

Incorporating UX in the Product Development Process

Shannon Mølhave

Senior UX Designer, Stibo Systems



UX at Stibo Systems

SUMMARY

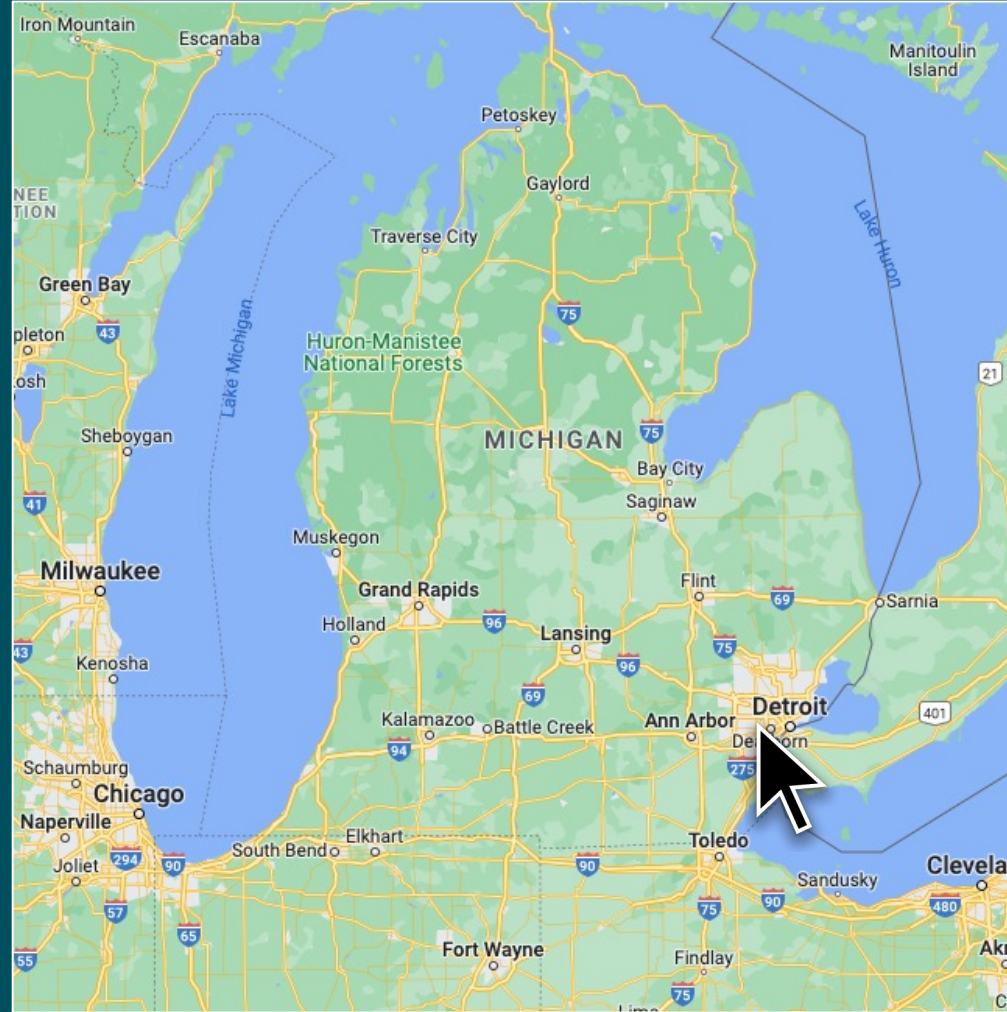
- Stibo Systems' Backstory
- Where Does UX Fit?
- What We've Learned
- Moving Forward
- Wrapping Up

Hi! 🖐️

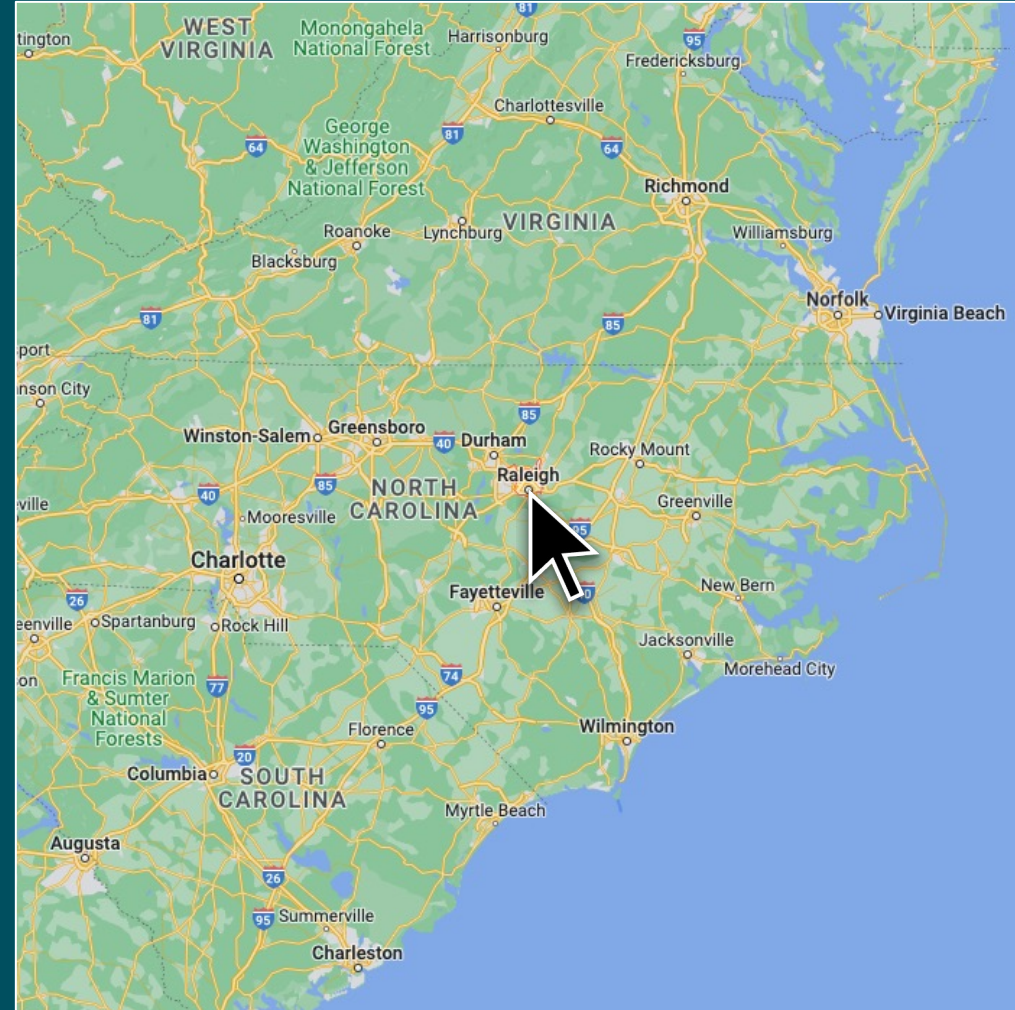
My name is
Shannon Mølhave



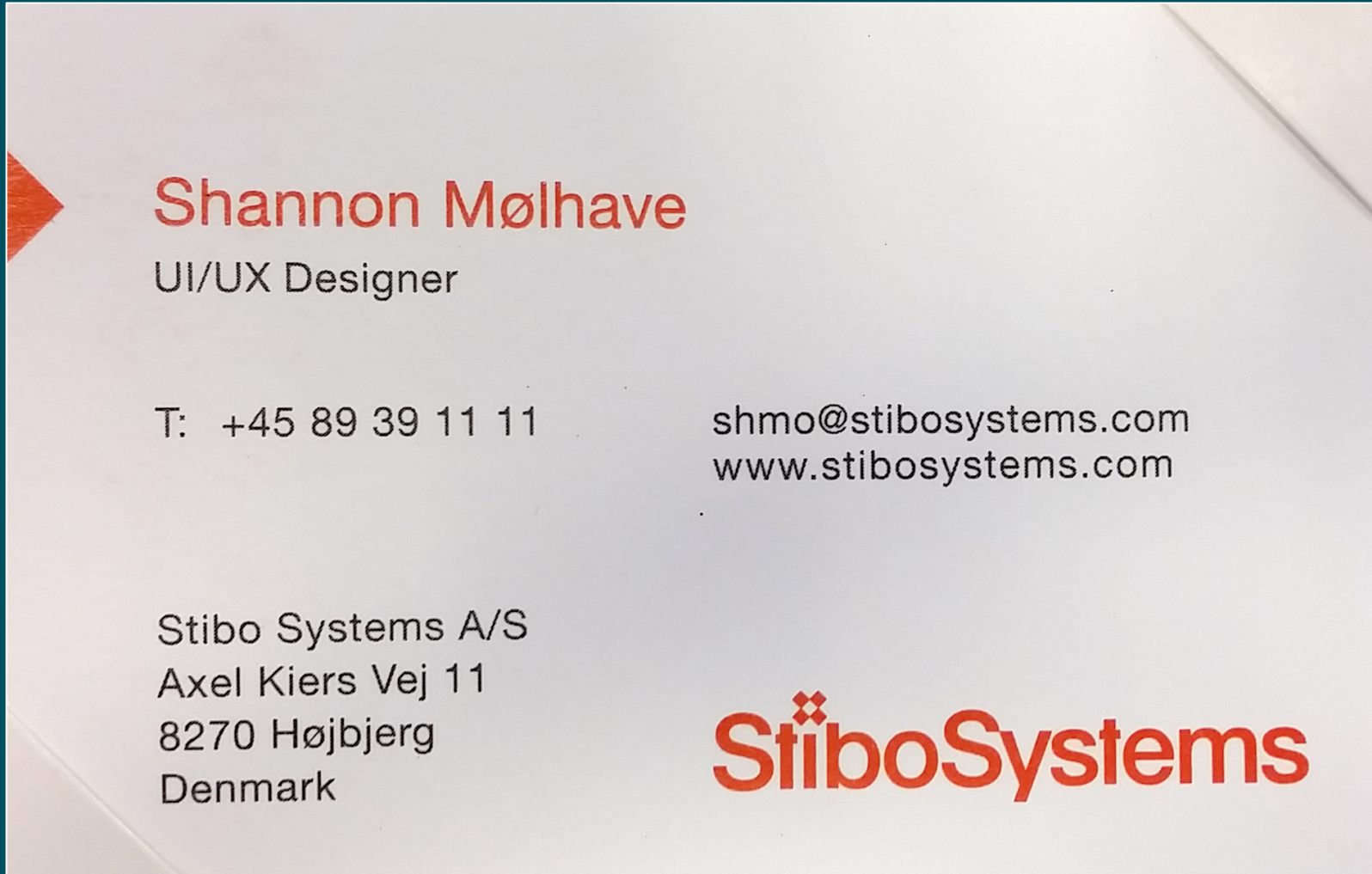
My Backstory



My Backstory



April 2016



Stibo Systems' Backstory

“UX”

