

# How Design Systems build the future of your business





## Rangle.io

Rangle is a Lean Innovation and Digital Transformation Consultancy that solves the most compelling digital challenges facing small and large companies today.

We accelerate digital innovation to create products and experiences that engage customers, drive better outcomes, and increase revenue.

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# Agenda

- The importance of CX - Insights from Forrester
- Experience Design & Why a Design System
- What is a Design System
- Design Systems in Practice
- Why this Matters to your Organization
- Q&A



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UI Architecture  
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SVP, Creative  
Rangle.io

FORRESTER®

CHALLENGE THINKING. LEAD CHANGE.





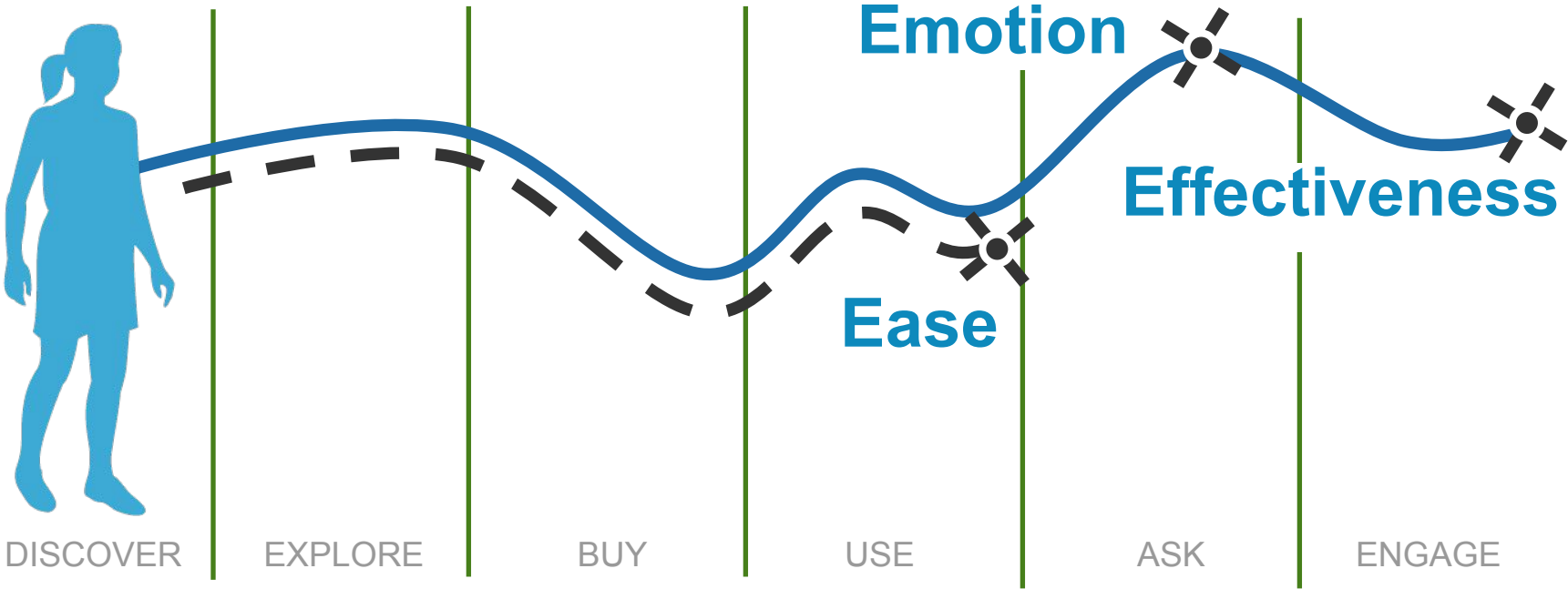






**The experiences that  
you create matter.**

# Customer Experience (CX): How customers perceive their interactions with your organization over time



# Great CX drives business results:

**5.1x**

Revenue growth of CX leaders over laggards<sup>4</sup>

**4.5x**

Willingness to pay a price premium of customers who have excellent versus very poor experiences<sup>5</sup>

**2.7x**

The operating margin for companies with engaged employees<sup>6</sup>

# And there is urgency:

**Digital disruption lowers barriers to entry.**

A graphic of a target with concentric circles and a central bullseye, positioned to the right of the text.

Netflix has 65 million subscribers, about 3x more than Comcast.<sup>1</sup>

**Hyperadoption reduces customer loyalty.**

A graphic of a smartphone with a screen and a camera, positioned to the right of the text.

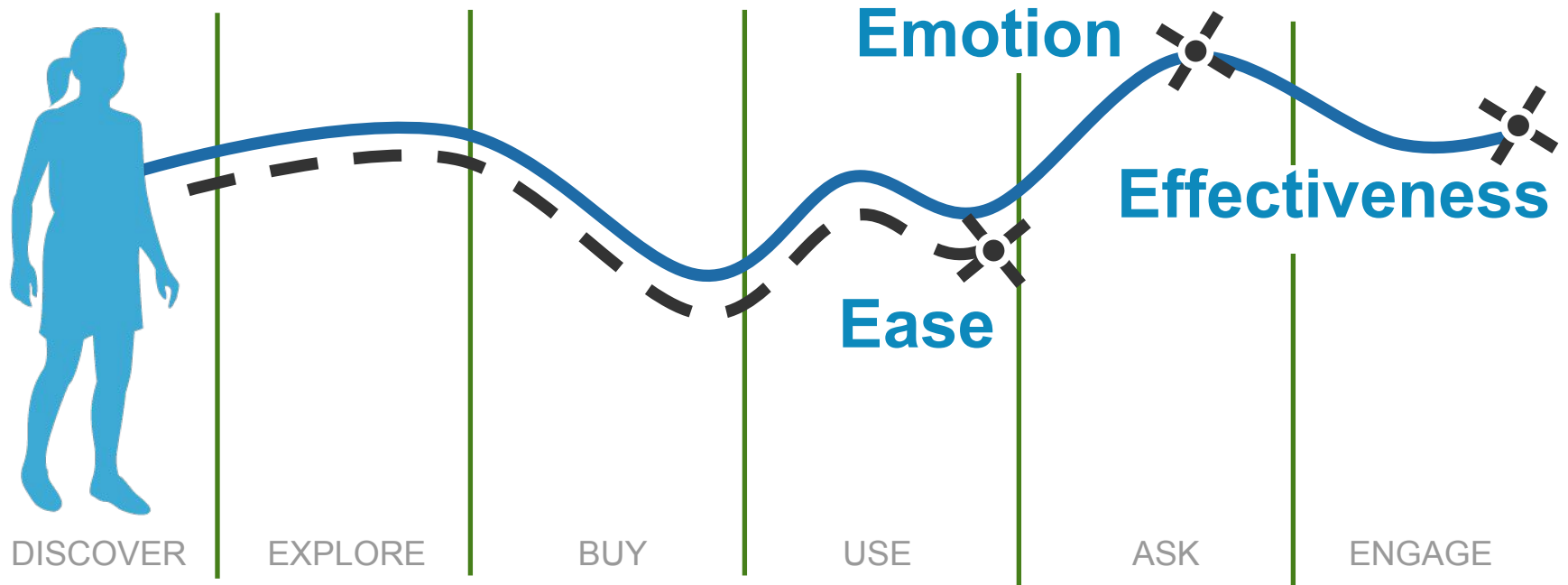
San Francisco has seen a 65% drop in average trips per taxi following Uber's entry to the market.<sup>2</sup>

**A changing workforce makes it harder to retain talent.**

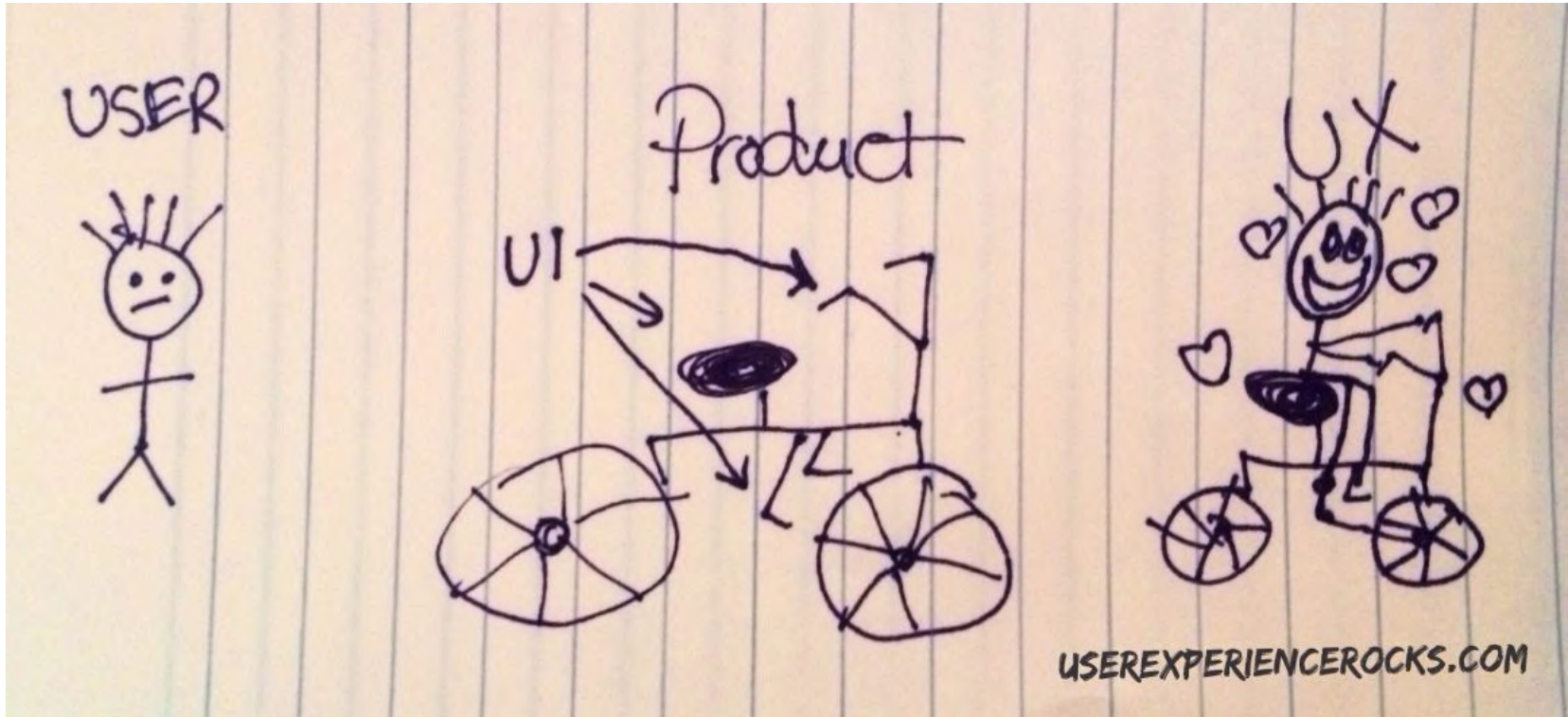
A graphic of a star with multiple points, positioned to the right of the text.

