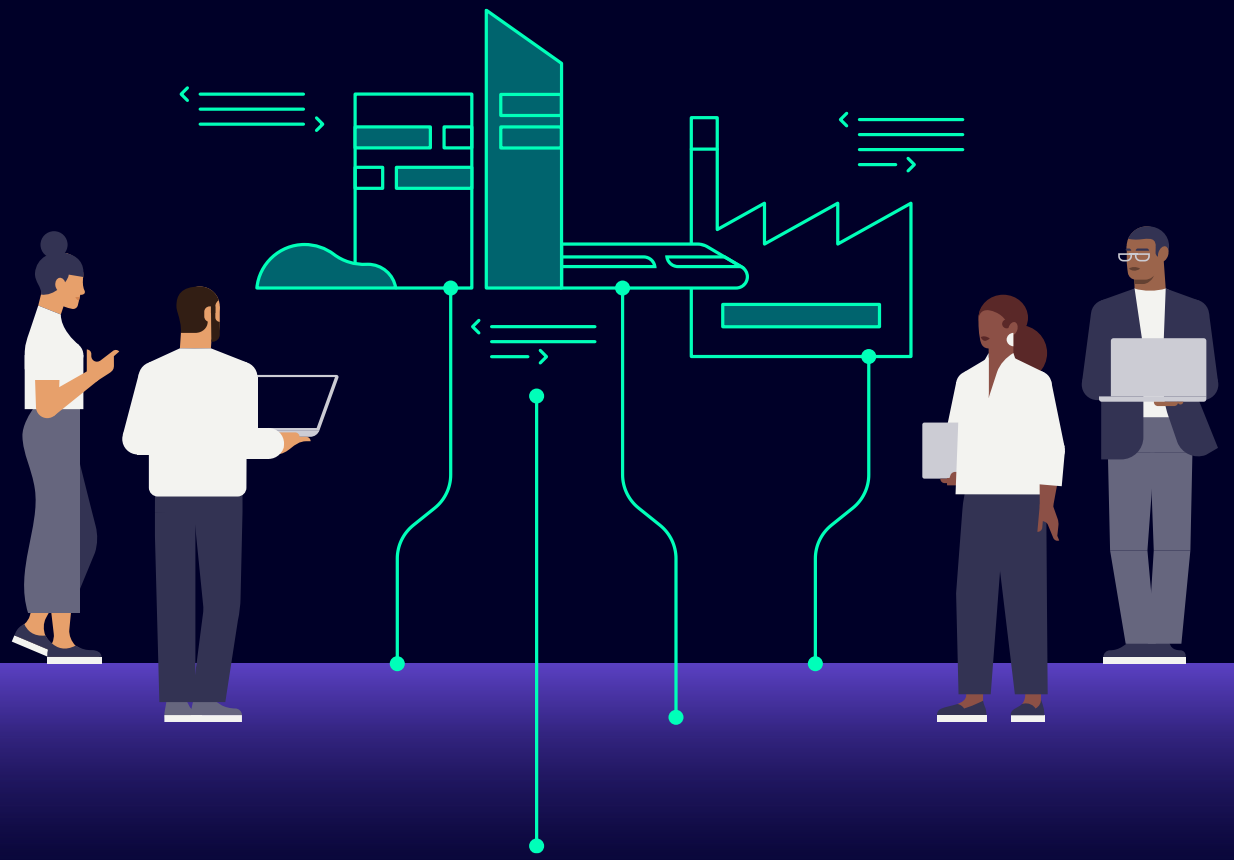
UXDX EMEA 2026

Extensible Design Systems

How to handle very large and “long-life” product portfolios



David Sward – Chief Design Officer

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David Sward

- Siemens – Chief Design Officer
- Hewlett Packard Enterprise - Chief Design Officer
- Cisco Security Business Group - Head of Design
- Symantec Corporation - Head of Design
- Intel Corporation - Multiple UX leadership roles
- Innovation Value Institute at the National University of Ireland - Founder
- Arizona State University Polytechnic - Adjunct Professor / Advisor
- Author of Measuring the Business Value of Information Technology

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Do you really know Siemens?

