

# The State of Design Tokens 2024



### Introduction

The report is brought to you by:



Supernova connects design and engineering data in one design system platform, so your entire organization can effectively design, build, and scale product development.

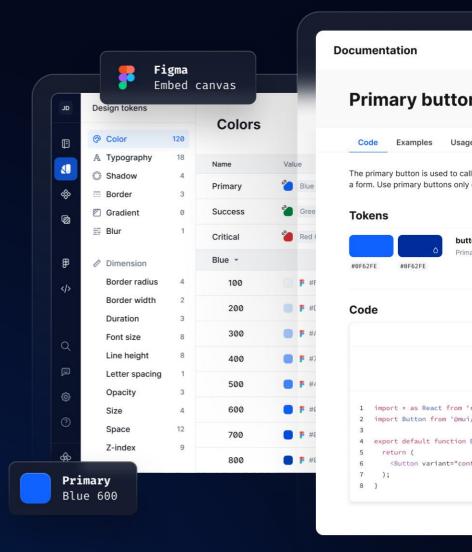












### What are design tokens?

Design tokens are the atomic elements of design within a brand. They represent a named value of an agreed-upon entity that both designers and developers can use to create consistent experiences. Specifically, design tokens represent a group decision about the pairing of visual properties and the code that creates them, packaged up in a way that is usable across all platforms.

# Table of Contents

| ways 4   | Key Takeawa      | 01 |
|----------|------------------|----|
| ants 7   | Participar       | 02 |
| kens 12  | Design toke      | 03 |
| ables 17 | Figma variabl    | 04 |
| nding 22 | Theming & brandi | 05 |
| ance 25  | Governan         | 06 |
| ısion 33 | Conclusion       | 07 |

# Key Takeaways

### Significant adoption of Figma variables

The biggest event in the design tokens landscape in the past year was the launch of Figma variables. One of the key questions we wanted to answer was whether this new feature made a concrete change in how teams approached design tokens. The answer is a resounding yes. Figma variables quickly became the most common source of truth for design tokens (42.5%) in 2024 and are used in the majority of design systems. In fact, 69.8% of respondents have already started using Figma variables and an additional 19.3% plan to do so. There are many reasons why teams implement Figma variables, with theming (74.3%) as the primary use case.



# Design-centric governance

Ownership and management of design tokens continue to be primarily designer-led (85.8%), with a majority (60.8%) who work on dedicated design system teams. However, no respondent said that developers own design tokens, unless they're a part of a dedicated design system team (9.9%).

The survey also reveals that larger companies tend to have dedicated design system teams to manage tokens, whereas smaller companies often rely on general product designers for this task. This indicates a correlation between company size and governance structure, with larger organizations favoring a more formalized, centralized approach.



### Lack of token standardization with naming and governing

Our survey revealed a significant gap in the standardization of naming conventions for design tokens across the industry. Despite various attempts to establish universal standards, 48.1% of respondents still prefer to craft their own naming conventions saying they value "ease of understanding" as their priority when naming. This lack of standardization across systems may affect cross-functional collaboration, onboarding, and scalability.

Among the standard naming conventions available, the "category-type-item-subitem-state" model from Style Dictionary emerges as the most adopted, with 33.0% of participants utilizing it, despite only 14.0% using Style Dictionary for token management. This suggests a partial alignment within the community towards a structured naming approach, but not enough to claim a universal standard.



# Automation and versioning challenges

We looked into the extent to which design tokens are automated from design to code, revealing a landscape where manual processes predominate (44.4%). Despite the clear benefits of automation in bridging the gap between design and development, a significant portion of the industry has yet to fully embrace automated workflows.

A similar trend is seen in versioning. A majority of respondents (62.5%) saying they don't version their design tokens, a significant increase from our previous State of Design Tokens report (44.5%). The findings highlight a critical area for improvement in the design token ecosystem. The lack of versioning adoption suggests potential obstacles, such as a lack of awareness about its benefits, the perceived complexity of implementing versioning, or insufficient tooling support.



