction Design
- UX/Usability

5. Prototype
- Concept
- Solution
- Screen Design

6. Validate *(Applicable throughout)*

PoC

Validate
ALL stakeholders

Iterate

#2: First Impressions – Business PoC

The initial prototype reflected the framework, structure and behavior, but was aimed at being fully implementable - factoring in things like technological constraints, business requirements, etc.

BIG MISTAKE!

"[CSP Name]don't want to know what we can't do; they want to see what we can do" "Make it screamingly simple!"

You only have one shot at getting your "foot in the door" and to that end, focus MUST be placed on the desired end-state (within reason) and NOT on known constraints

The Iteration of initial prototype was a big success and was compelling

#2: First Impressions – Showcase the End State

- ✓ The initial prototype (sometimes called the "business prototype") conveys the **concept**, framework, behavior and 'look & feel'
- ✓ It must showcase the framework/paradigm and it must include at least one frequent end-to-end task (*from caller ID to wrap up*)
- ✓ The initial prototype must be accompanied by a presentation and supporting work products that demonstrate the expected efficiency increase between the current system/s and the proposed solution (before vs. after)

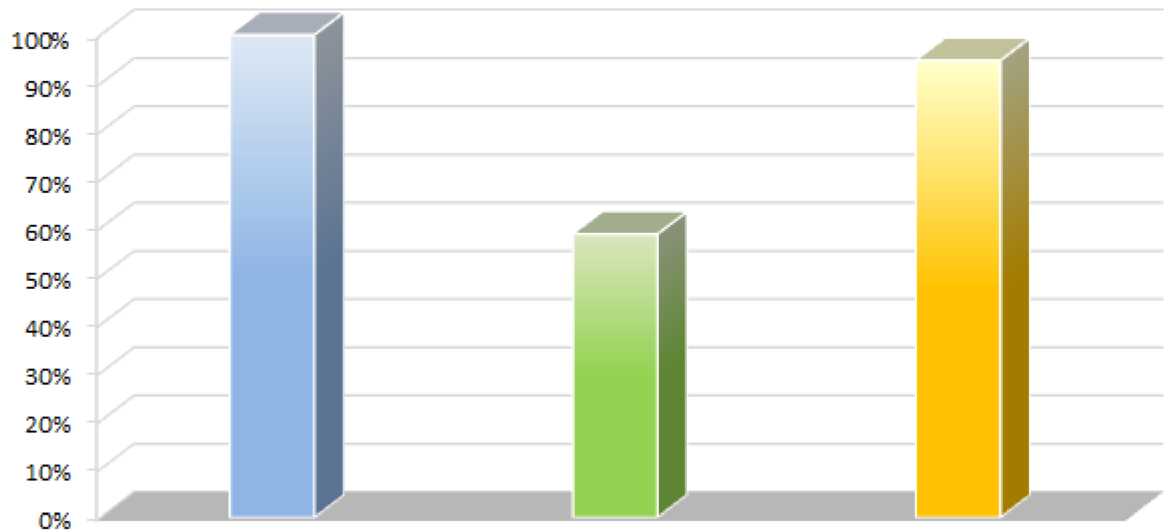
#2: First Impressions – Demonstrate ROI

Expected efficiency increase (AVG) of 5 most frequent care scenarios

61%

ALL TASKS - Summary

Phase 2	Current	Phase 1	Increase - Efficiency Current to Recommended
100%	59%	95%	61.0%

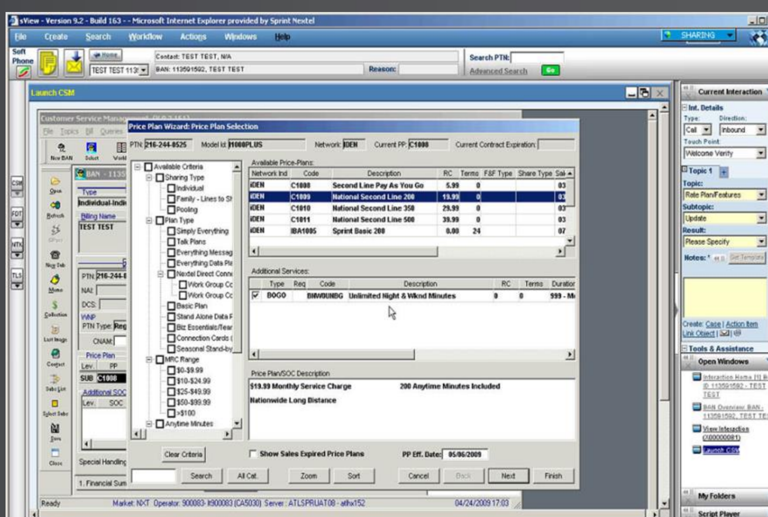


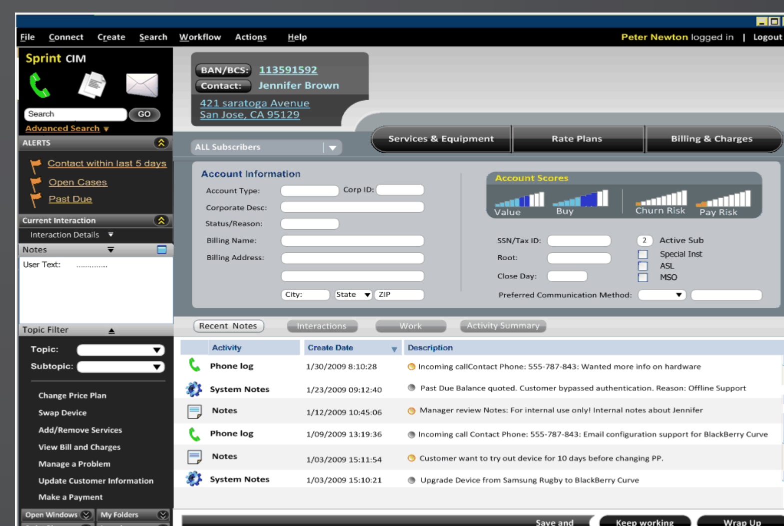
Phase 2	Current	Phase 1	Decrease - GOMS Time Currrent to Recommended
37 Steps 79.8% average visibility	63 Steps 50.4% average visibility	39 Steps 77.7% average visibility	
GOMS 1 minute 40 seconds	GOMS 2 minutes 18 seconds	GOMS 1 minute 43 seconds	25.3%

#2: First Impressions - POC for Simple E2E Change PP Flow

Application Centric	Customer Centric
11 Screen Changes	6 Screen Changes
2 Systems	1 System
17 user actions	10 user actions