With over 53.5 million workers, Millennials surpassed Gen X as the largest generation in the workforce.<sup>3</sup>

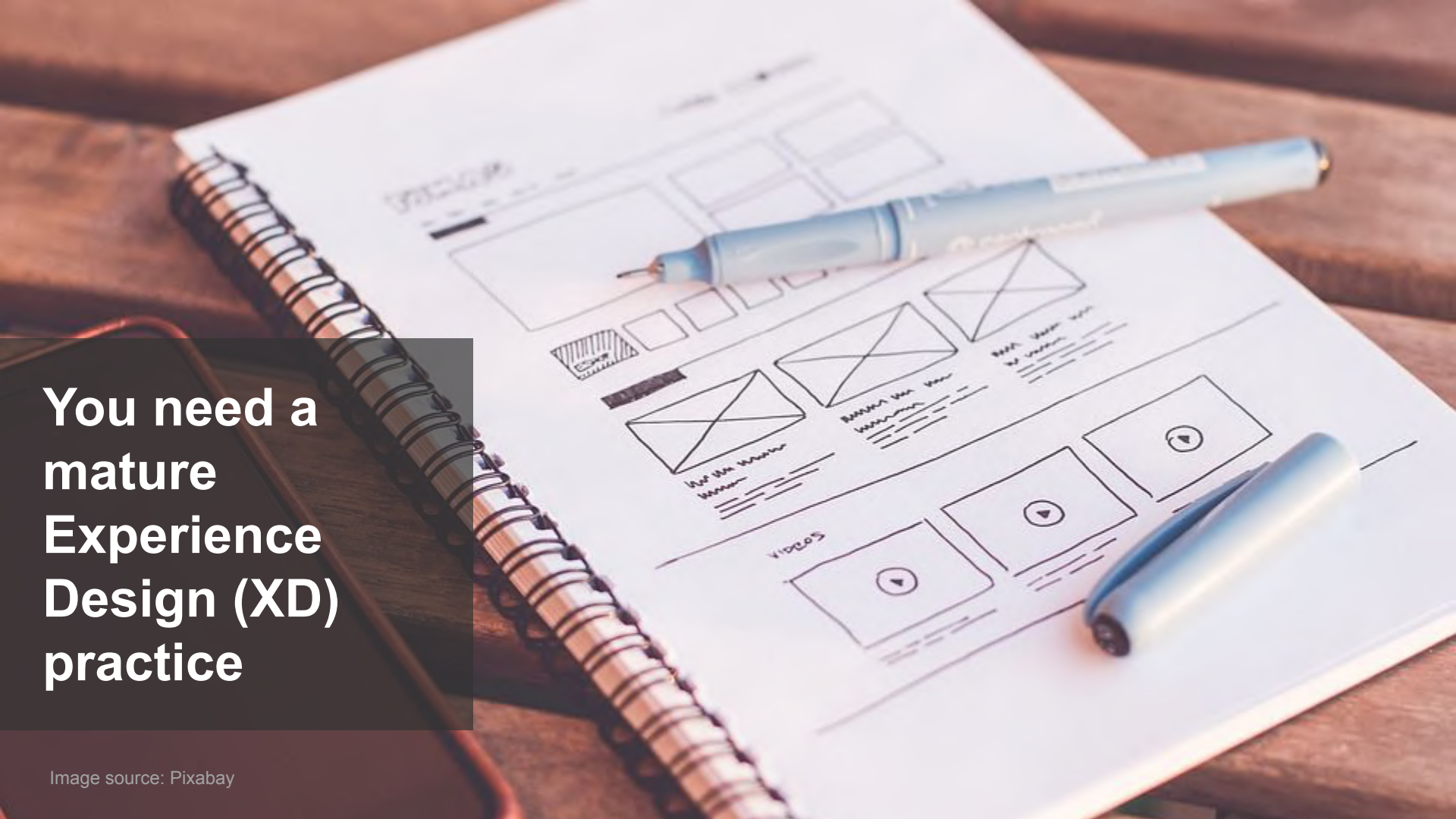
# Customer Experience (CX): How customers perceive their interactions with your organization over time



# User experience (UX): How a user interacts with a product, service, or system



# You need a mature Experience Design (XD) practice





## Experience design...

creates products, services, or systems that are perceived to be easy, effective, and emotionally engaging by the people who use them.

## **Experience design is:**

Defining and refining experiences based on your vision and research-based customer understanding.

# XD follows a user-centered design process



**Research**  
your users  
and their  
behaviors



**Analyze**  
your findings  
to define the  
problem



**Ideate**  
a range of  
solutions



**Prototype**  
solutions  
using an  
iterative  
process



**Validate**  
solutions  
directly with  
customers  
and users

Source: Icons from the Noun Project

## Effective XD leads to:

- › More accurate requirements □ lower engineering costs
- › Less customer confusion □ lower support costs
- › Better experience □ greater adoption of self-service
- › Higher quality experience □ increased customer loyalty
- › Positive word of mouth □ more referrals; less marketing

# The good news: XD influence is growing




*"The role of design in the eyes of many has been just to 'make it pretty.' Our business partners get more value from my team when they think of us as problem solvers, not just artifact creators."*

*- Heidi Munc, AVP of UX, Nationwide*

*Insurance*





**The bad news:  
scaling XD is  
difficult.**



# As XD grows...

- ▶ **XD gains influence:** 83% indicated that UX is responsible for designing digital experiences, 53% are also responsible for designing services.
  - More demand for time and people.
- ▶ **XD is working in agile:** 85% of companies in our survey are using or shifting to an Agile process.
  - More demand for speed and collaboration.
- ▶ **XD is decentralized:** 16% sit in a decentralized structure, 36% are some combination: certain functions centralized, others embedded.
  - More demand for consistency.

Source: Forrester's Q2 2018 Global Organizing For Experience Design Online Survey; "How To Scale Your Design Organization" Forrester report.

# Your process has to adapt.

- › Formalize processes and publish documented specifics.
- › Strengthen Agile-based design/development collaboration.
- › Foster new idea incubation.

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# Is your company ready?

	"citizens of...? you look for good..."	
Establish standards and processes	Do you have a documented design system?	
	Have you established a DesignOps function and allocated at least a portion of one team member's time to leading it?	
	Have you aligned as a team on which steps and artefacts in your design process are negotiable and which are required?	
	Do you invest in research focused on building a better understanding of customer segments and apply this understanding across projects?	
E...	Does your current structure realize the... centralized and... models?	

Source: October 18, 2018, "How To Scale Your Design Organization" Forrester report.

# The design system.



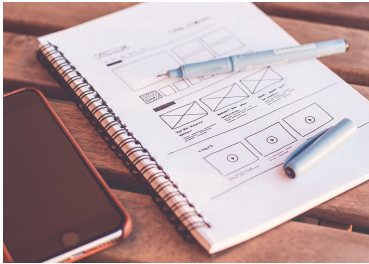
**68%** of survey respondents indicate that they use a design system



**65%** use design systems more than they did two years ago

Source: Forrester's Q2 2018 Global Organizing For Experience Design Online Survey

# Design systems help XD scale and amplifies outcomes with:



- Defined standard components
- Secured buy-in
- Documented decisions



- Improved collaboration with development
- Included code to expedite the process



- Onboard new employees
- Scale insights across the organization



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# Experience Design & Why a Design System?



## It's not about you

Begin with empathy for the customer and their needs. Serve their reality, not an organization's internal politics, structures, language, or goals.

The generation of revenue is a RESULT, not a goal when crafting exquisite customer experiences.

Be relevant, be of service... be magicians.



## Just because you can...

Doesn't mean you should.

The soul of experience design is to simply, smoothly, and directly identify and facilitate the goals of others.

