

# Shaping the way we interact with the world through product strategy and design.

## FEATURED WORK: 2006 - 2012

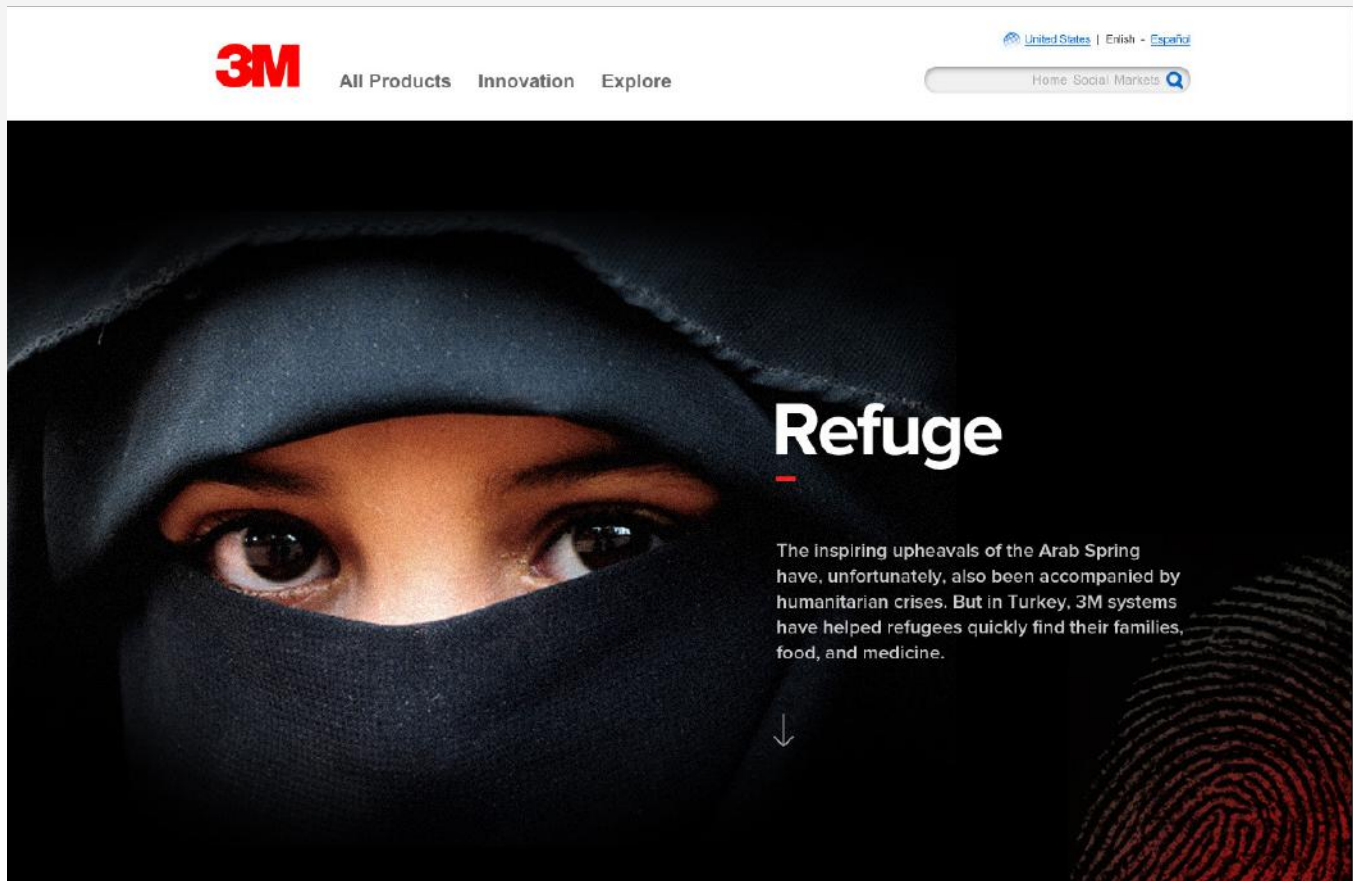
**3M Innovation Center**  
Responsive Web Experience

**ReSound ClearPath**  
Medical iOS Application

**ITT Scorpion USB Drive**  
Embedded Software/ Packaging

**3M Mpirico**  
Enterprise Web Application

**Land Securities**  
3D iOS Experience



## 3M Innovation Center

3M | RESPONSIVE ENTERPRISE PLATFORM

### AGENCY

space150

### BUDGET

1.25 Million+

### CONTRIBUTIONS

Innovation Consulting: 10

Interaction Design: 10

Information Architecture: 10

Art Direction: 3

Strategy: 7

As ubiquitous the 3M name is, most of the world is unaware of the vast responsibility the company has for global innovation. To tell their story, 3M uses interactive innovation centers to immerse visitors in the story. With only a handful of centers globally, space150 was tasked to create a digital experience bringing the experience to life for the world to see.

With a deep understanding of how the Innovation Center experience functioned and a wealth of powerful stories, we set out to build a platform that would replicate the physical space while sharing innovation stories with the world. The platform would also leverage all the technical innovations present in their global digital infrastructure and connect them in a way that would scale globally.



## PROJECT OBJECTIVES

### TARGET MARKET

Focused on the "Influential Geeks", but relevant and accessible to the general public, business leaders, engineers and product developers.

### RESPONSIVE DESIGN

Accessible and scalable to all devices with a single code base.

### GLOBAL INFRASTRUCTURE

Integration into 3M's data infrastructure acting as a bridge between cataloging systems and media assets.

### STORY-BASED

Provide a connection to ingredient products through the end products they enable and the problems they solve.

### CONNECTION TO PRODUCTS

Create relevance by connecting users to stories, stories to technologies and technologies to core product offerings based on browsing behavior and history.

## CORE ACTIVITIES AND RESPONSIBILITIES

### STRATEGY AND RESEARCH

Competitive audit. Content audit.  
Stakeholder interview development and execution. Persona development.  
Business analysis.

### DELIVERABLE

Project pitch including overall strategy summary, UX strategy, creative directions, and technical recommendations.

### INTERACTION DESIGN

User flows. Explorative and explanatory sketches. Prototyping. Wireframes.

### DELIVERABLE

Interactive prototypes.

### INNOVATION CONSULTING

Technical research. Interaction modeling and research. Feature prioritization and new technology exploration and prototyping.

### DELIVERABLE

Scenario narratives, interaction prototypes and technology roadmap.

### ART DIRECTION

Brand evaluation. Iconography. Interface elements. Typography.

### DELIVERABLE

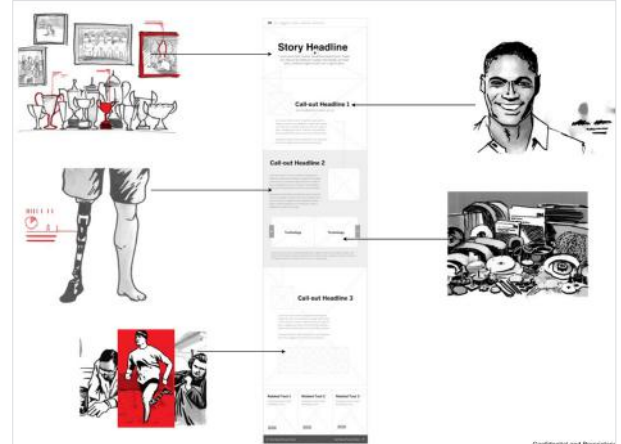
Interface moodboard, prototype, style tiles.