- “User Experience/UX” coined by Don Norman in 1993*



* *Don Norman: The term "UX" ([youtube.com/watch/9BdtGjoIN4E](https://www.youtube.com/watch/9BdtGjoIN4E))*

“UX”

- “User Experience/UX” coined by Don Norman in 1993*
- Many UX’ers studied or worked in other industries



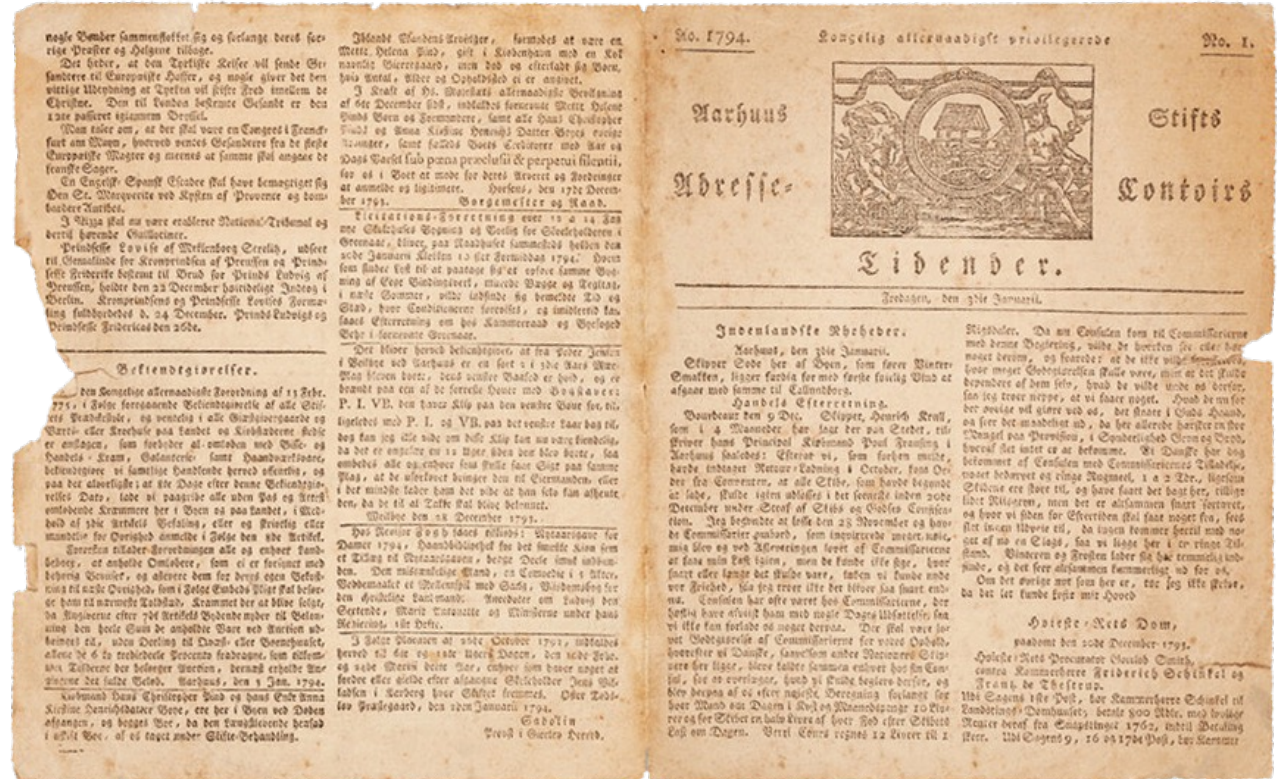
* Don Norman: The term "UX" ([youtube.com/watch/9BdtGjoIN4E](https://www.youtube.com/watch/9BdtGjoIN4E))

Fitting UX into product development be like...



230 Years of Stibo

- “Aarhus Stiftsbogtrykkerie” founded 1794



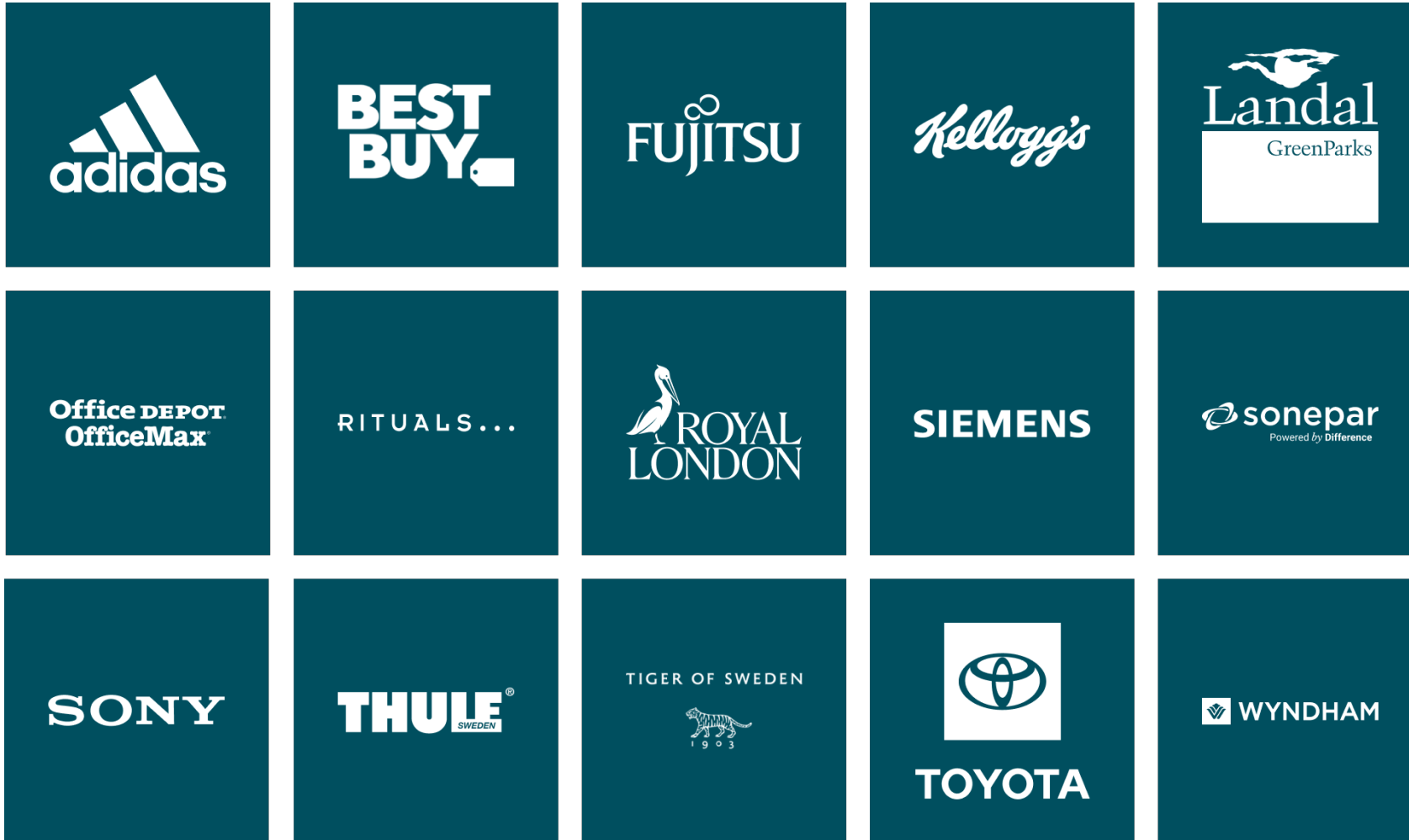
230 Years of Stibo

- “Aarhus Stiftsbogtrykkerie” founded 1794
- Stibo Sats (now Stibo Systems A/S) established in 1976



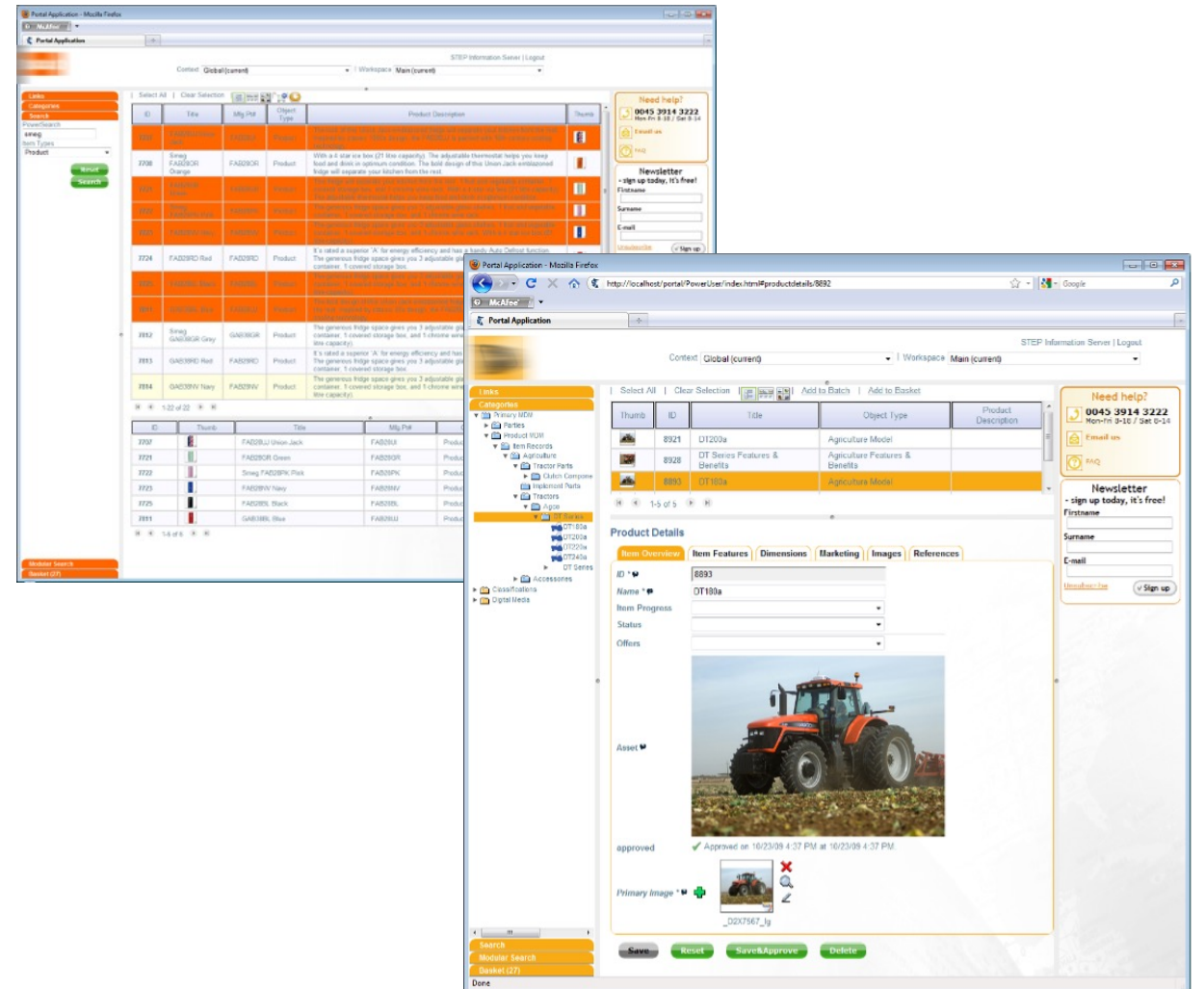
www.stibo.com/history

Stibo Systems Customers



UX at Stibo Systems

- First web application launched 2011
- First UX Designer hired 2013



UX at Stibo Systems

- First web application launched 2011
- First UX Designer hired 2013
- Current UX Team: 12 members