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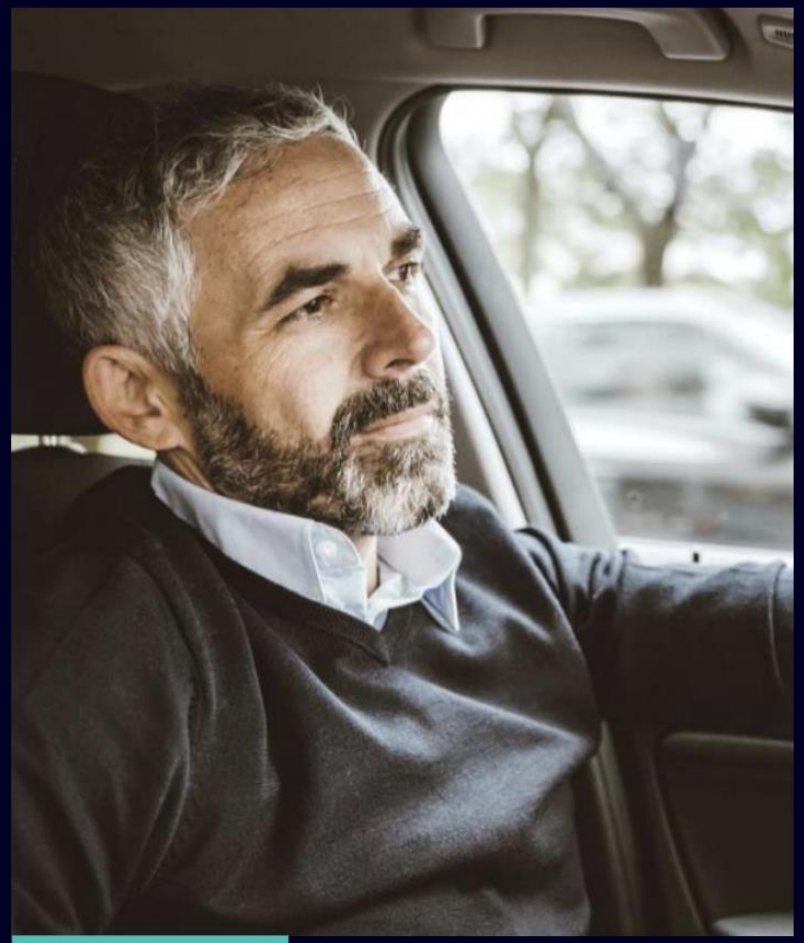

We commute in cars designed with **Siemens software** …

… built in factories running on **Siemens automation** ...

… and charged by a Siemens **smart grid**.

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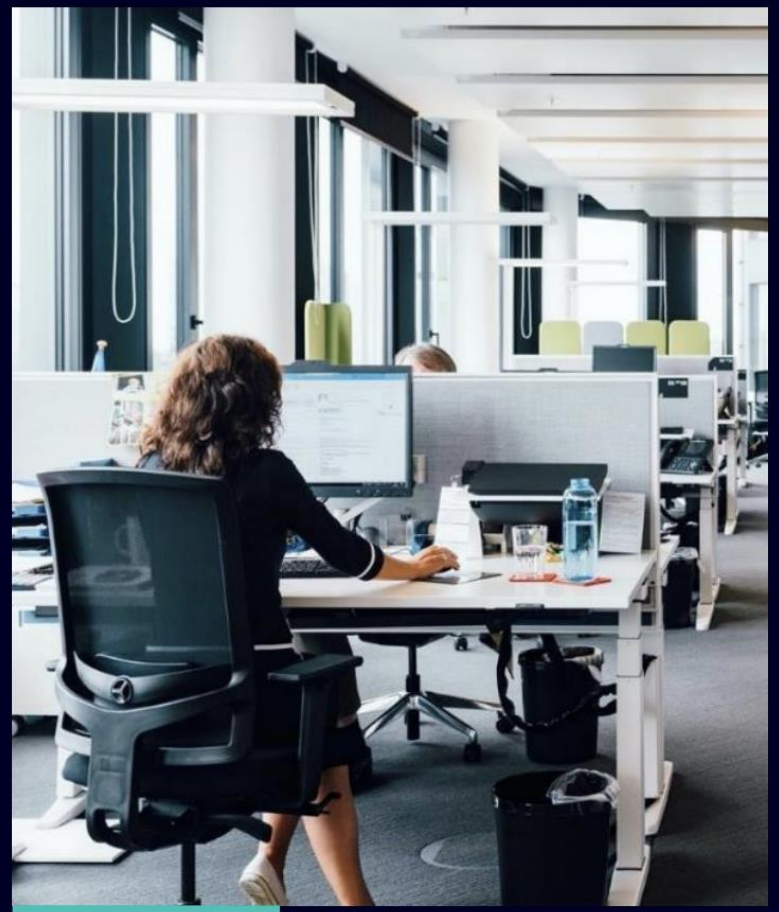
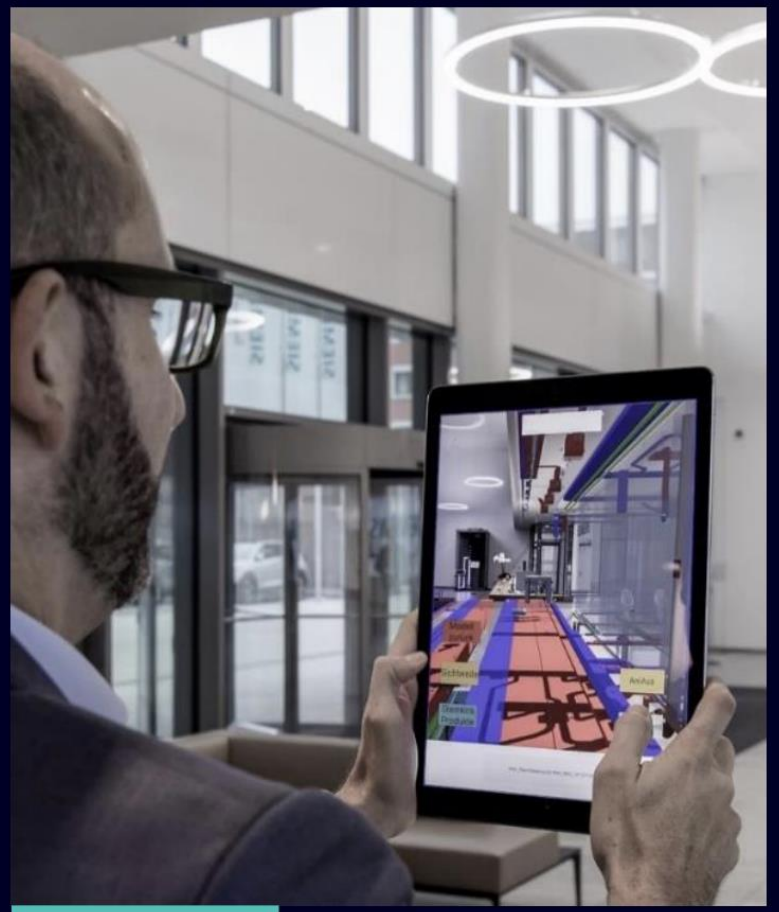


