

Theo Mandel, Ph.D.

User Experience Design & User Research Portfolio

theo@theomandel.com

- K12 – User Research
- Access Corporation – UX Design & User Research
- General Motors – Co-Design & User Research
- Ricoh Printers – Mobile App
- Hunter Douglas – PowerView Mobile App
- PayPal – UX Design
- PayPal – User Research
- Pearson Education (K-12) – User Research
- Freescale Semiconductor – Home Page Redesign
- CoolHotNot – Mobile App Design
- Zoll Data Systems – Emergency Medical Services (EMS) Application)
- emsCharts – Emergency Medical Services (EMS) Mobile App
- OKbridge – Online Bridge Game
- Conference Presentations
- Client List (Online)

K12 – User Research

User Experience Research Consultant (2018)

www.K12.com

User Experience research consultant for K12 Corporation. K12 is the largest K-12 online education program in America. K12 provides online learning for tuition-free and virtual public schools.

Mandel conducted user research on K12's mobile app for K-12 parents to complete the application and student onboarding process.

Access Corporation – UX Design & User Research

User Experience Design & User Research Consultant (2018)

www.K12.com

User Experience design and research consultant for Access Corporation. Access provides records and information management solutions for customers in the United States, Latin America, and the Caribbean. The company offers FileBRIDGE, a document process automation platform that provides integrated records and information management solutions.

Mandel conducted user research on the FileBRIDGE web application navigation structure. He then prototyped new navigation designs. Mandel also reviewed and prototyped innovative designs for the E-Forms application for employee document review and signature workflows. The consulting work with Access is ongoing.

General Motors – Co-Design & User Research

User Experience Design & User Research Consultant (2017)

www.GM.com

www.thedrive.com/news/19331/general-motors-autonomous-vehicle-production-begins-next-year

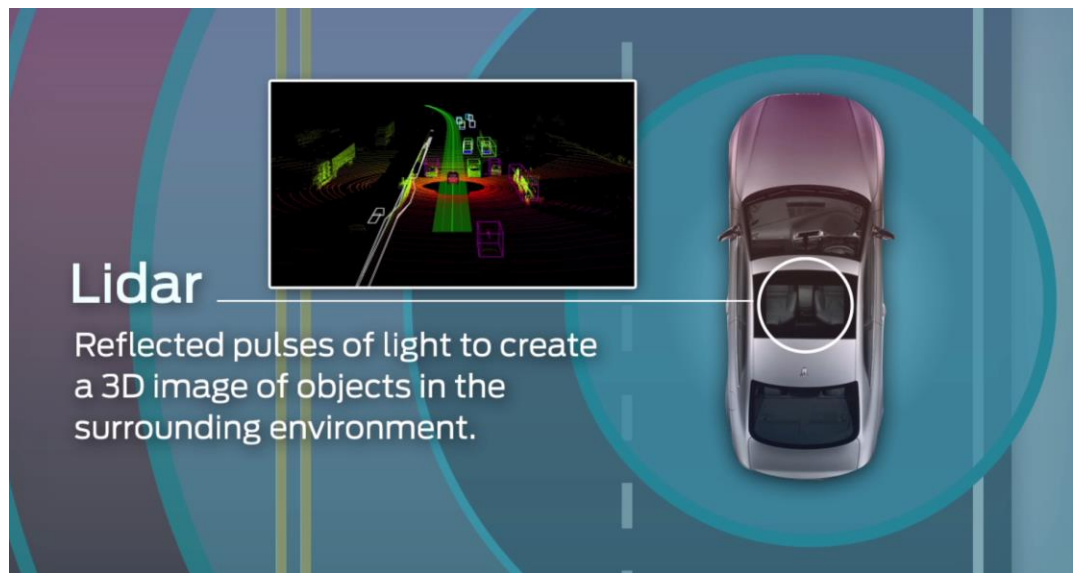
Mandel conducted co-design sessions with car drivers on designing tablet screens to be displayed in autonomous, driverless vehicles. The goal of these screens was to enable and build trust in a driverless by passengers. He also created an introductory video to display in driverless cars.

Mandel then conducted two iterative rounds of user research on the designs and created final designs. While conducting this research, Mandel created a trust questionnaire to create a quantitative measure of a person's trust in autonomous vehicles.

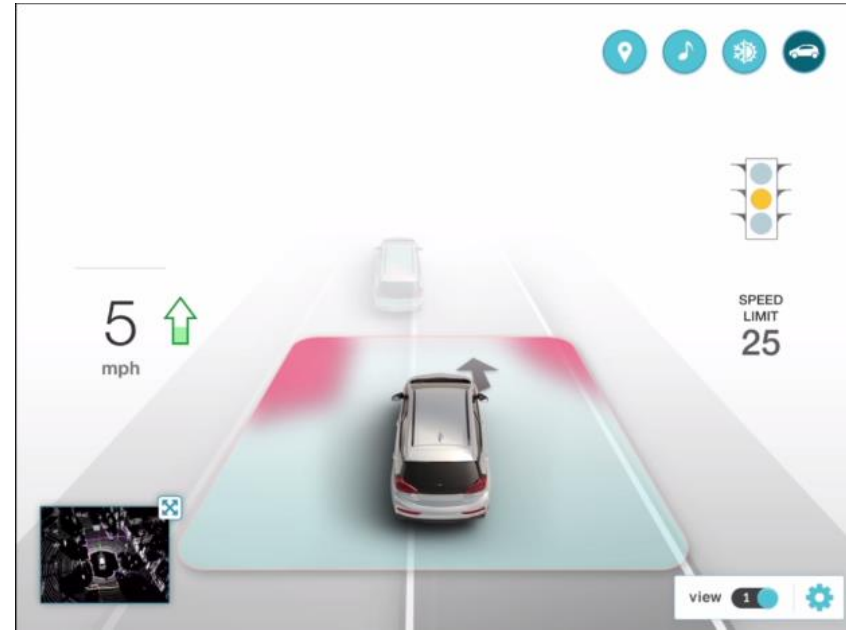
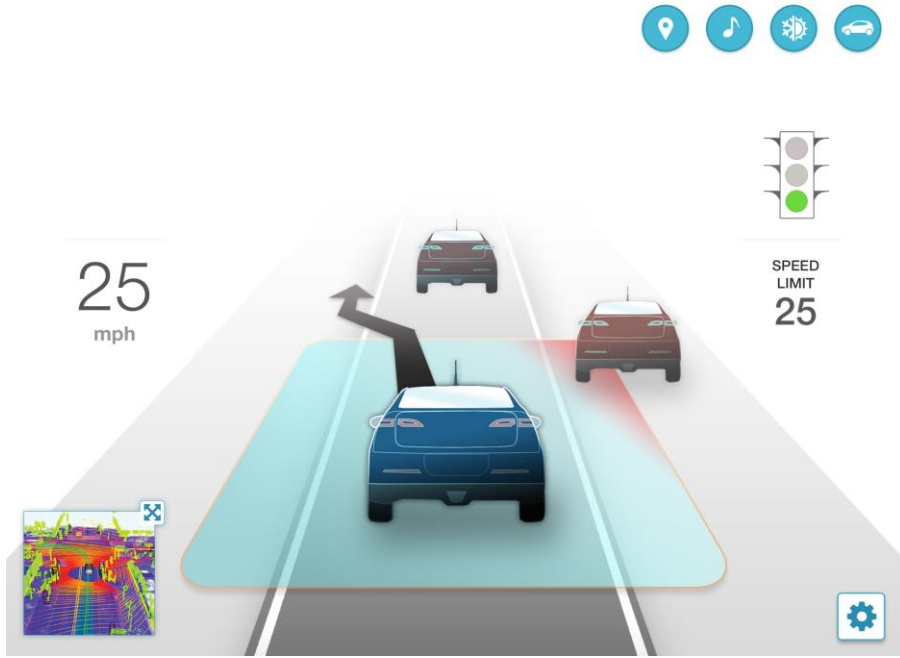
Co-Design Example