Web UI Then and Now

2016

SiiboSystems PETB Workflow - Enrich Name -

Name	ID	Color	Cost	Consumer Short Description
AC-PETB102	SalesItem-106805	Orange	5 \$	
AC-PETB103	SalesItem-106806	Orange	7 \$	
AC-PETB104	SalesItem-106807			
AC-PETB105	SalesItem-106808	Red		
AC-PETB106	SalesItem-106809	Orange		42
AC-PETB107	SalesItem-106810			
AC-PETB108	SalesItem-106811	Orange		42
AC-PETB109	SalesItem-106812			
AC-PETB110	SalesItem-106813			
AC-PETB111	SalesItem-106814			
AC-PETB112	SalesItem-106815			
AC-PETB113	SalesItem-106816			
AC-PETB114	SalesItem-106817			
AC-PETB115	SalesItem-106818			
AC-PETB116	SalesItem-106819			

Number of items : 98

2023

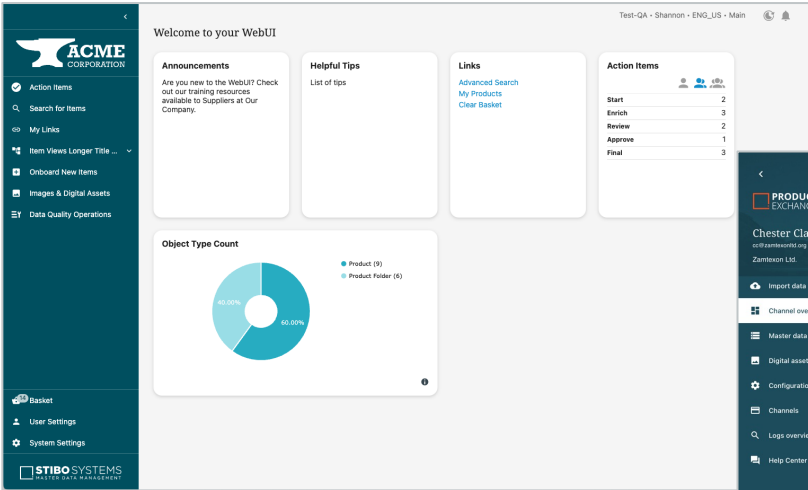
All Individuals COLLECTION 7407 Items - Last run : 2023-01-18 12:33:12

ID	Name	Object Type	Address	Phone
1579556	Joe Wilson	Individual Customer	180 thad dr Lonoke, AR, 72086 US	9369605693 5012312159
1579562	J W	Individual Customer	180 thad dr Lonoke, AR, 72086 US	8777225633 3168782055
1579568	Joe Wilson	Individual Customer	180 thad dr Lonoke, AR, 72086 US	5012312159 3366806784
1579574	Joseph Thompson	Individual Customer	20 5th ave Dardanelle, AR, 72834 US	7649609657 4796656276
1579580	J T	Individual Customer	20 5th ave Dardanelle, AR, 72834 US	6386051382 1853625667
1579586	Joaeoph Thompson	Individual Customer	20 5th ave Dardanelle, AR, 72834 US	4796656276 0554205274
1579592	joann martin	Individual Customer	1807dodd Dr Wynne, AR, 72396 US	8702384046 4106891727
1579598	j m	Individual Customer	1807dodd Dr Wynnw, AR, 72396 US	5127857455 9668311157
1579604	joann martin	Individual Customer	1807dodd Dr Wynnw, AR, 72396 US	8702384046 3759929563
1579610	Dana Wallace	Individual Customer	1300 n broadway st Blytheville, AR, 72315 US	8707404009 8260944335
1579616	D W	Individual Customer	1300 n broadway st Blytheville, AR, 72315	7177093717 4418702210

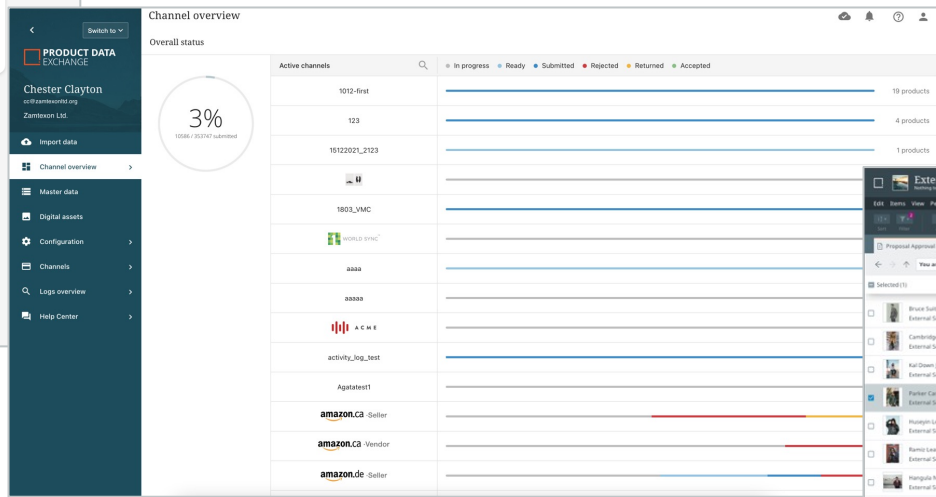
Selected Items: 0 Result is too big. Only a subset is shown.