We work in smart buildings that **promote** our **health** and **safety** …

… that use energy with **maximum efficiency** ...



… and connect the **physical** and the **digital** workplace.

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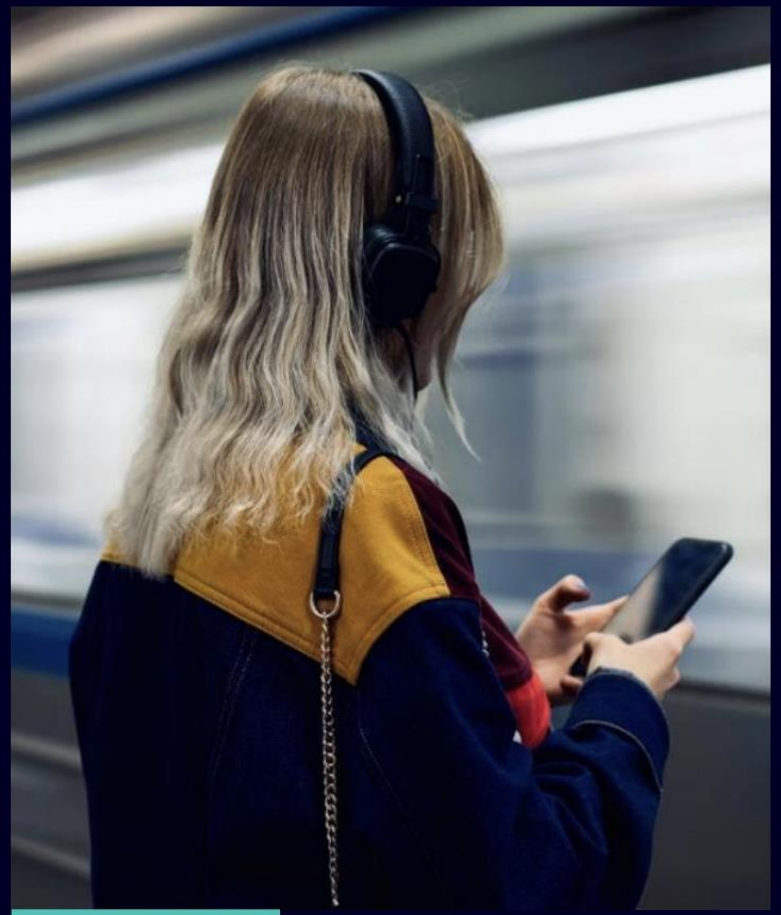

We book our train tickets with **Siemens software** …

… to travel on **trains made by Siemens** ...

… operated with Siemens **infrastructure technology**.