## EVOLVING THE DIGITAL ECOSYSTEM

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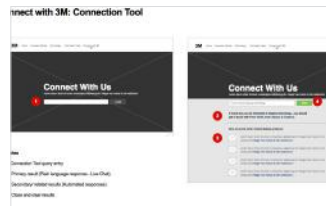
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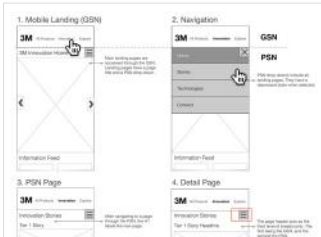
04 Connect with 3M: Connection Tool



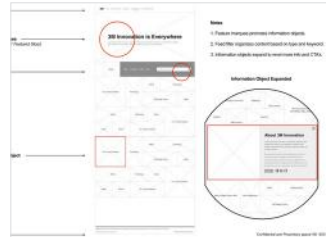
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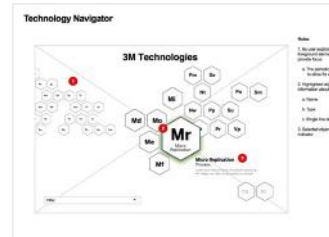
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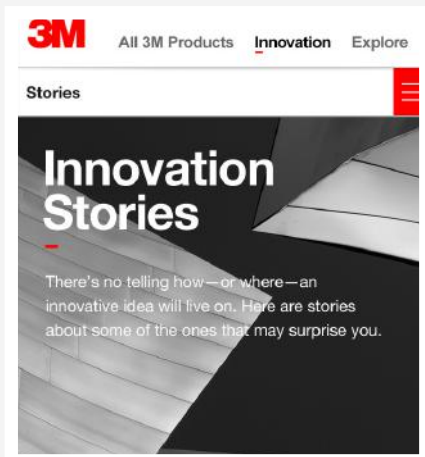
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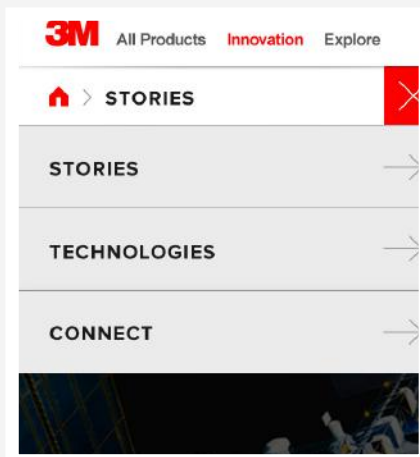
3M is responsible for much of the worlds innovative products. With over 2 million available products focused solely on enabling the development of others, organizing and promoting them has been an ongoing challenge.

To get the project moving, we focused on the structural elements of the experience, beginning to reshaping 3M's global digital ecosystem from the outside in - putting user needs first. With navigation, digital touch points and data models in place, we began the process of developing the responsive experience, mobile first.

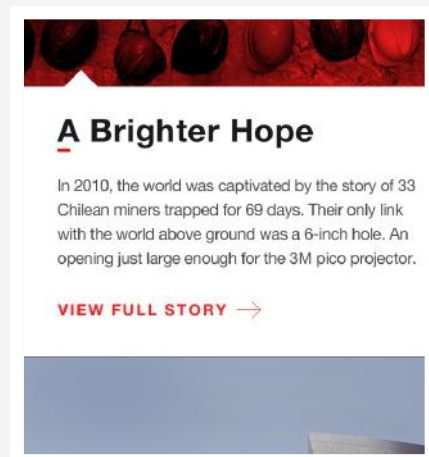
- 01 Initial template design and definition
- 02 Innovation story mapping
- 03 Initial data and site architecture model
- 04 Connect with 3M simulated intelligence
- 05 Internal tout exploration
- 06 Responsive navigation
- 07 Live feed interaction model
- 08 3M Technologies interaction model



