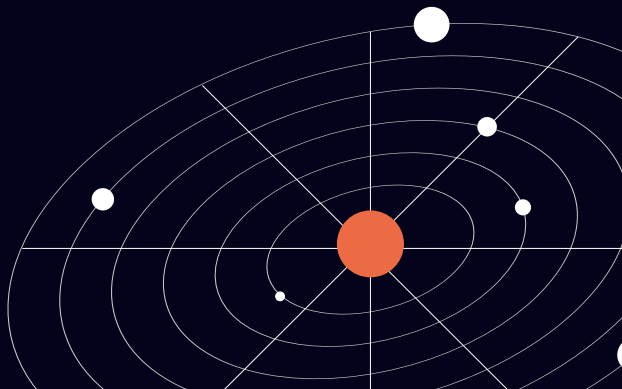


Everything You Need to Know About **Design Systems**



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01

Introduction to Design Systems

A design system is a crucial component for organizations looking to make an end-to-end compilation of their design assets in order to bring consistency and a sense of permanence to their product/s. The decision to create a comprehensive design system is one that not just benefits the team of designers and developers at a company but also creates a north star within the company that enables cohesive decision-making.

1A) What is a design system?

According to NN, a design system is a complete set of standards intended to manage design at scale using reusable components and patterns.

Airbnb, Uber, and IBM are companies that have transformed the manner in which they design digital products by creating a customized collection of repeatable components and a set of standards guiding the use of those components. Indeed, the efforts they invested in creating their design systems have elevated the pace of their output and innovation.

Design systems, when implemented well, can provide a lot of benefits to a design team:

i) **Create designs quickly**

The main advantage that a design system provides is that it enables the design team to create as well as replicate designs quickly thanks to the ready-to-use UI kit and style guide. The elements in these can be reused repeatedly, thus saving the need to reinvent the wheel and risk unintended inconsistency. With designers implementing the same colors, fonts, and input elements, it's easier for the developers to create a unified code to be used multiple times, thus saving time on development as well.

ii) **Enable product teams to focus on bigger, more complex problems**

With simpler UI elements at the ready, designers can turn their focus on more complex problems such as information architecture, workflow optimization, and user journey mapping.

iii) **Ensure a unified language across cross-functional teams**

Having a design system in place ensures a unified language in every situation - teams expanding or disbanding or working remotely. It reduces the time required for design and development by stemming miscommunications and debates by being a single source of truth that manages brand and UX components, coded elements, detailed documentation, and more so teams can stay in sync.

iv) **Product that scales as per the business**

An expanding business calls for the creation of more websites, apps, portals, and other systems, resulting in more conceptualization. However, with a design system in place, this scale-up can be as efficient as possible, what with all the design requisites already set in place. During brainstorming solutions, it allows designers to sync changes to the whole team, and push and pull design system assets with utmost ease.

v) **Visual consistency across products, channels, and departments**

Enterprises often have their teams work in silos, with each product or channel functioning independently of the others. This leads to the creation of fragmented and inconsistent experiences. However, a design system being a single source of components, patterns, and styles can unify disjointed experiences to become visually cohesive across the product. In the long term, any visual rebrands or redesigns can be managed at scale via the design system.

vi) **Reference repository for junior designers**

Explicitly written usage guidelines and style guides help onboard individual contributors who are new to UI design or content creation and also serve as a reminder for the rest of the contributors. Plus, with roles and permissions being assigned preemptively, it ensures safety by assigning control over who can view or edit the design system.

“The system
[addresses] **80%** of
what design and
development need
so they can **focus
on the other 20%.**”

The Top Four Takeaways From
[SF Design Week](#)

1B) When should you consider creating a design system?