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Design Systems

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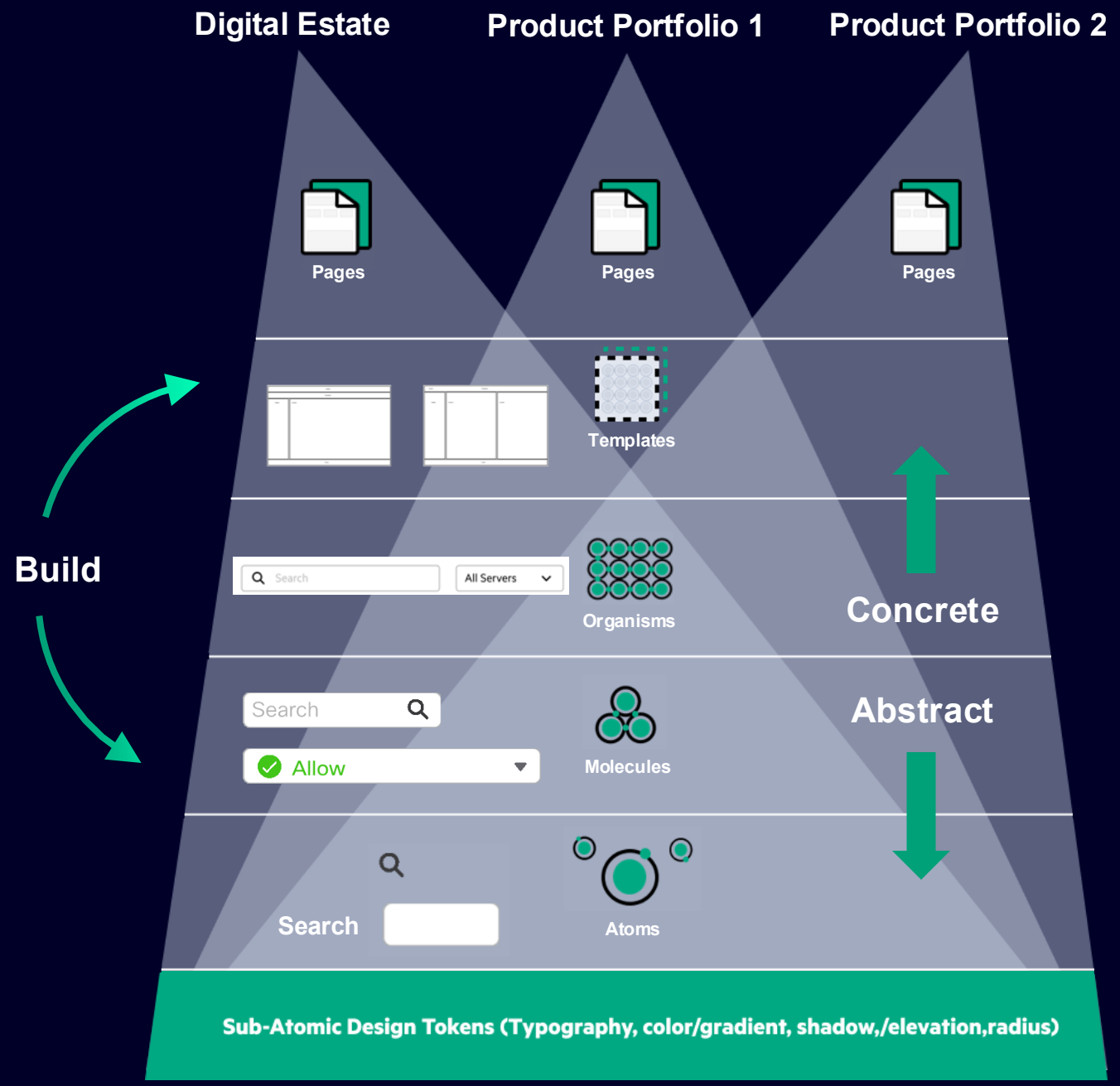
Design Systems

- Design Systems cover brand identity, tone of voice, detailed interaction patterns, and **evolve** over time
- Single reference point for solution teams, UX designers, and developers
- Enables a common look and feel at the presentation layer
- Detailed enough for product UIs to be cohesive, but flexible enough to support specific product and solution use cases



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Design Systems of Hyperscalers

Hyperscaler	Design System Name	Strategic Function
Google	Material Design	**Coordinates thousands of teams across Android and Web**
Microsoft	Fluent Design	**Scales the Windows and Azure ecosystems across all platforms**
IBM	Carbon Design System	**Orchestrates hundreds of products under one cohesive identity**
Salesforce	Lightning Design System	**Considered as benchmark for enterprise-level CRM scalability**
AWS	Cloudscape Design System	**Securing cohesive experience for AWS services and scaling platform strategy as Open-Source asset**

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What is your problem?

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Things to consider…

- Can you solve the problem with technology?
- How complex is your product portfolio?
- Does your company grow through acquisition or internal innovation?
- What is the lifecycle of your products / portfolio?
- What is your starting point - no system or multiple existing systems?
- Can you use an open-source design system?
- What skills do you have and / or can you get?
- Are there past attempts that have not worked? If so, do you know why?
- What can you afford to pay for?
- How flexible is the tech stack for your existing products?
- What will teams “accept” when you deploy the system?
- How do you tell people to stop using one thing and start using another?
- Do you need to open-source your solution to drive an ecosystem?