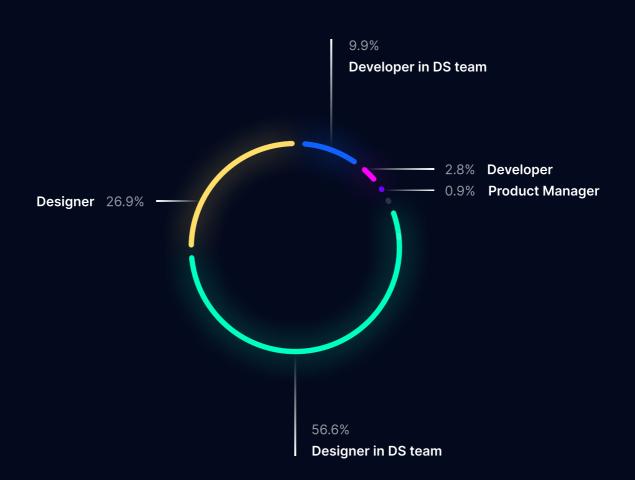
# Participants

### What is your role at your company?

This year's survey drew in some great folk from the design community, illustrating a strong engagement with design tokens across various roles. Designers within Design System teams (56.6%) represent a majority of respondents followed by a substantial 26.9% of participants identifying as Product Designers outside of dedicated teams. This distribution is a testament to the design community's keen interest in the evolution and application of design tokens.

On the flip side, Developers in Design System teams and Developers comprise 9.9% and 2.8% of the participants, respectively, alongside a diverse mix of Product Managers and executives, indicating a wide but varied interest in design tokens across professional spectrums.

This year, the participation of developers has seen a significant decline to 12.7% from a previous 21.3%, signaling a potential area for increased engagement and collaboration across roles.



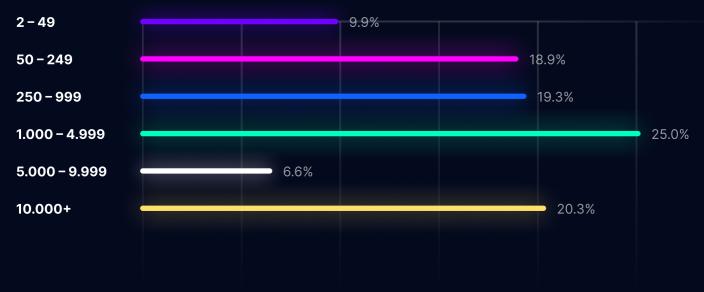
# Which industry does your company operate in?

Respondents work in a wide range of industries, with the most common being Information Technology (31.6%), Finance (16.0%), and E-commerce (14.6%). This diversity shows the broad applicability and interest in design tokens across sectors.



### What is the size of your company?

Responses came from a variety of company sizes, with 1000-4999 employees being the most common (25.0%), followed by 10000+ (20.3%) and 250-999 (19.3%). This suggests that both mid-sized and larger companies are actively engaging with design systems.



### How long has your design system been live?

A significant number of design systems have been live or in use for more than 2 years (31.6%), indicating mature design systems. Others are in the 1-2 years range (24.1%), with a notable number still under a year old or not yet implemented.



Larger companies, especially those with 10,000 employees or more, tend to have design systems that have been in place for over 2 years. On the other hand, smaller companies, particularly those with 50 to 249 employees, often have more recently implemented design systems, with less than 6 months being the most common duration.

### What is your primary source of truth for tokens?

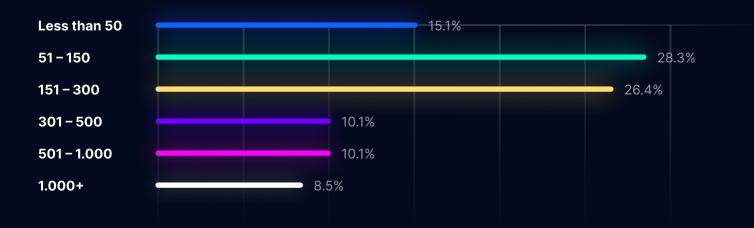
Since our last survey, Figma launched variables, a long-requested feature that changed the design tokens landscape. In fact, since launch in June 2023, it has quickly become the most common primary source of truth for respondents (42.5%).