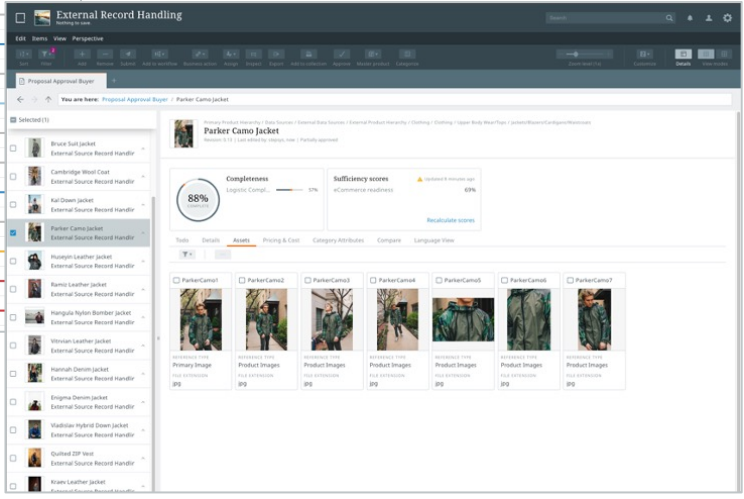
Stibo Systems Products



Web UI



PDX

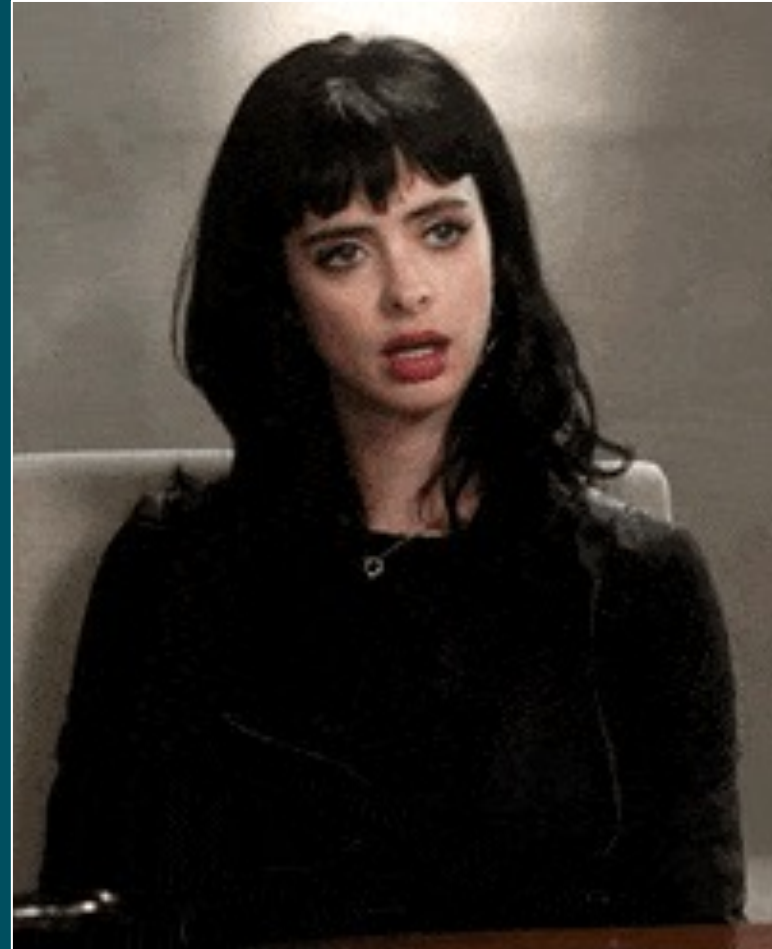


Instrument

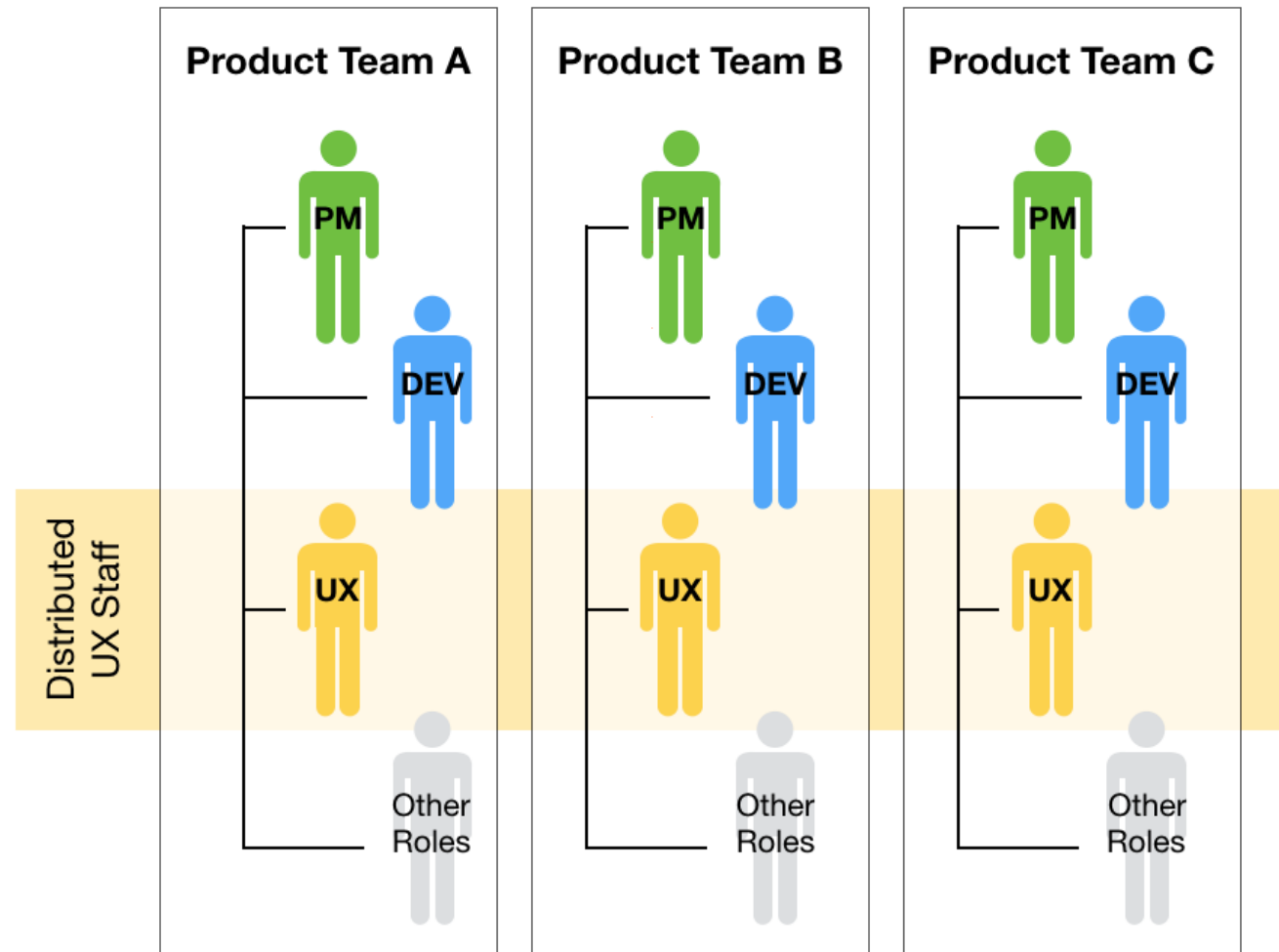
Where Does UX Fit?

“Can you make it pretty?”

- Misalignment in the system
- Frustrated UX designers
- Poor overall UX



2017 Reorganization: Decentralized Team



nngroup.com/articles/ux-team-models

NNGROUP.COM **NN/g**

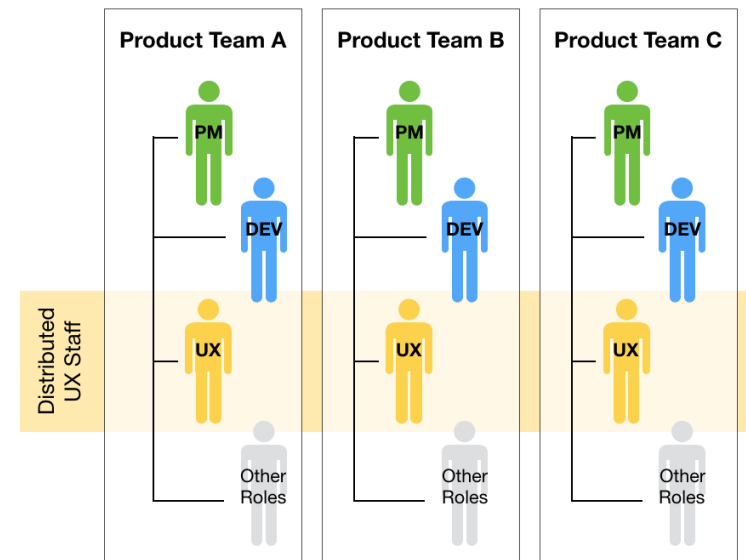
2017 Reorganization: Decentralized Team

Pros:

- Team meeting participation help with team inclusivity
- Closer proximity leads to impromptu discussions
- Stakeholders gained understanding of UX
- UX brought in earlier in development process

Cons:

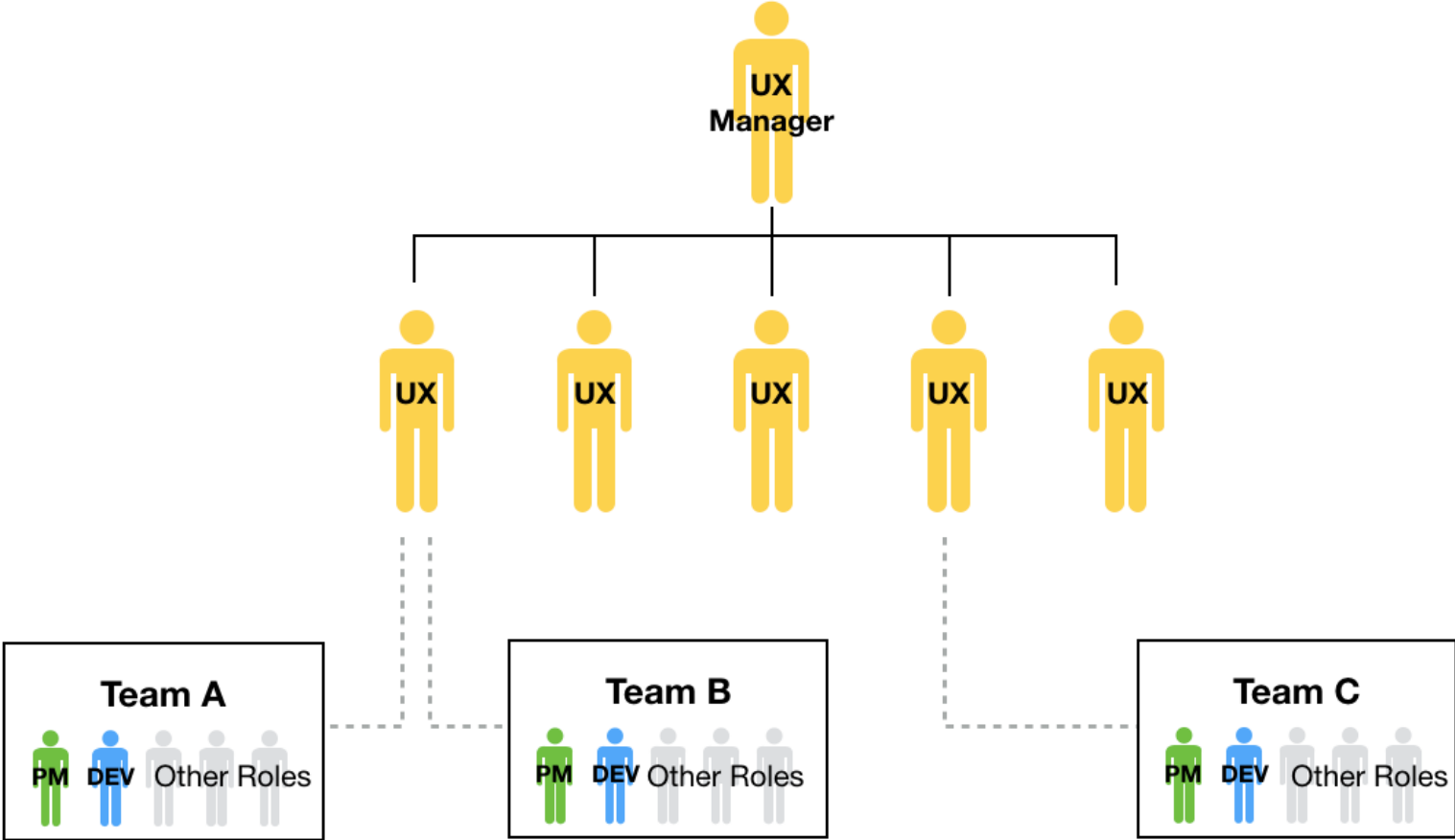
- Reported to manager with no UX experience
- Cut off from other UX designers creates silos
- No unified voice for UX



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2019 Reorganization: Centralized Team



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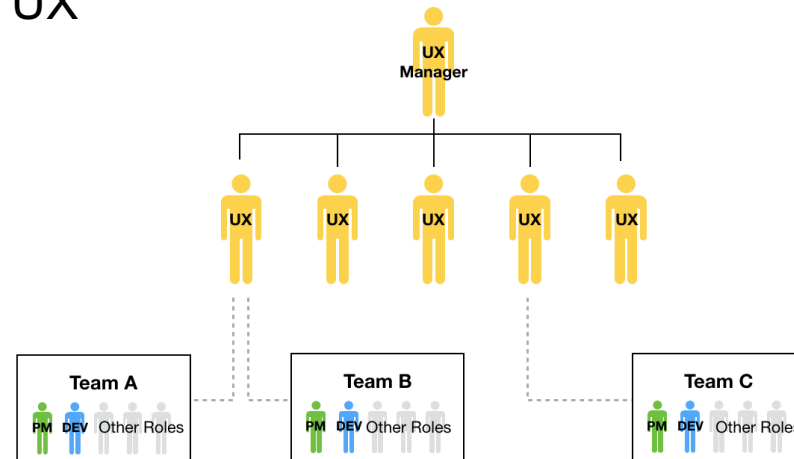
2019 Reorganization: Centralized Team

Pros:

- UX Manager was “one of us”
- Stronger UX Team bond
- Formed “Community of Practice”
- Documented design systems
- Better collaboration within UX

Cons:

- Less communication with development teams
- Discrepancies between UX design and implementation
- UX priorities often descoped
- More frustration and less satisfaction



nngroup.com/articles/ux-team-models

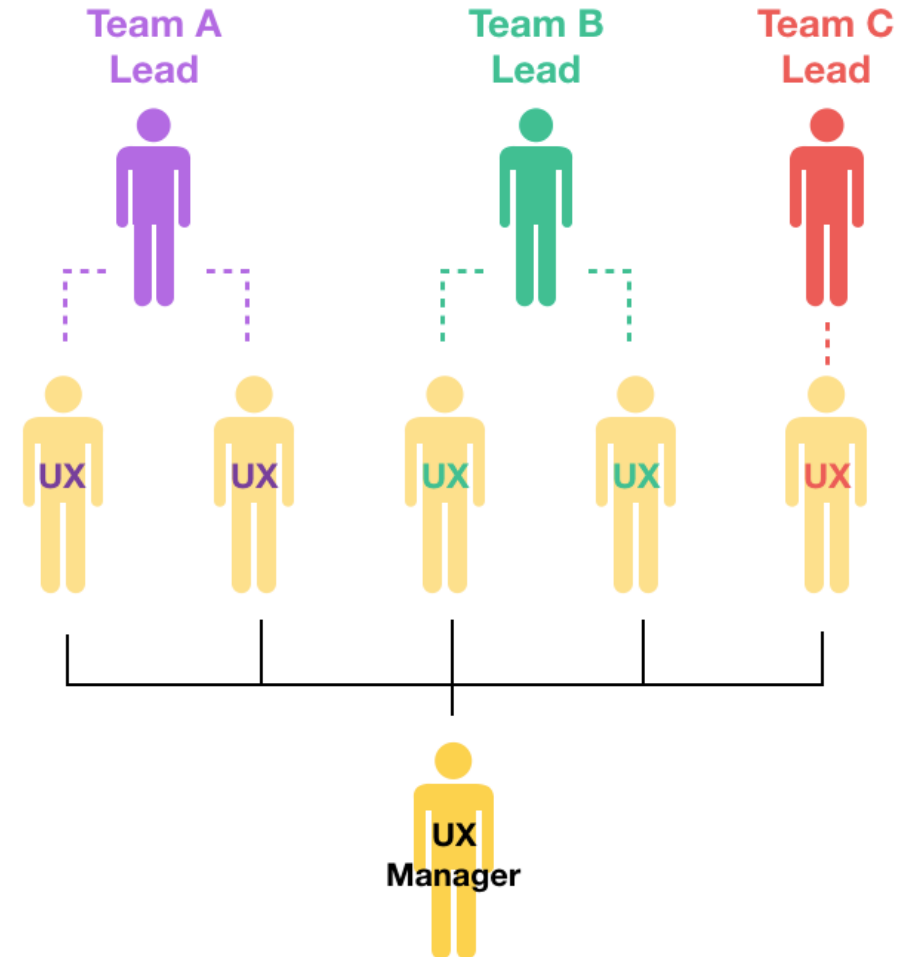
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Now what?

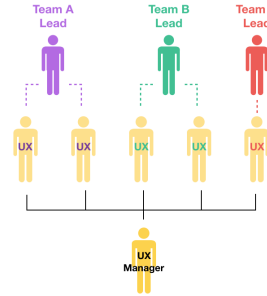
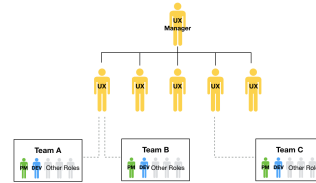
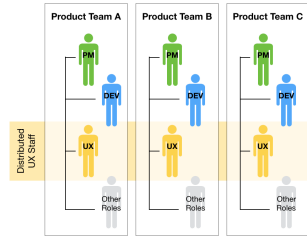
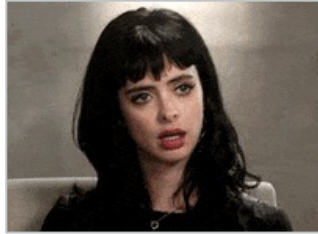
2022 Reorganization: Matrix Team

- Combines decentralized and centralized team aspects
- UX Team physically together with UX Manager
- Assigned to development teams and attend daily meetings
- Utilize different specialities within UX Team
- Dev teams have a direct UX contact
- Promotes a shared understanding and better end-product



nngroup.com/articles/ux-team-models

Stibo Systems UX Team Journey Map



User journey template courtesy of [figma.com/community/file/1010321128635031106](https://www.figma.com/community/file/1010321128635031106)

Q: Which team structure has (or hasn't) worked well for you?

What We've Learned

Document Through Design Systems

- Color System**: Color variables and naming conventions. Visual: A grid of color swatches.
- Icons**: All WebUI icons organized alphabetically and downloadable as svgs. Visual: A grid of various icons.
- Button Components**: All button designs and different states. Visual: Two buttons labeled 'Send' and 'Cancel' with different states.
- Design System Form**: Send the UX Team feedback or requests for additional content. Visual: A large letter 'F' in a teal square.

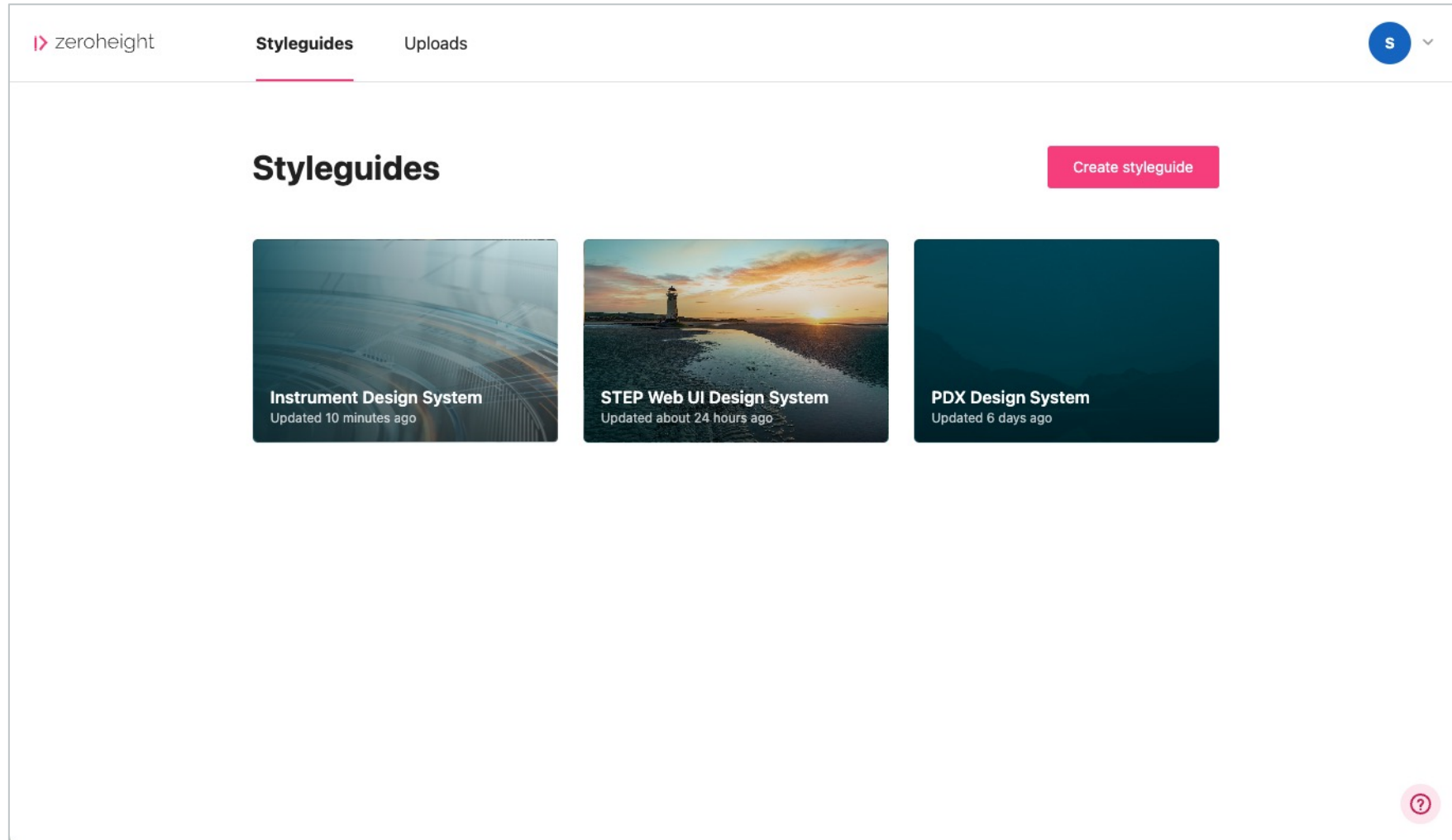


Design System Tool: Zeroheight (zeroheight.com)

The image shows a screenshot of the Zeroheight website. The top navigation bar includes the Zeroheight logo, links for Help, Community, Pricing, Careers, and Login, and a 'Try for free' button. The main content area is split into two sections. The left section is a landing page with the heading 'Increase adoption of your design system' and a sub-headline 'Create a central hub for designers, engineers, product and marketing teams. Connect everyone working with your design system.' Below this is a 'Start documenting for free' button. The right section is a preview of a 'Design System Documentation' page, updated 42 minutes ago. It features a search bar, an 'Upload logo' button, and a sidebar menu with categories like OVERVIEW, STATUS, PROCESS, GUIDELINES, and COMPONENTS. The main content area of the documentation page is titled 'Components' and describes them as 'core building blocks of our application'. It includes an 'Add tab' button and a text input field for content. Below this, there are several component cards: 'Button', 'Toggle', 'Text input', and 'Notifications'. Each card shows a visual representation of the component and a brief description. At the bottom of the page, there is a section titled 'Trusted by some of the world's leading organizations' with logos for Adobe, United Airlines, Intuit, Unity, The Guardian, Red Bull, and Instacart.



Design System Tool: Zeroheight (zeroheight.com)



Promotes Internal Communication

The screenshot shows a design system documentation page for STIBO SYSTEMS. The left sidebar contains a navigation menu with categories like Empty States, Data Visualization, Interaction Behaviors, PATTERNS, and COMPONENTS. The main content area is titled 'Buttons' and is currently displaying the 'Primary Buttons' section. The 'Primary Buttons' section includes a sub-section for 'Usage' which states: 'Indicates the primary or default action. Uses the @accent variable color.' Below this is a 'States' section showing five button states: Enabled (blue), Focus (light blue), Hover (lighter blue), Pressed (darker blue), and Disabled (grey). A right-hand sidebar lists navigation options: Primary Buttons, Usage, States, and Accessibility.