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Siemens Design Language

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Define, build, and evolve

3 Pattern and guideline layer
Combine components into coherent experience

- UX Writing
- Page Templates + Layout Patterns
- Interaction Pattern
- AI Guidelines
- Hardware Design Guidelines

2 Component layer
Functional and reusable interface components

- Figma Library
- Frontend Components
- Mobile Framework
- HMI/Panel
- AR/VR Framework

1 Foundation layer
Basic design decisions and assets

- Design Tokens
- Typography + Color
- Accessibility
- Design Principles

0 Siemens Brand layer
Core assets

- Core Siemens Brand Values

Publish, enable and support

ONE

ONE Reference for designers and developers

One common look & feel

At the presentation layer – one coherent UX (visual and interaction) for our customers and users.

Flexible frontend technologies

Driven by business needs – secure frontend development, interoperability and scaling.

Make it work!

Detailed enough for UIs to be cohesive, but flexible enough to support large scale Siemens offerings.

Empower designers & developers

Provide teams with guidance, training, tools and support to apply the Siemens Design Language.

Adopt and scale across products

- UI framework
- Product
- Product
- Product
- UI framework
- Product

Products apply the Siemens Design Language to ensure a consistent experience.

- UI framework
- Product
- Product
- Product
- Product

Outcome focused – not the one size fits all approach!

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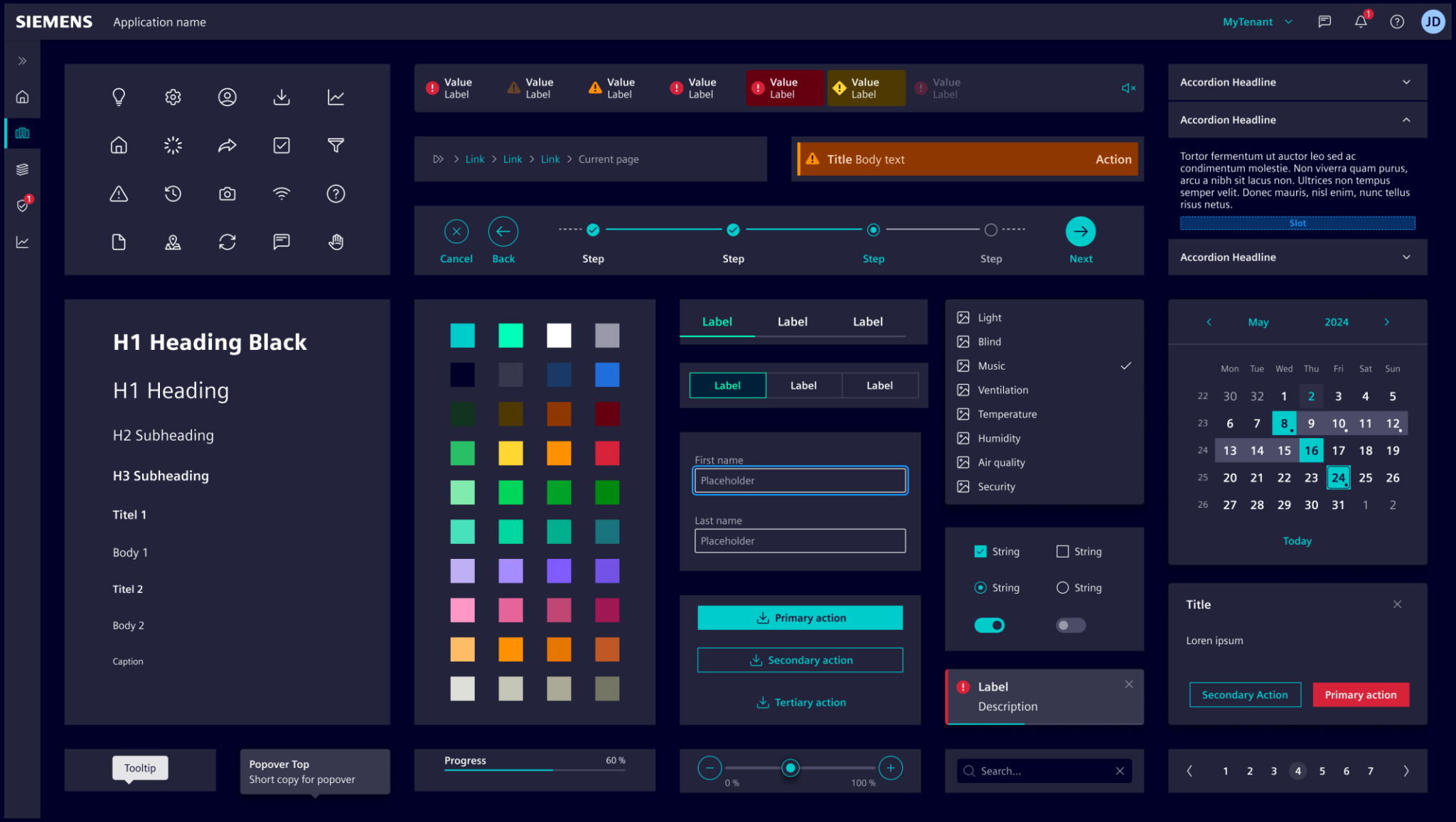
Example - base components