Introduction Video Screenshot



Trust Screen Designs

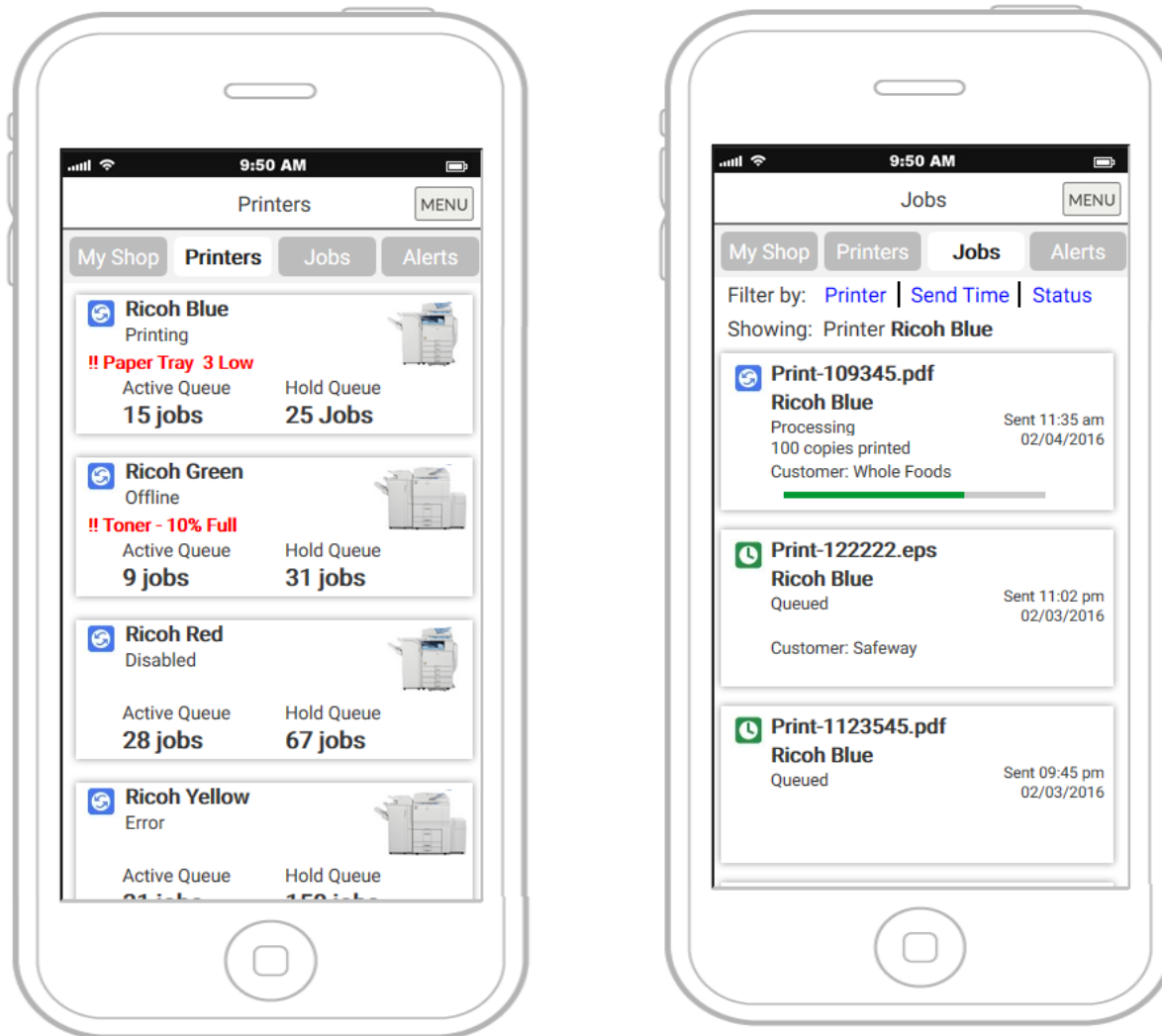


Ricoh Printers – Mobile App

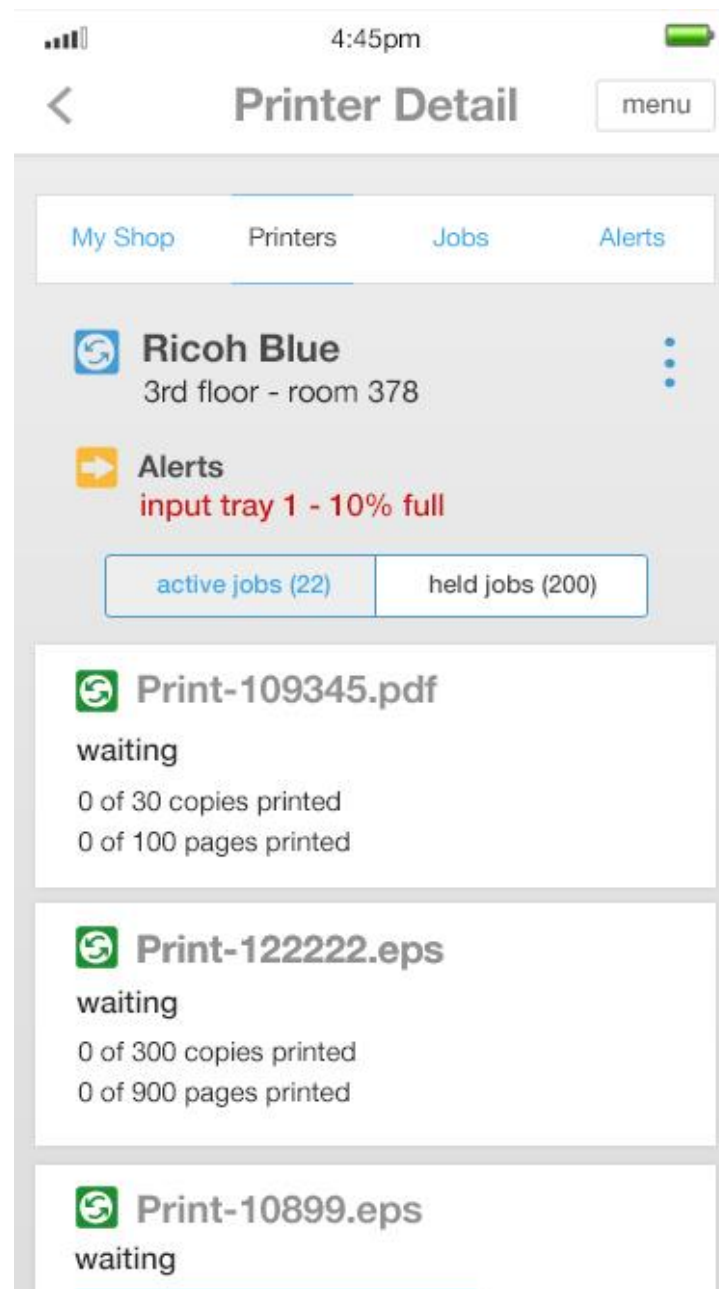
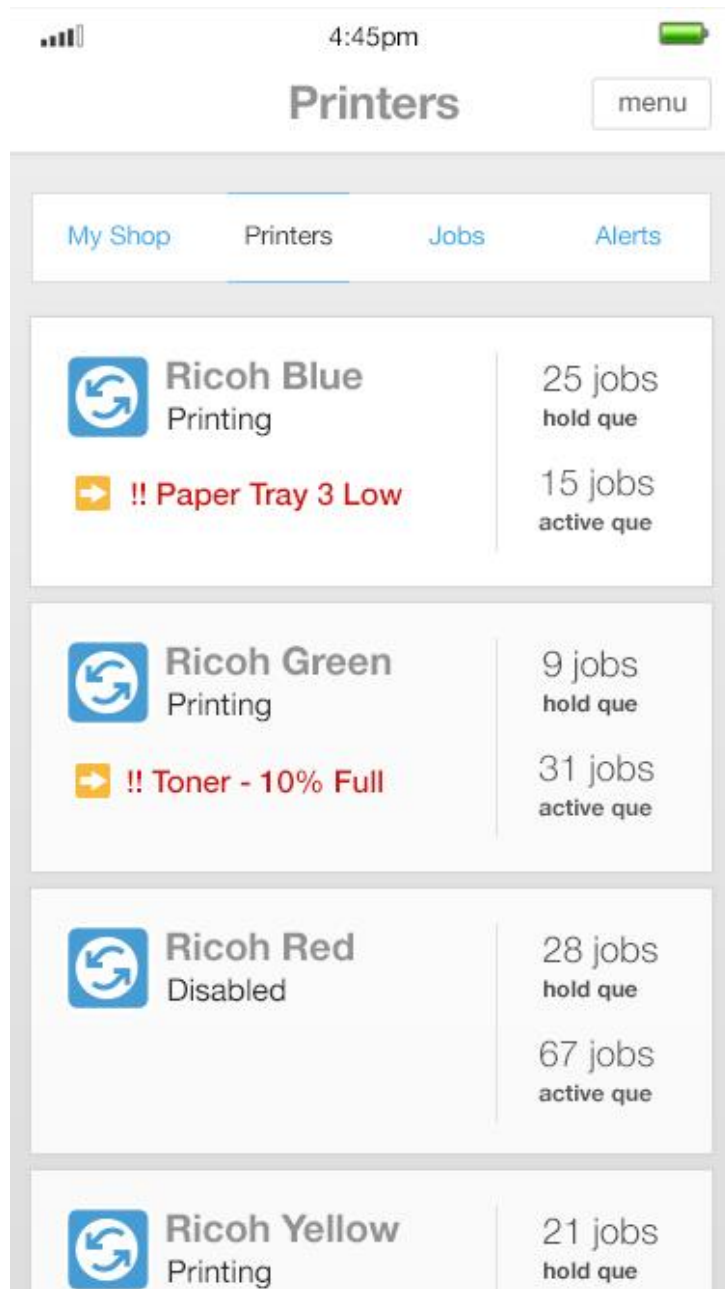
Mobile App Prototyping and Design (2016)

Mandel created interactive mobile app prototypes and designs for Ricoh's Large Production Printers printer management mobile app. The app is designed for large commercial printing businesses.

Prototype Designs



Final Designs



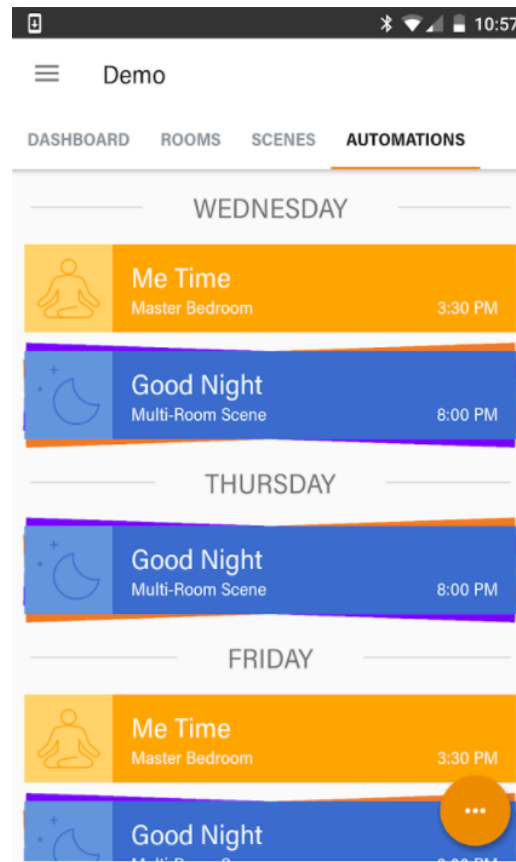
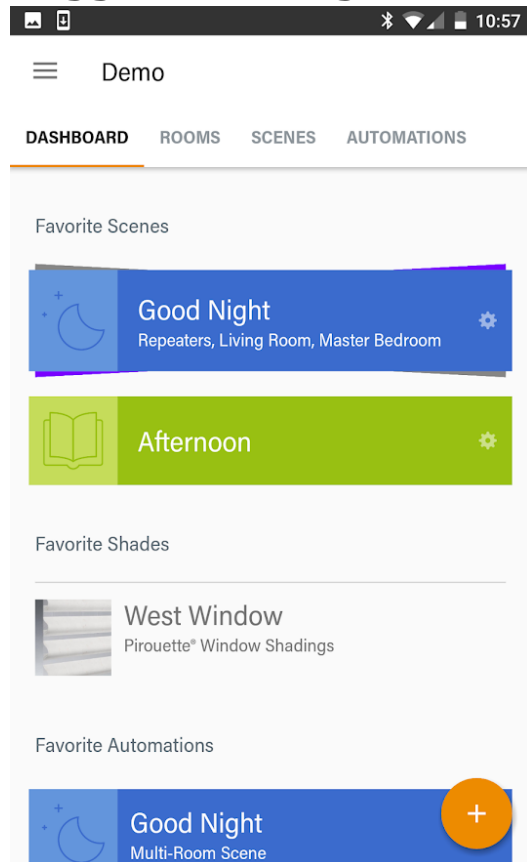
Hunter Douglas – PowerView App