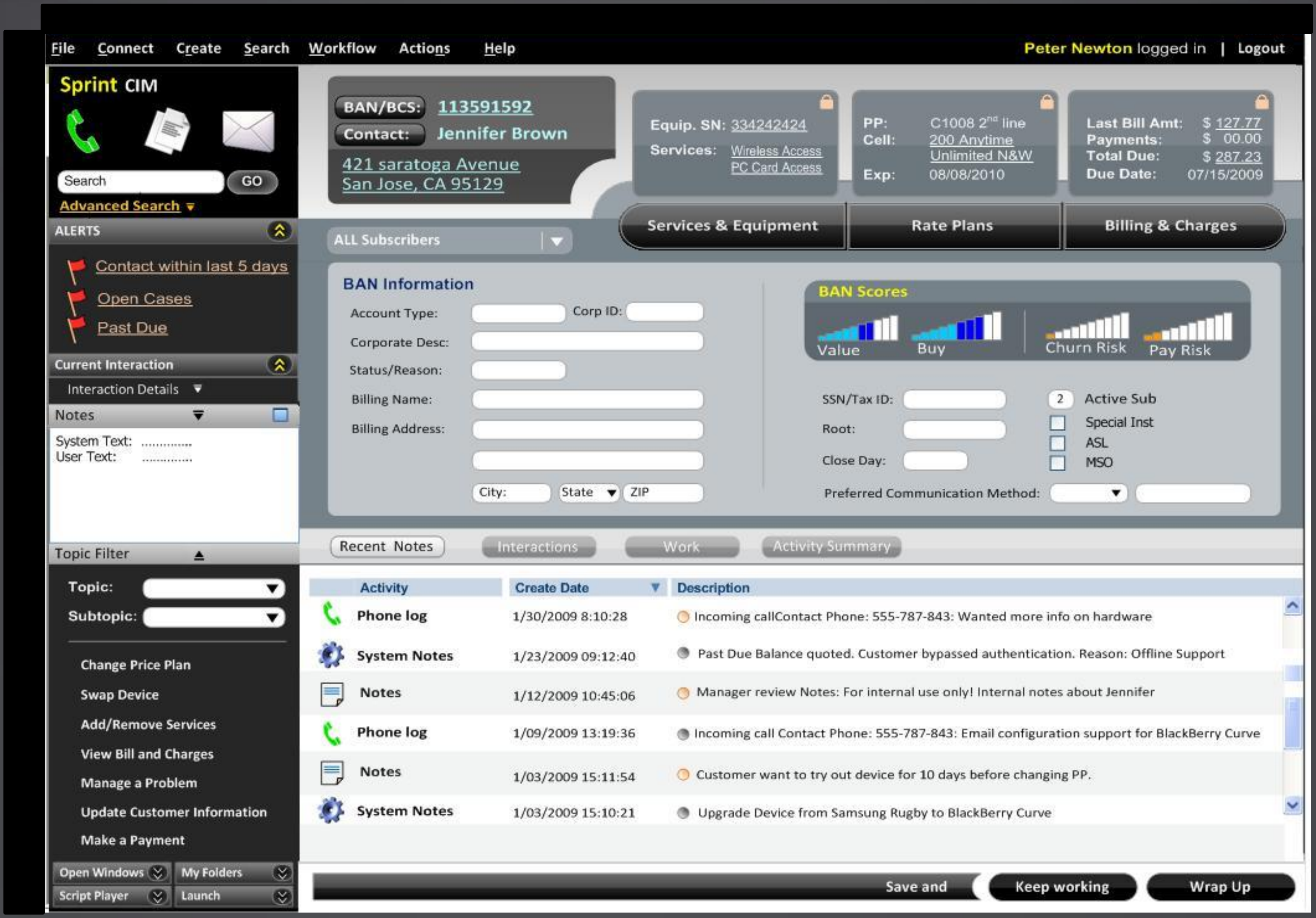
Application Centric	Customer Centric
- Not Intuitive	✓ Intuitive
- Not cohesive	✓ Cohesive
- Data/Object Driven	✓ Action Driven
- User Guides the System	✓ System Guides the User
- Far too much extraneous info	✓ WYSIWYN





#2: First Impressions – The Wow effect

Lesson #2: First Impressions – The Wow effect



#3: UX Presale Tiger Team

A “**Tiger Team**” that could be trusted was put together for this mission-critical task that required excellence, integrity, professionalism, speed, creativity, innovation, risk-taking and above all, rich hands-on experience and domain knowledge.

UX “Tiger Team” members remained with the project beyond the presale (*Functional & Business Requirements sessions, Impact Assessment Documentation, UI Design*) and worked as part of the account delivery team

In addition, training on the job between Design and Delivery provided developers with UI/Screen Design tools and skills

#3: Anatomy of a UX Presale Tiger Team

Roles	Description
Leader	The "glue" that holds everyone together and to the customer Enables, ensures and inspires the realization of objectives
PdM	Business & Functional Requirements; Customer study Input to [Company Name Virtual Agent & Predictive Analytics]
Design/UX	Design Concept, Customer/User Study. New solution, analysis, design, flow optimization, medium fidelity Prototype
Architect/SE	Working POC Platform , automation, process management, high fidelity prototype
Usability	Eliciting, gathering & analysis of data and information, call log analysis, diagnostics, inferences for predictive analytics
Business Analyst	Business & Functional Requirements, BP Flows and alignment between Customer & [Company]

Lessons Learned #4: Presale Activities

Output/Presale Deliverables

[CSP Name] were interested in our initial proof-of-concept and wanted to proceed. We requested that **they** formulate twelve detailed end-to-end scenarios ("*To Be Scenarios*") from inbound call to wrap up for different agent types.

We agreed to the following:

- ✓ 4 Scenarios would be developed and presented on our demo environment – connectivity and all!
- ✓ 8 scenarios would be presented in 8 UI documents ("white papers")
  - Detailed screen designs per scenario
  - Task Flows / Screen Flows
- ✓ Presentation and worksheets that demonstrate expected efficiency increase between existing and proposed (*before vs. after metrics*) for all 12 flows

Example Scenario ➡

Lessons Learned #4: Presale Activities

Example Scenario: **Adding Services - Multiple Subscribers**

Customer calls in to add Any Mobile Any Time (linked SOC), Mobile To Office, 6PM Nights and weekend, and 200 Overage Relief Minutes for 1 month (BOGO SOC Back-dated); Lost Stolen SOC also needs to be removed on one of the subscribers - Customer is currently on Shared Plan - Everything Data 1500 - with 4 subscriber.

1. Authenticate call
2. Are there any Urgent Account Notifications (This example should have a HPN)
3. Agent must check the Repeat Call Indicator
4. Identify transaction to be performed (SOC Changes)
5. Agent checks for Add on Services Offers - (In flow of selecting Add on's, offers will be displayed to the Agent. If selected the offer should be automatically applied, and should be dispositioned)
6. Make SOC changes on 4 subscribers
    a. Any Mobile Any Time added to all 4 subscribers
    b. Mobile to Office to all 4 subscribers. (Add the M2O numbers)
    c. 6 PM Nights and Weekend added to 2 of the 4 subscribers
    d. 200 Overage Relief Minutes for 1 month (Always Backdated) added to 1 subscriber
    e. Remove Lost Stolen SOC from one subscriber
7. Check Next Bill Estimate
8. Note account
9. Wrap up and end call

Lessons Learned #4: Presale Activities (Input)

Ideally, site visits aimed at observing agents at work and eliciting information is desired as part of the initial input. However, [CSP] first needed more confidence in our proposed direction and solution.