Fashions of design, extraneous distractions, badly considered paths, “rethinking” basic patterns, unless they are smoother and more reductive, are hubris.

If you make any design decision based on yourself, you have failed before you have begun.

BRAUN

höhen



tiefen



volumen



ein aus



phono



lang



mittel



ukw



sender

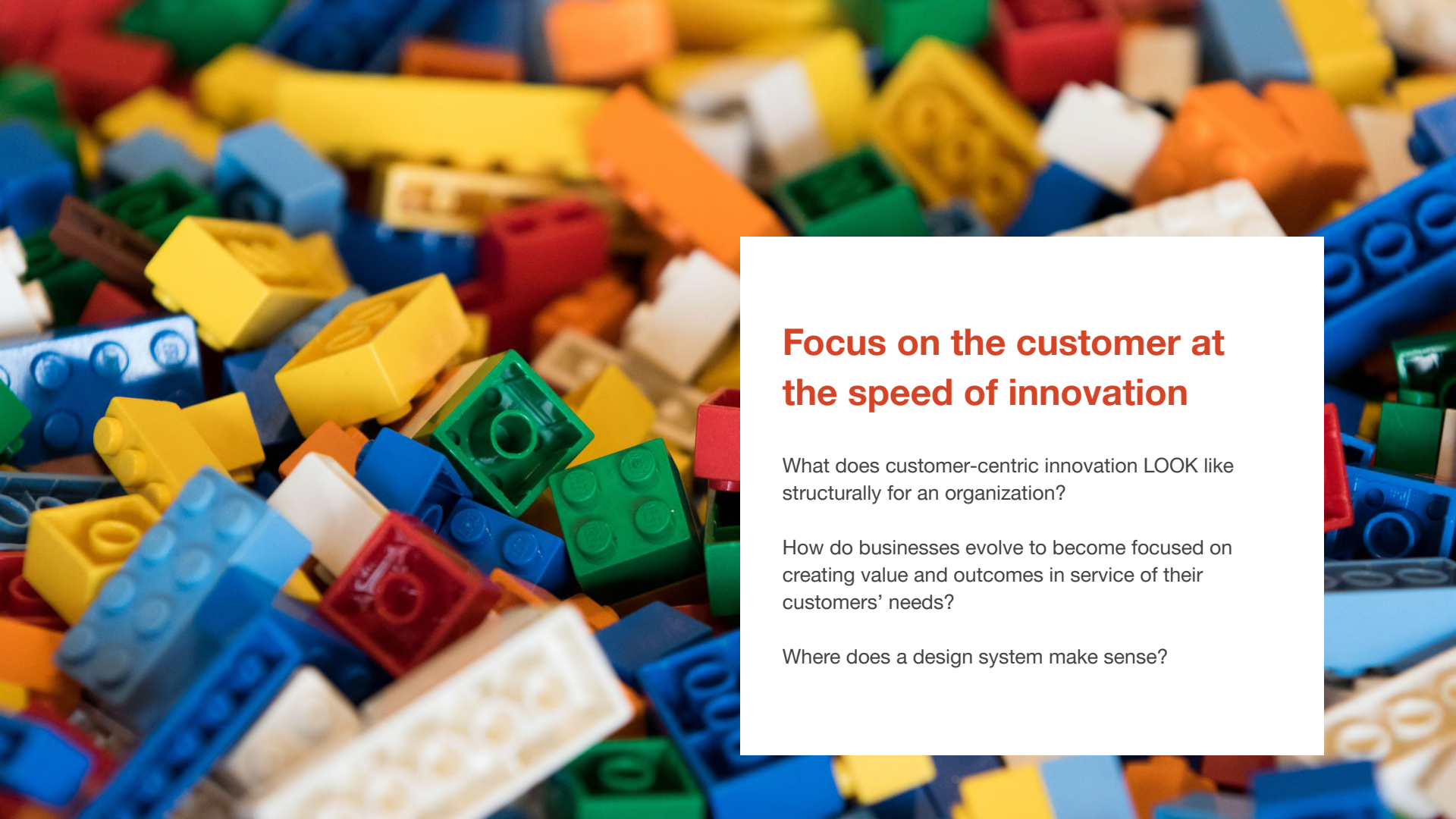


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**“Indifference towards people and the reality in which they live is actually the one and only cardinal sin in design.”**

Dieter Rams





## Focus on the customer at the speed of innovation

What does customer-centric innovation LOOK like structurally for an organization?

How do businesses evolve to become focused on creating value and outcomes in service of their customers' needs?

Where does a design system make sense?

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**“You have to start with the customer experience and work backwards to the technology.”**

Steve Jobs

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**UX - U = X**

(where "X" means "don't do it")

<https://www.nngroup.com/articles/ux-without-user-research/>

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## Digital Innovation Platform

Product Mindset



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# Digital Innovation Platform

Product Mindset

UX Research

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# Digital Innovation Platform

Product Mindset

UX Research

DevOps

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## Digital Innovation Platform