STIBO SYSTEMS
MASTER DATA MANAGEMENT

Search...

Empty States

Data Visualization >

Interaction Behaviors

PATTERNS ▾

Button Patterns

Capitalization

Icons in WebUI

Mandatory

Saving Data

Truncation

COMPONENTS ▾

Buttons ▾

Specs

Primary

Secondary

Tertiary

Icon

Toolbar

Summary Widget

Checkboxes

Chips

Dialogs >

Form Fields >

COMPONENTS

Buttons

Specs Primary Secondary Tertiary Icon Toolbar Summary Widget

Primary Buttons

Usage

Indicates the primary or default action. Uses the @accent variable color.

States

Label	Enabled
Label	Focus
Label	Hover
Label	Pressed
Label	Disabled

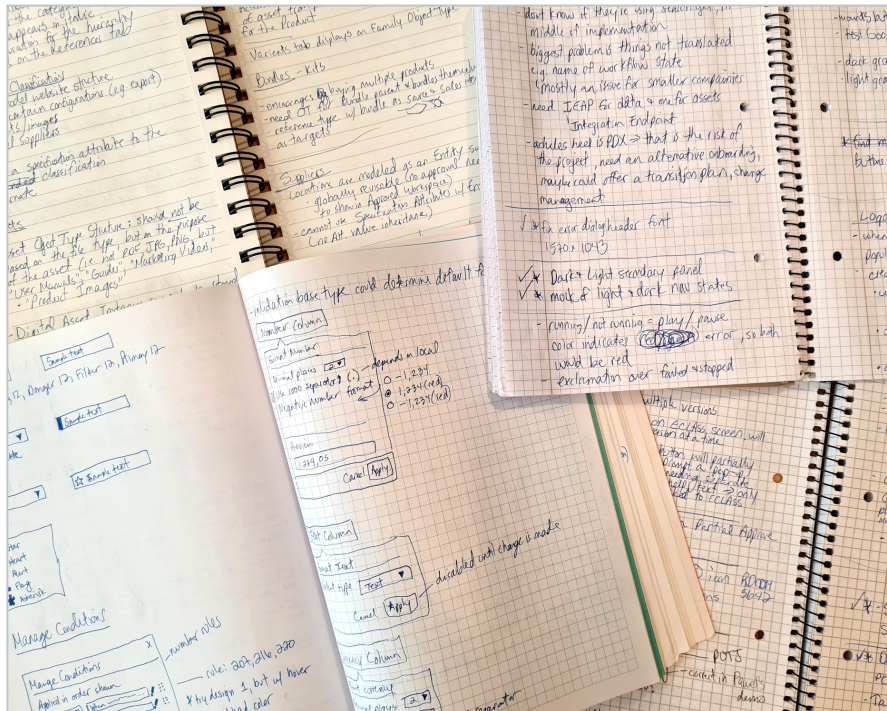
Primary Buttons

Usage

States

Accessibility

Helps External Communication



STIBO SYSTEMS
MASTER DATA MANAGEMENT

Search...

OVERVIEW

Introduction

Principles

STYLE

Color System

Shadows

Typography

Layout

Logos

Icons

COMMUNICATION

PATTERNS

Button Patterns

Capitalization

Icons in Web UI

Mandatory

Saving Data

Truncation

COMPONENTS

PATTERNS

Truncation

Text in Web UI

Names, titles, attribute labels and table headers should truncate with an ellipsis "..." when their given width is reached, not wrap to a second line. When the user hovers over the text they should see the full text in a tooltip.

Why we truncate

Truncation is used as a rule because it helps create consistency in how data is displayed in tables, headers and other elements where space is often constrained. There is a great deal of variation in the length of names for e.g. attributes and widget titles, so truncation allows the design of these elements (i.e. always as a single line rather than varying heights) to remain consistent in the UI. This type of alignment is helpful when reading data across columns as well as creating a more aesthetically pleasing interface. It is also important that the user is always presented with the same behavior in this regard so they know what to expect in terms of being able to see the entire line of text as an on-hover tooltip.

Examples

Product Information Mana...

PIM Links

- Download Basket
- PIM Quick Start Guide
- PIM Documentation
- Additional Product Information Resources
- HAL
- CreateObjectInWorkflow
- dashboardscreen
- mailto:santa@christmas.org

Welcome

Product Information Manager (PIM)

Click the gear ic
Widget to begin
Web UI. For help
configuring Web
User Interfaces
online help.



Spread the Word

Design Systems

Save 32 8 8 16 16

Cancel 8 8 16 16

40 8 8 12 10 12

Variable Shashon Mathave Senior UX Designer

What is a design system?

You might think of it as a "buzzword term", but design systems are more than just trendy. A design system is a single source of truth that ensures consistency, and provides guidance for our internal teams, partners, and customers when building new components for our products.

A design system is a set of deliverables that evolves with a product. It provides tools for designers and developers on patterns, components and guidelines within each product. Our design systems focus on both graphic style usage (e.g. colors, fonts, imagery) and functional components (e.g. buttons and value components).

How do I use it?

Our design systems are built with the [Zero Height](#) tool, which links directly to our mockups in Sketch and Figma. Any linked images can be opened and inspected to get sizing and color specs, similar to Zeplin. All components are shown in their various "states" such as default, hover, focus, selected and disabled. When available, the code for each component is also given, and any associated Less variables and design tokens.

[Web UI Design System](#) Visit

[Instrument Design System](#) Visit

[PDX Design System](#) Visit

STEP Web UI Design System

The STEP Web UI Design System (webuidesignsystem.stibosystems.com) is the source of truth for visual styling, interactive behaviors, and component design inside the Web UI. The design system includes information on e.g., typography, capitalization, truncation patterns, and the color system, as the following image shows:

Color System

Web UI uses a semantic color system, which means all colors have a meaning rather than being decorative.

Overview **Colors** Color Diagram

As of the 3.0.2 release, the former Color System configuration parameters were removed as they were damaging the usability of the system. New branding features were released in 1.1.0 allowing different [global navigation color themes](#) and the use of a [customizable brand color](#).

Accent

Used for primary action buttons and calls to action. Most commonly used variable: `@accent-500`.

50	100	200	300	400	500
#E0F2F1	#B2DFDB	#81C784	#4DB6AC	#00BCD4	#009688
600	700	800	900		
#00838F	#00696B	#004D40	#003333		

You can find information about why the Web UI uses three levels of hierarchy for text colors (following Google Material Design specifications), and why icons are used in certain places of the UI, but not others. There are also recommendations for using the branding features, when to use a modal vs. pop-up dialog, and when to use each value component such as a slider vs. a switch.

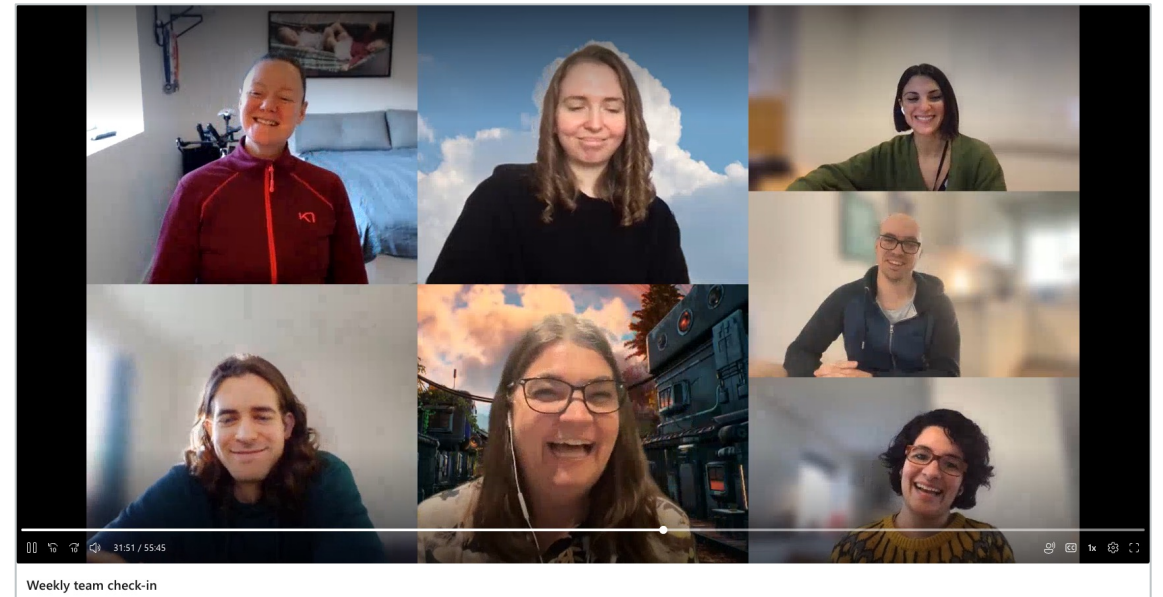
In addition, the design system includes inspectable components which show styling code to help you build custom features while keeping the entire Web UI consistent. The image below displays the specifications for button sizes and padding that are defined by the system.