User Experience Review and App Redesign (2015)

www.hunterdouglas.com/operating-systems/motorized/powerview-motorization

Mandel conducted an expert review and redesigned the world-renowned Hunter Douglas PowerView mobile app. The app allows homeowners to adjust blinds and shades by room, time of day and light conditions. Mandel reviewed Hunter Douglas blinds and shades hardware, networking and desktop/mobile software applications and proposed new software designs.

Suggested Designs



PayPal – UX Design

User Experience Design Consultant (2010 – 2012)

Scottsdale, AZ and San Jose, CA

www.PayPal.com

Member of PayPal's Scottsdale UX team tasked with redesigning PayPal's antiquated web user interface (PayPal Classic) for both consumers and merchants.

Mandel designed, prototyped and conducted user testing of conceptual designs, prototypes and beta products using Agile and Lean UX design and development methodologies.

Projects included overall PayPal site design and consumer/merchant account sign-up, setup, account maintenance, invoicing and contact management.

Designed and prototyped desktop, mobile and tablet user experiences using Axure RP as a wireframe and prototyping tool (expert Axure user).

PayPal.com – My Account (Classic)

[Log Out](#) | [Help](#) | [Security Center](#)



[U.S. English](#) ▾

My Account | [Send Money](#) | [Request Money](#) | [Merchant Services](#) | [Auction Tools](#) | [Products and Services](#)

[Overview](#) | [Add Funds](#) | [Withdraw](#) | [History](#) | [Resolution Center](#) | [Reports](#) | [Profile](#)

Welcome sunee muddu

[Help with this page](#)

Business: harmonytest52 (pbalakrishnan@paypal.com) | Account status: [Verified](#) | Status: Active

Search transactions

Next steps ▢

[Add a bank](#)

PayPal balance	Options ▾
Currency	Balance
U.S. Dollar (Primary)	\$25.32 USD
Mexican Peso	\$0.50 MXN
Australian Dollar	\$0.00 AUD
Yen	¥0 JPY
Taiwan New Dollar	NT\$0 TWD
Total in USD	\$25.36 USD

Account actions

- [My Business Setup](#)
- [Verify a credit card](#)

Quick links

- [Policy updates](#)
- [Tax Documents](#)
- [Refund Tutorial](#)

View transactions

- [All account activity](#)
- [Payments received](#)
- [Payments sent](#)
- [Account withdrawals](#)
- [Advanced search](#)

Tools

- [Invoicing](#)
- [Gift certificates](#)
- [Virtual Terminal](#)
- [Fraud Management](#)
- [My Saved Buttons](#)
- [Multi-order shipping](#)
- [Recurring Payments](#)

[About Us](#) | [Fees](#) | [Privacy](#) | [Contact Us](#) | [Legal Agreements](#) | [Site Feedback](#) [-]

PayPal.com – All Account History (Classic)

[Log Out](#) | [Help](#) | [Security Center](#)



My Account | [Send Money](#) | [Request Money](#) | [Merchant Services](#) | [Auction Tools](#) | [Products and Services](#)

[Overview](#) | [Add Funds](#) | [Withdraw](#) | **History** | [Resolution Center](#) | [Reports](#) | [Profile](#)

History

Balance
\$25.35 USD

[Recent Activity](#) | **All activity** | [Find a transaction](#)

Select 1/2/2013 to 2/1/2013

All activity | [All activity \(with balance\)](#) | [Payments received](#) | [Payments sent](#) | [More filters](#)

In [All Currencies](#)

All activity - Jan 2, 2013 to Feb 1, 2013 [Print](#) | Download: [CSV](#) | [More](#)

[Move to Recent Activity](#) | [What's this](#) | [Payment status glossary](#)

<input type="checkbox"/>	Date	Type	Name/Email	Payment status	Details	Order status/Actions	Gross	Fee	Net amount
<input type="checkbox"/>	Jan 31, 2013	Authorization From		Voided	Details		\$0.02	\$0.00	\$0.02 USD
<input type="checkbox"/>	Jan 31, 2013	Authorization From		Voided	Details		\$0.01	\$0.00	\$0.01 USD
<input type="checkbox"/>	Jan 31, 2013	Authorization From		Voided	Details		\$0.06	\$0.00	\$0.06 USD
<input type="checkbox"/>	Jan 31, 2013	Authorization From		Voided	Details		\$0.05	\$0.00	\$0.05 USD
<input type="checkbox"/>	Jan 20, 2013	Canceled Payment From	ce2test@yahoo.com	Completed	Details		\$1.00	\$0.00	\$1.00 USD
<input type="checkbox"/>	Jan 8, 2013	Payment From	rakesh patel	Completed	Details	Print shipping label	\$1.00	-\$0.33	\$0.67 USD

[Move to Recent Activity](#) | [What's this](#)

The most common payment statuses [View more status types](#)

Canceled: The sender canceled this payment.

Completed (referring to a bank withdrawal): Money is being transferred to your bank account. Allow up to 7 days for this transfer to complete.

Completed (referring to a payment): Money has been successfully sent to the recipient.

Denied: The recipient chose not to accept this payment.

Held: Money is being temporarily held. The sender may be disputing this payment, or the payment may be under review by PayPal.

Pending: This payment is being processed. Allow up to 4 days for it to complete.

Returned: Money was returned to the sender because the payment was unclaimed for 30 days.

Unclaimed: The recipient hasn't yet accepted this payment.

[About Us](#) | [Fees](#) | [Privacy](#) | [Contact Us](#) | [Legal Agreements](#) | [Site Feedback](#) [-]

Copyright © 1999-2013 PayPal. All rights reserved.

PayPal.com – My Accounts (New Design)



IDD



Log out

Money >

Available

\$0.00

Bill Me Later

\$0.00

Tools



Invoicing



Request money



Send money

Customers



We'll soon have a new feature that will help you with your customers.

Coming Soon

Transactions >

Jan 28, 2013

Payment To Justin Leasure
Completed

-\$24.78 USD >

Jan 22, 2013

Transfer To Bank Account
Completed

-\$30.48 USD >

Jan 22, 2013



Refund From Skype Communications Sarl
Completed

\$30.48 USD >

Jan 13, 2013

Payment To DealPixel
Completed

-\$15.00 USD >

[All Transactions](#)

PayPal.com – All Transactions (New Design)



IDD



Log out

Transactions

Custom

Monthly

Quarterly

Yearly

12/03/2012



to:

02/01/2013



View

All transactions

All currencies

for Dec 03, 2012 to Feb 01, 2013

Jan 28, 2013

Payment To Justin Leasure
Completed

Action



-\$24.78 USD >

Jan 22, 2013

Transfer To Bank Account
Completed

-\$30.48 USD >

Jan 22, 2013



Refund From Skype Communications Sarl
Completed

\$30.48 USD >

Jan 13, 2013

Payment To DealPixel
Completed

-\$15.00 USD >

Main

Money

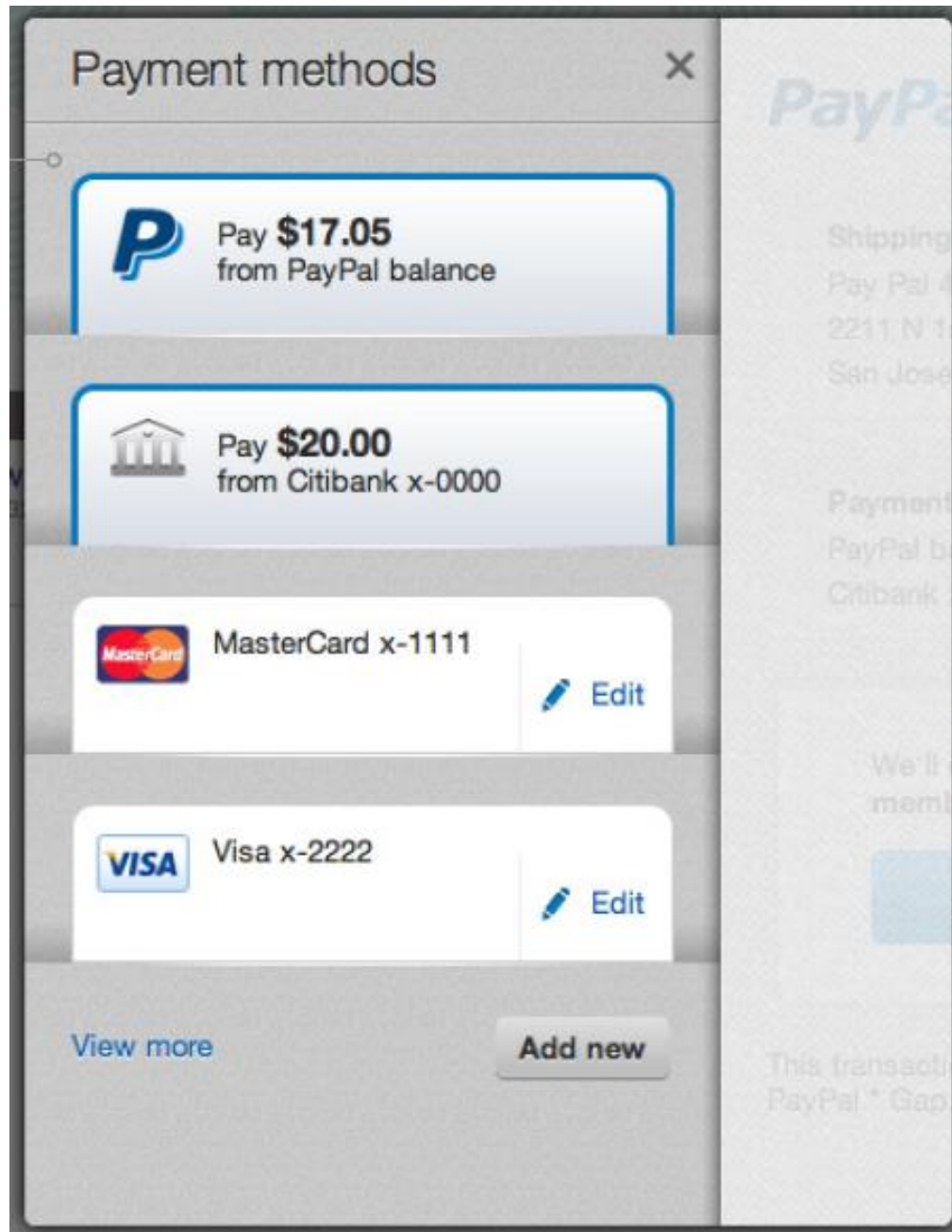
Transactions

Customers

Reports

Tools

PayPal.com – New Mobile Designs



PayPal – User Research

User Experience – Agile User Research (2013 – 2014)

www.PayPal.com

Principal user experience researcher for PayPal's Scottsdale agile design and UX team tasked with redesigning PayPal's consumer – merchant communications regarding issues when items are bought and sold using PayPal as the payment method.

User test sessions are conducted every three weeks at the end of each agile sprint. Six consumer and/or merchant PayPal accountholders are brought in to test the current development version.

All test sessions are audiotaped and transcribed, video-taped and observation notes are collected. Task completion, completion time, errors, assists and all comments are collected. A summary report of the study results and recommendations are created and presented to the project stakeholders.

Pearson Education (K-12) – User Research

User Experience Research Consultant (2011 – 2016)

www.Pearson.com

User Experience Research consultant for Pearson Education (world's largest education company). Focus on research and evaluation of Pearson's web, tablet and mobile education products. Studies involve K-12 teachers, students, school administrators and parents.

Conducted onsite and remote research studies involving a wide range of research methodologies:

- Heuristic evaluation of applications and website
- Card sorting studies on information architecture and site navigation
- Eye-tracking studies of task performance on websites
- One-on-one usability studies in usability lab
- Group usability studies in usability lab
- Remote un-moderated usability evaluations using UserZoom and UserTesting
- Remote moderated usability evaluations using WebEx and other collaborative programs.

Designed a usability laboratory for a joint project between Pearson Education and Arizona State University.

Mandel redesigned Pearson's Chandler research facility.

Freescale Semiconductor – Home Page Redesign

User Experience Design Consultant (2013-2014)

www.Freescale.com

Mandel was asked to update and redesign the Freescale Semiconductor home page main area. This was the first phase of a multi-phase redesign effort by Freescale. In later phases, Mandel will redesign the e-commerce shopping process.

Key objectives of the home page redesign were to reduce clutter, prioritize key content areas, increase font size, focus on Freescale's positioning statement and improve the banner area. Mandel created three conceptual wireframes of the home page redesign. One of the redesigns has been chosen to replace the current home page. Final designs are in the process of being developed and implemented.

NOTE: Conceptual prototypes did not focus on the Freescale color palette, graphic design or banner images. The focus was on overall home page layout and navigation design.



Locations | 中文 | 日本語 | 한국 | | My Freescale | Login

Keyword Product/Parametric Orderable Part

Search by keyword

- Products
- Applications
- Design Resources
- Support
- Sample and Buy
- About



When Energy Efficiency and Functional Safety Matter

Explore the latest Qorivva MCUs for chassis and safety applications >

My Freescale

Welcome Guest

[Register or Login](#)

[Browse History](#)

[My Recommendations](#)

[Why Register?](#)

Connect With Us

[Sales and Support](#)

[Communities and Blogs](#)

[University Programs](#)

[Investors](#)



Designing with Freescale



Events

April 8 – 11, 2014 - [Freescale Technology Forum Americas 2014](#), Dallas, TX

November 17 – 20, 2013 - [MILCOM'13](#), San Diego, CA

November 21 – 22, 2013 - [LTE North America](#), Dallas, TX

December 10 – 11, 2013 - [Wearable Tech Expo](#), Universal City, CA

January 7 – 10, 2014 - [CES](#), Las Vegas, NV

[All events >](#)

Freescale Technology Forum

FTF 2014
Americas: April 8-11
China: May
India: August
Japan: October

[Don't miss out on FTF, get more info >](#)

Headlines

Oct 29, 2013 - [Freescale Semiconductor to Attend RBC Capital Markets 2013 Technology, Internet, Media and Telecommunications Conference](#)

Oct 28, 2013 - [Freescale Collaborates with ARM and Oracle to Add New Vertical Segment Support for 'One Box' IoT Gateway Platform](#)

Oct 27, 2013 - [Freescale Announces](#)

[All news >](#)

Partners

Freescale Connect—your essential source for embedded designs



[All partners >](#)

Now Playing

Kinetis L Series MCUs Energy Efficiency

(05:22 min) This live demonstration proves the winning energy efficiency of Freescale's Kinetis KL02 against TI MSP430, Microchip PIC24 and ST Micro.



- Find Products
- Microcontrollers
- Processors
- Analog and Power Management
- DSPs and DSCs
- RF
- Sensors
- Parametric Search

- View Applications
- Automotive
- Connectivity
- Consumer
- Industrial
- Medical/Healthcare
- Motor Control
- Networking
- Smart Energy

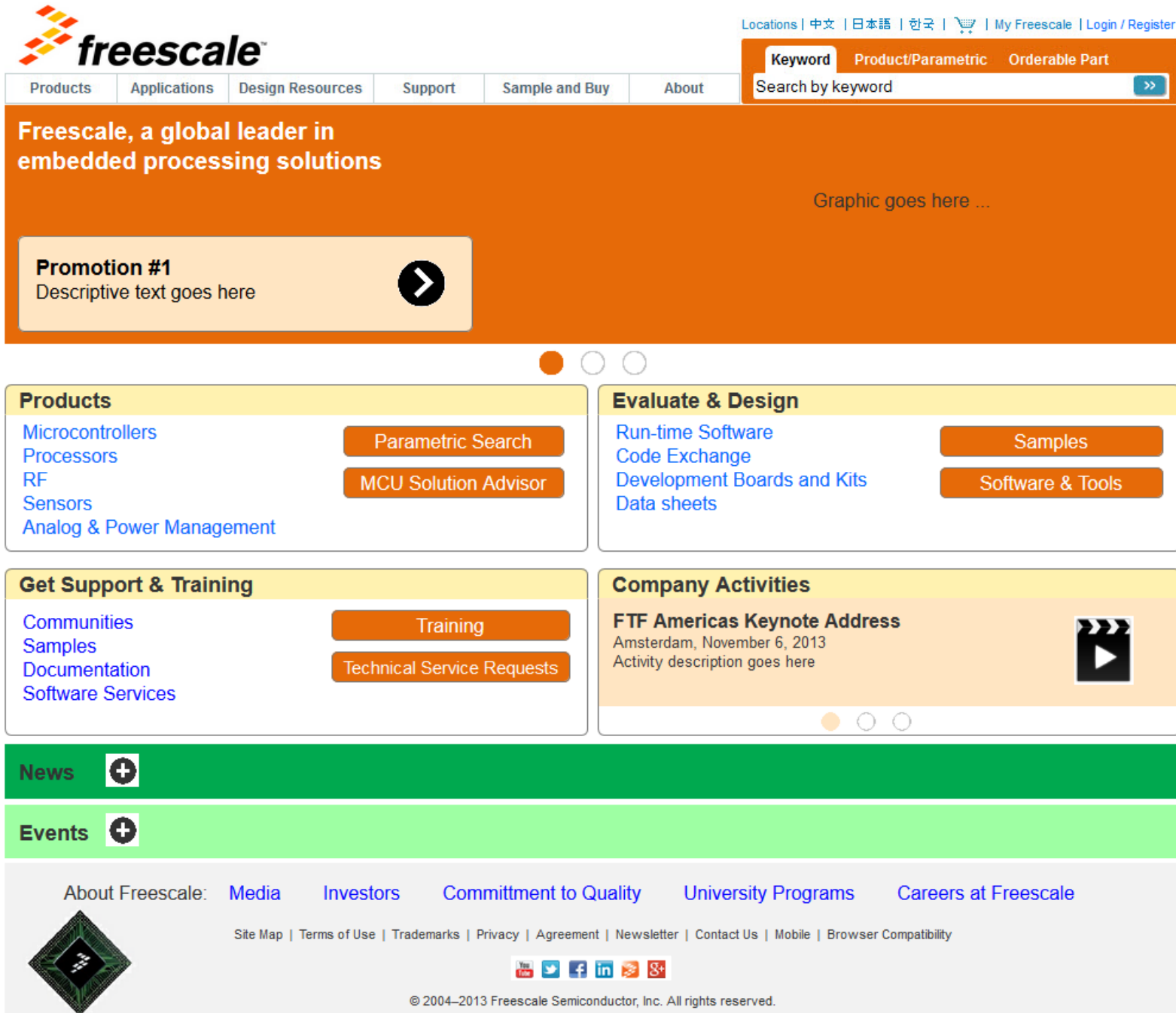
- Design Resources
- Software and Tools
- Reference Designs
- Training
- Partners
- Functional Safety
- Product Longevity
- Energy-Efficient Solutions
- Custom ICs and SOCs
- Documentation