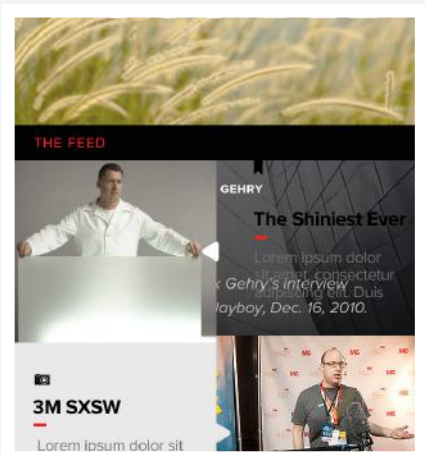
01 Responsive navigation



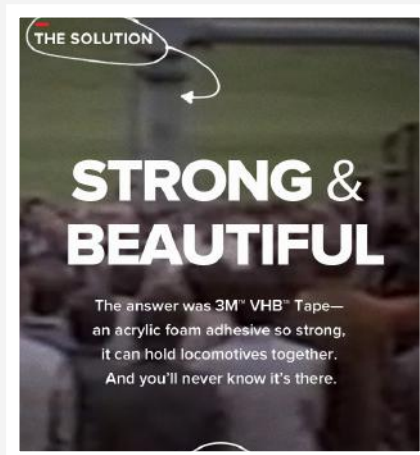
02 Scalable structure



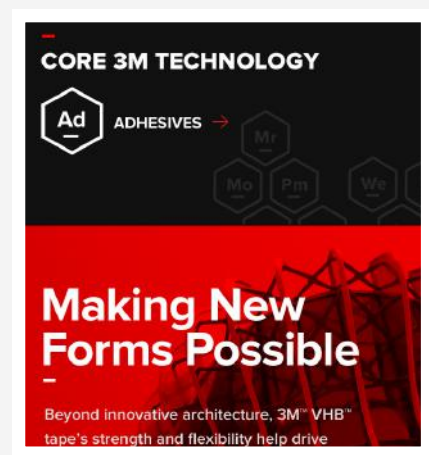
03 Mobile optimized hierarchy



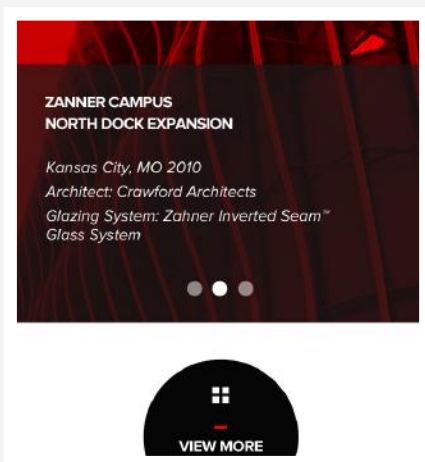
04 Mobile optimized interactions



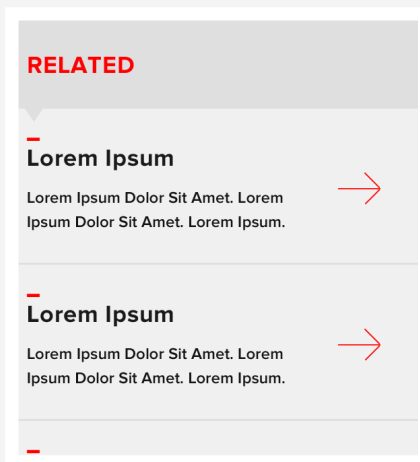
05 HTML5 animations



06 Dynamic connection to products

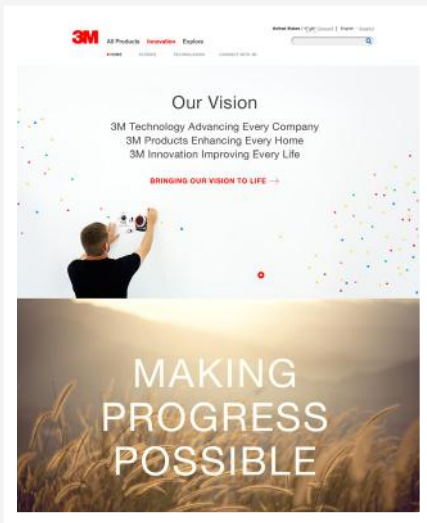


07 Intuitive responsive modules

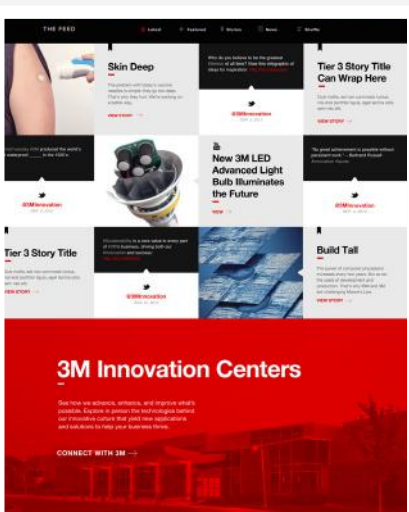


08 Mobile first design

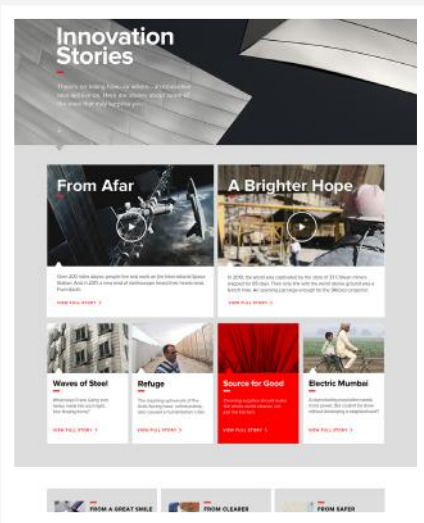




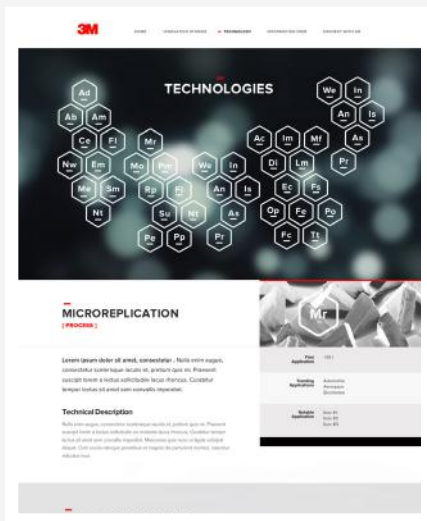
01 Home Page



02 Innovation Feed



03 Innovation Stories landing page



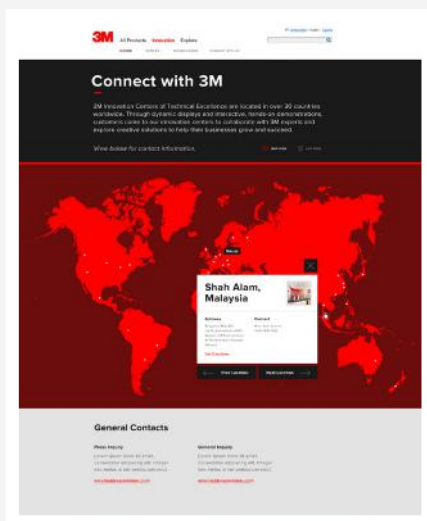
04 Technologies landing page



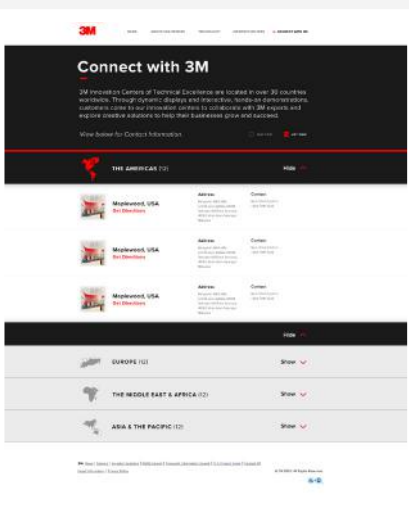
05 Technology detail page



06 Technology tout



07 Connect with 3M map view



08 Connect with 3M list view

## STORY STRUCTURE

The structure of the 3M innovation process and story drove the architecture of site and page level hierarchy.

### 01 INTRODUCTION

Showcase real people, in real-world situations.

### 02 ABSTRACT

A short teaser that states 3M made this scene happen.

### 03 RESULT

People are empowered to do something they couldn't before.

### 04 CHALLENGE

Explanation of the situation before it was solved.

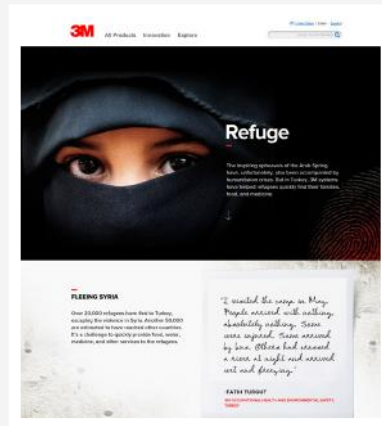
### 05 SOLUTION

Tell the story of the 3M technology that made the difference.

### 06 BRANCHING

One story leads to another through core technologies.