Product Mindset

UX Research

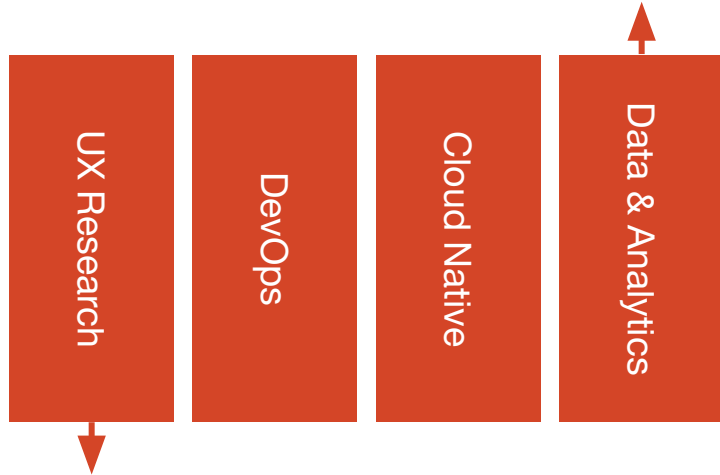
DevOps

Cloud Native

Data & Analytics

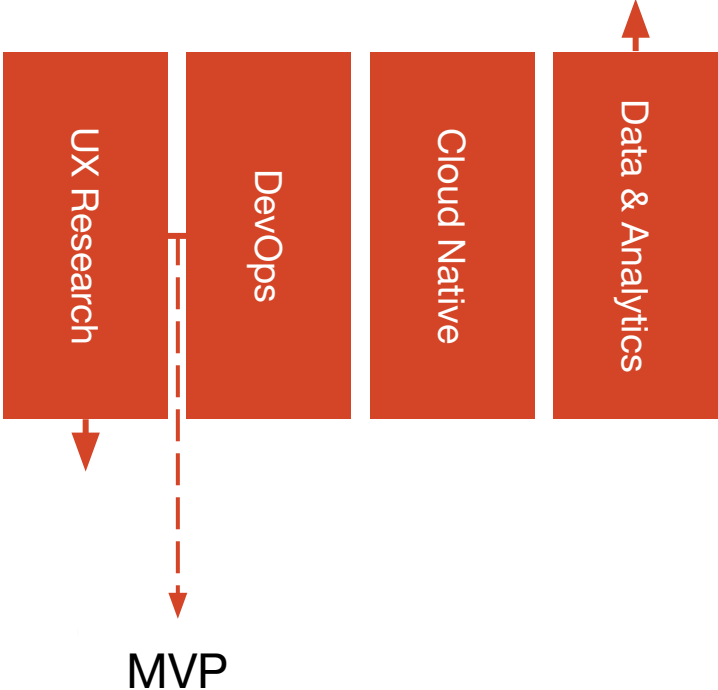
# Digital Innovation Platform

Product Mindset



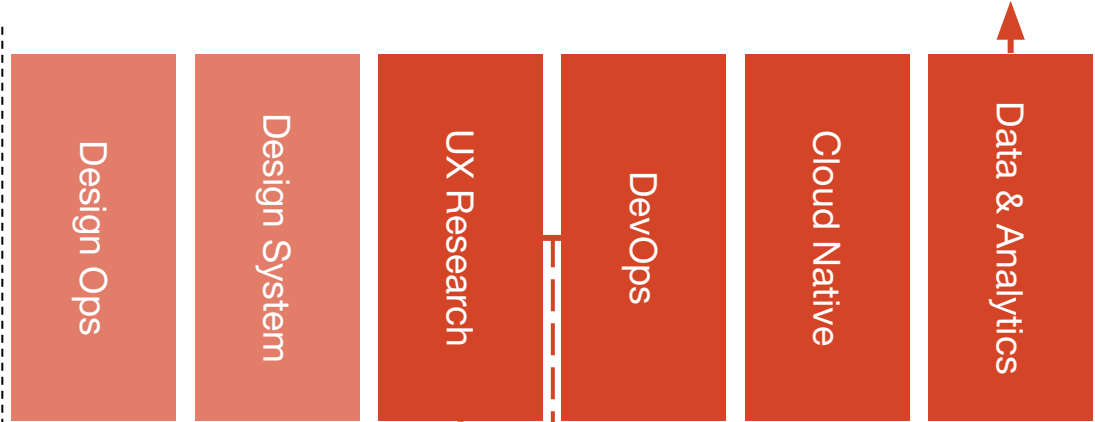
# Digital Innovation Platform

Product Mindset



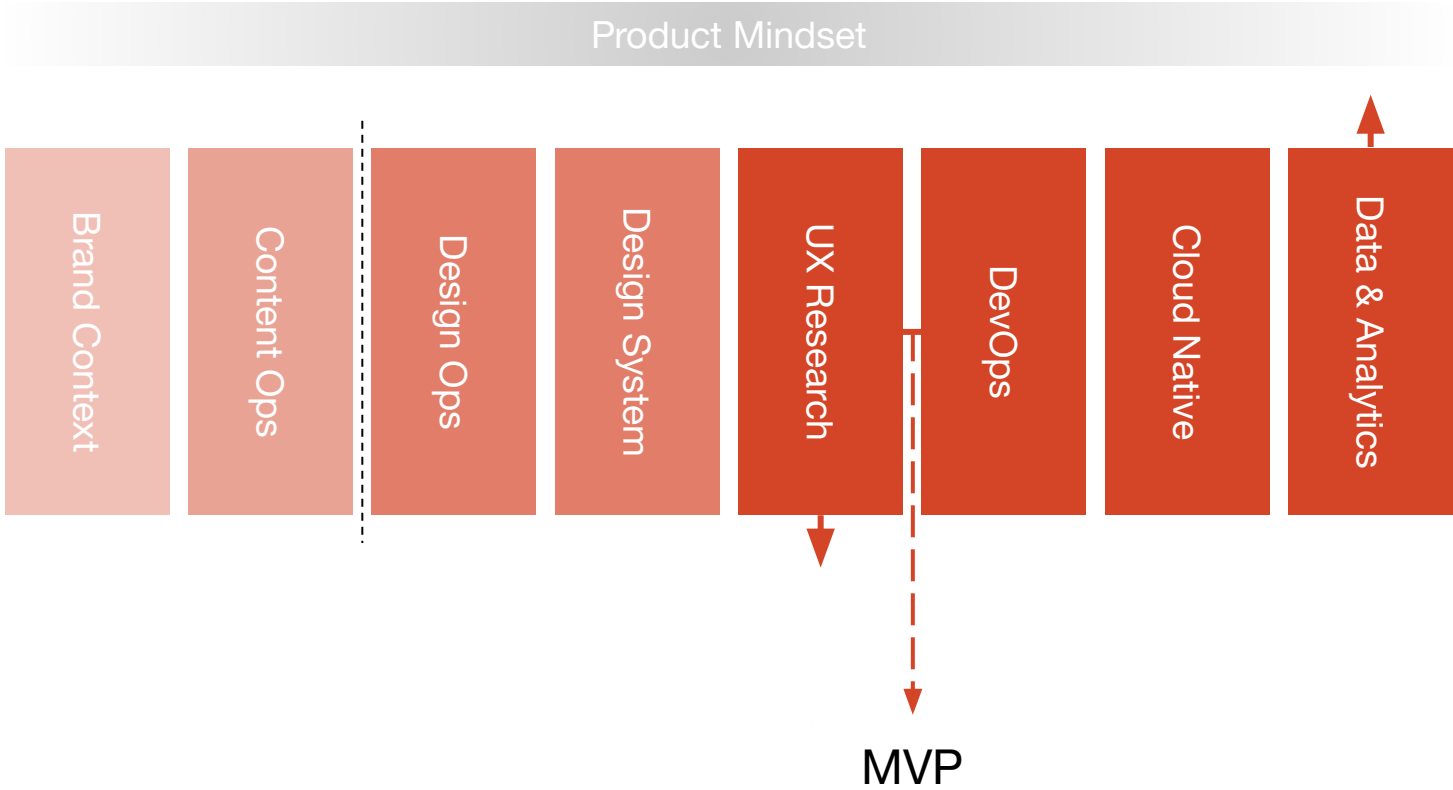
# Digital Innovation Platform

Product Mindset

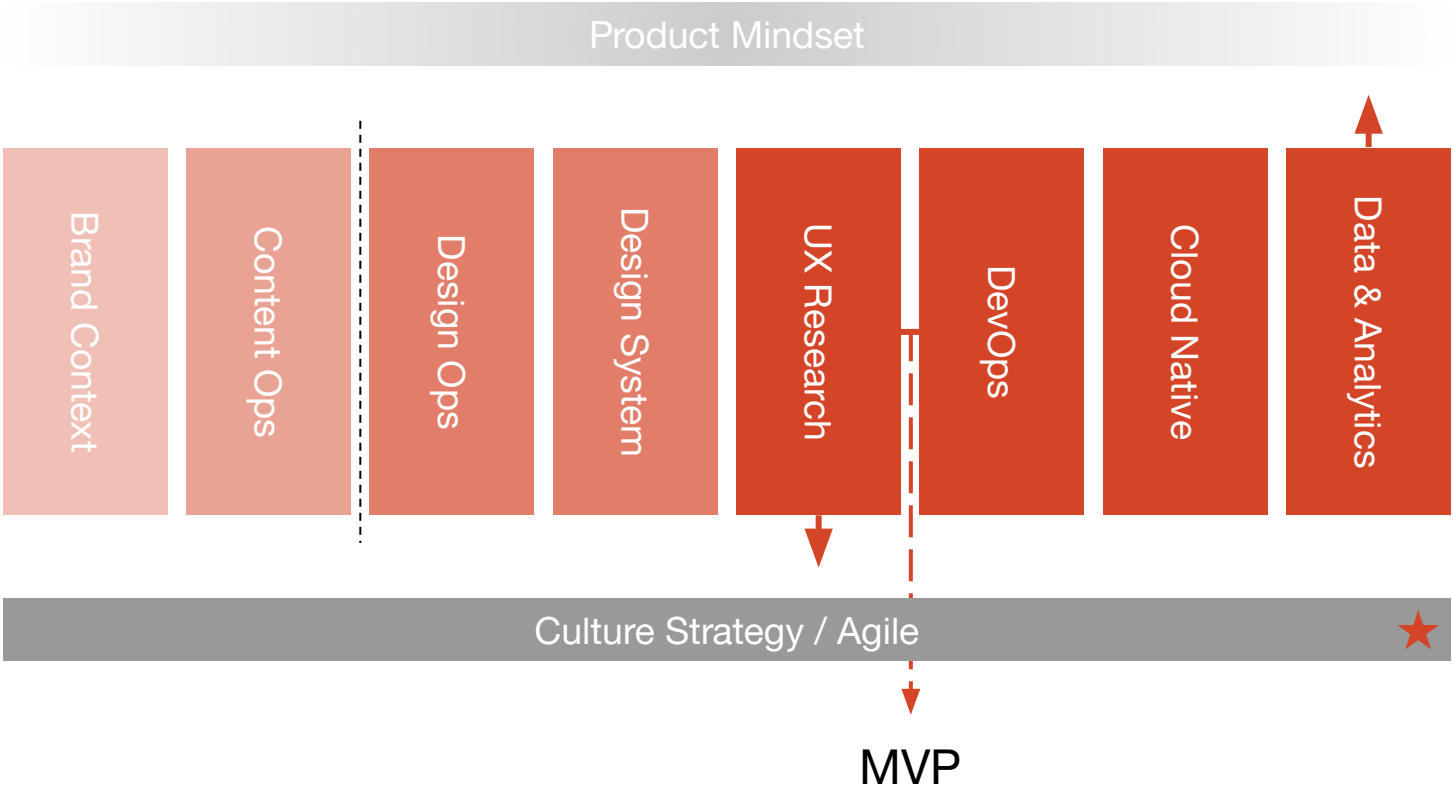


MVP

# Digital Innovation Platform

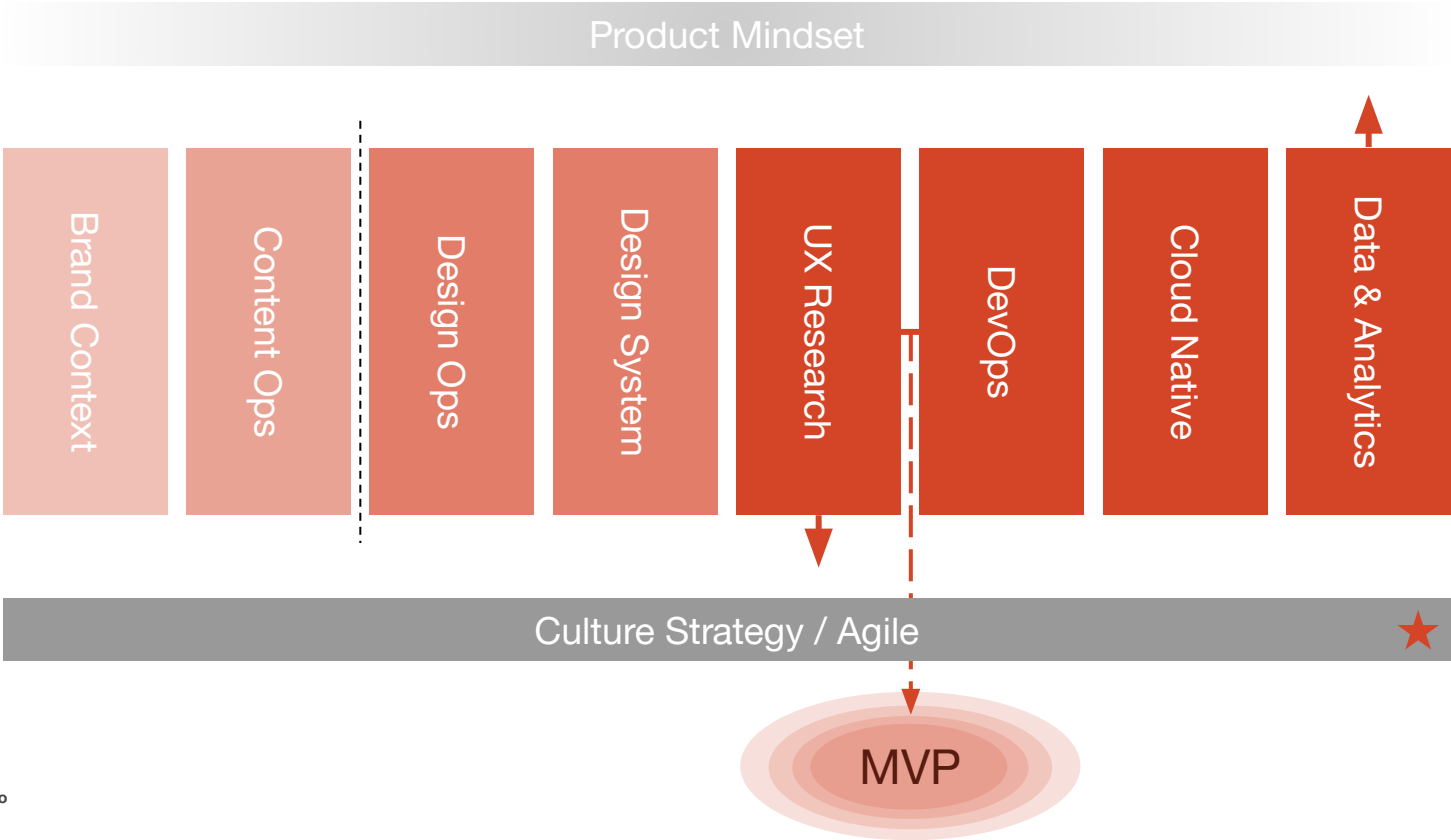


# Digital Innovation Platform





# Digital Innovation Platform





## Don't stop the train

The point isn't to halt anything in order to learn about the customer, craft experiences to their needs, and then apply the look and feel and code.

Rather: it is about evolving a larger innovation construct that empowers the people solving customer problems to do so at speed, while also generating actionable learnings to improve and evolve at that same speed.