Have you been struggling lately with your design-development workflow? Are you experiencing the handoff problem resulting in poor product decisions? **Here are some other indicators that point toward the requirement of a design system -**

i) Accumulation of design debt

Design debt is a by-product of the incoherent user experience and design processes that appear over time as a result of innovation, growth, and lack of planning. Design debt naturally incurs over time and may happen to any product as the business scales with new features being added, old ones getting outdated and evolving standards and needs.

ii) **An inconsistent product experience**

With visual components and workflows being designed in an ad hoc manner, inconsistencies in the product experience are bound to arise over time. While these inconsistencies may not be apparent at first glance, a UX audit can reveal all the weak spots that hamper the UX.

iii) **Lethargic workflows**

The lack of a unified design system slows down the design process while also creating distance among teams. These will then become departments that do not have a common design language, which ultimately slows communication and the speed at which products are updated and released.

Consistency and predictability are the pillars of UX design. A robust design system holds the key to providing a unified experience to your customers. From the team's perspective, a design system enables them to build better products faster, resulting in strengthening their brand. By creating a consistent language that your internal and external users can understand, you can create better experiences for the people using your products.

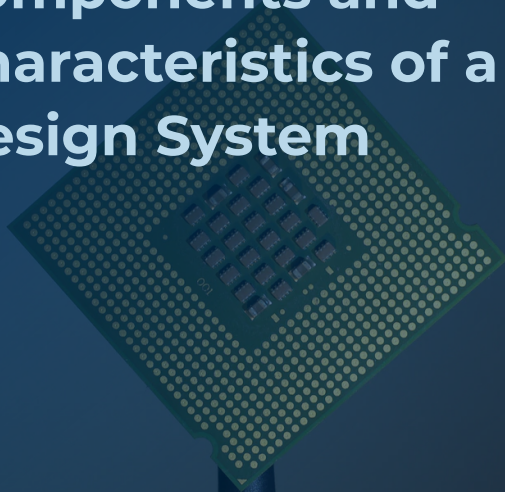


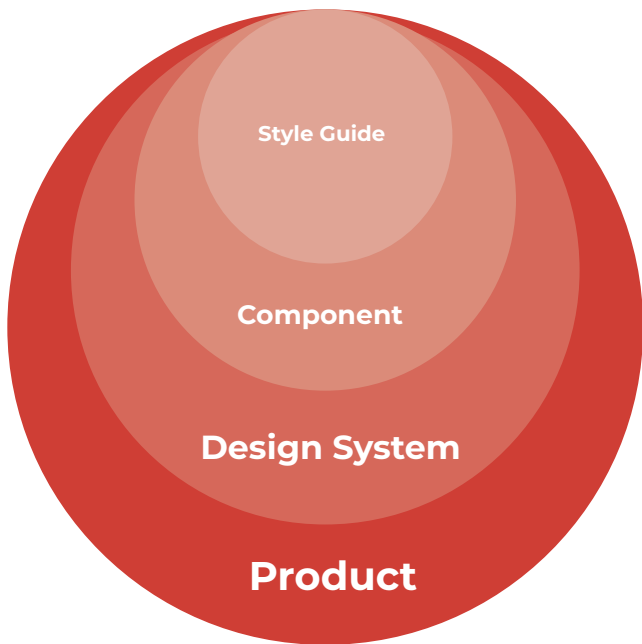
Teams working with
a system completed
their tasks **34%**
faster than those
without one.

Measuring the Value of Design
Systems: [A Report by Figma](#)

02

Components and Characteristics of a Design System





A design system is a documented catalog of components and styles used within a product, or across products within an organizational umbrella.

Here are some components you'll find within a design system -

i) **Brand values and guidelines**

Putting forth the brand values upfront ensures that the design system aligns with the company's nature and objectives. Not only does this bring consistency across the product, but also binds the designers together in a more unified manner.

ii) **Design principles**

The design principles answer all the questions such as 'why does this look like it does' or 'why are we taking this decision'. Decisions that require choosing between two competing goals do not run into debates, thanks to the guidance provided by the design principles. Principles ensure that the design team truly understands why they are designing what they are designing, which positively influences their quality of work.