01



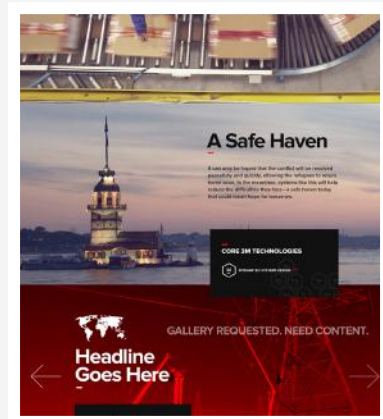
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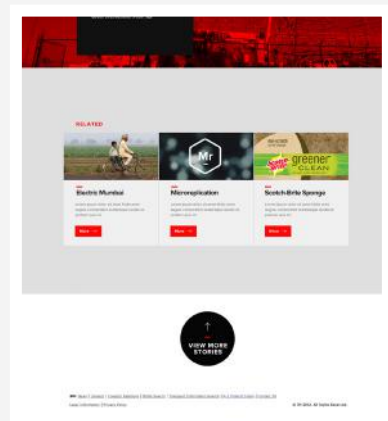
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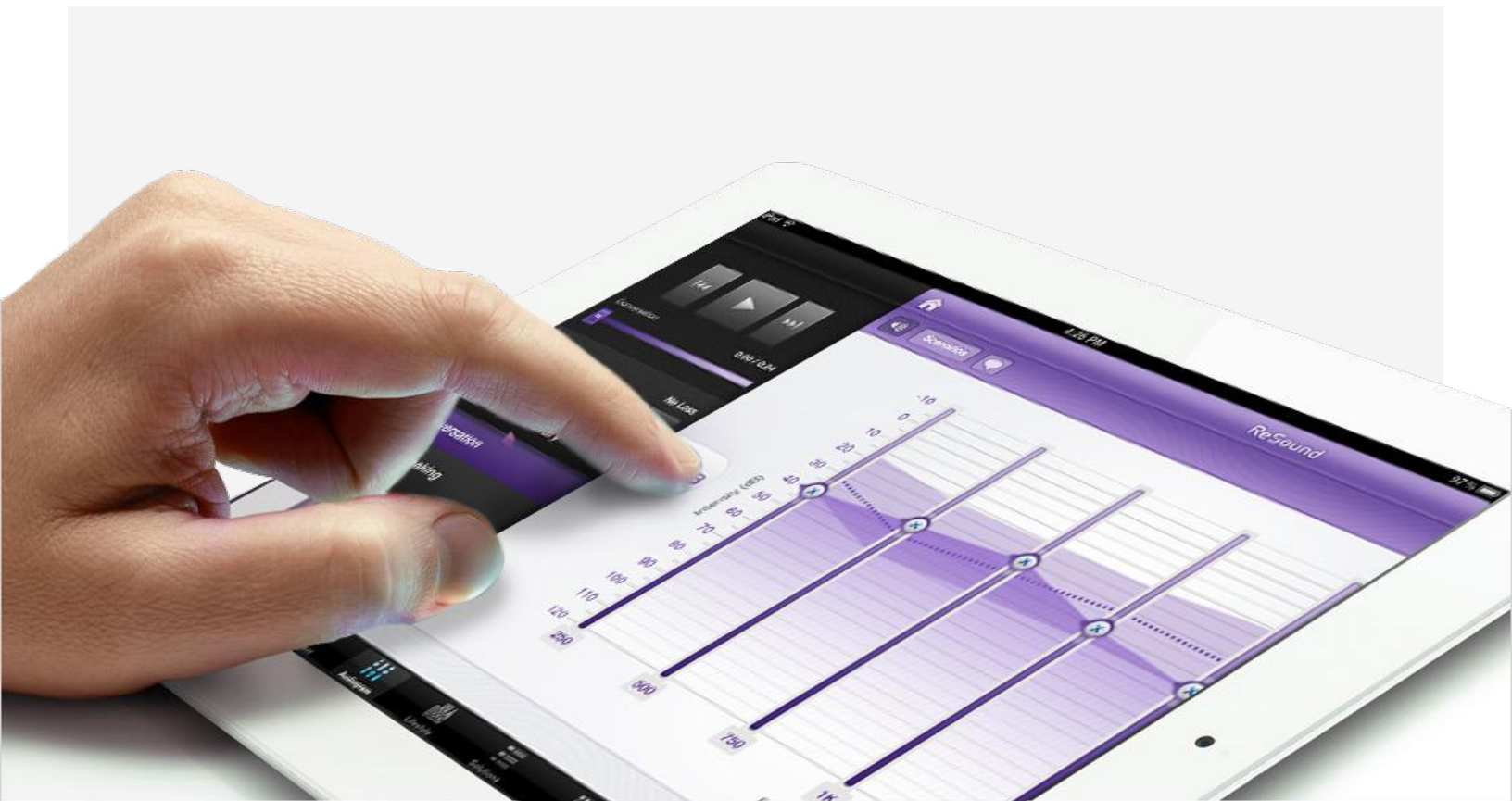


03



06





## Resound ClearPath

RESOUND | IOS

### AGENCY

space150

### BUDGET

175k+

### CONTRIBUTIONS

Product Design: 10  
Innovation Consulting: 8  
Interaction Design: 10  
Information Architecture: 10  
Art Direction: 8  
Strategy: 8

Selling hearing aids is a difficult process. Customers rarely understand how a hearing aid can help them in their daily lives. Customers also don't perceive their loss as "bad", requiring a more powerful device and trend towards purchasing low quality equipment. ReSound set out to change this by approaching space150 to create a sales tool to better connect patients with their products.

With a clear understanding of the problem, we set out to build a flexible counseling tool that would connect users to features earlier in the purchasing process. As a result, patients would be able to understand why features were important and how they related to the technology driving them. Patients were now able to focus on the appropriate device based on actual need.





**PROJECT OBJECTIVES**

**TARGET MARKET**

Developed for ReSound dispensers to counsel patients ranging from mid 50 to the late 80's.

**FLEXIBLE**

Provide a complete consultation path while allowing dispensers the freedom to choose how they move through the evaluation.

**ACCESSIBLE**

Design must follow accessibility standards while applying product branding throughout the experience.

**SCALABLE**

Create a structure that can grow with ReSound product lines and evolving customer facing software systems.

**UNDERSTANDABLE**

Create a tool that enables a conversation between dispensers and patients focusing on the benefits and purpose of technology in a context patients can relate to.

**CORE ACTIVITIES AND RESPONSIBILITIES**

**STRATEGY AND RESEARCH**

Competitive audit. Reframing. Stakeholder interview development and execution. Persona development.

**DELIVERABLE**

Product and experience strategy. Stakeholder interview and focus group analysis.

**INTERACTION DESIGN**

User flows. Software architecture. Explorative and explanatory sketches. Prototyping. Wireframes.

**DELIVERABLE**

Sprint-based Interactive prototypes.

**USER RESEARCH**

Concept model. Customer journey map. Scenario narratives. Customer and dispenser interviews. Survey.

**DELIVERABLE**

Product architecture documentation. Summary of findings documentation.

**ART DIRECTION**

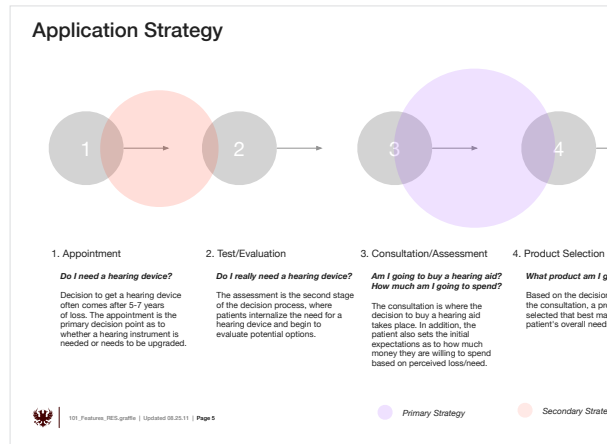
Brand evaluation. Iconography. Interface elements. Typography. Visual Language.

**DELIVERABLE**

Interface moodboard, style tiles.

## FINDING FORM

01



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### Feature Tiers

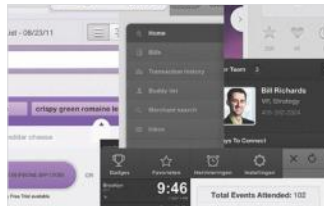
	Foundational	Counseling Mode	Trade Show Mode	Other
<b>Tier 1</b> Essential to the success of the app	App packaging App distribution App settings Access control	Data entry of assessment Data entry of audiogram List of all products Product recommendations Feature detail Product detail Lifestyle comparison Counseling summary	Company information App overview Image slideshow	Takeaway Reference Accessibility
<b>Tier 2</b> Nonessential but nice to have		Personalization Store and save patient information Product comparison Education of hearing Sound reproduction	Idle mode	
<b>Tier 3</b> Additional features not supported within scope	User tracking	Order placement Product modeling	eCademy	News feed

101\_Features\_RHS.greffe | Updated 08.25.11 | Page 7

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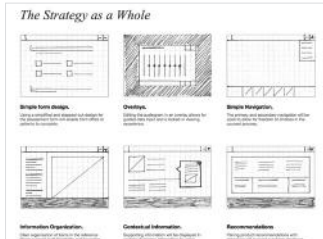
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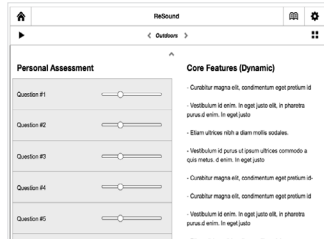
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- 01 Patient Counseling Flow
- 02 Feature Map/ Prioritization
- 03 Experience Strategy
- 04 UI/ Interaction Mood Board
- 05 Interaction Models
- 06 Concept Sketch
- 07 Wireframe Prototypes
- 08 Recommendation Engine Modeling



01 Mobile optimized interactions



02 Intake assessment form



03 Interactive audiogram



04 Dispenser override and counseling mode



05 Printable recommendation summary



06 Expandable product details



07 Interactive hearing scenarios



08 Simulated listening environments



09 Adaptive counseling Mode



10 Real-time feedback



11 Extensive CMS-based library



12 E-mail integration



## Scorpion Secure USB

ITT CORPORATION | CONSUMER ELECTRONICS

### CUSTOMER

United States Government  
and Military Forces

The Scorpion Secure USB drive is a mobile Data at Rest security solution for military and Department of Defense (DoD) organizations requiring top secret security protection in a disposable, portable, non-classified form factor.