Communication is Everything



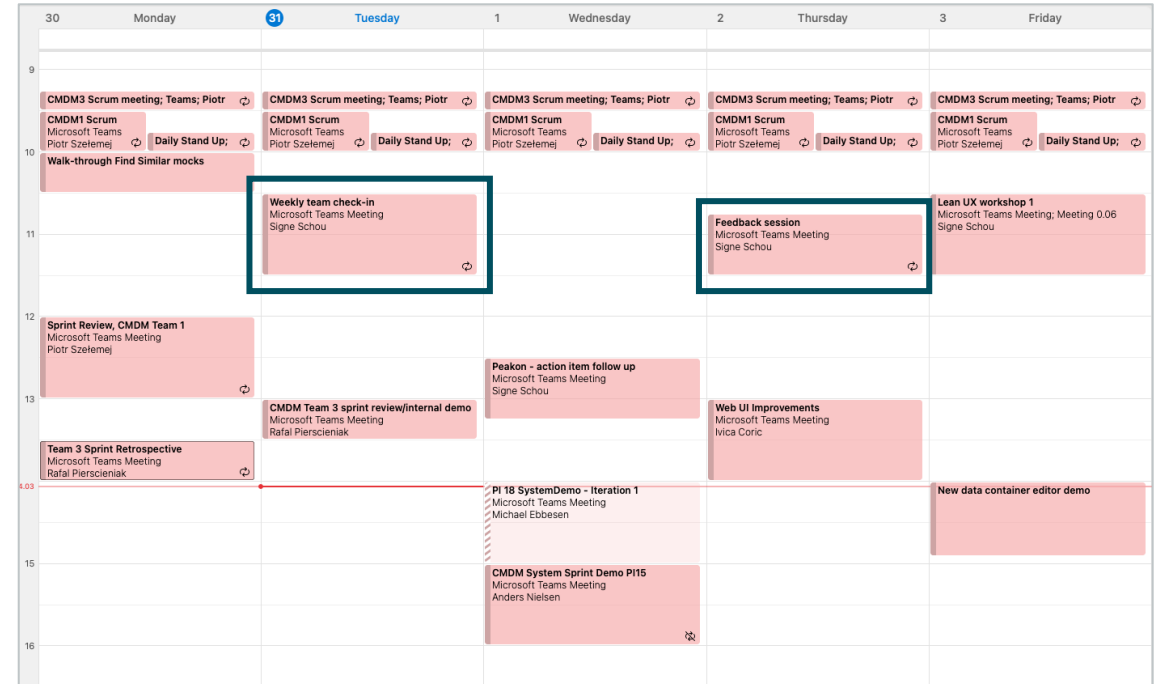
Communication is Everything

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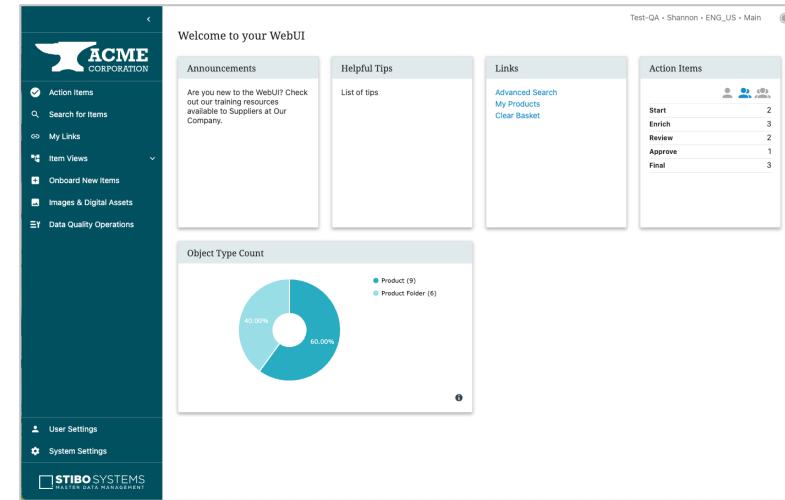
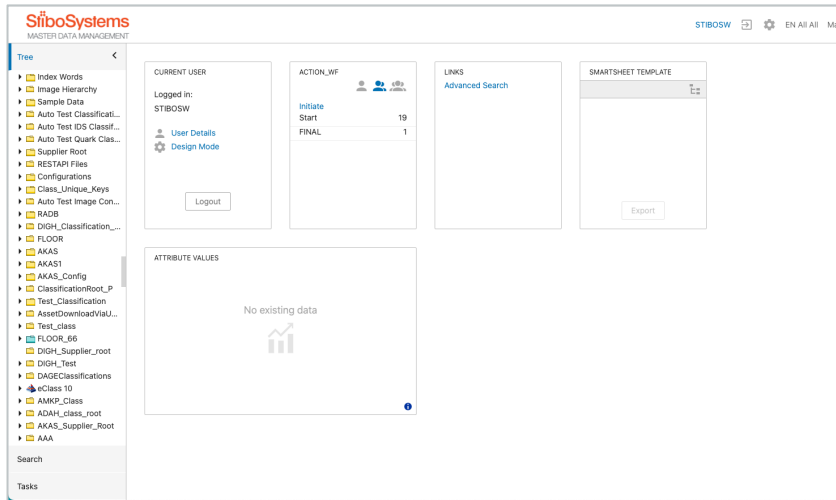
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- Form a “Community of Practice” in UX
 - Gets designers out of project silos
 - Identify existing patterns, avoid “reinventing the wheel”

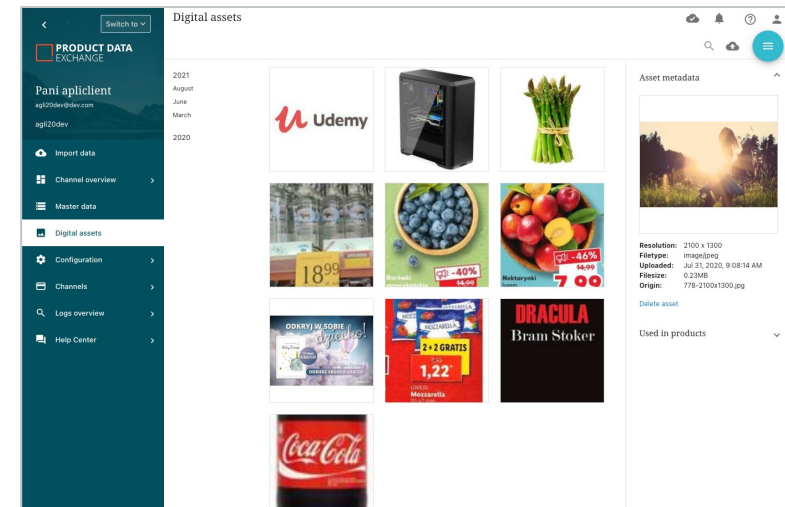
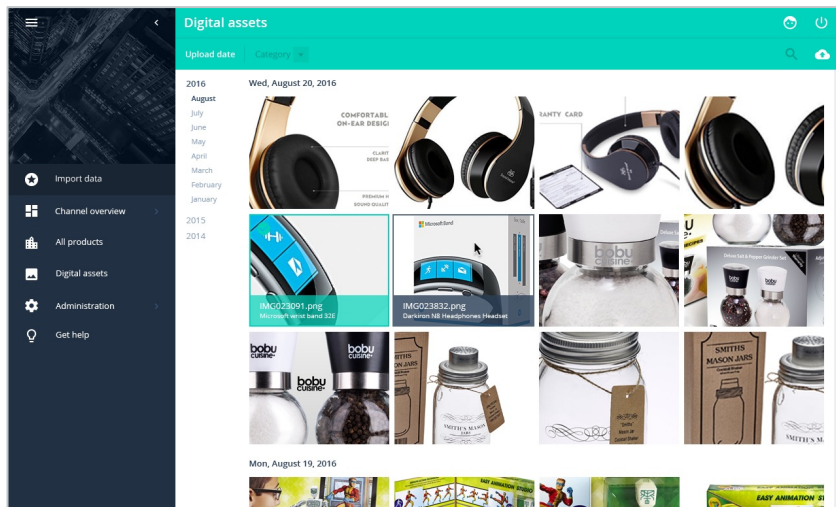


Before and After Community of Practice

Web UI

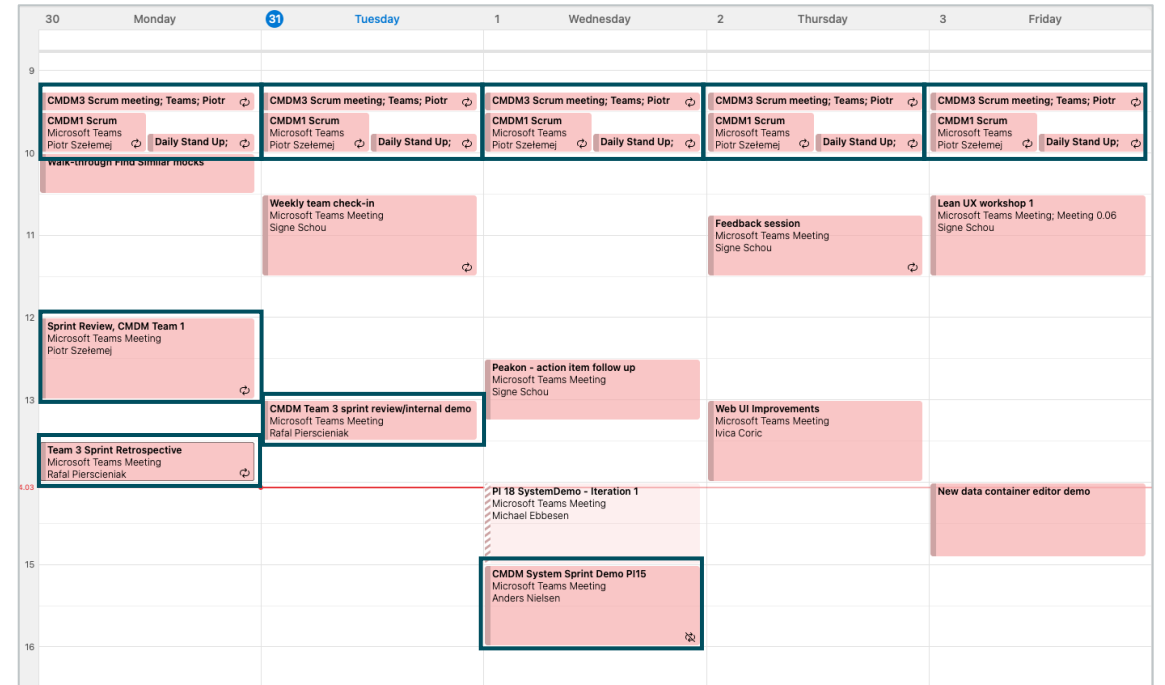


PDX



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 - Includes scrums, sprint reviews, system demos
 - Daily facetime keeps the dialog going



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 - Daily facetime keeps the dialog going
 - Team members become your advocates
- Get involved early in the solution design
 - Reach out to your PO and stakeholders
 - Early communication creates a shared understanding between UX, PO, R&D and stakeholders



Connect with your Team Members

- Important for both within UX and product teams



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- Get to know your colleagues by getting out of the office



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 - Social events and ice-breakers are important
 - Helps foster collaboration across countries and timezones



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 - Helps foster collaboration across countries and timezones
- Creating personal connections on any scale encourages communication

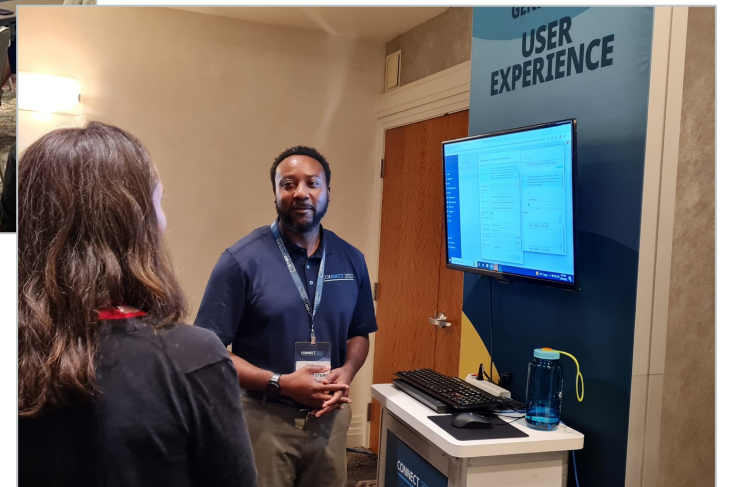


Data Management Planning, October 2022



Participate in Company Events

- Volunteer to speak about UX
- Interact with colleagues and departments that don't often work with UX
- Speak to real customers and end-users
- Spread awareness about what UX does



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- Speak to real customers and end-users
- Spread awareness about what UX does
- Put a face on the UX name
- Educate others about what UX is and why it's important

The screenshot shows a Zoom meeting interface. On the left, there are three video thumbnails: the top one shows a woman speaking, the middle one is black, and the bottom one shows another woman. The main area displays a presentation slide titled "CONNECT 2022" with the subtitle "Tips to Improve the WebUI User Experience" by Shannon Mølhave, Senior UX Designer at Stibo Systems. The slide features a large yellow and orange graphic. Below the title, the text reads: "Shannon Mølhave Senior UX Designer Stibo Systems".