You can start small.

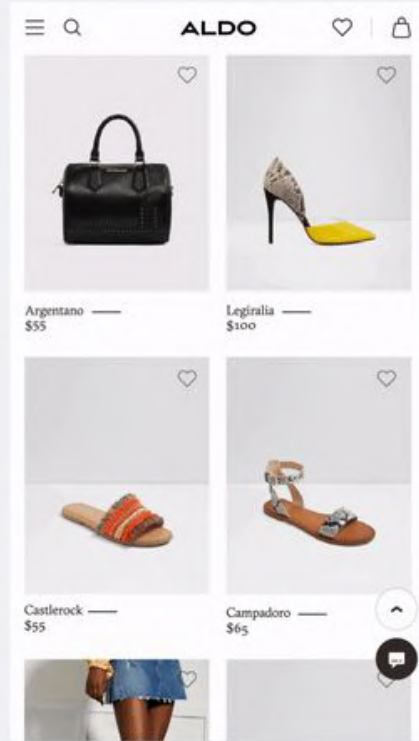
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# What is a Design System?

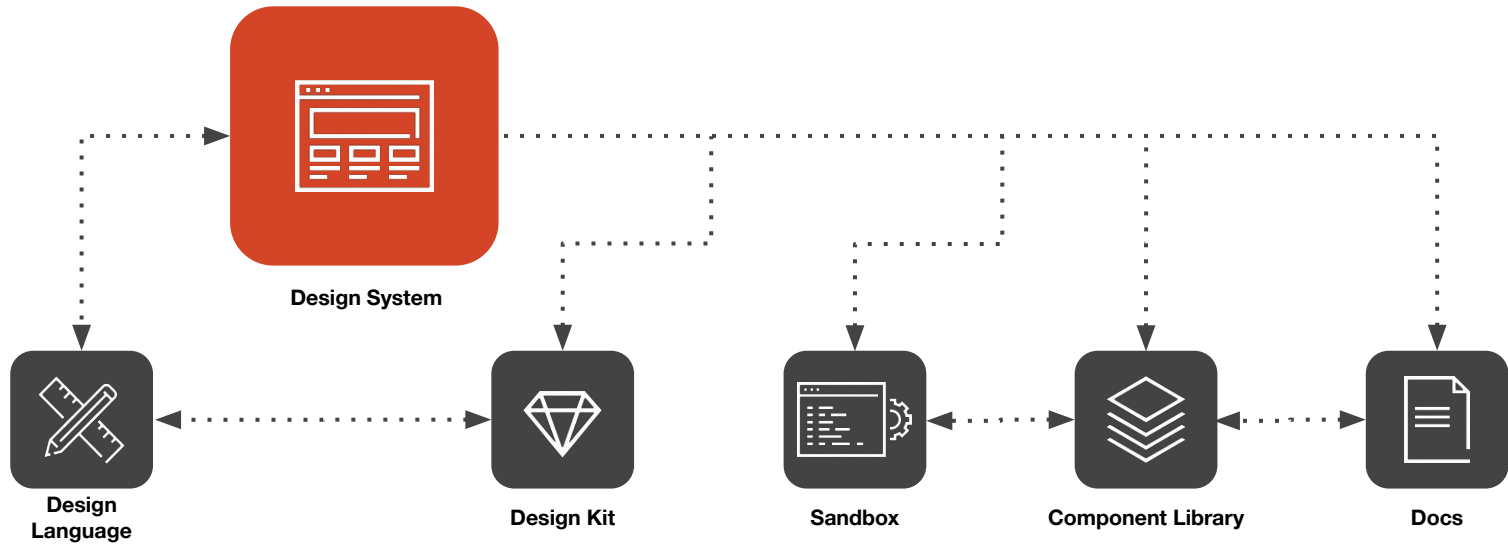
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**“A Design System is a systematic approach to product development — complete with guidelines, principles, philosophies, and code.”**

# Structure of a Design System



# A Design System in Practice

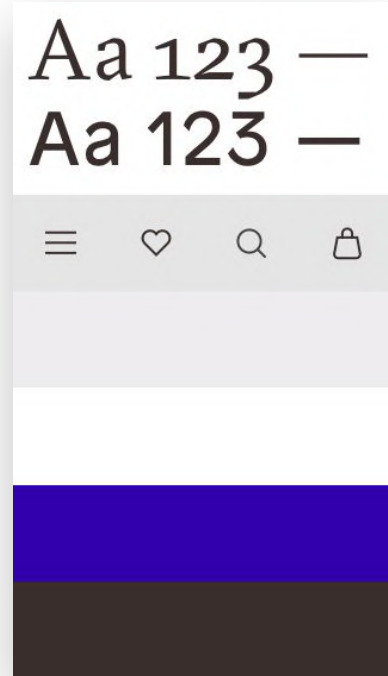


## Design Language

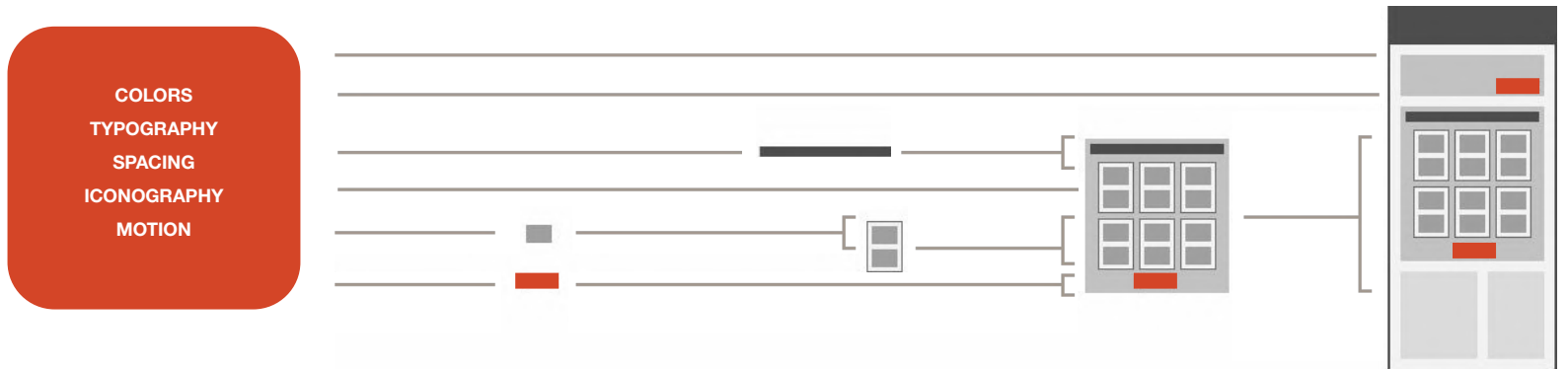
The essence of your brand in the digital context and the overall visual design of a product.

Includes characteristics such as typography, colors, icons, spacing and information architecture.

Maintained as Design Tokens in code.



# Component Hierarchy



## Design Tokens

Visual design layers that are applied globally to elements, patterns, and features.

## Elements

Basic reusable building blocks of the system.