Due Diligence (*receivables*)

✓ Study of current system and applications

- [CSP Name] walked through their 12 detailed scenarios
- We received recordings "click-throughs", screen captures and relevant documentation

✓ Operational Statistics

- Inbound calls by reason codes (for a 2-month period nationwide)
- Call Frequencies, Transfers, Volume

Lessons Learned #4: Presale Activities Deliverables

Each of the 12 "To Be" scenarios were analyzed alongside our optimized flow (Use Case & Task Analysis). Task Efficiency and Task Visibility were measured and compared

Task: *In order of Frequency*	Phase 2	TV	Current sView/CSM	TV	Recommended	TV
3. Change Price Plan	Starting from the Customer Interaction Home: The default view at the start of a new customer interaction includes the history grid (half expanded) showing 8 records		**Reason Codes (Topic 1)** ~ Acct Management ~ Bill Inquiry ~ Cancellation/Deactivation ~ Equipment ~ Lost/Stolen ~ Offer Presentation ~ Other ~ Rate Plan/Features ~ Services ~ Troubleshooting ~ Not Authenticated	0	Starting from the Customer Interaction Home: The default view at the start of a new customer interaction includes the history grid (half expanded) showing 8 records	
			1. User clicks Topic 1 dropdown and selects Rate Plan/Features	0		
	1. Optionally: User clicks History Type and selects a filter	0.5	**2.** User clicks Topic 2 dropdown and selects Update	0.5	**1.** Optionally: User clicks History Type dropdown and selects a filter	0.5
			3. User clicks CSM Launch In Context Icon (dropdown) and selects Subscriber Agreement	0		
	Interaction Notes is persistent in the Interaction Home		System Launches CSM (on first use) on Citrix Client		Interaction Notes is persistent in the I_Home	
	2. User enters interaction notes	1	**4.** User clicks the current price plan in the Price Plan Grid (Part of the Price Plan Group in the Agreement Tab - very crowded!)	1	**2.** User enters interaction notes	1
			System opens the price plan wizard popup window			
			5. User filters search on Available Criteria checkbox "tree" (or clicks "Search") to view Available Price Plans. When no criteria are specified in the search, the current PP is defaulted			
			6. User selects new price plan			
			7. User Clicks "Next"			
			8. User selects additional services and clicks Insert (and related features in a grid below and clicks Include/Exclude) User may also relate the PP to a dealer			
			9. User Clicks "Next"			
			System displays Services and usage Overview page			
			10. User clicks Finish			
			System returns to the Agreement Tab of the BAN (in CSM)			
			11. User clicks Refresh Icon			
			System refreshes view and displays new price plan			
			12. User clicks the Save icon			
			System commits changes to DB			
			13. Wrap Up: User clicks results dropdown and selects result			
			14. User adds interaction (Topic) notes			
	3. User clicks Save	1	**15.** User Clicks End	1	**3.** User clicks Save	1
Total Steps	3		6		3	
Task Efficiency (EE)	100.0%		50.0%		100.0%	
Task Visibility (TV)	83.3% Avg. per step	2.5	41.7% Avg. per step	2.5	83.3% Avg. per step	2.5

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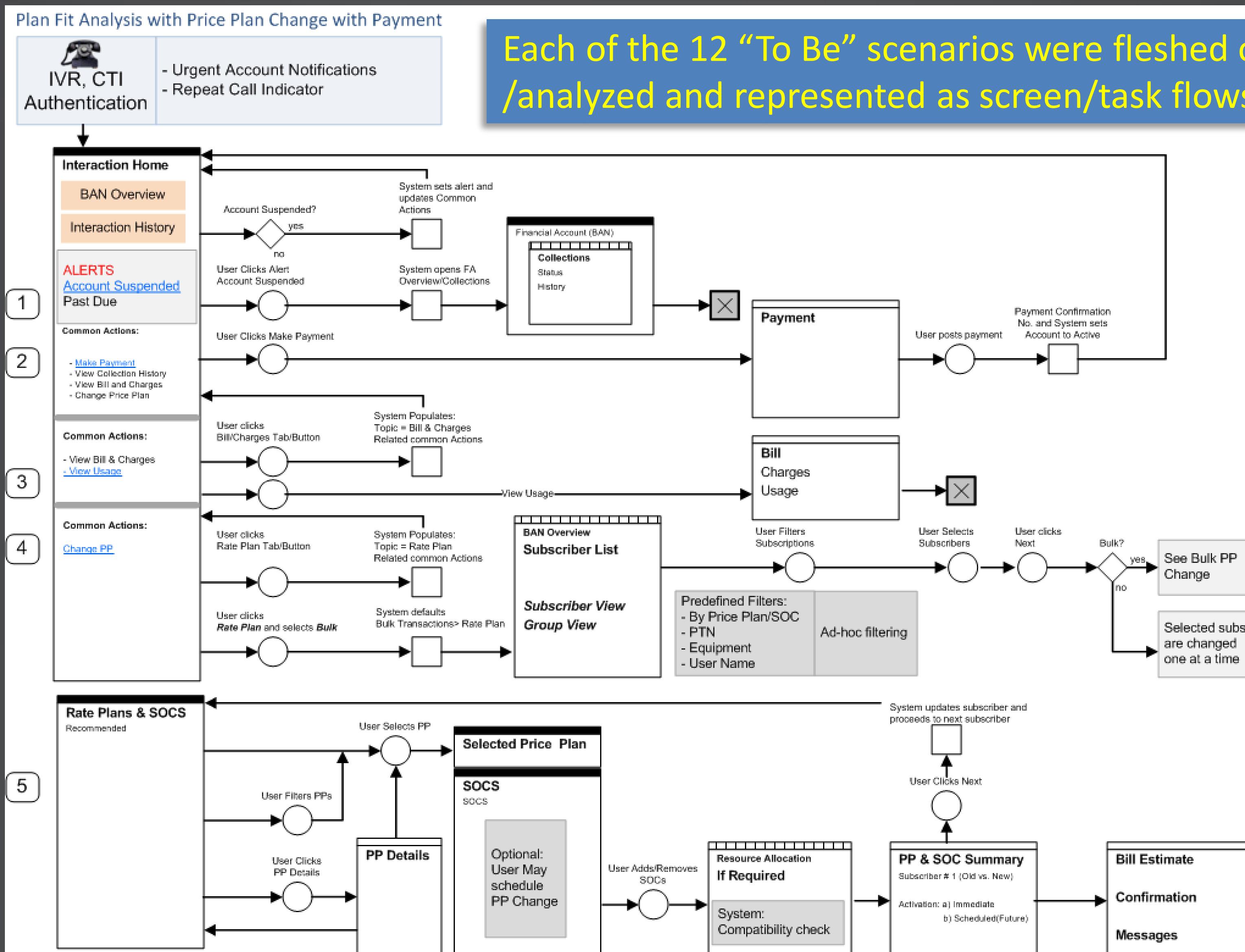
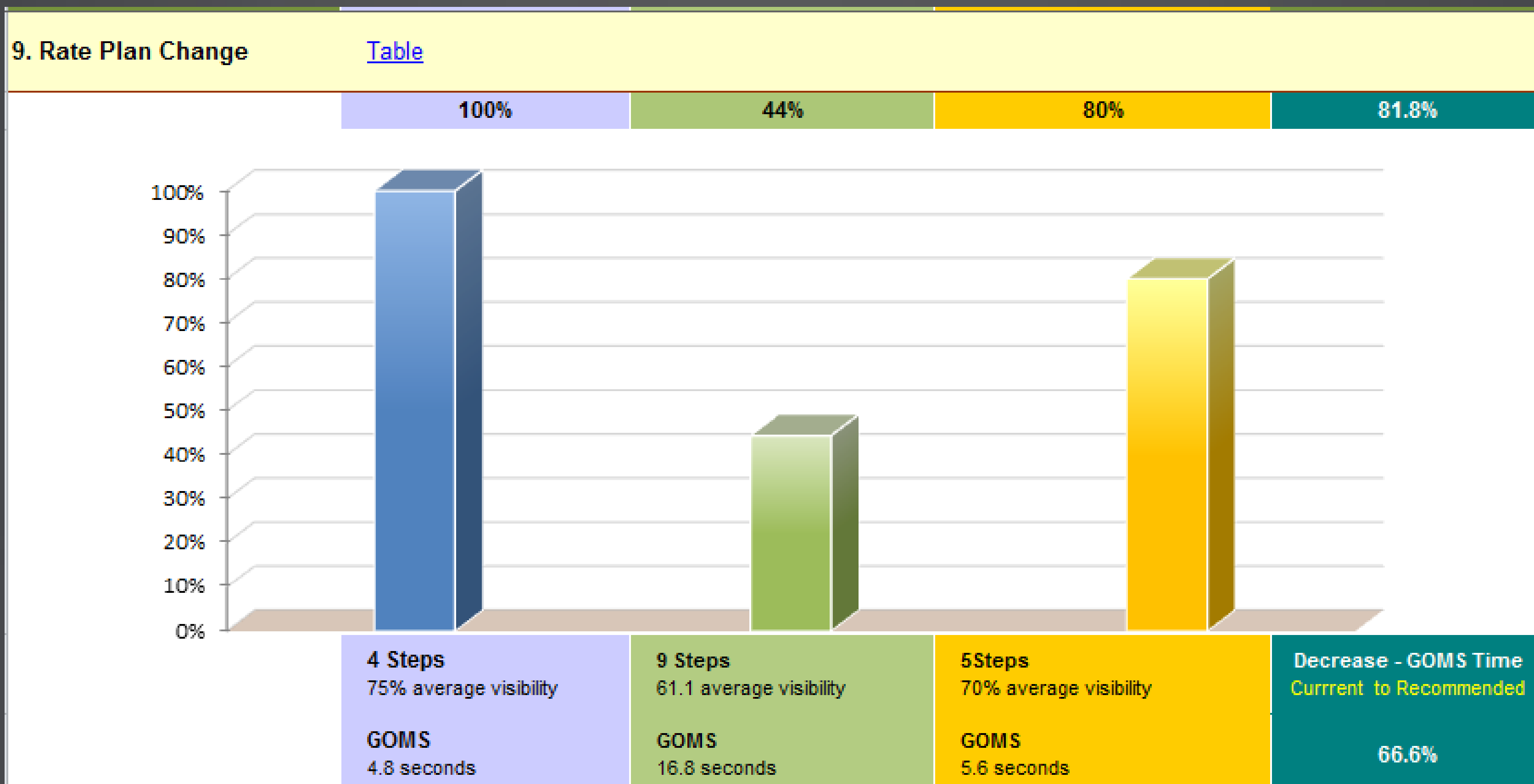
Lessons Learned #4: Presale Activities Deliverables