- About Freescale
- Media
- Investors
- Quality
- University Programs
- Careers at Freescale



Making the world a smarter place. Freescale, a global leader in embedded processing solutions, powers the latest innovations in cars, smart mobile devices, networks, medical electronics and smart energy >

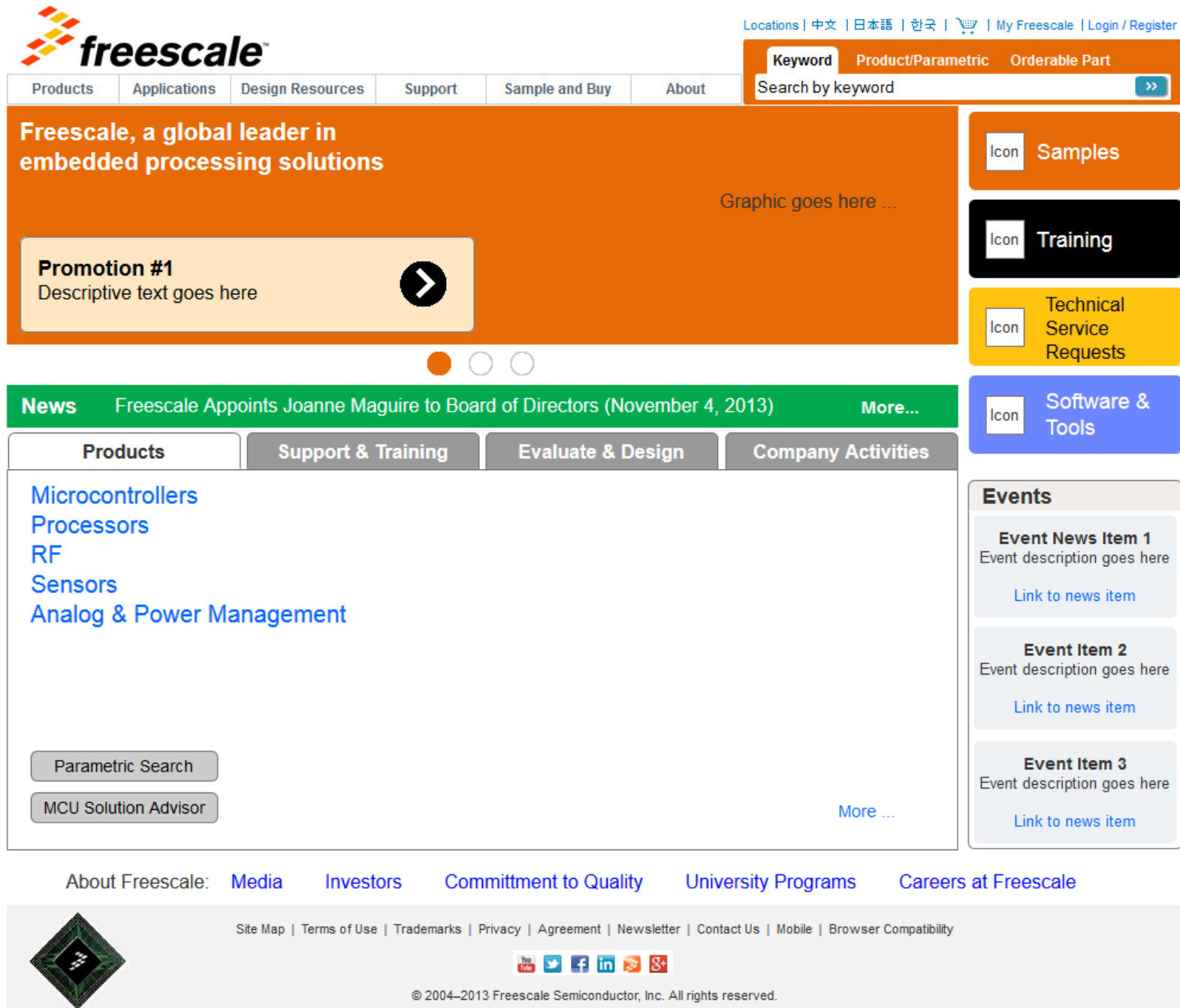
Freescale.com – Conceptual Prototype 1



Freescale.com – Conceptual Prototype 2

The image shows a conceptual prototype of the Freescale.com website. At the top left is the Freescale logo. To its right are links for 'Locations | 中文 | 日本語 | 한국 | 购物车 | My Freescale | Login / Register'. Below the logo is a navigation bar with 'Products', 'Applications', 'Design Resources', 'Support', 'Sample and Buy', and 'About'. A search bar is positioned to the right of the navigation bar, with tabs for 'Keyword', 'Product/Parametric', and 'Orderable Part', and a 'Search by keyword' input field with a search button. The main content area is a large orange banner with the text 'Freescale, a global leader in embedded processing solutions' and a placeholder 'Graphic goes here ...'. Below this banner is a 'Promotion #1' box with 'Descriptive text goes here' and a right-pointing arrow. To the right of the banner are four vertical buttons: 'Samples', 'Training', 'Technical Service Requests', and 'Software & Tools', each with an 'Icon' placeholder. Below the banner is a green 'News' section with the headline 'Freescale Appoints Joanne Maguire to Board of Directors (November 4, 2013)' and a 'More...' link. The main content area is divided into four columns: 'Products' (listing Microcontrollers, Processors, RF, Sensors, Analog & Power Management, Parametric Search, and MCU Solution Advisor), 'Support & Training' (listing Communities, Samples, Documentation, Software Services, Training, and Technical Service Requests), 'Evaluate & Design' (listing Run-time Software, Code Exchange, Development Boards and Kits, Data sheets, Samples, and Software & Tools), and 'Company Activities' (listing FTF Americas Keynote Address, Tool of the Month, and Participate in Tower Trivia). To the right of these columns is an 'Events' section with three event items, each with a title, description, and a 'Link to news item' link. At the bottom of the page is a footer with 'About Freescale:' followed by links for 'Media', 'Investors', 'Commitment to Quality', 'University Programs', and 'Careers at Freescale'. Below this is a 'Site Map | Terms of Use | Trademarks | Privacy | Agreement | Newsletter | Contact Us | Mobile | Browser Compatibility' section, a row of social media icons (YouTube, Twitter, Facebook, LinkedIn, YouTube, and Google+), and a copyright notice: '© 2004–2013 Freescale Semiconductor, Inc. All rights reserved.'

Freescale.com – Conceptual Prototype 3



Freescale.com – New Home Page Design



[Cart](#) [Sign In](#) [English](#)

All Search...



Products

Applications

Software & Tools

Training & Communities

Sample & Buy

About

We're Heading to Vegas, Baby!

120 demos on the Internet of Tomorrow Tour rolls into town for CES, January 6-9
Las Vegas Convention Center, Central Plaza

Join Us



A Global Leader in Embedded Processing Solutions

Learn Why

Find Products

Microcontrollers
Processors
Analog & Power Management
RF
Sensors

Parametric Selector

Evaluate & Design

Hardware Development Tools
Software Center
Documentation

Applications

Access Training & Support

Samples
Training & Events
Video Vault

Communities Support

News 3 Dec 2014 Embedded Beat: The added benefits of self-driving cars



CoolHotNot.com – Mobile App Design

Co-Founder, UX Architect (2008 – Present)

www.CoolHotNot.com

“I believe that trusted curation is the future”

Mark Cuban, Shark Tank

Co-founder and user experience architect for CoolHotNot.com, a social website of consumer electronics reviews from trusted technology experts such as John C. Dvorak of MarketWatch and tech blogger Chris Pirillo. Part of a world-class team of industry tech experts, marketing experts, graphic designers and developers.

CoolHotNot’s next iteration will include a membership site that fully exploits the power of social media to facilitate the sharing of real-life, personal product experience in a creative new way that lets members define the recommendations they get by category or keyword, according to the friends and experts they choose. View [Learn More video](#) to see upcoming social membership features.

Mandel is responsible for all user experience aspects of the website – overall design and page layout, navigation and user interaction.

Home Blog Team

Let's Make Product Search Social

RECOMMENDED
it's
COOL
and belongs on the
BEST LIST

WANTED
it's
HOT
and belongs on the
WISH LIST

DISAPPOINTING
it's
NOT
cool and belongs on the
WORST LIST

when we
SHARE LISTS
we
DISCOVER
what's best to
BUY, GIVE, & AVOID

Key Features & Benefits

Product Search Made Social
Imagine knowing what to buy, what to give, and what to avoid based on the real-life experience of people you know and trust. How cool is that?

Sharing Made Fun & Rewarding
Sharing your experience with products is as easy as clicking on a thumb; plus, the more you contribute to the sharing community, the more you'll get!

24x7 Shopping Guidance
You'll be able to tell at a glance whether and how much the product is liked, wanted, or disliked by the crowd (join or the experts (star).

CoolHotNot in a Nutshell

Our disruptive innovation is simple: individuals share their lists of products they:


1. use and want to recommend to friends (Best List – Cool),
2. want (Wish List – Hot), and
3. tried but found disappointing (Worst List – Not)

Then, using our patent-pending method, we can combine individual lists for any number or group of people into ranked lists – eg. search results or Top 10 Lists – and thus provide instant, 24x7, at-a-glance shopping guidance!

I believe that trusted curation is the future.
Mark Cuban, Shark Tank

About Us Privacy Policy Contact Us
© CoolHotNot Corporation, 2015

CoolHotNot Home Page – 2014




Beta
What's Best, Wanted, and Worst
In Consumer Electronics ...