## Patterns

Reusable building blocks that are comprised of other building blocks.

## Features

A set of patterns, elements, & styles that come together to support a specific user task. (JavaScript container component)

## Layouts

How features come together to form a page.

.....  
**Strict - centrally managed**

.....  
**Fluid - managed by individual teams**



# Component Hierarchy

Phone

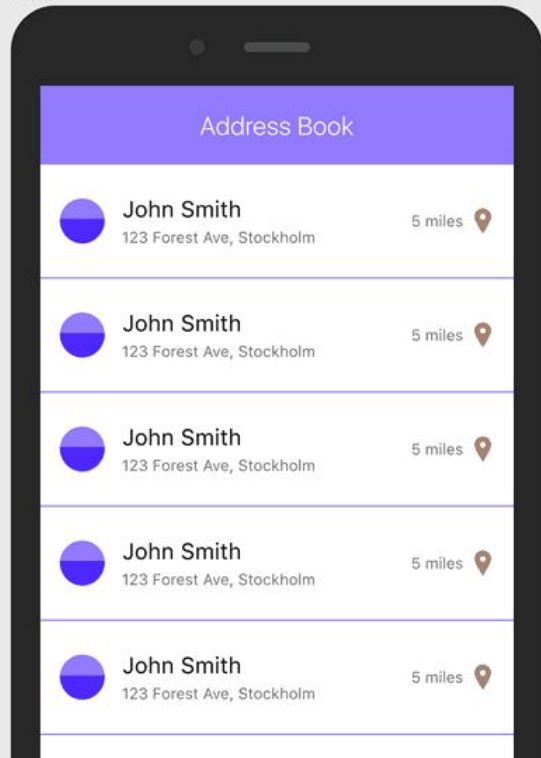
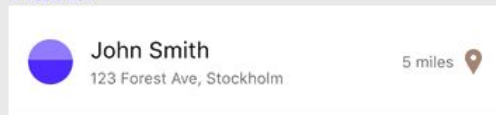


Table Row



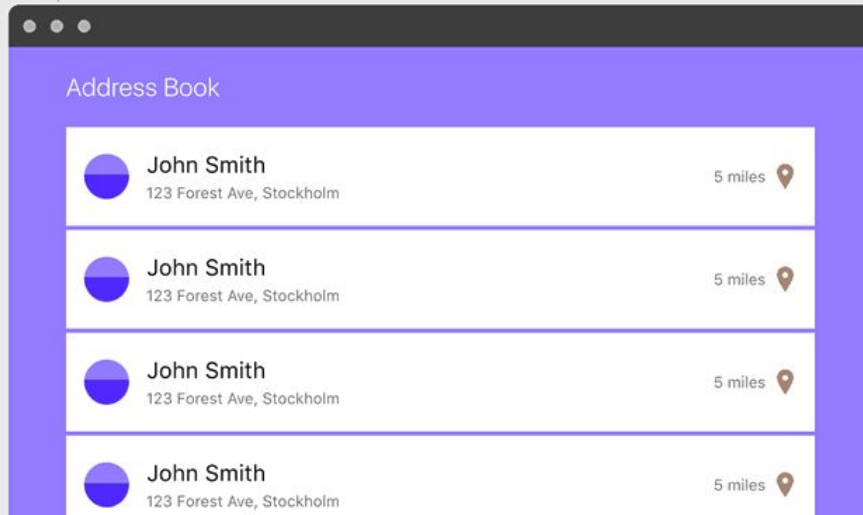
Location



Label  
Label

Small Label  
Small Label

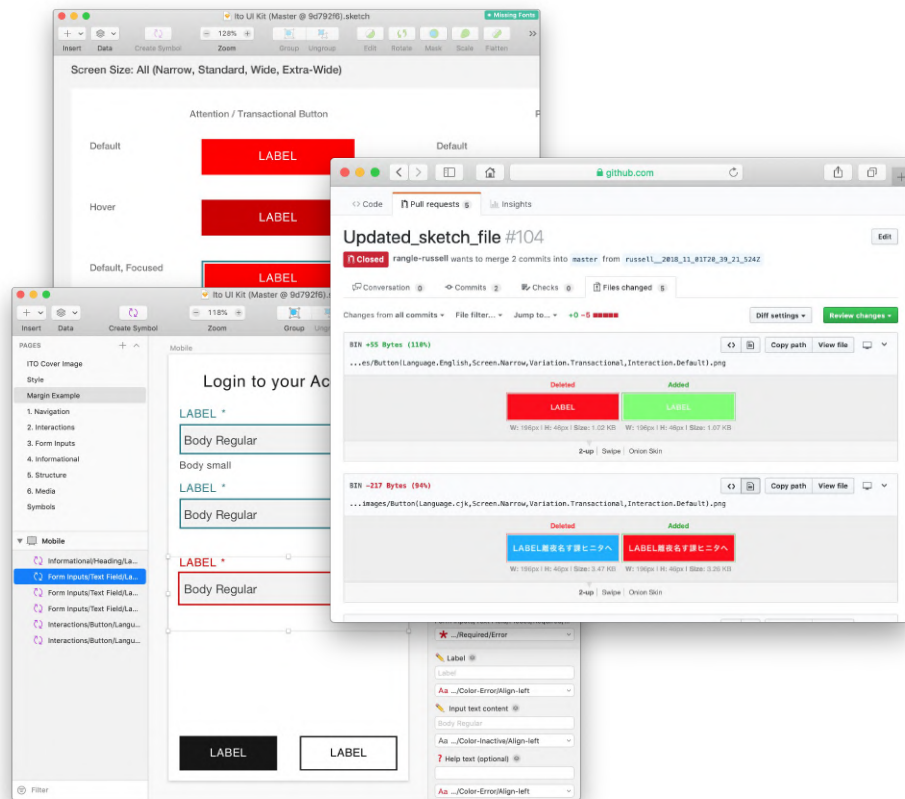
Desktop



# Design Kit

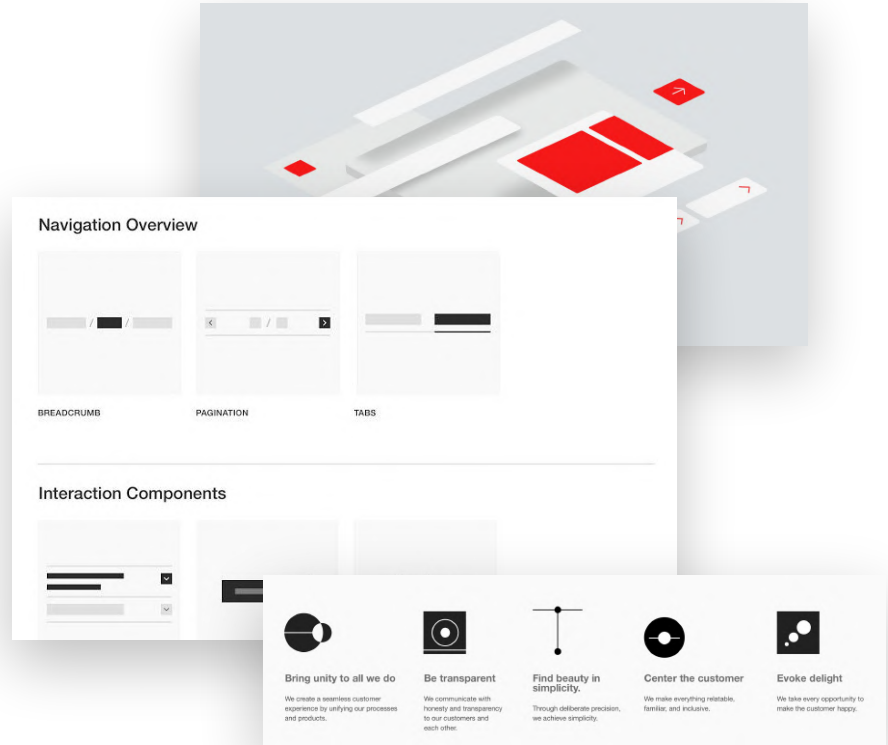
A library of shared styles, symbols or components that can be used by product teams to design or prototype new experiences.

These symbols mirror the JavaScript components from the component library and are updated to be always kept in sync.



# Component Library

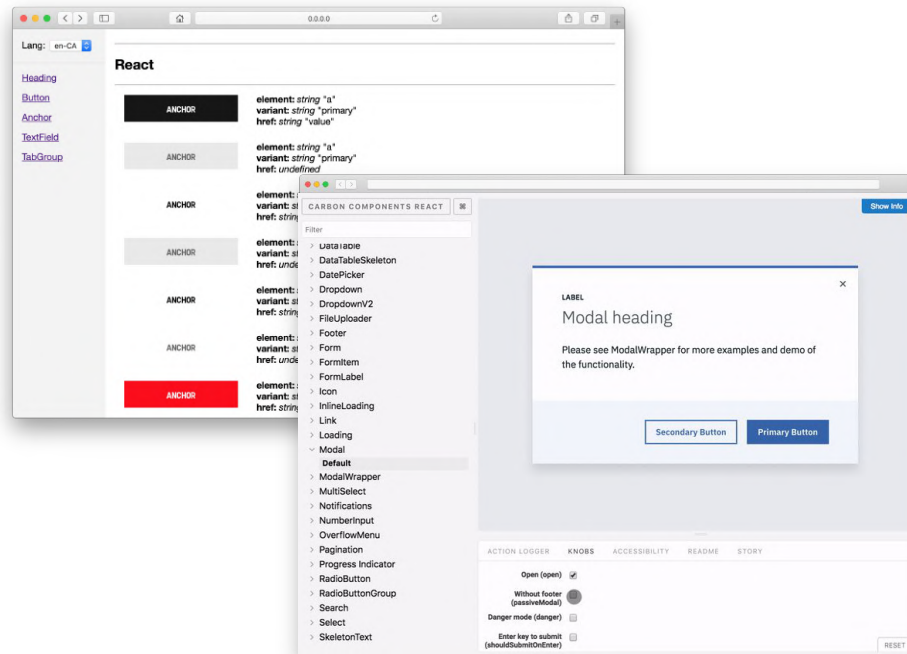
A set of JavaScript components that are version controlled and are composed to build one or more products.