Each of the 12 “To Be” scenarios were fleshed out /analyzed and represented as screen/task flows

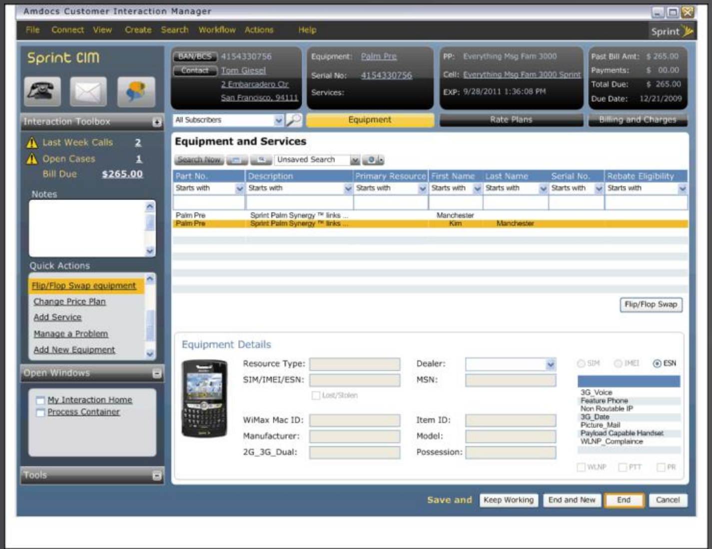


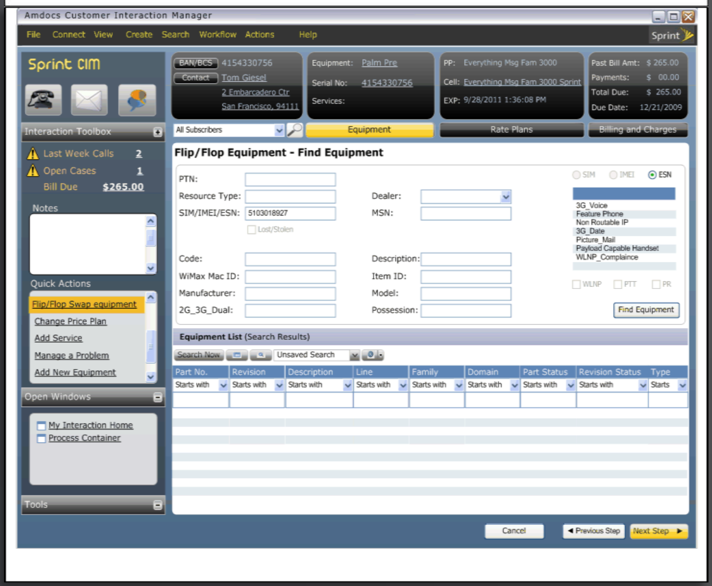
Lessons Learned #4: Presale Activities Deliverables

Each of the 12 “To Be” scenarios were fleshed out alongside our optimized flow noting the expected overall efficiency increase per end-to-end flow



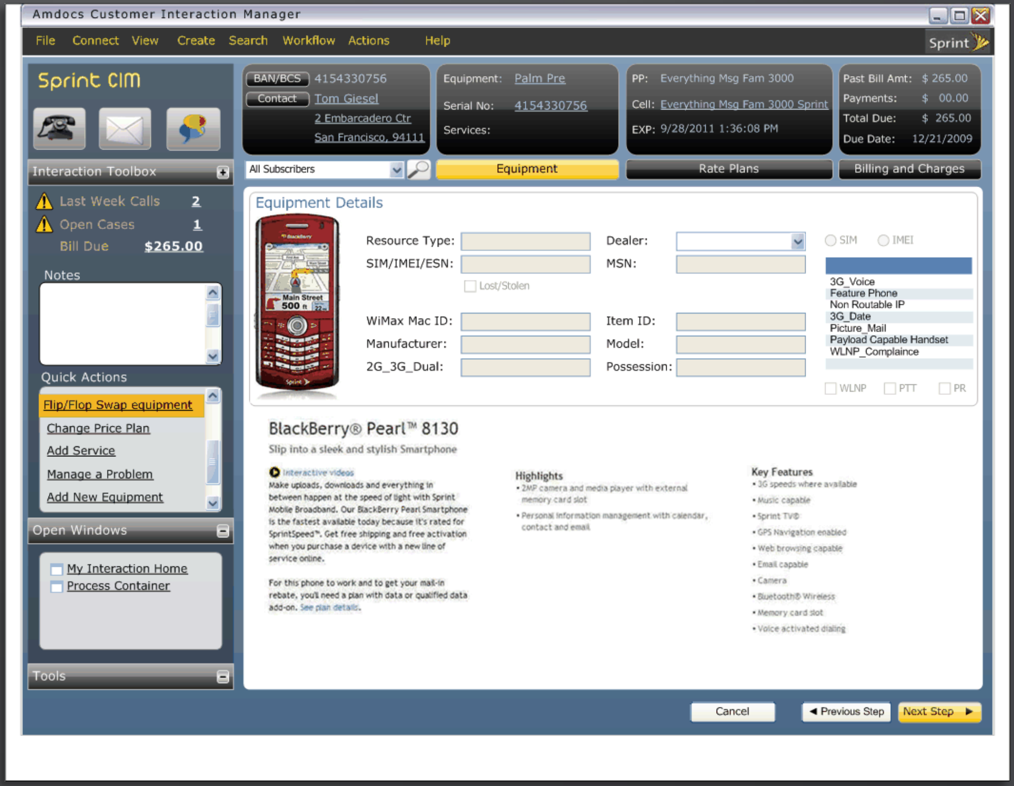
Lessons Learned #4: Presale Activities Deliverables