iii) **Visual language and identity**

The visual language covers colors, fonts, icons, shapes, animation, voice, the use of the company logo, and more. The design system includes thorough details about their usage so that the designers use the right combination of elements. The visual language is a unique representation of your brand and helps it to be instantly recognized. A consistent visual language among your range of products – from a website, a mobile app, to a voice interface – creates an enhanced and trustworthy customer experience.

iv) **Components**

Consider components to be LEGO blocks that are used to build all the other parts covered above, for example, CTA buttons, form fields, and checkboxes. These are at the heart of the design system. The UI kit is created by designers with a frontend code assigned to them by the developers to help significantly minimize the effort required to build a product. Reusing components speeds up the workflow, saves time, and avoids duplication, as interface elements don't need to be recreated from scratch. Components are also great for rapid prototyping as long as their functional behavior is outlined.

v) **Patterns**

Design patterns refer to the building instructions or recommendations that dictate the use of the components effectively across the product. Standardized patterns help generate familiarity, which means things will be quicker and easier for users and help establish trust.

vi) **Documentation**

Documentation is the detailed description of the design system itself. It includes what the product should look and feel like, use cases for UI patterns, correct typographic scales, code standards, best practices, and how they can vary in terms of comprehensiveness and detail. It guides designers regarding the implementation and developers about design guidelines, which ensures both parties make sound decisions for the product and its users.

2B) Characteristics of a design system



Adaptable

It becomes a natural part of the design process and evolves gradually.



Consistent

Its different parts seamlessly work together.



Well-documented

Its documentation is clear and up-to-date.



Balanced

It provides team members enough freedom to contribute yet stay within parameters.



Robust

Its usage in any product or platform ensures minimal flaws.



Efficient

It makes the design process more cost-effective.



Reusable

Its components are timeless and can be reused in many contexts.

03

Benefits of a Design System



A design system is essentially a developing map of a brand's existent products. Its primary purpose is to provide pointers while exploring new design directions. It unifies a brand by compiling all the common interface patterns being used across an organization.

While having a design system seems to be an all-encompassing solution to UX problems, it does require substantial investment in terms of finance, time, expertise, and effort. How does one go about justifying this investment and measure its success, upon implementation?

The scalability, efficiency, and consistency of a design system can be measured by setting down Return on Investment (RoI) parameters in place. From the context of a design system, these can include an increased productivity rate, better customer experience, and faster workflow. These parameters will help in understanding the primary goals of every business, i.e. increasing revenue and decreasing expenses.

In 2020, 65% of companies surveyed revealed that they use design systems

- Forrester Research

3A) How to measure the ROI of Design Systems

Design systems are primarily used by companies to elevate the overall user experience and to ensure that their own design and development teams have a more efficient, smooth, and enhanced workflow. **Deriving successful results from the implementation of a design system requires the following metrics to be set into place -**

i) Increased efficiency/productivity

If implemented well, a design system is expected to boost your product development efficiency and efficacy by at least 25% in terms of time and resources — with compounding returns as the system matures. This is done through better product development, which in turn ensures proper delivery of customer needs.

Indicators to measure against the 25% benchmark include -

Before and after surveys

Surveys, both before and after can be conducted to measure the perceived speed of delivery over time. This qualitative data can shed light on the underlying perception and reasons for the changes that may have come about.

Project management data

While there are multiple factors that tend to impact speed to completion for tickets, comparing the before versus after speed completion for tickets with similar scopes can be a useful parameter to measure the impact of a design system. For example, it may have taken 8 weeks to design and develop 6 new features before the design system was in place, which now only takes 6 weeks.

Bug reports

The reuse of production-tested components from the design system are aimed at ensuring a reduction in system bugs as compared to building something from scratch. Monitoring before and after bug reports can help measure component efficacy.

ii) **Cohesiveness and scalability**

A successful design system's library of scaleable, and extensive web/native components is built to anticipate and fulfill future needs. This is done to negate the need to do a full redesign in order to accommodate one new feature.