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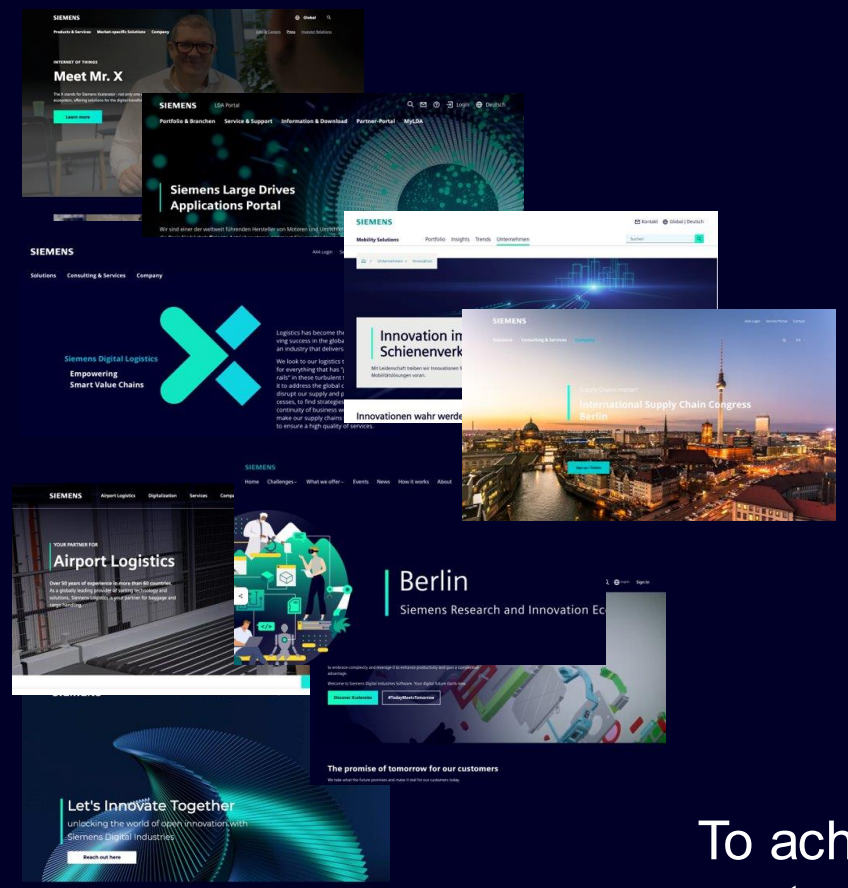
A coherent end-2-end experience