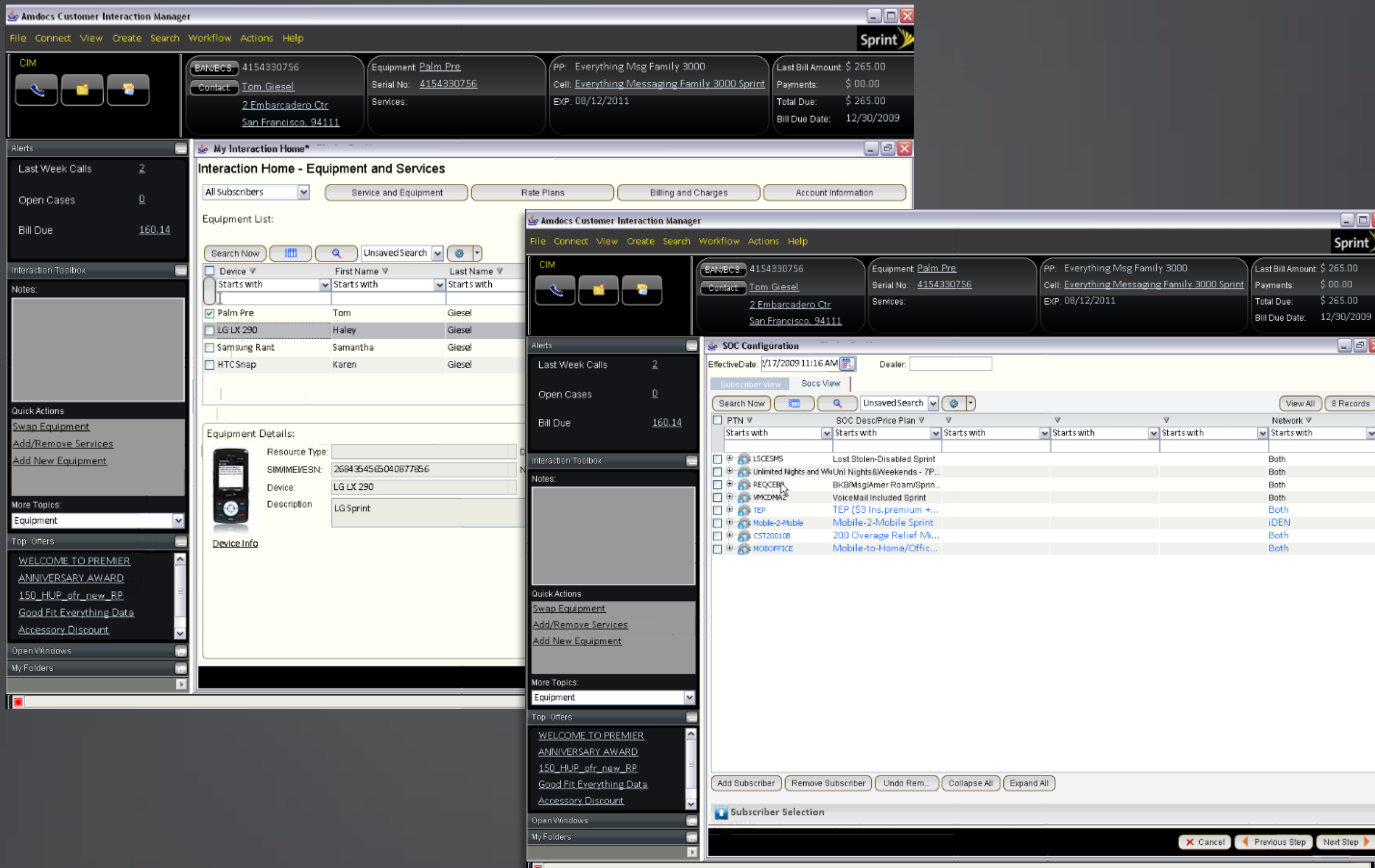
Detailed screens for 8 of the "To Be" scenarios were mocked up (Visio) and reviewed

Total of about 40 screens



Lessons Learned #4: **Presale Activities** ***Deliverables***

4 of the "To Be" scenarios were developed as live connected prototypes



Lessons Learned #5: UX Business Case

Measurable Objectives and Reliable Predictions

The UX business case is directed at demonstrating the efficiency increase and hence, the user productivity increase.

This is achieved by measuring end-to-end tasks
And UI visibility for existing systems against
[Company] recommended solutions

Once task efficiency has been measured, it is
Applied to KPIs

Lessons Learned #5: UX Business Case

The units of measure for task efficiency

1. Essential Efficiency $$EE = 100 \cdot \frac{S_{essential}}{S_{enacted}}$$

Measures the efficiency of user steps (intention/action) of a use case or task as a ratio of the essential length (simplest, most straightforward interaction) to the actual enacted length

User Steps

- Entering data into one field
- Selecting a field, object, or group of items (click, double-click, drag, etc.)
- Selecting a field with a keystroke
- Switching from keyboard to pointing device and vice versa
- Triggering an action
- Selecting from a menu or menu item
- Shortcut key or action via menu
- Dragging & dropping
- Scrolling
- Mental act of routine thinking or perception

Lessons Learned #5: UX Business Case

2. Task Visibility

$$TV = 100 \cdot \left[\frac{1}{S_{total}} \cdot \sum_{\forall i} V_i \right]$$

Where,
V_i = feature visibility (0 to 1) of enacted step i
S_{total} = total number of enacted steps

Measures the fit between the visibility of features and the capabilities needed to complete a given task or set of tasks

Visibility Rules

- **Hidden = 0**
  (Entering a shortcut in the absence of a visual prompt or cue; Choice is neither obvious nor evident based on visible information
- **Suspending = 0**
  (Switching to another page; Launching another application, window, page, etc.)
- **Exposing = 0.5**
  (Dropdown; Menu; Right-Click; Popup; Drill-down; Opening Tool/Palette/Toolbox; Switching to another part of the screen/page like a tab)
- **Direct = 1**
  (Direct Action, where choice is evident)

Lessons Learned #5: UX Business Case

AHT Reduction

- The UoM for AHT is the end-to-end task time (CTI to Wrap-Up) per task
- Clicks alone are NOT a reliable, responsible UoM
- AHT = User Actions + Research & Listening + Talking + Time in Error + System Processing
- For static usability metrics, we only consider User Actions + Research & Listening
- We therefore apply Overall Efficiency to AHT/2

Example:

Given:
The AHT for making a one-time payment (E2E) in Bell Single View is 6 minutes (360 seconds)

Current EE is 62.5%	Recommended EE is 100%
Current TV is 56.3%	Recommended TV is 80%

Therefore:

Affected AHT is	**180 seconds**	*(360/ 2)*
Current Avg EE *TV is	**59.4%**	
Recommended Avg EE*TV is	**90%**	
Efficiency increase is	**51.5%**	*(90 – 59.4) / 59.4*
New Time is	**87 seconds**	180 - (180 X 51.5%)

Finally: **AHT reduction for a one-time payment (E2E) is from 6 minutes to 4 minutes 27 seconds**

Note on KPIs:
- AHT applies to First Call Resolution (FCR) calls
- AHT weight is halved for Retention calls (Saved Accounts)

Lessons Learned #5: UX Business Case

EXAMPLE	**Control**	**7.5.2**	**CIM 2.0**
Steps	1	5	1
Screens	1	3	2
Task Visibility (TV)	100%	80%	50%
Task Efficiency (EE)	100%	20%	100%
Overall Efficiency	100%	50%	75%

For the task: View previous bills (3 months):
CIM 2.0 is 50% more efficient than 7.5.2

Note

1. We afford equal weight to Essential Efficiency and Task Visibility: (EE+TV) / 2
2. We apply Overall Efficiency to 50% of AHT to calculate AHT reduction *(Next Slide)*

Lessons Learned #5: UX Business Case

Operational Statistics are our guarantee!