Home Tech Xperts' Picks Win Cool Stuff Products Learn More

Sign in Sign up

Reliable tech product recommendations from people you trust



The CoolHotNot Tech Xperts



John C. Dvorak, Dave Whittle, Steve Bass, Cheryl Currid, Robin Raskin, Jim Louderback, Dave Graveline, and Chris Pirillo

What's Cool

Xperts Love It




Apple iPad

Our Best List

What's Hot

Xperts Want It





Kinect for Xbox 360

Our Wanted List

What's Not

Disappoints Xperts



Samsung Galaxy Tab

Our Worst List

Click to win our Featured Product




I want it!

Color3


Color hasn't evolved since the 1970's, but our TV's have. It needed to play catch-up, so Entertainment Experience created Color3 to bring your viewing experience into the 21st century and beyond, regardless of room conditions. With Color3 you don't need to compromise. Our adaptive technologies present the perfect picture no matter where you put the TV, or the lighting of the room. When w....More >

Want to win it? Click on the Red Wanted Thumb



Discover our Tech Xperts' Product Lists


What They Love, Want, and Found Disappointing



View Xpert List

Featured Product Giveaway

Discover and Win Cool or Hot Tech Xperts' Picks



View Featured Product

CoolHotNot 101

Simplify your shopping decision process.

Learn More

Home | Tech Xperts | Featured Product | About | Press | Advertise | Privacy | Terms | FAQ | Contact | Learn More

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Social Site – New Member

coolhotnot Beta What's Best, Wanted, and Worst In Consumer Electronics™

Joe Logout MEMBER 10 Tickets

Product Search Search

Home Products List & Recommendations Win Cool Stuff Learn More

Find Someone

Me & My Lists

My Friends

My Xperts

CoolHotNot Crowd

CoolHotNot Tech Xperts

Dave Whittle | My Next Steps

Share your Product Experience with Friends and Community

To be eligible to win our giveaways, just add a product to your Wanted List – once it's on your list, you'll be AUTOMATICALLY entered to win whenever we give away that product! All it costs is one ticket per contest entry.

- » [Update Your Loved, Wanted, or Letdown Lists](#)
- » [Browse Other People's Lists](#) to Find Products to Add to Your Lists

TICKETS Get More Tickets – It's Easy and Fun!

You earn tickets (in semi-random, surprise amounts) for contributing to the CoolHotNot community in various ways, such as sharing your lists or inviting others to join. You can use the tickets you earn to increase your chances of winning the giveaways for products on your Wanted List, or for other fun purposes you can learn about later (when we're out of beta testing).

Click Any Item Below to Earn More Tickets:

- » [Sponsor a Friend to Join CoolHotNot](#)
- » [Add Others to Your Own Personal Team of Xperts](#)
- » [Update Your Lists](#)

MEMBER Build Your Credibility – Advance in Cred Level

CoolHotNot is all about trustworthy reviews and rankings; and that means that we give more weight to those reviewers who prove their personal credibility. So everyone wins when you let people know who you are so they can choose to friend you or make you their Xpert.

Click On An Item Below to Boost Your Credibility:

- » [Complete Your Profile](#) (Let people know who you are)
- » [Invite Friends](#) to join CoolHotNot
- » [Post Your Own Personal Referral Link](#) (on Facebook, Twitter, your blog, or anywhere else people can click your link)

CoolHotNot List Page



What's Best, Wanted, and Worst
in Consumer Electronics™

Jared
Logout

ADVISOR

1231
Tickets

Product Search

Search

Home

Products

List & Recommendations

Win Cool Stuff

Learn More

My Lists | My Friends | My Xperts | CoolHotNot Crowd | CoolHotNot Tech Xperts

Find Someone

CoolHotNot Crowd



Click on the CoolHotNot Crowd button above to see the combined, ranked lists of the CoolHotNot Tech Xperts Team. Click on a photo to see that member's lists.

Dave Whittle

My Friend

My Xpert



TECH XPERT

9235 Tickets

5,432 Referrals

Summary

I'm the Founder & CEO of CoolHotNot, a father to 9, social media pioneer, and I'm changing the world that's been changing me since 1979 when I first went online.



Dave Whittle | Loved List - Using, Enjoying & Recommending

Loved List

Wanted List

Letdown List

Select Category Filter

Keyword Filter

Products 1-10 of 24

Previous

1

2

3

Next

1

GO

Page 1 of 3

1

Lenovo ThinkPad Edge 420s

Price Range: \$749 - \$899



MINI-REVIEW

Dave Whittle: This is just a great notebook. Great screen, the trackpad and pointing stick offer great alternatives, and you can stuff a second battery into the DVD slot. Lenovo makes awesome notebooks ...

Add to my List:



2

BlueAnt T1 Bluetooth Headset

Price Range: \$119 - \$130



MINI-REVIEW

Dave Whittle: The quick-and-easy voice-assisted setup won me over on the Q1 - not to mention the excellent sound quality and comfortable fit. It offers great alternatives, and you can stuff the device into your ...

Add to my List:



3

Nintendo Wii

Price Range: \$199 - \$249



MINI-REVIEW

Add to my List:



Zoll Data Systems – Emergency Medical Services Application

UX Design Consultant – RescueNet ePCR (2007)

www.ZollData.com/rescuenet-ePCR

ZOLL Data Systems has been providing Windows-based Emergency Medical Services (EMS) software solutions since 1994, longer than any other vendor in the EMS market. ZOLL Data Systems is a software division of **ZOLL Medical Corporation**, one of the leading manufacturers of cardiac resuscitation devices.

Mandel designed, prototyped and conducted usability testing of touch-screen designs for Zoll’s next-generation PC touch-screen and pen-based EMS field data collection and management program, **RescueNet ePCR**. ePCR is used by EMS and Fire/Rescue ambulance teams in the field to document patient information, history, vital signs, medical and trauma assessments, interventions, and treatment during the entire patient care process up to delivering the patient to a hospital Emergency Room.

To understand how users work with the program, Mandel rode along in ambulances for four days, watching medical technicians and paramedics use the hardware and software in the field. Customers and users were intimately involved in designing the new version of the product.

Zoll’s ePCR is widely regarded as the gold standard in the EMS software industry.

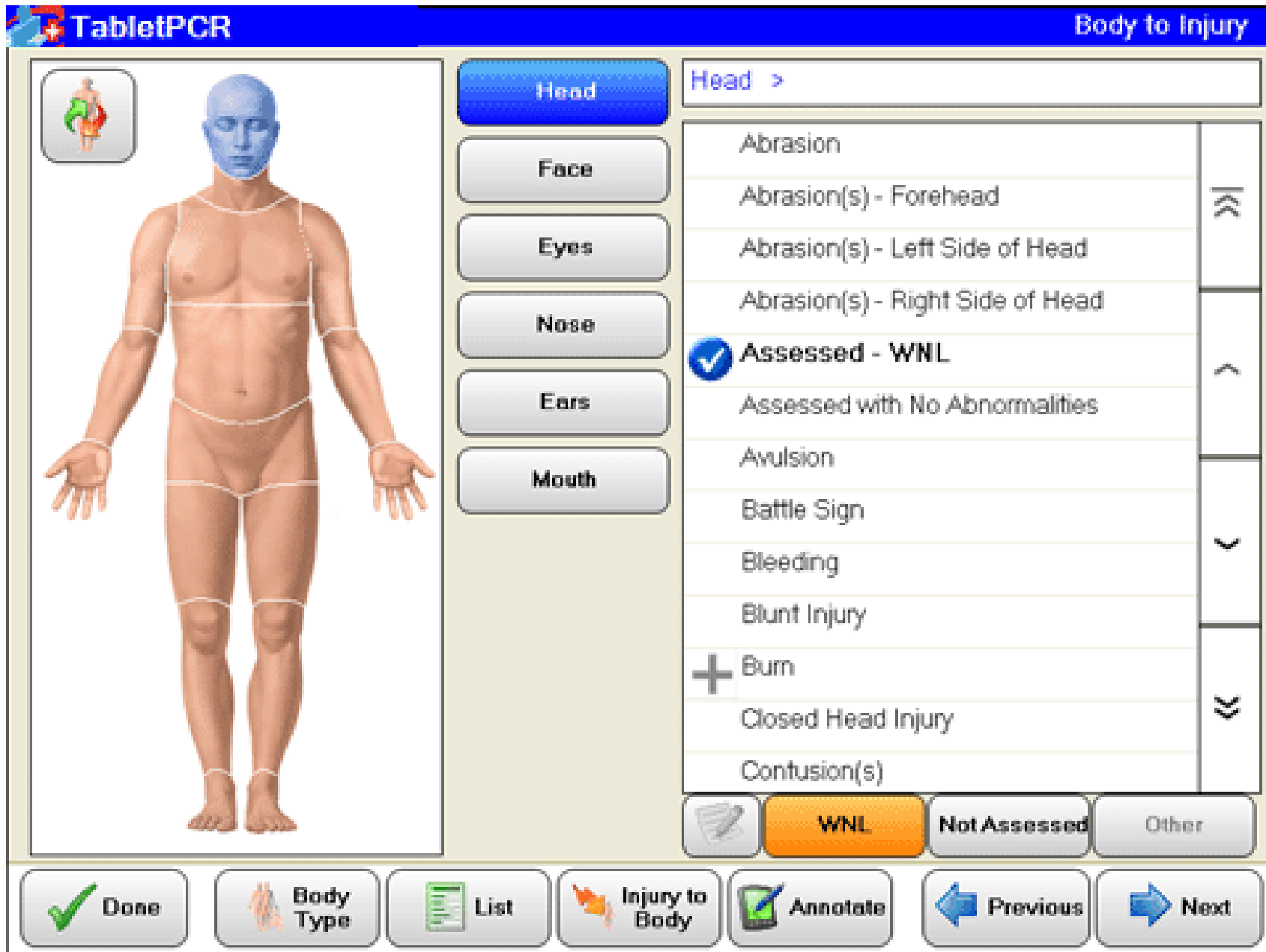
[Case study](#) published in **User Experience** magazine, November 2007.