Digital Estate

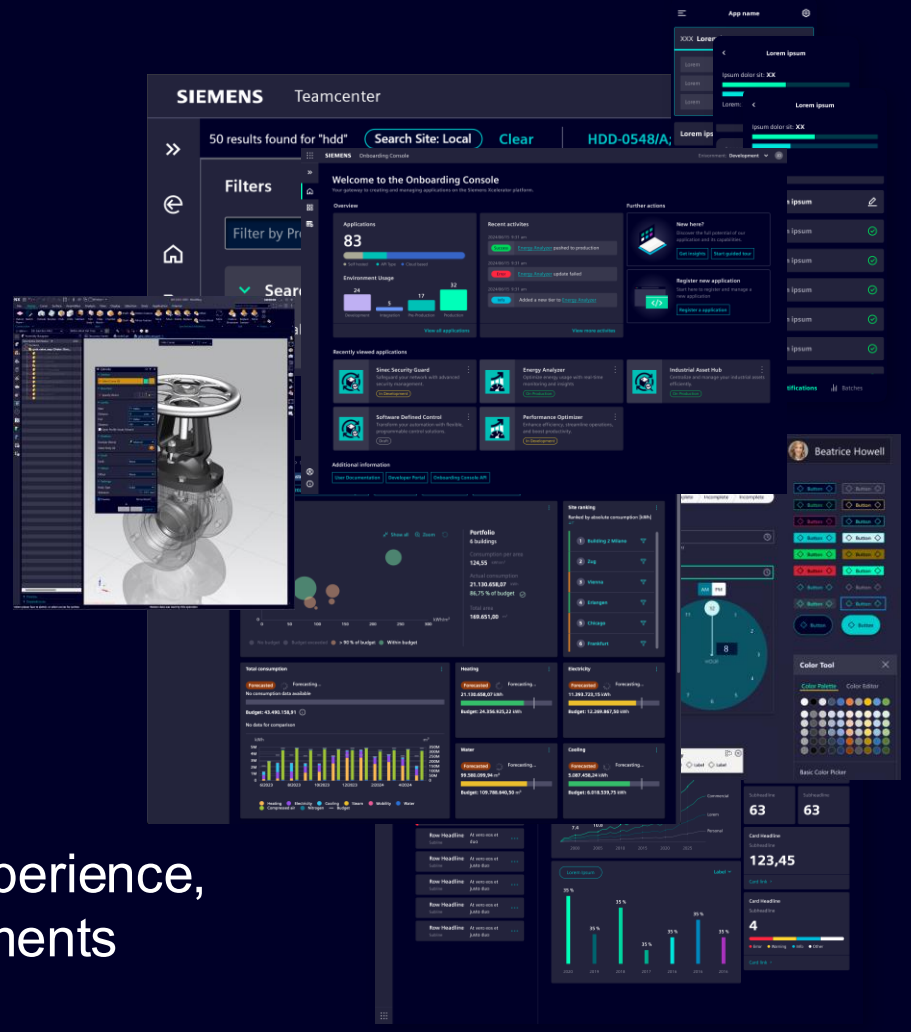


Digital Handshake

Try

Buy

Product Offerings



To achieve a consistent end-2-end experience, teams **share** common design elements

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Siemens Design Language

Components & tokens
Design

Open-source code
Build & contribute

Accessibility center
Include

AI tools
Accelerate

UX design patterns
Explore & apply

UX writing guidelines
Communicate

Documentation
Learn & implement

Community
Collaborate

https://element.siemens.io

https://ix.siemens.io

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What was my big problem?

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Our digital estate and products need to be **100%** identifiable as Siemens!

The solution had to scale across a diverse product portfolio (HW & SW), be extensible (acquisitions), account for existing offerings, and set the stage for a coherent end-2-end experience

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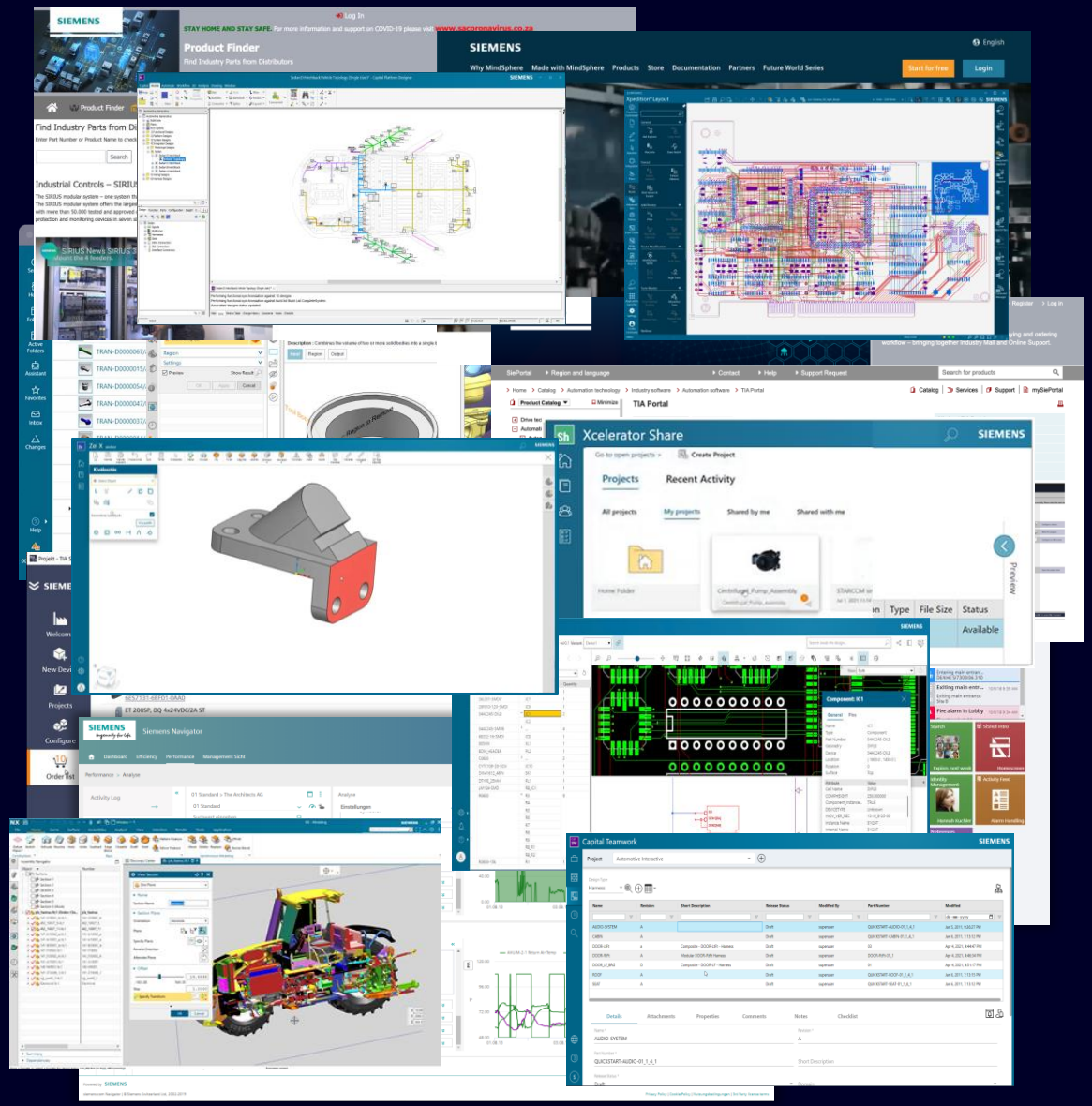
From this…