- ✓ Inbound calls frequency by reason codes
  - Most frequent reason 1's become main level panels
  - Most frequent reason 2's become probable actions in context
- ✓ AHT per task
- ✓ Call Transfers (vs. FCR)
- ✓ Repeat Callers
- ✓ Call Volumes

Lessons Learned #6: Site Visits

At [CSP Name] we conducted 7 site visits (12 days onsite and > 200 calls observed) covering:

✓ Care	(Houston)
✓ Account Services	(Elmsford)
✓ Technical Support	(Oklahoma)
✓ Back Office	(Temple)
✓ BCS (Business)	(Fort Worth)
✓ BOOST (Prepaid)	(Bakersfield)
✓ Financial Services	(Denver)

The essential purpose of a site visit includes:

- ✓ Familiarization with agents' operational contexts
- ✓ Insight as to how current call center software application is used in production
- ✓ identify potential areas where process and/or user interface (e.g. screen flow) improvement may be applied to increase call center efficiency.
- ✓ Identify key capabilities and improvements that the next-generation of customer service and billing products must address to improve call center performance

Lessons Learned #6: Site Visits

Site Visit Objectives

- ✓ Elicit Information from site visit *(observations , Interviews & Survey)*
- ✓ Evaluate usability of existing applications
- ✓ Identify usability improvement opportunities (short & long term)

Input

- ✓ Guided Tour of Call Center
- ✓ Meetings/Interviews with Call Center Management
- ✓ Observations/Side By Sides (CSRs at work)
- ✓ Call Logs
- ✓ Subjective Usability Surveys
- ✓ Task Analysis
- ✓ Operational Statistics

Deliverables

- ✓ Data Analysis (usability Excel worksheets - embedded)
- ✓ Findings & Executive Report

Lessons Learned #6: Site Visits

Site Visit Work Products

- ✓ Site Visit Plan and Procedure
- ✓ Subjective Survey (SUS)
- ✓ Usability Questionnaire
  - *Management*
  - *Agents*
- ✓ Data Collection and Analysis
  - *Call center information and KPI related data*
  - *Call logs*
  - *Identified issues*
  - *Recommendations*
  - Task Analysis

Visit Plan

Subjective

Questionnaire

U_Worksheets

Lessons Learned #7: Design: Best Practices

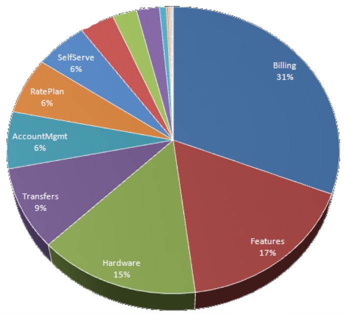
- ✓ UI and UX framework scales across business units

  Care, Prepaid, Collection, Finance, Technical Support, Retention
- ✓ Traversing from any source to any destination is no more than 2 clicks
- ✓ Prototypes are driven by scenarios provided by the customer
- ✓ Visio is a rapid means to develop a set of screens that can be hyperlinked to make an HTML demo. It is template and stencil based and screens are reused as detail designed screens
- ✓ Requirements, Functional and Design Reviews include all stakeholders including users of the system, business, IT, etc.
- ✓ A UX/Usability expert is present at all reviews
- ✓ Establish feedback loop between customer implementation and product development
- ✓ One size does not fit all!

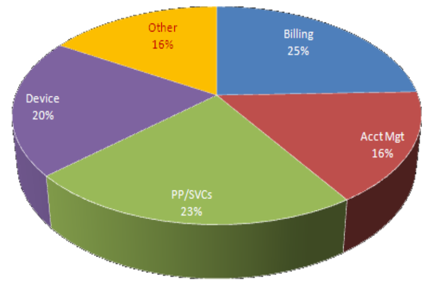
Inbound Calls

By frequency and accounting for 75% - 85% of calls

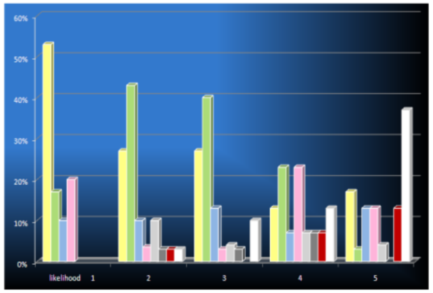
CONTEXT



Over 11,000 calls logged (**signal tracker**)



51 calls were logged at recent call center '**side-by-sides**'



30 consumer care agents were asked to rank the 5 most frequent tasks

Billing & Payments	31%	25%	Very High	1
Rate Plan & Services	23%	23%	High	2
Hardware & Device	15%	20%	Medium-High	4
Accnt /Sub Mgt	6%	16%	High	3
TOTAL:	**75%**	**84%**		

