Knapsack presents

Design System Insights:

ROI

Design systems are well worth their cost, but that cost needs to be justified. Small and large teams, mature and immature practices, need to be able to justify their expense by proving their return on investment (ROI).

ROI proof is different for teams at different stages of design system maturity. We've addressed three:

1. Initial investment
2. Expansion
3. Building a dedicated team

Insights

1 To get buy-in, stakeholders have to be willing to take a leap of faith.

2 What you can and should measure evolves as your practice grows.

3 Design system investment doesn't stop with maturity (or ever).

4 The most successful design systems have evangelists.

1

What can't be measured can be researched.

It's hard to measure what you haven't implemented. Getting the initial buy-in for a design system can be an uphill climb. Successful teams use a combination of internal insights (challenges and opportunities), third-party examples (case studies and ROI data), and effective planning (roadmap and milestones) to help get the initial endorsement to start.

Leadership will need to take a leap of faith, but we can make it more comfortable by painting a pragmatic picture of the way forward.

2

Measuring ROI for design systems

Design system effectiveness can be proven with numbers, but what those numbers are and the story they tell evolves over time.

Early on, establishing time-bound OKRs (objectives and key results) sets manageable goals for your team and defines success for leadership while showing progress towards larger goals.

Design system effectiveness is correlated with investment. Proving adoption and effectiveness justifies further investment.

2

Adoption: the OKR that enables ROI

Adoption is the key enabler of a design system's effectiveness. As adoption increases, so can impact.

People

- How many people or teams are using the design system?
- How many are contributing to it?

Product

- How many digital products are built using the design system?
- What proportion of those products does the system support?

2

Sample design system OKR

Sample Objective: Integrate foundational system elements (e.g. primary styles and simple components) into initial products

Sample Key Results:

- X products implemented at least one element of the system
- X products have Y % of system integrated
- 100% of published roadmaps include system integration

Source: *Measuring Design System Success*

2

Sample design system OKR

Sample Objective: Effectively operate as a system team while balancing other ongoing commitments and priorities

Sample Key Results:

- Leadership funds X headcount (≤ FTE) for Y consecutive quarters
- Team members miss X% of meetings due to conflicting priorities
- Maintain sprint velocity above 50%
- Sponsors (Design and Eng Management) attend ≥ 100% of release planning sessions, ≥ 66% sprint reviews, and ≥ 20% sprint planning sessions

Source: *Measuring Design System Success*

2

Why is adoption so important?

Design systems only work as well as the teams using them.

Design system effectiveness is entirely dependent on their usage: the amount of people using them, and the amount of products they support.

A successful design system is useful to product teams in their entirety, and can support support an entire digital ecosystem efficiently.

2

Saved time = saved money

Design systems help designers, developers, and content strategists save time by enabling them to reuse common elements and patterns, rather than recreating them. The most mature design systems are the ones that hold foundational patterns that address workflow challenges, not endless collections of components.

2 Pattern (i.e. 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

2 Sample pattern efficiency calculation

(35 hours design + 81 hours development + 22 hours maintenance) * 18 UIs using the pattern

2,484 hours without design system to build and implement this pattern across 18 UIs

−

(59 hours design + 118 hours development + 81 hours maintenance) + ((4 hours design import time + 8 hours development import time) * 18 UIs using the pattern)

474 hours with design system to build and implement this pattern across 18 UIs

=

81% efficiency improvement

2,010 hours saved

Design System Insights: ROI

Credit for pattern efficiency formula: IBM

2 ROI measured in people cost

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**

2

Focus on consistency, not coverage

More doesn't always equal better. In the case of design systems, blindly adding more patterns (i.e. components and tokens) to cover more use cases can end up hindering its effectiveness.

Focus instead on maintaining a core set of patterns and usage guidelines that can be used to solve as many of the user flow and experience needs of your various applications as possible effectively.

2

The effectiveness of your system is in how much you've built

The biggest argument for implementing a design system is **time saved** in handoff, rebuilding existing components, collaborating on new designs/code, and version control.

Effective design systems cover the maximum amount of recurring uses cases across your digital experiences. Effectiveness can be measured by the amount of times the design system is used to reuse an existing pattern, instead of rebuilding it.

3

Why do you need to keep advocating for design system resources?

Just like with any other product, the investment doesn't stop at launch.

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

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.

3

When is it time to ask for more resources?

There are two triggers for asking for more resources: smashing your goals, or not reaching your goals.

If you've hit your adoption goals and want to move onto the next stage of design system maturity, you'll have an easier time advocating for resources.

If you're coming in short of your goals because you don't have enough time or financial investment, you'll need to rely on industry standards, best practices, and case studies to get your point across.

3

Pro tip: align with established priorities

"If a corporate goal exists—accessibility, responsive web design, or another measurable criteria—and the system can help, redirect system objectives and track results commensurate with that goal." - Nathan Curtis, *Measuring Design System Success*

4

Why do you need a design system evangelist?

Design system evangelists are accountable for tracking and presenting design system effectiveness and encouraging design system adoption throughout the organization. They're the ones who are charged with advocacy to senior leadership and accountability for system successes and setbacks.