# Sandbox

A tool for developing components in isolation, document use cases and write structural or visual tests.

Primarily aimed at the design system developers.

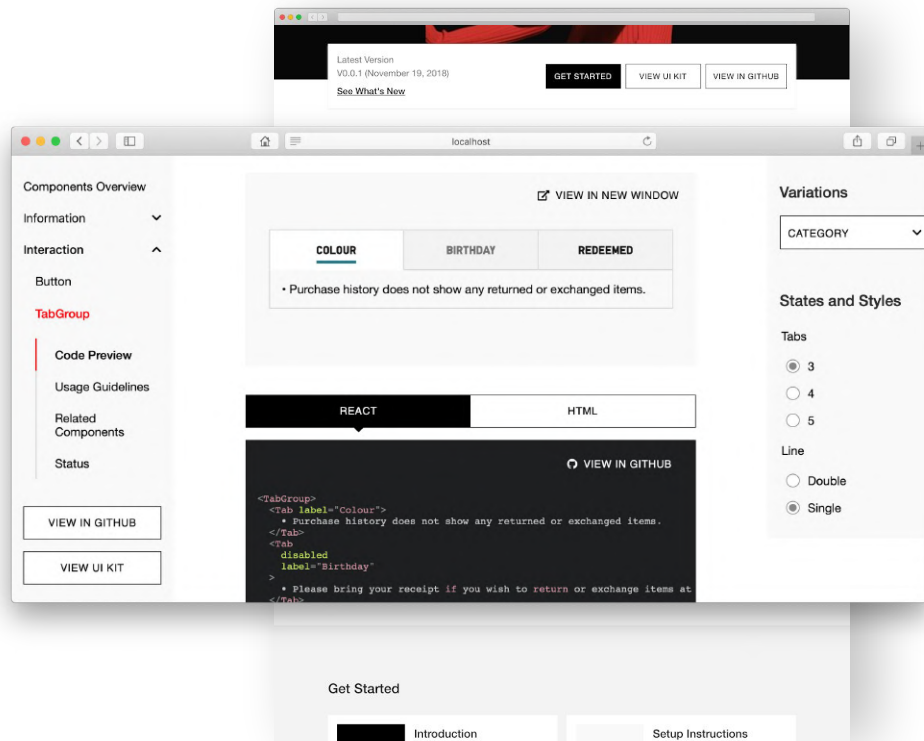


# Documentation

Houses guidelines on how to consume the design system, what design and dev considerations were made and how to contribute to the design system.

Detailed documentation for each component. A component explorer, component APIs, patterns and recipes.

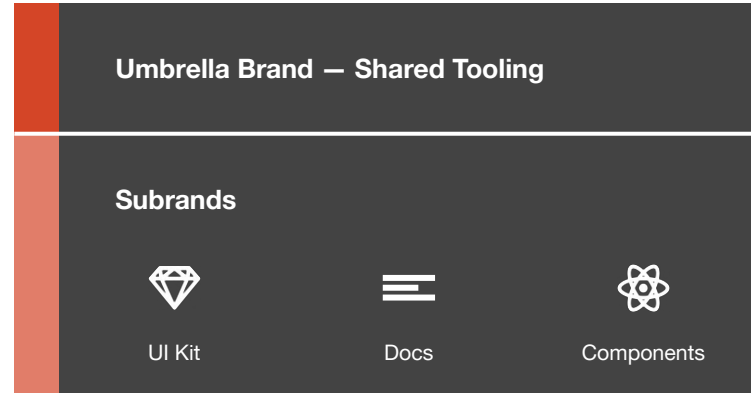
Often includes a live playground which is aimed at the consumers to try out the design system in the browser.



# Multi-Brand Design System

## Application

A Design System equips each sub-brand with its own UI Kit. This ensures a consistent user experience across all brands, regions, and languages.



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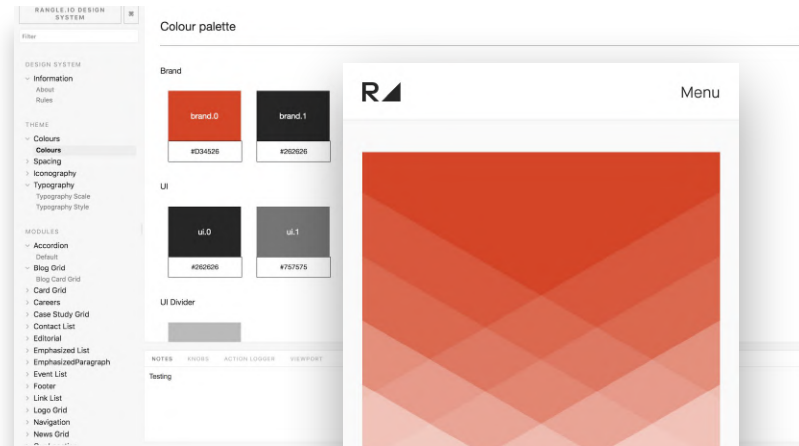
**Design systems use what we know to anticipate what we don't know.**

# Evolution of the Design System

A Design System is never really *done*; it will grow and evolve just like any other product.

As a website or product changes over time, there will be needs for new UI patterns to be created.

**By ensuring that the right governance processes are in place, teams can understand when and how to best introduce new elements into the system.**



## Guides & learning opportunities

Team up with fellow innovators on topics that are close to your heart. Our active groups include the Accessibility Guild, Design Guild, Diversity Guild, IoT, AI, Quality Guild, and more.