### CONTRIBUTIONS

Product Design: 10  
Industrial Design: 3  
Interaction Design: 10  
Information Architecture: 10  
Visual Design: 10  
Strategy: 5

### TRANSPARENT

Operate within military computer systems  
requiring no software or drive installation

### SIMPLE

Provide a simple user interface with dual  
hardware- and software authentication

### COMMERCIAL-LIKE

Leverage commercial design and devel-  
opment practices to provide a modern  
look and feel and reduce overall cost and  
time-to-market.

### DISPOSABLE

Designed to be field replaceable and cost  
effective for DoD customer base. Extend  
to future DoD applications such as secure  
tokens and fill devices..



## RESEARCH & ANALYTICS

The complexity of the user environment was the primary challenge in developing the product. Extensive customer interviews were conducted from both technical and marketing teams to gain a better understanding of the environment the devices would be used in and identify baseline requirements to begin product development.

Development efforts began for both hardware and software teams by reviewing the USB market landscape and analyzing a robust engineering tear down of competitive products to learn from existing technology providers and aid in evaluating design decisions.

01



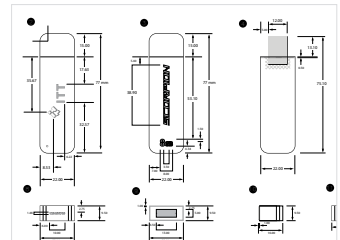
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01 Concept Designs (ATOM)

02 Mood Range - All

03 Mood Range - Category

04 Pre-Concept Prototype

## INDUSTRIAL DESIGN

Traditional products designed for the DoD maintain a number of analog features due to the environmental and physical constraints of the war fighter. This model is often applied to non-ruggedized and digital products. To reduce cost and provide more relevant experience to the non-war fighter we designed and produced the drive leveraging commercial practices where allowed.

## PROTOTYPE AND USER TESTING

A key challenge for the product was aiding in lifting the DoD ban on the use of all USB drives in military computing systems. By using engineering prototypes and a theory of operation we were able to create a new classification for USB drives allowing their use for those who are cleared.

SOFTWARE DESIGN

The Scorpion USB drive required a system design that blended hardware, software, and firmware in a way that had never been approached before. This required the framework to provide maximum compatibility without forcing software upgrades and be under 5Mb

01



02



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- 01 Initial template design and definition
- 02 Innovation story mapping
- 03 Initial data and site architecture model

In the case of military products, speed and ease of use are critically important and having a fast and intuitive interface was a key performance evaluator. The Scorpion interface was designed to provide all functionality from a single screen and eliminated any feature that was not accessible in specific modes.

BRAND AND PACKAGING DESIGN

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- 04 Trade Show Banners
- 05 Packaging Label



## 3M Mpirico™

3M | WEB APPLICATION

### AGENCY

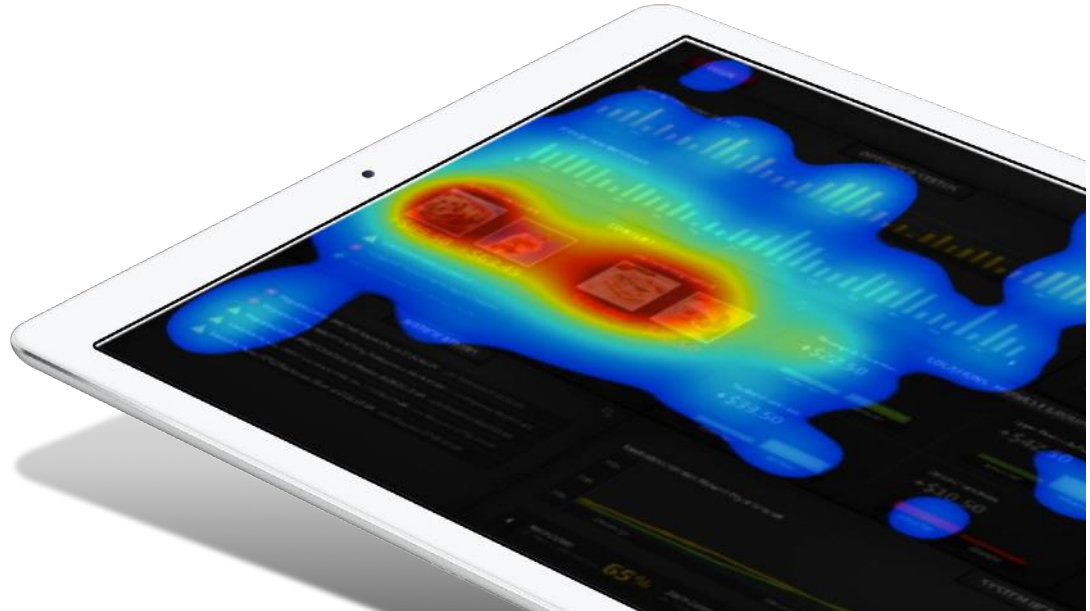
space150

### CONTRIBUTIONS

Product Design: 10  
Innovation Consulting: 10  
Interaction Design: 10  
Information Architecture: 10  
Art Direction: 8  
Strategy: 6

3M's Mpirico™ system combines the power of a closed loop display network, analytics tools and CMS platform to evaluate in-store advertising as it directly affects purchasing behavior. 3M's closed loop solves a fundamental problem, because it works without requiring "clicks" needed by an Internet closed loop. No physical interaction with the content or the display is needed.

The system was designed to work within any environment that 3M's closed loop can be established; it connects the digital sign network, digital content promoting available products and services, and a data stream associated with customer business goals.



## PROJECT OBJECTIVES

### TARGET MARKET

Global retailers with point of purchase systems and in-store advertising.

### CMS CORE

Develop a systems to easily manage, house, organize, test, and serve all content across the display network .

### ANALYTICS INTEGRATION

Integrate a robust analytics platform to continually analyze and optimize marketing and system performance

### SCALABLE

Design a system to support multiple user and data types from single store environments to global networks.

### DISPLAY NETWORK

Provide a simple user interface to manage system assets and control simple to complex display networks across one or multiple locations within an enterprise environment.

## CORE ACTIVITIES AND RESPONSIBILITIES

### PRODUCT STRATEGY

Stakeholder interview development and execution. Persona development.

### USER RESEARCH

Technology evaluation. Product roadmap. Requirements documentation. Agile project development implementation. A/B and focus group testing.

### SYNTHESIS AND SENSEMAKING

Insight Combination. Reframing. Contextual design. Card sorting. Affinity diagrams. Concept mapping.