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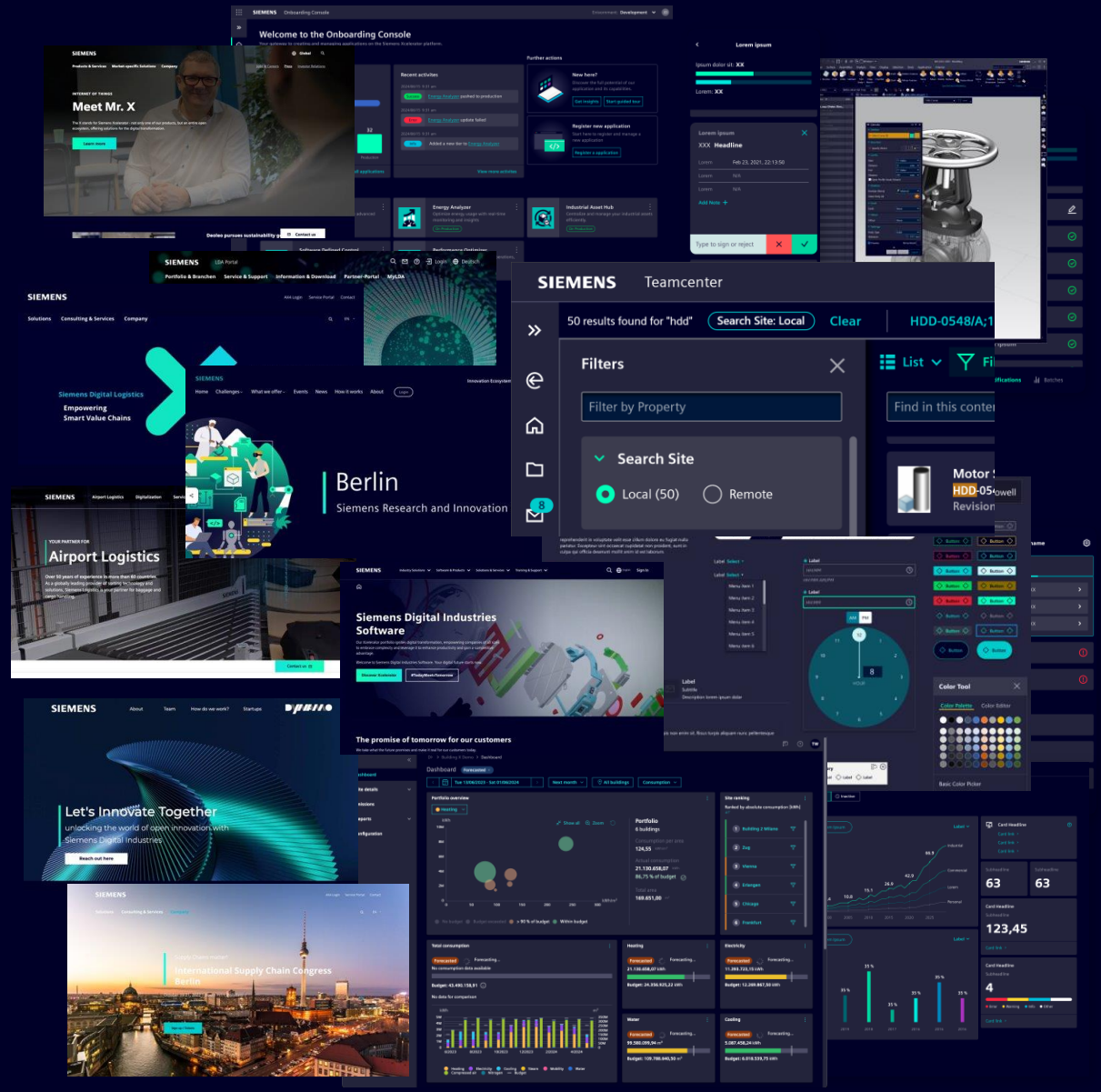

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Thank you

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