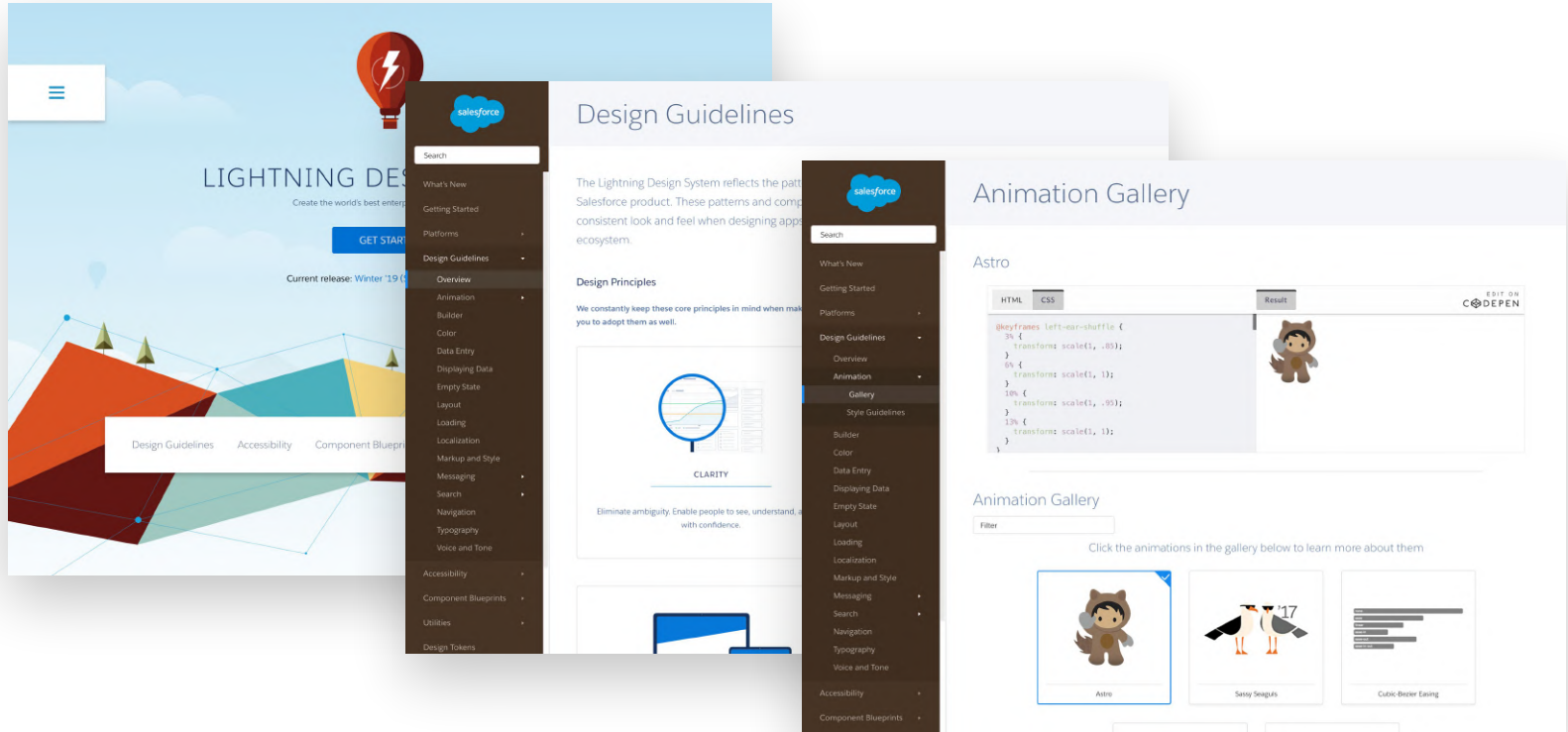
PRINCIPLE 03  
**Approachable**



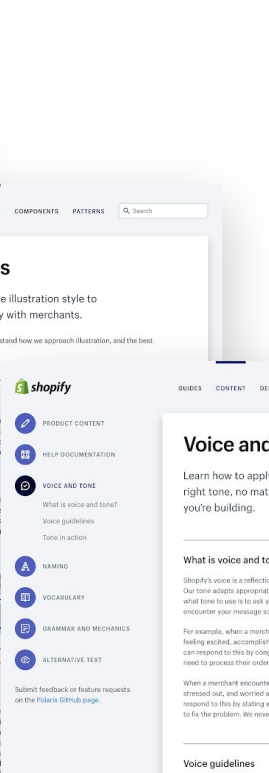
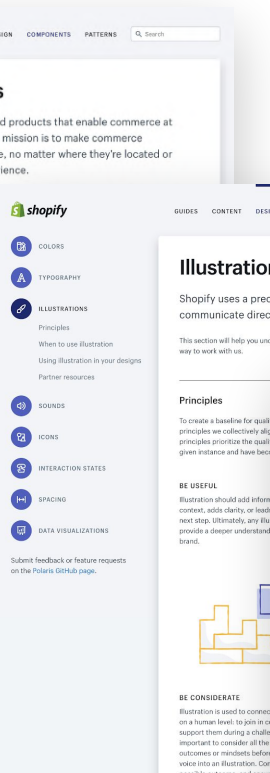
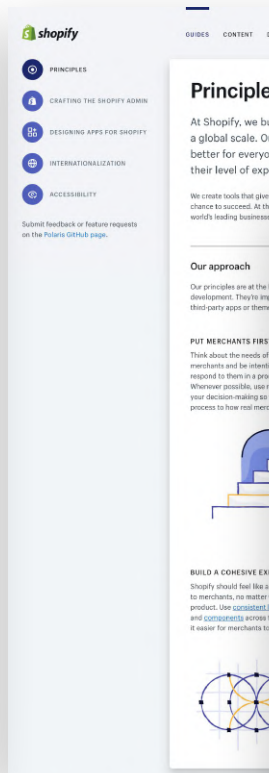
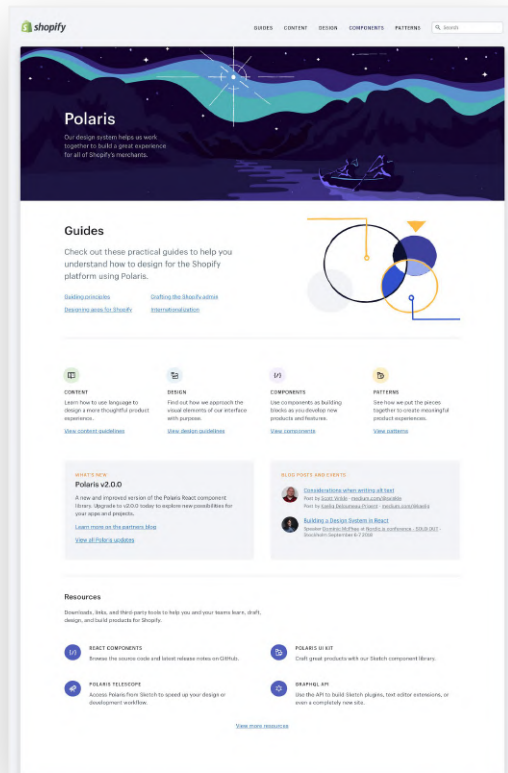
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# Design Systems in Practice

# Salesforce Lightning



# Shopify Polaris



# IBM Carbon

Carbon Design System

Getting Started

What's New

Guidelines

Style

Components

Data Visualization

Utilities

Component Status

Resources

Design kit →

Visuals repo →

React repo →

## CARBON DESIGN SYSTEM

Explore the system

### Getting Started

Onboarding for designers and developers who are using Carbon for the first time.

### Style

Guidance on usage and application for basic design elements.

### Components

A library of all Carbon components, comprised of code, usage and style guidelines.

### Resources

A helpful list of tools, links and downloads that will improve a Carbon user's workflow.

#### Carbon Design Kit

A flexible file containing icons, styles, components, and patterns a designer needs to use Carbon as a framework for building product experiences.

#### Carbon Components

Components are written in two languages: Vue.js and React. Storybook, a UI Component development environment, houses the React components.

#### Carbon CodePen

CodePen is a social development playground for front-end designers and developers, houses demos of Carbon Components.

#### Theming Sandbox

This sandbox allows you to build a custom theme by changing a color variable's hex value and then exporting the theme sheet SCSS file.

Wondering how to contribute to Carbon?

We welcome all feedback, designs, or ideas in order to produce the best

## Color

Swatches Usage

### Carbon default theme

<b>brand-01</b> #347382	<b>brand-02</b> #557666	<b>brand-03</b> #4188c3	<b>ui-01</b> #fff	<b>ui-02</b> #d9d9d9
<b>ui-03</b> #d9d9d9	<b>ui-04</b> #8887a2	<b>ui-05</b> #5a6877	<b>text-01</b> #152933	<b>text-02</b> #5a6877
<b>text-03</b> #a6a6a6	<b>inverse-01</b> #fff	<b>inverse-02</b> #272623	<b>field-01</b> #d9d9d9	<b>field-02</b> #fff

### Hover Colors

<b>hover-primary</b> #2166bc	<b>hover-primary-text</b> #2166bc	<b>hover-danger</b> #dc3547	<b>hover-secondary</b> #3170a2	<b>hover-new</b> #6a8b10b,230,11
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### Support Colors

<b>support-01</b> #e63946	<b>support-02</b> #4dc045	<b>support-03</b> #f1c232	<b>support-04</b> #3672b8
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# Why it matters.

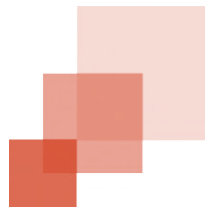
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## Why a Design System Matters



### Creating Efficiencies

As applications scale and age, it becomes increasingly difficult to remain competitive and up-to-date without a digital-first mindset. Design Systems save time for development teams and allows for quick technical iterations.



### Scalable Design

An internal Design System is the best, most accessible source of truth for product teams. It provides the gravitational pull to keep team members aligned and in sync when pivoting to the changing business and customer needs.

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## Why a Design System Matters



### Design Consistently

By utilising standardised components, your sub-brands can create a more predictable and intuitive user experience.



### Improve Accessibility

Implementing accessibility at the component level ensures consistency, effectiveness, and compliance of accessibility at scale.

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## Why a Design System Matters



### Faster Product Launch

Working within an existing Design System allows your sub-brands to establish flows and interactions quickly. They save time building prototypes and variants for experimentation, helping teams rapidly gain insights and data for a faster product launch.



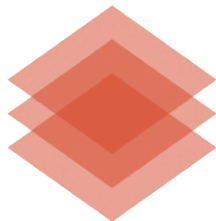
### Save Time

Whether evolving the style of your UI or making UX changes to a flow, using a Design System reduces effort from hundreds of lines of code to as little as a few characters. This makes iterations quick and painless, and experimentation much faster.



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## Why a Design System Matters



### Build with Components

Leveraging JavaScript and Componentized architecture simplifies future development requirements. Components allow you to focus on creating pages and content, instead of consistently developing new layouts.



### Governance by Design

Design Tokens enforce brand rules and standards throughout development and deployment. They are architected from the ground up to ensure the user experience and design language are never broken or modified.

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## Increasing ROI for Clients

- A report by [Forrester](#)\* claims a well-designed user interface could raise a website's conversion rate by up to **200%**, while a better UX design could boost **conversion rates by up to 400%**.
- While impact on ROI can vary greatly; Forrester recommends to start by **quantifying the financial value of changes in users' behavior**.

Business Objectives	Behaviour Metric	Financial Metric
<b>Increase Direct Revenue</b>	<ul style="list-style-type: none"><li>• Conversion rate</li><li>• Number of leads</li></ul>	<ul style="list-style-type: none"><li>• Revenue per lead</li><li>• Gross margin</li></ul>
<b>Reduce Support Costs</b>	<ul style="list-style-type: none"><li>• Service calls per year</li><li>• Online self service resolution rate</li></ul>	<ul style="list-style-type: none"><li>• Cost per service call</li><li>• Cost per transfer</li></ul>
<b>Increased Customer Loyalty &amp; Advocacy</b>	<ul style="list-style-type: none"><li>• Likelihood to recommend</li><li>• Customer satisfaction score</li></ul>	<ul style="list-style-type: none"><li>• Lifetime value of lost customers</li><li>• Increased revenue from word of mouth</li></ul>

UX Design Business objectives And Associated metrics <https://www.forrester.com/report/The+Six+Steps+For+Justifying+Better+UX/-/E-RES117708>

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# Q&A

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# Thank you!

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