### INFORMATION ARCHITECTURE

User flows. Software architecture. Explorative and explanatory sketches

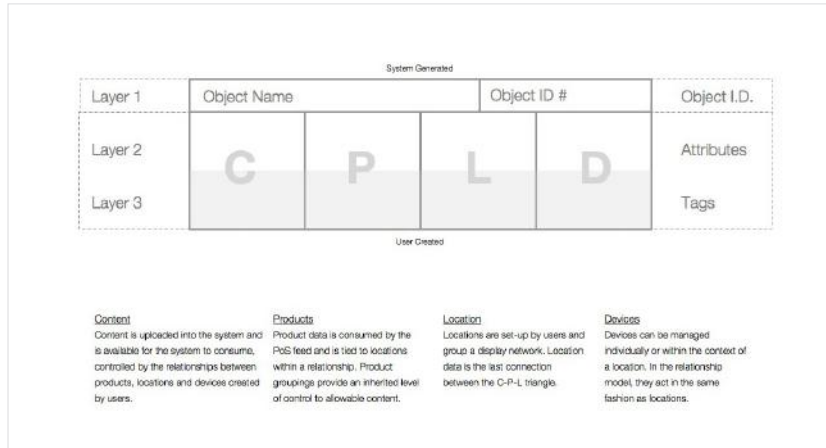
### UI DESIGN

Wireframing. Prototyping. Storyboarding. Sketching. Iconography. Interface elements. Typography. Styleguide development.



## DESIGNING THE SYSTEM

01



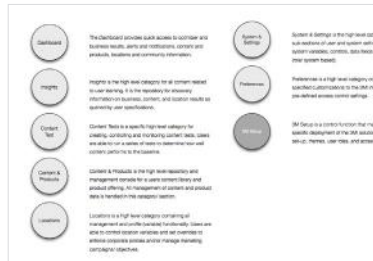
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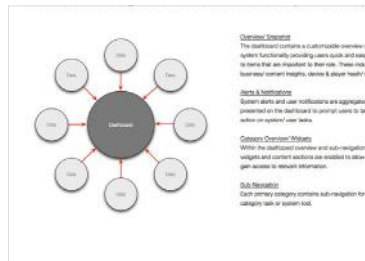
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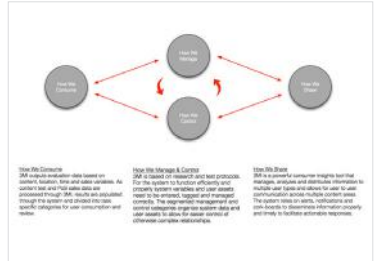
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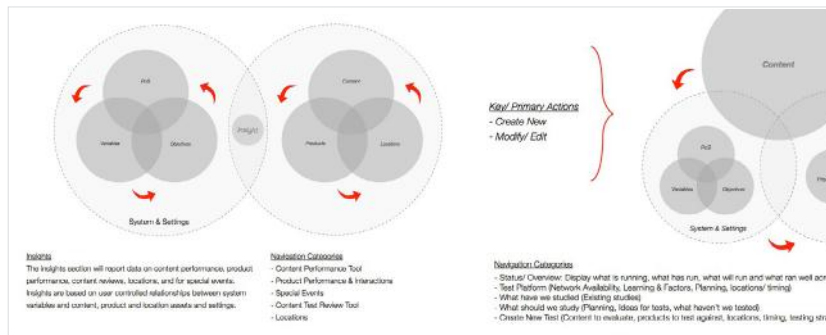
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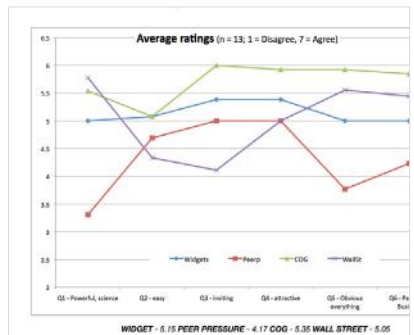
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01 Database model and architecture

02 Interface exploration: Input methods and attributes

03 Interface exploration: content management

04 System object definitions

05 System object definitions

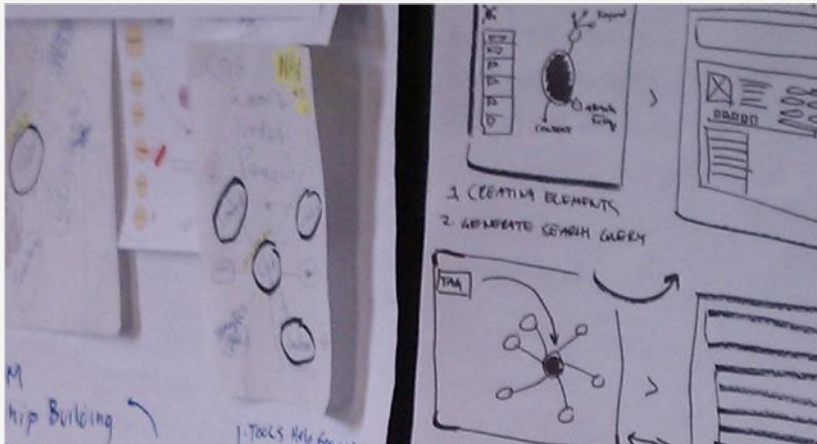
06 Mental model: system interactions

07 Data model: System objects and user tasks

08 User testing results

## RESEARCH, SYNTHESIS AND SENSEMAKING

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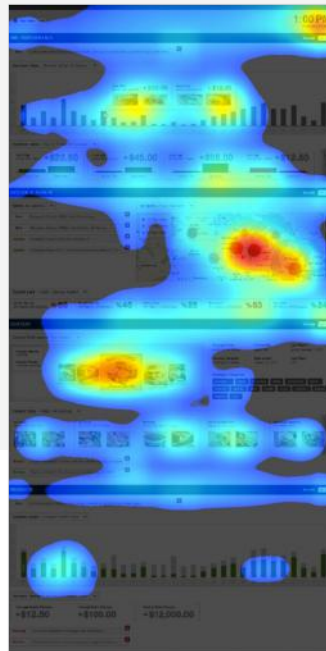
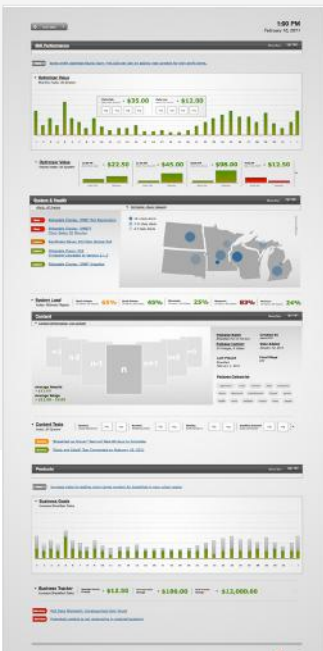
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Designing the 3M Mprico™ system presented a wide range of challenges requiring a significant amount of user and business research. By evaluating current business and marketing ROI tools, interviewing and observing multiple persona types, and understanding end-customer behavior, we were able to synthesize the data into four different front- and back-end approaches to the system.