On the other hand, 7.5% of respondents said they didn't have a source of truth at all. However, when we looked deeper into that subset, we found that half of them didn't have a design system in place. Surprisingly, 18.8% without a source of truth worked on design systems that were over two years old.



# How many design tokens does your design system have?

The distribution of design tokens within systems varies, with 51-150 tokens being the most common (28.3%), followed closely by 151-300 (26.4%). Some systems have less than 50 tokens (15.1%), while others have more than 1000 (8.5%), reflecting the wide range of complexity and scope in design systems.



Smaller companies (less than 50 employees) tend to have fewer design tokens compared to larger companies. The percentage of design tokens generally increases with the size of the company, with some fluctuations showing that companies vary in how they add and categorize tokens.

# How many platforms and programming languages do your design tokens support?

Design tokens are used to support a range of platforms, with 38.7% of respondents focusing on one platform and 36.8% covering three platforms. This diversity in platform support underscores the versatile application of design tokens across different environments.





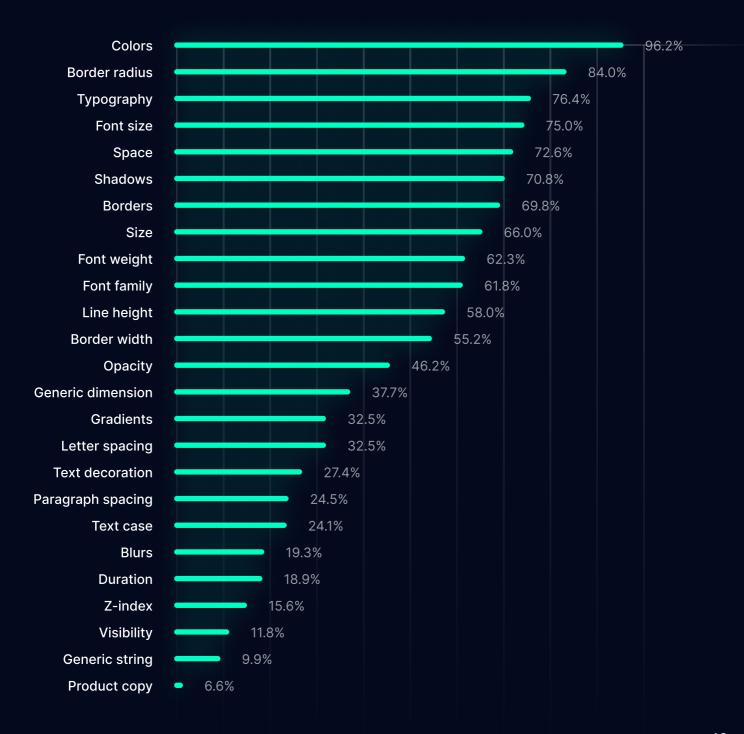
# Design tokens

In this section, the report delves into the intricate landscape of design tokens, shedding light on their fundamental role in maintaining design cohesiveness across platforms. We further investigate the categorization and utilization of these tokens, including the increasing reliance on aliases and the cautious application of programmatic tokens, to understand their evolving influence on design systems.

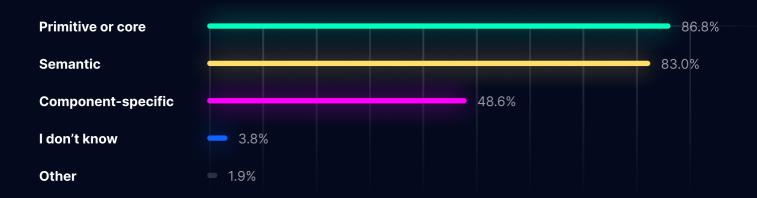
# What types of decisions do you store as design tokens?

Design tokens play a significant role in product development, and understanding what types of decisions they store can clue us into what their priorities are. Respondents indicated that the most common types of decisions stored as design tokens include colors (96.2%), border radius (84.0%), typography (76.4%), and font size (75.0%), highlighting the foundational role of these elements in maintaining design consistency.

On the other end of the spectrum, the least common design tokens were product copy (6.6%), generic strings (9.9%), visibility (11.8%), and z-index (15.6%).



