

Design Systems

ROI Analysis

October 2022

Problem & Opportunities

How do we...

Understand the ***impact*** and
value of continuing to invest in
Design Systems?

Business opportunity

Project objective

Focus of this workstream

Understand the **ROI Formula** to gain insight into why adoption of and continued investment in Design Systems is critical for success

Saved Time = Saved Money

Pattern (component) efficiency formula

(design effort + development effort + maintenance effort) * number of UIs using the pattern

Total effort without design system

—

(design effort + development effort + maintenance effort) + ((design import time + development import time) * number of UIs using the pattern)

Total effort with design system

=

Pattern efficiency

Banner Example Formula

(20 hours design + 60 hours development + 20 hours maintenance) * 5 UIs using the pattern

500 hours without design system to build and implement this pattern across 5 UIs

(30 hours design + 80 hours development + 30 hours maintenance) + ((2 hours design import time + 4 hours development import time) * 5 UIs using the pattern)

170 hours with design system to build and implement this pattern across 5 UIs

66% efficiency improvement

330 hours saved

Card Example Formula

$$(10 \text{ hours design} + 20 \text{ hours development} + 5 \text{ hours maintenance}) * 30 \text{ UIs using the pattern}$$

1,050 hours without design system to build and implement this pattern across 5 UIs

$$(30 \text{ hours design} + 60 \text{ hours development} + 20 \text{ hours maintenance}) + ((2 \text{ hours design import time} + 4 \text{ hours development import time}) * 30 \text{ UIs using the pattern})$$

290 hours with design system to build and implement this pattern across 5 UIs

$$72\% \text{ efficiency improvement}$$

760 hours saved

ROI measured in people cost

Team Cost

60 total designers and developers

\$150,000 loaded cost per person
(salary + associated costs)

\$9 million annual loaded cost

Efficiency Value

50% improvement = **\$4.5 million**

40% improvement = **\$3.6 million**

30% improvement = **\$2.7 million**

20% improvement = **\$1.8 million**

10% improvement = **\$0.9 million**

ROI scales as teams grow

Team Cost

100 total designers and developers

\$150,000 loaded cost per person
(salary + associated costs)

\$15 million annual loaded cost

Efficiency Value

50% improvement = **\$7.5 million**

40% improvement = **\$6 million**

30% improvement = **\$4.5 million**

20% improvement = **\$3 million**

10% improvement = **\$1.5 million**

Investment Opportunities

Development Resources

Product Implementation and Support

Additional development resources can work with product teams to help with implementation of specific components or patterns and to advocate for the use of system components as well as advocate for individual product needs within the system team.

Encouraging teams to adopt the most current version of the design system is an ongoing effort whose payoff is increased ROI. Cross-product consistency with the best, most up-to-date version of tokens and components saves time and maintenance costs.

Continuous Improvement

Technologies, standards, and abilities are always evolving and keeping up takes time, effort, and money.

In order to maintain a best-in-class system that not only meets our product team's needs, but continues to deliver on these expectations over time means we need to be able to support existing components and features while also building to meet new needs.

Additional development resources would be used to continually comb through the existing components and ensure that all code patterns and principles are up to date with best practices as well as meeting all requirements for accessibility and usability.

Design Resources

Product Consulting

We often find ourselves chasing after leads and catching issues with design proposals too late into the product development lifecycle. Once something has gone to development it is often too late to make significant changes, this results in product design decisions that often feel disconnected or out of tune with the rest of our products.

Additional design resources would be used to set up recurring consultations with product managers and designers in order to ensure that the system is providing what they need, provide input and support on how to use existing components of features to achieve the same goal, or intake requests to improve the system.

Continuous Improvement

Just like in development, the design world is consistently evolving as are our tools. In order to ensure we're providing the best experience for our product designers we need to continually evaluate all of our designs and components in our design tools.

Additional design resources would be used to continually comb through the existing components and ensure that all Figma Components and design tooling are up to date with best practices as well as meeting all requirements for accessibility and usability.

Ops Resources

Design Team Rituals

There are no standardized meetings for collaboration, critique or review of work on the design team. This can result in work that does not align with the overall product vision being approved and pushed out to production without a larger review.

Ops resources focus on *how we work*. This means that Design Ops resources can dedicate time to facilitating design reviews and collaborative working sessions, develop comprehensive onboarding and “people operations”, and dedicate time increasing the impact of our designers, allowing our designers to focus on designing the best products and experiences for our users.

Design Team Tooling

Managing how we work as a team within our tools is a full-time job within itself.

Often when a designer transfers teams, or needs to work collaboratively with someone else they can find themselves in wholly unfamiliar territory because every individual on our design team organizes their thoughts and files in a different manner.

Ops resources would be used to establish and enforce consistent usage patterns within our design tools; whether it's how we organize teams, projects, and files, to how we create and reference components and libraries. Ops resources are critical to the continued growth and success of design systems and the design team.

Notes and Resources

Knapsack presents Design System Insights: ROI

<https://hubspot.knapsack.cloud/hubfs/Design-System-Insights-ROI-2021.pdf>

Measuring Design System Success

<https://medium.com/eightshapes-llc/measuring-design-system-success-d0513a93dd96>

Design System Maturity Model

https://sparkbox.com/foundry/design_system_maturity_model

NNG DesignOps 101

<https://www.nngroup.com/articles/design-operations-101/>