- 01 Discovery and concept exploration
- 02 Affinity diagram and concept model
- 03 Iterative concept sketch work
- 04 Concept A development and testing
- 05 Concept B development and testing

Navigation:	Home/ Dashboard	Display Network	Insights	Content	Products	Locations
Content Categories and Functions	Manage Widgets Browse P Add New Display W Edit Display Post W Edit Display Group W Manage Content & Products W	Reports Browse P Create New Report W Export Reports View P Tools	Recommendations Compare Content Perf. T Product Perf. Evaluation T Prod. Canonicalization T	Manage Library P Upload New Content W Edit Product Photos W Edit Page Titles & Locations W Connect Content to Products W	Monitor Create P Create Product Browse W Edit Product Browse W Configure Related Prod. List T Connect Product to Content W Add Content Product W	Manage Browse P Add Location post W Edit Location group W Content & Products Manage New Content W Manage Image Content W
	Manage Players Overview P View Player Profiles W	Information Report Widgets P Widgets W Submit Ticket W		Content Types Overview P Add New Post/ Browse P Create New Post W Manage Post Structure W	Insights Product Perf. Evaluation T Prod. Canonicalization T	
				Briefs Overview W View Product P Create New W		
				Insights Compare Content Perf. T		
<hr/>						
System & Settings	*Pin-Board M	**User Profile				
Data Feeds Manage Data Feeds P Attributes Manage Attributes T Manage Tags T	User Management Create User W Edit User W Role Management T Billing Settings P Accounting W	Log in/Log out Settings Content Settings Media & Layout Account Permissions User Information Payments Themes				
Network Players Displays Superactivity Log		P - Page W - Widget T - Tool M - Module L - List W - Widget T - Tool M - Module + Page content + Mobile				

## Team 1 Sprint 1 Proposal

**US 80 - Admin User is able to create standard users**

This story has the following description and done criteria:

As an Admin User, I would like to create standard users.

**Done Criteria**

1. Present the Admin user with a wizard.
2. Admin user enters new user's email address (will be the unique ID to customer).
3. Admin selects BC membership for new user
4. Admin selects role for new user
5. Admin is able to view a summary of the user's setup before new user.

Based on the above done criteria and our team decide that a user story that recommended that the story be broken down into the following user story and is promised to an epic. This story is only for sprint 1. Future stories based on the created in following sprints. For example, assign user to business unit, assign a team.

- User Story - Add a user thru a wizard**
  - A. Done Criteria
    1. User can navigate to add user wizard
    2. User is prompted with a wizard
    3. User can enter in basic user information (i.e. username)
    4. Summary page that summarizes data entered in wizard

Search For	Sort By
Jackson, Samuel L.	Status: Active Last log in: 02 hrs <a href="#">View</a>
James, Rick	Status: Active Last log in: 12 hrs <a href="#">View</a>
Jamerson, Sam	Status: Active Last log in: 02 hrs <a href="#">View</a>
Jenson, Matt	Status: Active Last log in: 10 hrs <a href="#">View</a>
Jemstone, John	Status: Active Last log in: 24 hrs <a href="#">View</a>
Jerk, Adam	Status: Active Last log in: 2 Days <a href="#">View</a>
Add user 1 <input type="text"/>	
Add user 2 <input type="text"/>	

Location Type

Country

Business Name  Other Name

[Done](#)

Johanna, Scott	Status: Active Last log in: 3 Days <a href="#">View</a>
Johnson, Amanda	Status: Active Last log in: 1 Week <a href="#">View</a>

### Notes:

**Objects/ Functions:**

1. users in system
2. users awaiting confirmation
3. Active users
4. Inactive users
5. Last log-in
6. Recent registration
7. registration status in system
8. Filter by type
9. Filter by alphabet
11. Ascending/ descending
12. Search/ Find

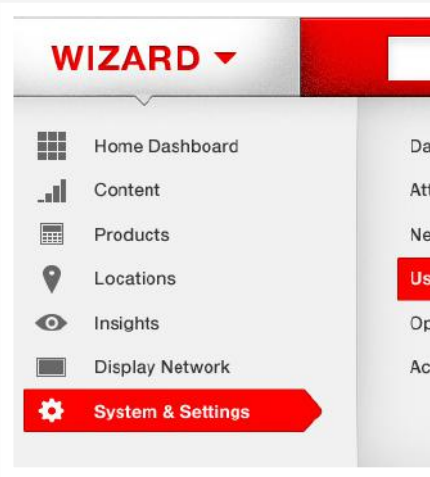
**Roles, groups they have to**

13. Edit user

14. Delete user

15. De-activate user/ role

16. Additional actions



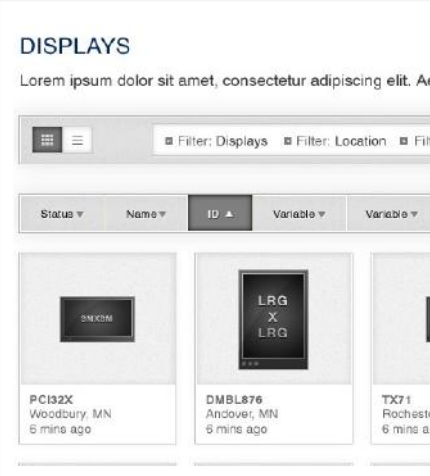
01 Global navigation



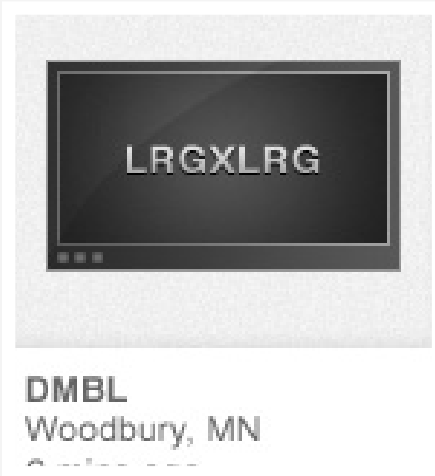
02 Customizable controls



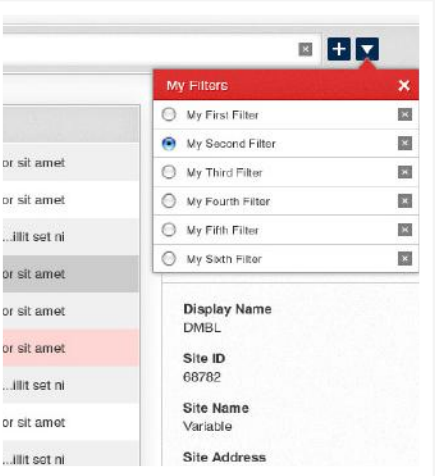
03 Expandable details



04 Grid view with animated indicators



05 Custom icon library



06 Contextual controls

A screenshot of a 'ADD NEW USER' form. It has a red header with the title. Below the header is a text area with 'Lorem ipsum dolor sit amet, consectetur adipiscing elit. Aenean viv congue semper. Vestibulum viverra, arcu et semper feugiat, dui dia'. There are two input fields for '\* First Name' (Adam) and '\* Last Name' (Jerkowski). Below these is a red error message: 'Error: Invalid email address'. There's an input field for '\* User Email' (adam.jerkowski@bullseye.com). At the bottom, there are two input fields for 'Address Line 1' and 'Address Line 2'.