Customer Context

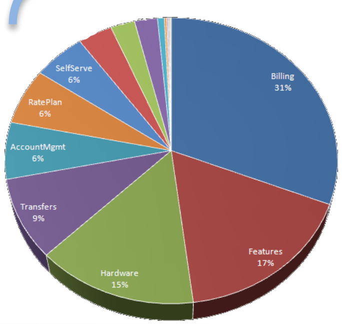
Customer Info Panels

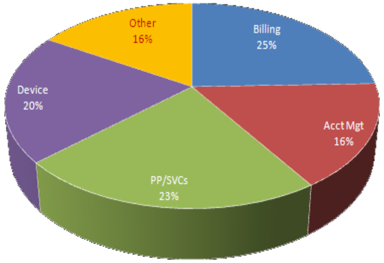
Account / Subscriber Mgt

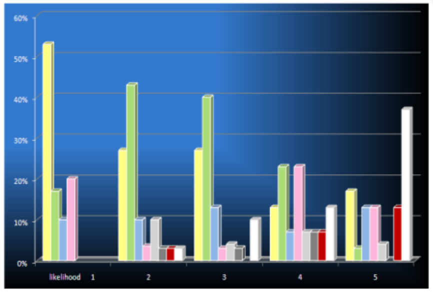
Hardware & Device

Rate Plan & Services

Bill, Charges & Usage

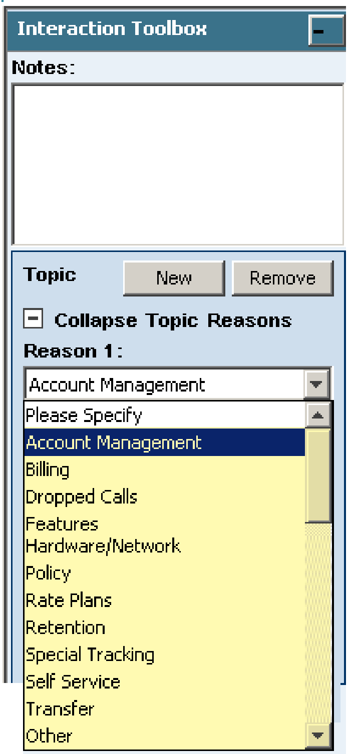




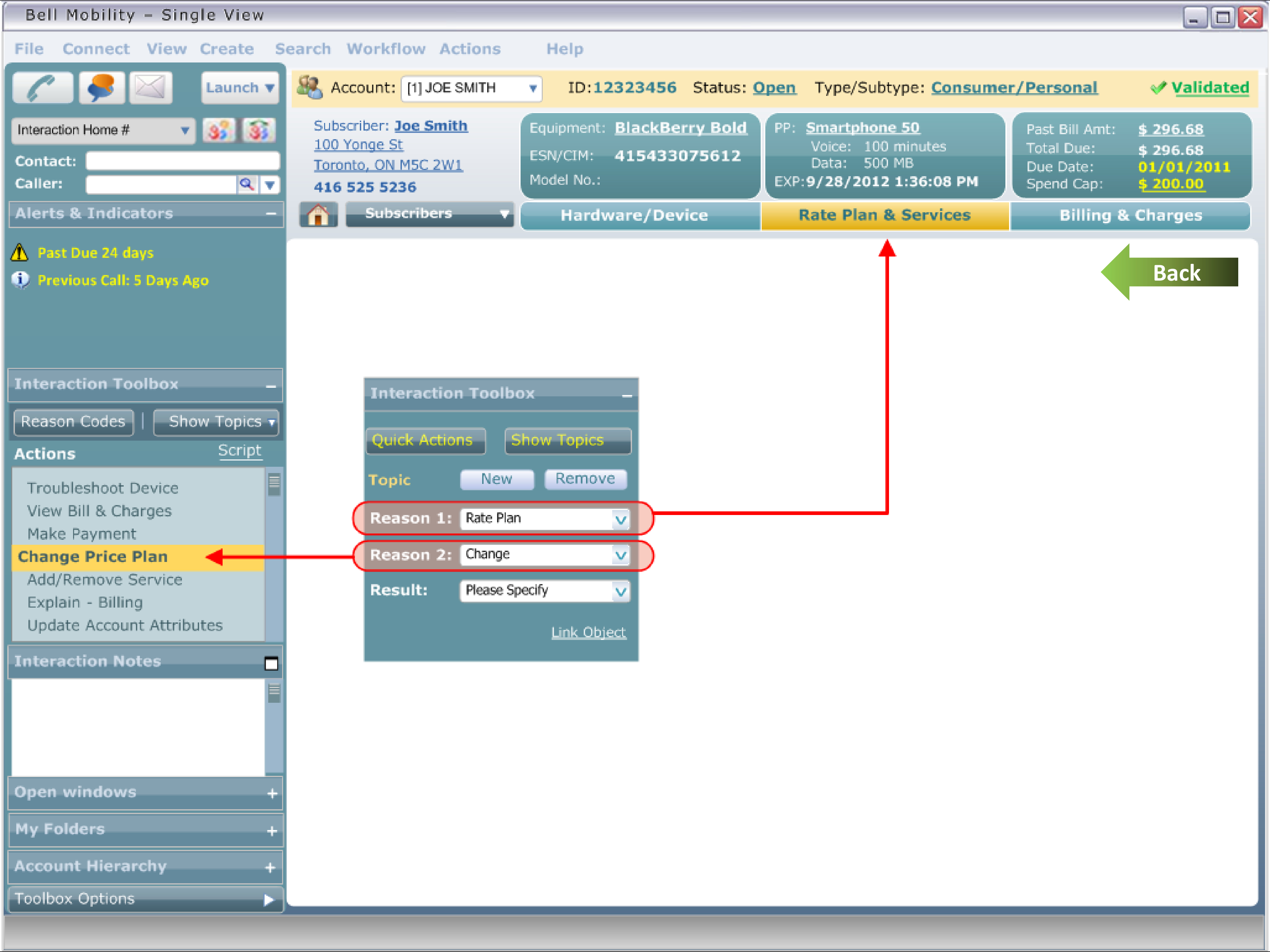


Actions In Context

Current Reason Codes



Reason 2	Account / Subscriber Mgt	Hardware & Device	Rate Plan & Services	Bill, Charges & Usage
Reason 2: Account Mgt Status Change Update Account Attributes	✓			
Reason 2: Billing Account Balance Disputes Explanation/Inquiry Payments				✓
Reason 2: Features Add Explanation/Inquiry Password Reset Remove			✓	
Reason 2: H/W Network Broken Hardware Device Training/Info Explanation/Inquiry Outage		✓		
Reason 2: Policy Dispute Fulfillment Hardware Upgrade Pricing Privacy	✓	✓		✓
Reason 2: Rate Plans Change Explanation/Inquiry			✓	
Reason 2: Retention Cost of Hardware Cost of Service Economy Explanation/Inquiry Irate/Poor Service Hardware Network/Coverage No Need Out of Service Area		✓	✓	✓


Bell Mobility – Single View
File Connect View Create Search Workflow Actions Help
Launch
Account: [1] JOE SMITH
ID: 12323456 Status: Open Type/Subtype: Consumer/Personal
Validated
Interaction Home #
Contact:
Caller:
Subscriber: Joe Smith
100 Yonge St
Toronto, ON M5C 2W1
416 525 5236
Equipment: BlackBerry Bold
ESN/CIM: 415433075612
Model No.:
PP: Smartphone 50
Voice: 100 minutes
Data: 500 MB
EXP: 9/28/2012 1:36:08 PM
Past Bill Amt: $ 296.68
Total Due: $ 296.68
Due Date: 01/01/2011
Spend Cap: $ 200.00
Alerts & Indicators
Subscribers
Hardware/Device
Rate Plan & Services
Billing & Charges
Past Due 24 days
Previous Call: 5 Days Ago
Back
Interaction Toolbox
Reason Codes
Show Topics
Actions
Script
Troubleshoot Device
View Bill & Charges
Make Payment
Change Price Plan
Add/Remove Service
Explain - Billing
Update Account Attributes
Interaction Toolbox
Quick Actions
Show Topics
Topic
New
Remove
Reason 1: Rate Plan
Reason 2: Change
Result: Please Specify
Link Object
Interaction Notes
Open windows
My Folders
Account Hierarchy
Toolbox Options

Usability Study (what we need to know to design optimal solutions)

- **Observation & Subjective Study**
  - ✓ Observing actual users in their real-world operational environments
  - ✓ Interviews and Surveys (*users, supervisors, managers, executives*)
  - ✓ Measuring user satisfaction (*SUS*)
- **Diagnostic**
  - ✓ Expert Usability Review (identify issues and defects; recommend solutions)
  - ✓ Task Analysis and Flow Optimization
  - ✓ Standards and Best Practices
  - ✓ Information Architecture (navigation, structure, taxonomy & visualization)
- **Summative**
  - ✓ Usability Metric Study (Task Efficiency, Task Visibility, Layout Uniformity)
  - ✓ Operational Statistics (e.g. task frequency, repeat caller, etc.)
- **Validation**
  - ✓ Demonstrating improvements (before vs. recommended)
  - ✓ Simulated scenarios of use with actual users (testing recommended solutions)

1. Elicit Information

Back

- Observe (*contextual inquiry*)

The most reliable input is observing actual users in their real operational environments ("side-by-sides")

- Elicit Information
  - ✓ Operational statistics (inbound calls by lines of business)
  - ✓ User guides and training material
  - ✓ Business process flows
  - ✓ Data Model and System Architecture
- Surveys & Interviews
  - ✓ Subjective Usability Scales (SUS) – scale of user satisfaction
  - ✓ Structured management and agent interviews
  - ✓ Online structured surveys
- User Needs & Requirements
  - ✓ User profiles and personas
  - ✓ User-driven use cases of frequent and important tasks