Old Design

The screenshot shows a software window titled "1 UNKNOWN, A". The interface is divided into several sections:

- Top Bar:** Contains a menu (Action, Patient, Go, Help), a patient selection dropdown (1: UNKNOWN, A), and various utility icons like a plus sign, minus sign, clipboard, printer, checkmark, and a ZOLL logo.
- Second Bar:** A row of icons representing different medical and emergency services, including a person, a person with a dollar sign, Hx, a person with a checkmark, a syringe, BLS PTA, a person with a checkmark, an eye, TR, a person with a checkmark, a clock, a person with a checkmark, a person with a checkmark, AG, Pd1, P2, Ad1, Ad2, State Data Pickup, and State Data Drop-off.
- Third Bar:** A tabbed interface with "Initial Response" selected. Other tabs include "Time, Mileage, Codes".
- Main Content Area (Left):** A scrollable list of information sections:
 - Shift Date- 06/05/2007, Medic #1- Bader, Bob, Medic #2- Preston, Penny
 - Initial Response Information (highlighted in yellow)
 - Scene Information
 - Billing / Insurance Company
 - Patient- UNKNOWN, A
 - 16:26:29 Time of Injury
 - History Information
 - PMH- Alcohol Abuse; Anemia
 - 15:01:01 Assessment- Other Comments: Other: Other Comments;
 - Diagnosis
 - 11:24:52 BP- 204/37, Pulse- Weak Irregular, Respiratory Rate- 44, ECG- Normal Sinus Rhythm, Ectopics- Pacer Rhythm with Ectopy, Glasgow- E2 V3 M2 = 7
 - BLS/PTA Interventions
 - Interventions
 - Outcome Information
 - 16:26:29 Time At Hosp.
 - Signatures
- Main Content Area (Right):** A form for "Initial Response" with the following fields:
 - Call Received By: [Dropdown]
 - Incident Number: [Text]
 - State Number: [Text]
 - Call 3 Number: [Text]
 - Nature of Call: Abdominal Pain [Dropdown]
 - Click here to enter: [Text]
 - Responding With: Abdominal Pain, Females >=45, Females w Fainting, Males >=35, Not Alert
 - Reason for Delay: [Text]
 - Location Type: [Text]
 - Common Location: [Text]
 - Location of Call: [Text]
 - From Zone: [Dropdown] To Zone: [Dropdown]
- Bottom Bar:** Contains a "Save" button (green checkmark), a "Cancel" button (red X), a status indicator (red exclamation mark), and the time "10:45 AM".

New Design



emsCharts – Emergency Medical Services Mobile App

UX Design Consultant – emsCharts Mobile (2010)

www.emscharts.com/pub/product-mobile.cfm

Established in 2003, emsCharts provides dynamic electronic data collection and management solutions for the emergency medical field. The suite of products gives air medical and ground emergency medical services mobile access to web-based data collection applications for Patient Care Records (PCRs).

Mandel designed and prototyped emsCharts' first mobile touch-screen system. Like Zoll Data Systems' **RescueNet ePCR**, **emsCharts Mobile** is used by EMS and Fire/Rescue ambulance teams in the field to document patient information, history, vital signs, medical and trauma assessments, interventions, and treatment during the entire patient care process up to delivering the patient to a hospital Emergency Room.

To understand how users work with the program, Mandel rode along in an air rescue helicopter for one day, watching medical technicians and paramedics use the hardware and software in the field. Customers and users were intimately involved in designing the new version of the product.

Old Windows-Based Design

The screenshot displays the EMSCharts.com web interface. At the top, the logo "emsCharts.com" is visible. Below it, a navigation bar includes "home", "Level: Initial Entry (50)", "Add QA Flag", "View Flags (6)", "Pt: JoAnn Doe", "ghoward - 08/31/05", and "logout".

The left sidebar contains a menu with the following items:

- » Patient Charts
- » Page 1 (Dispatch)
- » Patient
- » Page 2 (PT,CC,HPI)
- » Page 3 (Neuro, Airway)
- » Page 4 (Resp, Cardio) **←**
- » Page 5 (Secondary Survey)
- » Page 6 (Labs, Fluids)
- » Page 7 (Meds, IVs PTA)
- » Page 8 (Activity Log)
- » Page 9 (Misc Forms)
- » Entire Chart
- » Print Preview
- » Special Report
- » Chart Toolbox
- » Import Data

The main content area is divided into two sections:

RESPIRATORY

Effort: Normal | Breath Sounds: L: Clear | R: Clear
O2: 15 l/min | Via: NRB
Comments: local police dept administering oxygen; bilateral wheezing **Ventilator**

CARDIOVASCULAR

Pulses		Invasive Monitoring	
Left	Right	Art Line:	PA Line:
Carotid: Not Checked	Not Checked	Brachial - Left	
Radial: Strong	Absent	Brachial - Right	
Brachial:		Femoral - Left	
Femoral: Not Checked	Not Checked	Temp: °F	
Dorsalis: Strong	Strong	IABP Settings	

JVD: Not Appreciated | Cap Refill: Brisk | Edema: Not Appreciated
Comments: **Pacemaker**

Buttons: Defaults, Cancel Changes, << Back, Next Page >>

New Mobile Designs

Chart #41 (Test, PT - 420 Henry Street)

Upload Charts
 Print
 Tool Box
 Documents
 No Patient
 New
 EKG Import
 Test, PT

Full Chart | **Templates**

- Dispatch
 - General
 - Specialty
 - Vehicle
 - Crew
 - Referring/Receiving
 - Associated Patients
- + Patient Information
- + CC/HPI
- + Neuro/Airway
- Secondary Survey
 - Injury/Assessment
 - Drains and Tubes
 - Obstetrics
 - Skin
- Activity Log
- Signatures

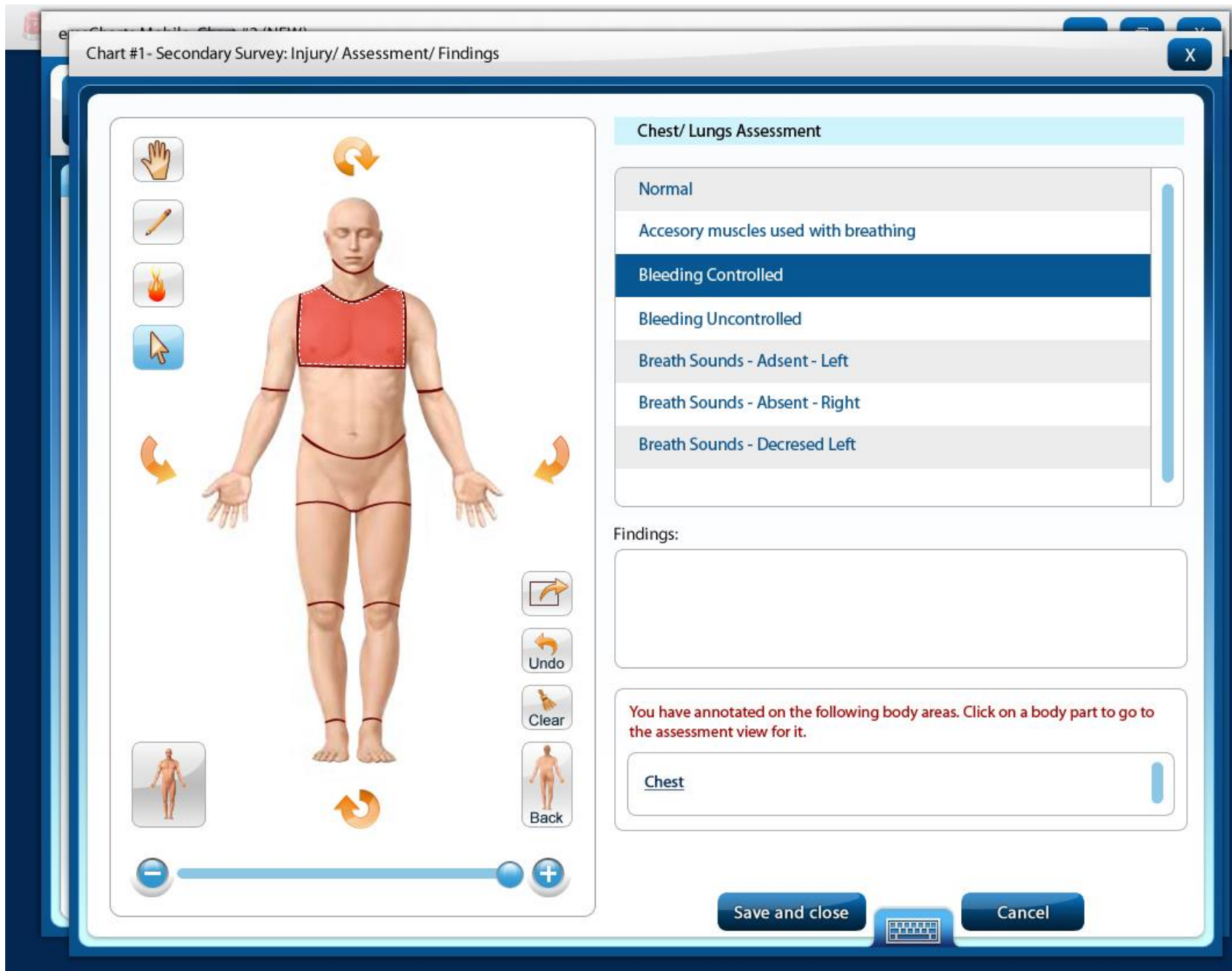
Activity Log Show Comments

Time	HR	BP	SaO2	ETCO2	Resp.	Effort	GCS	Pain	Action
04/29/2011 15:18		/					0	0	Airway
04/29/2011 15:17		/					0	0	Intubation
11/15/2010 00:27	86	110/70	98		98	Normal	15	1	Medication
11/15/2010 00:20	86	110/70	98		98	Normal	15	1	Initiate IV