Cohesiveness and scalability can be measured by checking the percentage of shared components between screens or between products - the higher the better. Customer journey mapping can help measure the interaction pattern cohesiveness.

iii) **Coding requirements**

The more a design system covers, the lesser custom CSS per feature is required. When the system ends up covering adequate development tasks and UI design, the CSS growth rate drops over time since newer features require lesser code and ad-hoc design. A lower count of specific CSS properties is considered better.

iv) **Customer feedback**

Businesses that lack design systems tend to rustle up varying design stacks while delivering newer experiences in the shortest time possible. This leads to fragmented experiences and causes usability friction between two or more products. On the other hand, a sound design system is focused on providing a consistent experience to customers. This ensures a consistent brand image and a delightful and predictable user experience that reflects in the customer feedback.

A design system when introduced in a company doesn't just reduce the workload of the designers and developers in the product team, but ensures improved bonding across departments. Investing in a design system yields greater ROI over time with the delivery of scalable, cohesive features that remain true to the brand's values.

Design systems help save an estimated \$1.5M+ annually or around 21.25% of the time for a typical product development annual budget.

- [How Design Systems Help Businesses Save Millions](#)

A top-down view of three people ziplining down a line. They are wearing harnesses and holding onto a blue bar. The background is a dark, solid blue. The text '04' is in the top left corner, and '23' is in the bottom right corner.

04

Alternatives to a Design System

Design systems are indeed good for business. They become so by providing a shared language and communication across the team, which betters the understanding and morale throughout the team and permeates to the customer base as well. **That said, there can be some business limitations that do not warrant the creation of a design system. These are -**

- ✓ The overall digital presence is minimal, say a singular, small-scale website that doesn't call for an investment in a design system.
- ✓ Creating a design system to fit an existing website or app retroactively - this can cost way more in terms of time and finances and may not even provide the intended results.
- ✓ If your design is rather fluid and you're not using atomic design (reusable components).
- ✓ Creating it for a proof of concept or an initial prototype that is likely to evolve, since a design system can generate a credible RoI only in the long term.

Additionally, it is important to note that the creation and maintenance of a design system are time-intensive and call for a dedicated team effort. It may take time for teams to correctly apply the design system in the process. Design systems work best when the organization foresees years of future, replicable design work.

Even if you foresee a team expansion or multiple products and codebases, there are other cost-effective options to enhance communication and consistency than building a full-on design system. Consider if you really need a design system, or do you just need better documentation? Do you simply require a round-up of your brand assets and guidelines?

If a design system seems too heavy of an investment in terms of time and resources when compared to your business needs, you may want to consider the following options that are part of the design system -

4A) **Component library**

A component is a reusable block of code that can stand alone or form part of multiple UI patterns—for example, a button. A component library is a collection of UI components within a design system.

4B) **Pattern library**

A pattern is a group of components that designers use to solve usability issues—for example, a navbar with a logo, links, search form, and CTA button. A pattern library is a collection of UI patterns within a design system.

4C) **Style Guide**

A style guide is a piece of documentation that provides context and instructions for a design system's patterns and components—for example, color HEX codes, typography scales, usage, dos and don'ts, etc. If a pattern library showcases visual elements, a style guide is the broader documentation. It describes how to use the elements, as well as rules for how the brand should feel, what language to use and how it should work overall. They're more "instructions" and fewer "reusable components".

05

Design System Template



Use our design system template to create a wholesome design language with seamless, intuitive, and meaningful experiences. The design system comprises a library of visual components such as color scale, typography, grids, and CSS code to help you design and develop a cohesive design language.

[Click here to access our free-to-use design system template.](#)

About Koru UX Design

We are an Enterprise UX design agency, focused on creating a positive, powerful and pleasurable impact on workplace tools and applications.

Our services include UX Research and Strategy, UX and UI development, and Front-end Development on complex enterprise systems like ERP, EMR, CRM, and other SaaS applications across web and mobile platforms. We're on a passion-driven quest to bring the finesse of consumer-grade UX to enterprise applications and transform the way the world works, making it delightful and efficient for all.



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