2. Analyze

Back

- Analysis
  - ✓ User-driven use case analysis *(use case list & narratives)*
  - ✓ Analysis of operational statistics
- Expert Usability Review
  - ✓ Heuristic Evaluation *(Identify usability defects and issues)*
  - ✓ GUI Inspection *(standards, consistency, information architecture)*
  - ✓ Usability testing *(low ROI)*
  - ✓ Recommendations
- Business Case
  - ✓ Establish usability goals and design heuristics
  - ✓ Derive design strategy from business KPIs
  - ✓ Identify opportunities
  - ✓ ROI *(cost/benefit analysis)*

3. Improvement Plan

Back

- Findings Report
  - ✓ Usability issues and recommendations *(by priority, severity, effort, "low hanging fruit", longer term optimization)*
  - ✓ Executive summary presentation
- Improvement Plan
  - ✓ End-to-end scenario development *(or storyboards)*
  - ✓ Identify screens and flows
  - ✓ Estimates *(effort, time, screens)*
  - ✓ Staged improvement plan (*"evolution or revolution"*)
- Proof Of Concept *(end state)*
  - ✓ High-end graphic prototype *(Flash, HTML, static screens)*
  - ✓ Innovation
  - ✓ Best practices
  - ✓ Before and after screens *(comparative analysis)*
  - ✓ Efficiency improvement *(usability and KPI metric study)*

4. Design

Back

- Abstract Prototype
  - ✓ Based on use case analysis and end-to-end scenarios
  - ✓ Factor in technological and other constraints/requirements
  - ✓ Factor in business process flows
  - ✓ Functional requirement review and validation
- Formalize GUI Style Guide
  - ✓ Industry standards
  - ✓ project style guide
  - ✓ UX patterns *(tabs, accordions, grids, wizards, etc.)*
  - ✓ Screen Design templates and stencils
- Detailed Design
  - ✓ Interaction design
  - ✓ Task and screen flows
  - ✓ Site map
  - ✓ Content management

5. Prototype

Back

- Detailed Screen Design
  - ✓ Innovation
  - ✓ Best practices
  - ✓ Physical Screens
  - ✓ error handling
  - ✓ Style sheet (CSS)
- Screen Element Table *(detailed element annotations)*
  - ✓ Type
  - ✓ Label
  - ✓ Valid values
  - ✓ Defaults (values, states)
  - ✓ Data source & destination
  - ✓ Business rules
  - ✓ Tab order
  - ✓ Comments
  - ✓ Alternate flows and exceptions

6. Validate

Back

- Customer & User Validation
  - ✓ UAT *(not recommended unless demanded)*
  - ✓ Walkthrough & reviews with ALL stakeholders
  - ✓ Validation
- Iteration
- Sign Off / Delivery Support

UX and Usability Services

- **Observation & Subjective Study**
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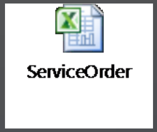
Contents Catalog of UX Services

- **Business Case & Presale**
  - ✓ Operational Efficiencies & KPIs
  - ✓ Proof Of Concept / Demo (Scenario Driven)
  - ✓ Statistical Analysis & Metrics
  - ✓ Before Vs. After Assessment
  - ✓ UX and UI Improvement Plan
- **Expert Usability Review**
  - ✓ Problems, Defects and Issues
  - ✓ GUI Inspection / Information Architecture
  - ✓ Standards & Consistency
  - ✓ Heuristic Evaluation
  - ✓ Improvement Recommendations
- **Detailed Design**
  - ✓ Task & Screen Flows
  - ✓ Screen Wireframes (E2E)
  - ✓ Style Guide Development
- *Graphics Development*
  - ✓ High End Graphics Prototypes & Demos
  - ✓ GUI optimization
  - ✓ Branding
  - ✓ Iconography
- **Customer Engagement & Site Visit**
  - ✓ Call Center Visit
  - ✓ Subjective Study
  - ✓ User study
  - ✓ Call Logs (side-by-sides)
  - ✓ Findings & Recommendations
- **Functional & Task Analysis**
  - ✓ Use case Analysis / Business Processes
  - ✓ Abstract Prototype
  - ✓ Existing vs. Recommended end-to-end flows
  - ✓ Task Efficiency & Usability Metrics
  - ✓ Interaction Design Solutions
- **General**
  - ✓ User Needs Analysis
  - ✓ Business Needs Analysis
  - ✓ Design, Usability & UX Training
  - ✓ UX / Usability Consultation
- **UX Service Order**



Subjective Study

Benefits

- ✓ Reliable indication of user satisfaction
- ✓ Industry best practice
- ✓ Involving users as stakeholders driving design

SUS	ISO 9241-11 suggests that measures of usability should cover: • effectiveness (the ability of users to complete tasks using the system, and the quality of the output of those tasks), • efficiency (the level of resource consumed in performing tasks) • satisfaction (users' subjective reactions to using the system). SUS, which is a usability industry standard, provides this type of high-level subjective view of usability by yielding an overall usability score and is thus often used in carrying out comparisons of usability between systems.
Interviews & Questionnaires	• Subjective Survey (Like, Dislike, Would do differently) • User interviews • Management and executive interviews
Demographics	• Agent tenure and churn • Application and business background

User Study / Observation

Benefits

- ✓ Ensures that design approximates the real world of actual users
- ✓ Understand the user context
- ✓ Observe issues as they happen
- ✓ Elicit valuablele information from users

Observation (side by sides)	Observing agents doing their work • Total Task Time • Hold time • Call volume handled • Transfers • Screens (and systems) traversed • User actions • Identify issues and defects

Task Efficiency

Benefits

- ✓ Reliable means of predicting performance improvements
- ✓ Excellent tool to optimize tasks and process flows
- ✓ Diagnostic tool to identify defects and issues
- ✓ Essential UX aspect of the business case

Task flow analysis (E2E Flows)	User intentions (steps) and system responsibility (displays) Similar to use case narratives (including alternates and exceptions)
Efficiency and Task Visibility metrics	• Essential Efficiency measures actual steps vs. optimal • Task Visibility measures the fit between the visibility of features and the capabilities needed to complete a given task or set of tasks • Task Efficiency = (Essential Efficiency + Task Visibility)/2
Expected efficiency improvement	• Comaprison between current efficiency vs. proposed efficiency • Expected % improvement • Task Efficiency is applied to AHT (factoring in system processing time, talking to customer, user thinking time, etc.)

Statistical Analysis

Transfer Rates	• Senior agents and supervisors • Managers • Finance, Back Office, Collection • Tech Support • Retention • Retail Store
Inbound Calls by reason codes	• Reason 1 / Reason 2 • Frequency of use • Call Volumes (per defined period) • Abandonment Rates
Repeat Callers	As defined by the business (e.g. 7 calls in one month)
Handling Times	• AHT per task • First Call Resolution (Done in One)

Expert Usability Review

Benefits

- ✓ Identify most issues (all major issues) with low overhead
- ✓ Ensure optimal visualization
- ✓ Ensure standards, consistency and best practices

Heuristic Evaluation	Diagnostic review driven by design heuristics. Examples: • User Control And Freedom • Maximize Automation • Simplicity • Etc.
GUI Inspection	Information Architecture: • GUI Visualization • Standards and consistency • Perceived Visual Affordance • Navigation and Taxonomy • Structure and Layout

Training & Reference Material

Training Material is located at: *NOT CONNECTED*

Click on Folders in presentation mode *NOT CONNECTED*

Smart Client Framework

Work

Site Visits

UX Study Examples

Resources

Process Methodology