Activity Details

Date/Time:	11/15/2010 00:27	Procedure:	Medication	Narrative/Comments:
Heart Rate:	86	Crew:	BSIL, BSIL	Medication
BP:	110/70	Successful:	Yes	Metoprolol, 2 MG via IV -
SaO2:	98	Attempts:	1	PUSH given by BSIL,
ETCO2:		Dose/Rate:	2	BSIL
Resp:	98	Router:	2	
Effort:	Normal	Medication:	30	
GCS Score:	15		a	
Pain:	1	Lot#:		
		Unit:	2835	
		Witness 1:		
		Witness 2:		

New Mobile Designs



OKbridge – Online Bridge Game

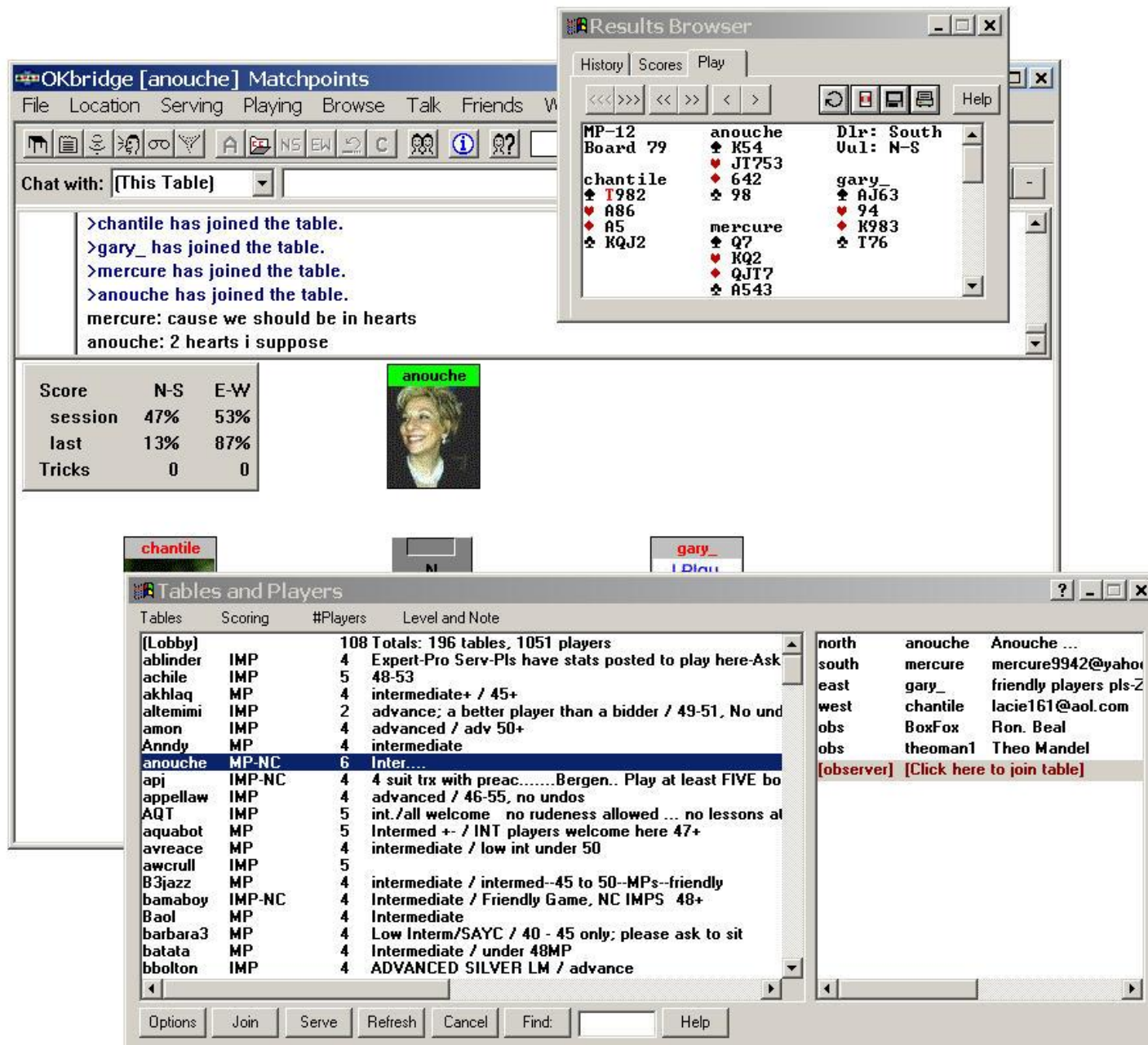
UX Design & User Research Consultant (2004 – 2010)

www.OKbridge.com

OKbridge, Inc. is an online bridge club dedicated to serving the worldwide community of bridge players by providing superior software and service. Today, OKbridge has more than 18,000 members from over 90 countries, making it the world's largest member-supported online bridge club. Mandel worked closely with OKbridge founder and development team to design and prototype the next generation of the online program. Mandel's designs focused on the needs and requirements of both expert-level and novice bridge players, through user research and usability evaluations.

- Reviewed and redesigned the site's registration process.
- Led the redesign effort to move from an old Windows-based design to a modern Java-based game design. Successfully designed the Java-based application for maximum enjoyment and usability.
- Conducted expert evaluations of the OKbridge website and online game.
- Conducted usability research with OKbridge members on the new user experience.
- Ongoing design and incorporation of new functionality in OKbridge website and OKbridge game experience.

Old Windows-Based Design



New Java-Based Design – Game in Progress

The screenshot displays a Java-based online bridge game interface. The main area features a green background with player avatars and cards. At the top, the window title is "OKplus [scarlet]". The interface includes a menu bar with "Table", "Players", "CCs", "Hands", and "Help".

Player information and scores are shown on the right side:

trumpguy	
Game Information	
Matchpoints	Rated
Undos allowed	
Scores	
MP-30.222	
Session: 0.00%	Contract: 4♥
Last Hand: --	By: trumpguy

The "Tricks" section shows a score of "We:1 They:0". The "Last Trick" section displays a card layout:

	♦5 < Lead	
♦4		♦T
	♦K	

At the bottom, there is a chat window with a "Go to Table" button, "Hints" and "Filter" buttons, and a "Chat with:" dropdown set to "Private Chat". The chat log contains the following messages:

- * trumpguy has joined the table.
- * trumpguy is now sitting South.
- * brett_m is now sitting North.
- * You are now sitting East.
- * ladyc is now sitting West.

The bottom of the interface includes a text input field with the placeholder "[Type message, then press Enter or Send]" and a "Send" button. The window title at the bottom is "Applet Window".

New Java-Based Design – Available Players Online

The screenshot displays the OKplus Java-based design interface, which is a web-based application for finding and playing bridge games. The interface is divided into several sections:

- Top Navigation:** Includes tabs for "Lobby", "Friends", "Open Tables", "All Tables", and "Tournaments".
- Player Grid:** A grid of 15 player avatars, each with a name below it. The names are: strat, sunfun, suzieh, swheart, timm2, timpani, tinmarin, tobice, TTime, TuNCi, valjorfe, wacocase, worthy14, yeye, and zafer. The "timm2" player is highlighted with a green border.
- Player Profile (Right Panel):** A detailed view of the selected player, "judy timmons". It includes a search bar, a profile picture, and various icons (MP, IMP, SYS). The profile information includes:
 - City: Alamo California
 - ACBL/WBF: silver life master
 - Info: sayc or rule of 20 s play michael's 0314 capp lebensol wjs
 - Level: Intermediate
 - Rating: MP 51.00 IMP 46.61There are buttons for "Add as Friend/Reminder", "Add timm2 as friend", and a text input field for "Type reminder".
- Chat Window (Bottom):** A chat area with a scrollable message history and a text input field. The messages include:
 - Moryn: need interm. players at @@@@ Moryn
 - * braude is now serving a table.
 - lillum: need 1 player pls
 - fullas: 48 / 50 pl
 - killer: need 52+imps pls, 2/1
 - braude: 45-50
 - Moryn: need interm. players at @@@@ Moryn
 - JAMIE99: need 1 gorenButtons for "Watch", "Filter", and "Hints" are visible. The chat window is titled "Applet Window".

New Java-Based Design – Open Tables Online



Conference Presentations

UXPA World Conference, June 2015

uxpa2015.org/program/event/using-your-ux-super-powers-good-or-evil

www.slideshare.net/UXPA/mandel-uxpa-2015-goodevil

Theo Mandel presented at the international user experience conference in San Diego, June 2016. This conference is attended by hundreds of design and research practitioners from over 40 countries world-wide. Mandel presented his popular session titled, **“Using your UX Design Super Powers for Good or Evil.”**

Internet User Experience Conference (IUE2014 & IUE2013)

www.iueconference.com

Dr. Mandel co-organized the 2013-2014 Internet User Experience conference in Phoenix, Arizona. The well-respected conference has been offered for the past 10 years. Over 160 people attended the conference each year in 2013 and 2014.

Mandel’s popular presentations are based on his 20-years of experience in user experience design and research, beginning with his ground-breaking research and guidelines for Object-Oriented User Interfaces (OOUIs). The presentations have been posted on SlideShare.com and were selected as featured presentations and “Hot on LinkedIn” on SlideShare’s homepage within hours of their posting.

SlideShare Presentations

Mandel's presentations were among the top 3% of most viewed content on SlideShare in 2013. View [Mandel's SlideShare presentations](#).

Using your UX Design Super Powers for Good or Evil

- [SlideShare presentation](#) (over 4,000 views of all versions of this presentation)

Golden Rules of User Experience Design

- [SlideShare presentation](#) (over 18,000 views of all versions of this presentation)

Designing Object-Oriented User Experiences

- [SlideShare presentation](#) (over 5,000 views)