The bottom right of the screenshot shows a slide titled "Semantic Coloring" with the following content:

- Colors in WebUI have a meaning; not just decorative
- Color is a form of communication:
 - Red = Error
 - Yellow = Warning
 - Green = Success
 - Blue = Navigation

Below the text, there are six examples of error and warning messages in a grid:

Export Error Export failed due to misconfiguration. Contact your System Administrator.	Export Error Export failed due to misconfiguration. Contact your System Administrator.
Value Warning The "Price" attribute value must be between 50-500.	Value Warning The "Price" attribute value must be between 50-500.
Onboarding Success Your new product has been successfully onboarded.	Onboarding Success Your new product has been successfully onboarded.

At the bottom left of the slide, it says "15 STIBO SYSTEMS".



Spreading UX Awareness

Q: Have you done promotion or education on UX in your company?

Moving Forward

Applying Lean UX

Principles of *Lean UX* by Jeff Gothelf and Josh Seiden:

- Iteration; improving existing functionality
- Identify projects by what problem they solve
- Conduct user research throughout the entire development process
- Proactive in finding improvements rather than just reactive to complaints



leanuxbook.com

Outcomes vs. Outputs Mindset

Output	Why?	Outcome
HTML5 redesign	Works better on mobile	Make mobile experience as good as desktop
Twitter and Facebook integration	Allows customers to promote the product by sharing results	Make it easy and fun for users to promote our product
Infrastructure work for scalability	App slows down under heavy traffic	Ensure access and that we can fulfill peak demand

jeffgothelf.com/blog/difference-between-user-outcome-and-business-outcome

Longterm Strategy



Longterm Strategy

These *Lean UX* changes in the development process encourage productive collaboration.

Lean UX Method

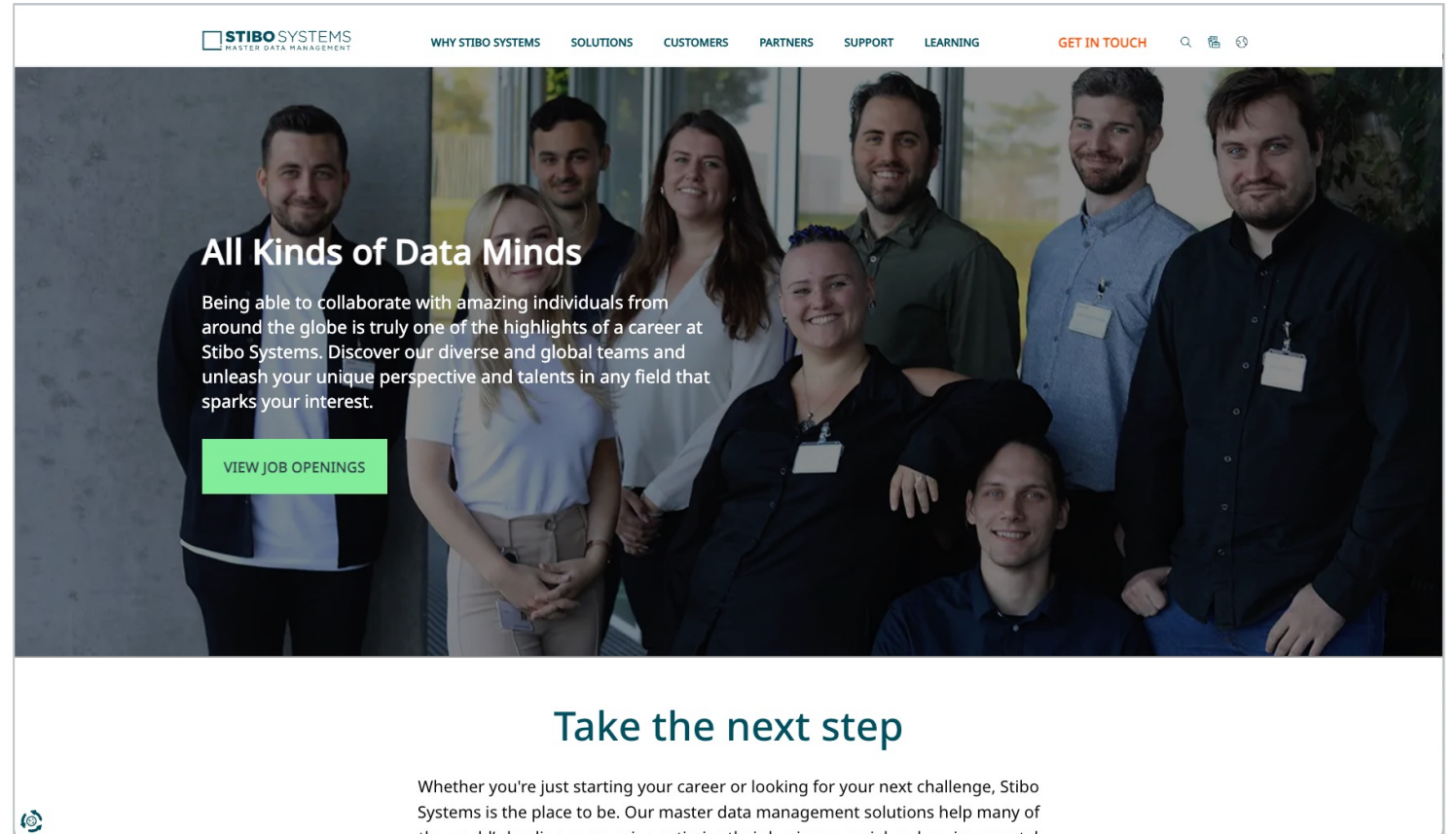
Q: Have you tried the *Lean UX* Method? What did you think?

We're Growing!

UX Team seeking early 2024:

- UX Designer (associate)

stibosystems.com/careers

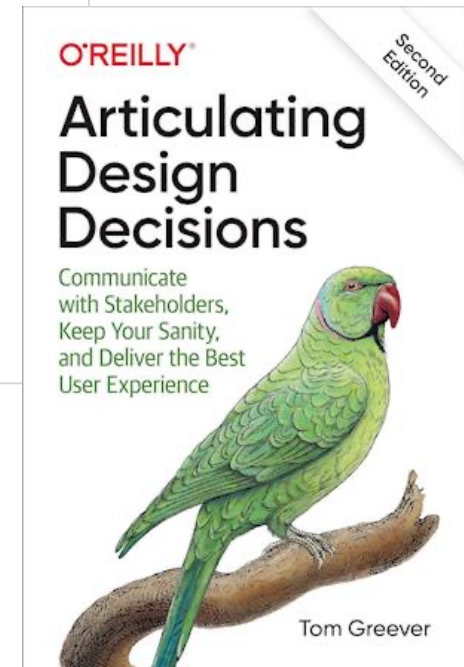
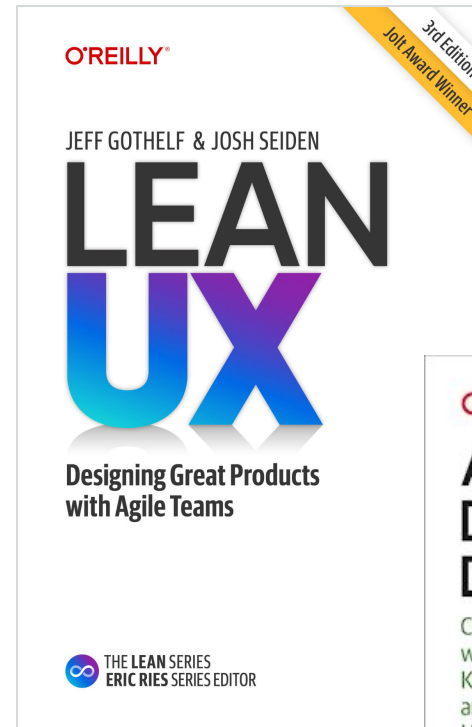


The screenshot shows the top portion of the Stibo Systems careers page. At the top left is the Stibo Systems logo with the tagline 'MASTER DATA MANAGEMENT'. To the right is a navigation menu with links for 'WHY STIBO SYSTEMS', 'SOLUTIONS', 'CUSTOMERS', 'PARTNERS', 'SUPPORT', and 'LEARNING'. Further right is a 'GET IN TOUCH' link and search, language, and accessibility icons. The main visual is a large photograph of a diverse group of eight employees smiling. Overlaid on the left side of the photo is the heading 'All Kinds of Data Minds' in white. Below the heading is a paragraph of text: 'Being able to collaborate with amazing individuals from around the globe is truly one of the highlights of a career at Stibo Systems. Discover our diverse and global teams and unleash your unique perspective and talents in any field that sparks your interest.' Below this text is a bright green button with the white text 'VIEW JOB OPENINGS'. At the bottom of the page, the heading 'Take the next step' is centered in a dark teal color. Below this heading is a paragraph of text: 'Whether you're just starting your career or looking for your next challenge, Stibo Systems is the place to be. Our master data management solutions help many of the world's leading companies optimize their business, social and environmental...'. A small accessibility icon is visible in the bottom left corner of the page.

Wrapping Up

Combat UX Collaboration Challenges

- Explore the Matrix Team Structure
- Document design standards in a design system
- Form a UX Community of Practice
- Participate in the scrum process
- Get to know your colleagues (OOO)
- Speak up:
 - To stakeholders and PO's for early involvement
 - At company events to spread UX awareness
- Further your own UX education
 - Workshops, conferences, books: *Lean UX* and *Articulating Design Decisions*



Get in Touch!



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BETTER DATA.
BETTER BUSINESS.
BETTER WORLD.