4

What do design system evangelists do?

Design system evangelists can work on design systems in any capacity—think designer, developer, content strategist, or product manager. They're accountable for tracking and presenting design system effectiveness and encouraging design system adoption throughout the organization.

How you apply these insights depends on your current stage in the design systems process and your objectives for the future. We've broken down our approach for each of the three stages, along with helpful tips and resources.

1. Initial investment
2. Expansion
3. Building a dedicated team

Asking for initial investment

Asking for your first investment in a design system is asking leadership to take a leap of faith. To advocate for this investment, you'll need to prove to stakeholders that:

- Design systems are a worthy investment
- You and your team know how to build an effective, long-lasting design system
- You are thinking about ROI from the start

Crafting a successful pitch

To convince stakeholders that design systems are worthwhile, invest in showing *and* telling.

- Show them examples of effective design systems and platforms
- Tell them how you'll use your design system to increase effectiveness across teams
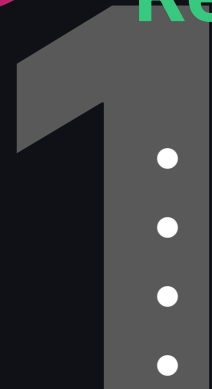
Crafting a successful pitch

You won't have all the answers, especially early. Make ROI an ongoing conversation from the very start by aligning with stakeholders around key questions:

- What are our key metrics at the current stage?
- How will we capture and report on these metrics?
- What are our targets or benchmarks?
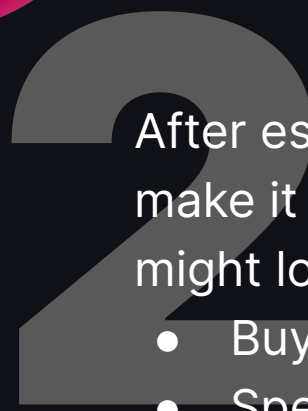- How may our measurement strategy evolve as we progress?

Resources

- *Build Better Products Faster With Design Systems*, Gartner
- *Does My Organization Need a Design System?*, Method
- *The Main Pillars of Effective Design Systems*, Adobe
- *Why You Need a Strong Design System (and How to Build One)*, Drawbackwards
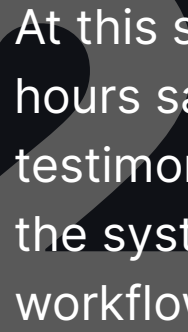
Asking for expansion

After establishing your design system, you might find that to make it effective, you need to increase your investment. This might look like:

- Buying a dedicated platform, or increasing paid seats
- Spending more time on maintenance and evangelism
- Working with a consultant on maximizing your investment

Crafting a successful pitch

At this stage, you might not be able to show great returns on hours saved, but you will be able to prove adoption. Bring testimonials from teammates using the system attesting to the system's ease of use, efficiency, and benefit to their workflow. Along with this, be able to clearly explain to leadership what you need to reach the next stage in design system maturity, and why that matters.

Crafting a successful pitch

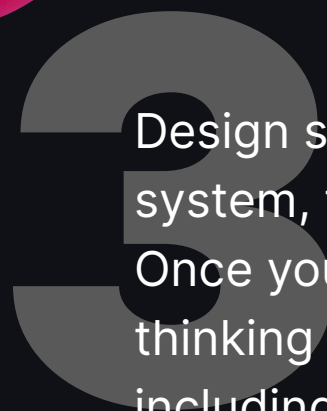What you might want to advocate for at this stage:

- Increased hours spent on design system maintenance
- Increased investment in tools (more seats; a bespoke design system management tool)
- Budget for a consultant or agency
- More design, development, and content resources

Resources

2

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Building a design system team

Design system work never ends. The more you invest in your system, the better it will be able to support your work and team. Once your design system is proving its value, you should start thinking about building a dedicated design system team, including a product manager, content strategist, designer, and developer.

Crafting a successful pitch

Design system teams manage design systems like standalone products. This has multiple benefits:

- **Improving system adoption and effectiveness:** Your design system team will be able to focus wholly on improving your design system, without worrying about other products.
- **Expanding the reach of your design system:** Use your design system as a branding or recruitment tool, start a design system blog, or incorporate more of the company culture and needs into your system. With a dedicated team, you can do it all.

Crafting a successful pitch

To convince stakeholders that building a dedicated design system team is worthwhile, you can:

- **Show** increases in adoption and usage since the beginning of your design system journed
- **Share** how much time your design system saves the product teams relative to how much time your team spends on design system maintenance
- **Present a plan** for the roles you'd like to recruit for (product manager, content strategist, consultant), how much that will cost, and how that will *still* lead to increased ROI.

Resources

- *What do design system product managers do?* Maya Hampton, product manager of REI's Cedar Design System, shared her experience as a design system product manager on Knapsack's blog, *Design System Insights*.
- *Teamwork makes the design work: Why your design system needs content strategy* Andrea Burton, Abstract's Design Advocate, explains why, as standalone products, design systems need their own content strategy—and content strategist.

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Knapsack is an enterprise-grade design system platform connecting design and code for teams of every size. Work together to ship products in half the time—no more rework, no more conflicts.