07 Wizard based system

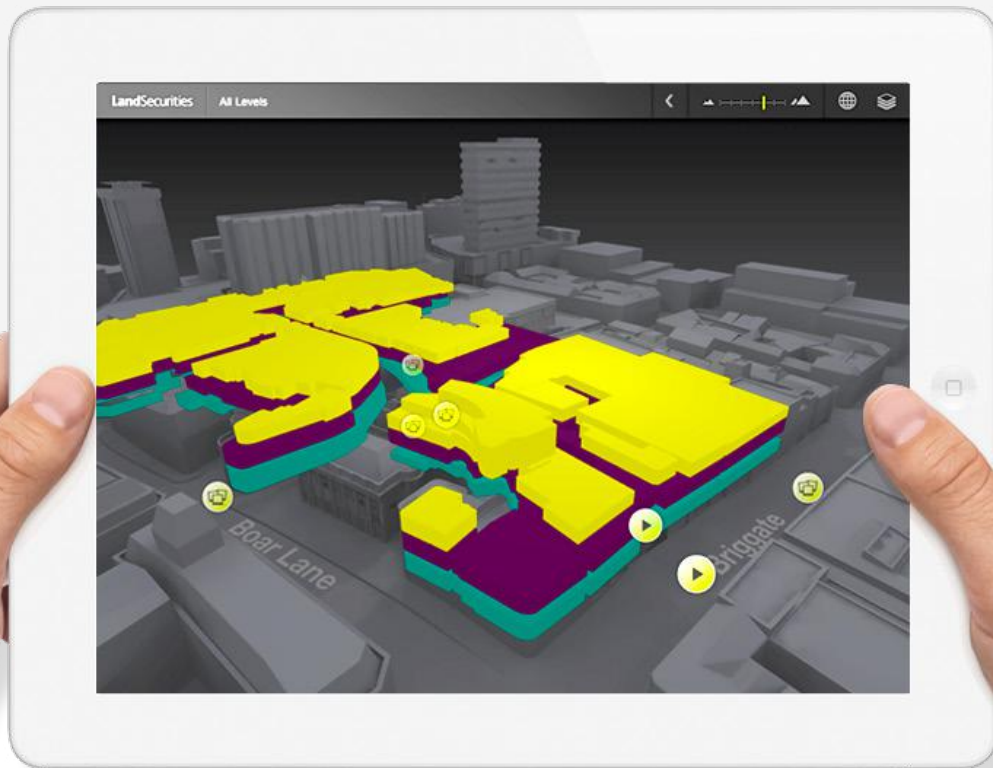
A screenshot of a form with a 'Next' button. The form has a title 'Main Drinks' and a dropdown menu. Below the dropdown is a section titled 'Demographics' with a dropdown menu. At the bottom, there are three buttons: 'Cancel', 'Back', and 'Next'.

08 Themeable interface

A screenshot of a table showing file groups. The table has columns: 'Name' and 'Duration'. The rows are: '01234567890123456789012345678901234', 'Business Unit #2', and 'Business Unit #3'. Below the table is a 'PREVIEW' section with a red header. The preview section contains the following information: 'BU: Business Unit #3', 'Status: OK', 'Displays: 36 View Error', 'Players: 24', 'Consumer Visit Duration: Indoors: 20min, Outdoors: 15min'.

08 Scalable system architecture





## Land Securities Presenter

LAND SECURITIES UK | IOS

### AGENCY

space150

### BUDGET

250k+

### CONTRIBUTIONS

Product Design: 10  
Innovation Consulting: 4  
Interaction Design: 10  
Information Architecture: 10  
Art Direction: 10  
Strategy: 4

Commercial real estate is cutthroat. It's a game of show and sales. The traditional foam-model pitch is expensive and inefficient, yet it's been the industry standard for decades. Land Securities knew there had to be a better, and came to space150 for help reshape their sales experience.

### ADAPTABLE

Flexible presentation structure to match dialogue patterns and allow for easy transition from data types to properties

### NETWORK AGNOSTIC

Provide all up-to-date content without reliance on wireless network access while maintaining high quality and performance.

### SCALABLE

Allow for management of application and property data to be centrally managed by Land Securities and pushed to devices.

### INTERACTIVE

Provide better than physical model showcase of properties. Allow viewing and sharing of media assets library.

## CORE ACTIVITIES AND RESPONSIBILITIES

### 01 STRATEGY AND RESEARCH

Competitive audit. Feature and requirements gathering. Stakeholder and user interview development and execution. Persona development.

### 02 EXPERIENCE DESIGN

User flows. Software architecture. Explorative and explanatory sketches. Prototyping. Technical wireframing.

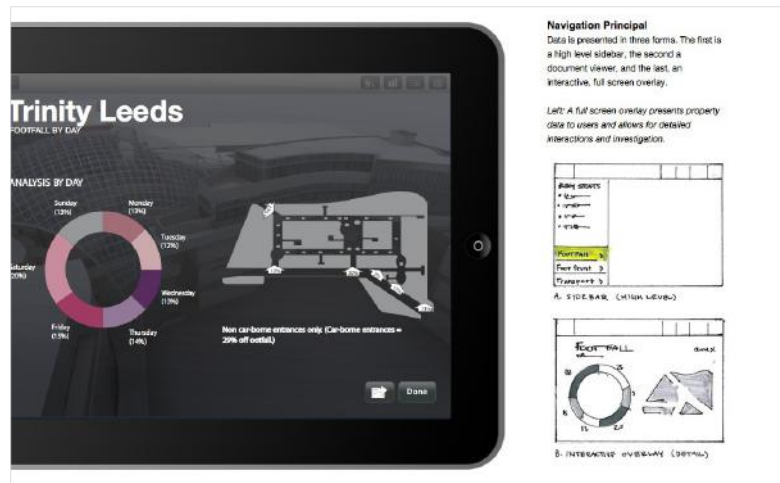
### 03 INNOVATION CONSULTING

Technology evaluation and testing. Product development roadmap. Agile project development management and implementation.

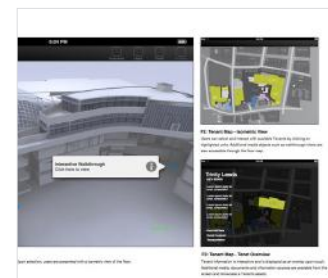
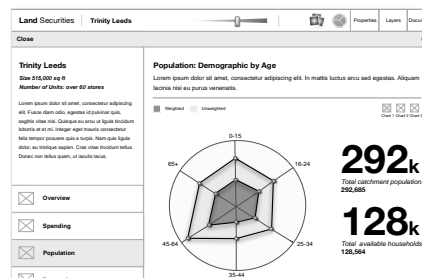
### 04 ART DIRECTION

Brand execution. Iconography. Interface elements. Typography.

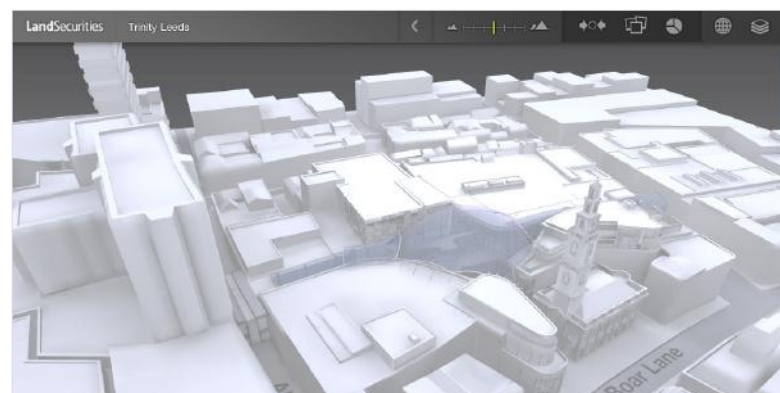
01



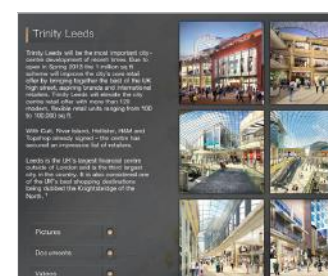
02



03



04



### DEMO VIDEO

<http://vimeo.com/36707003#at=0>

Flexible Presentation Architecture allows the user to choose a presentation path and access data as conversation dictates.

#### 01 LOAD SCREEN

Initial load animation and CMS checksum.

#### 02 INTERACTIVE MAP

Fully functional map of the UK with property navigation.

#### 03 MEDIA GALLERY

On-demand media gallery based on property selection from global title bar.

#### 04 INTERACTIVE CHARTS

Catchment and spending data based on property selection.

#### 05 3D MODELS/ PROPERTY DETAIL

Interactive 3D model with expandable floors for showcase property. Addition 2D maps for all other properties.

01

02

03

04

05