# What categories of design tokens are in your design system?



Core (86.8%) and semantic (83.0%) design tokens continue to dominate design systems. Interestingly, while core tokens maintained almost exactly the same portion of design tokens as the last survey, both semantic and component-specific design tokens dropped almost 10% from the last survey. One possible explanation is a wider audience of respondents could lead to less advanced applications of tokens.

The usage of component-specific tokens is still more present in larger companies, potentially indicating a more complex or extensive design system with a greater focus on component-level customization and management. On the other hand, smaller companies still utilize component-specific tokens but to a lesser extent, reflecting potentially simpler design systems or fewer resources dedicated to design token management.



Donnie D'Amato, Founder & Chief Architect Design Systems House

"We ultimately do not need tokens that aren't semantic functionally in our ecosystems. However, the reason why a token like color-blue-500 exists seems to be for human discourse. It is easier for people to speak about a color in a human-readable way than a color code. It also restricts the number of possible colors to use so slight variations of the same value do not appear accidentally."

**Truly Semantic** 

### Do you use aliases in your design tokens?

Aliasing design tokens is a best practice that helps improve maintainability, consistency, and scalability. Respondents seem to agree, with 85.0% saying they use aliases in their design tokens, demonstrating a high adoption rate for this practice, which helps maintain scalability and flexibility in design systems.

There has also been a noticeable growth of 10% more respondents using aliases compared to the last survey's results. With standards and best practices being shared for <u>creating token</u> <u>architecture</u>, the industry could start showing signs of a standardized future.



### Do you use programmatic design tokens?

Programmatic design tokens are tokens that can be defined using math.

{spacing.xs} × {spacing.scale}

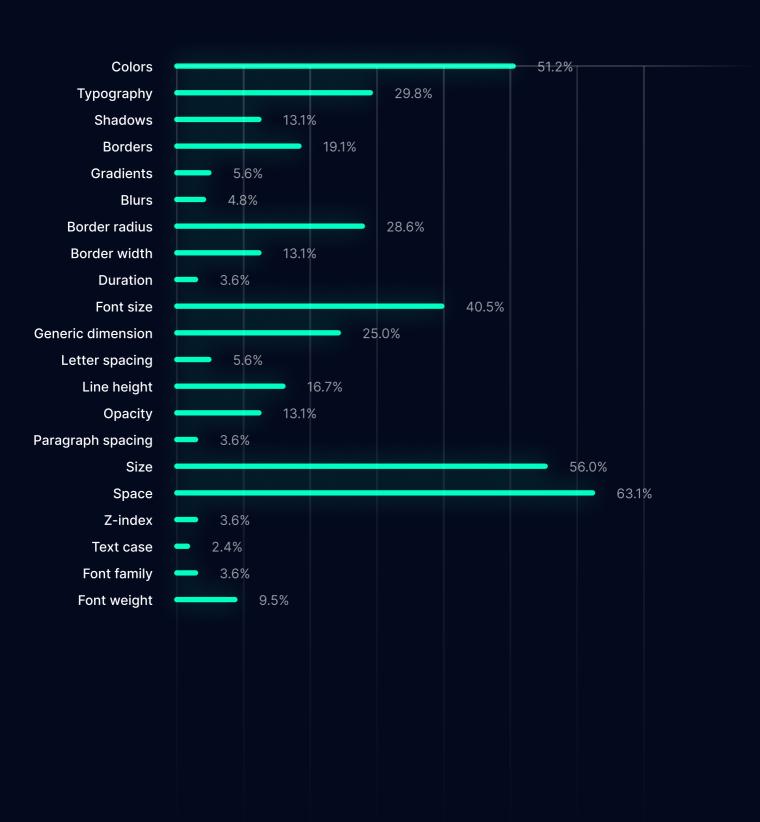
The use of programmatic tokens presents a more nuanced picture compared to the widespread adoption of aliases. This year, only 40.4% of survey participants reported incorporating programmatic design tokens into their systems, marking a slight decline from the last survey's 46.7%. This trend suggests a cautious or selective approach towards leveraging programmatic tokens, which offer dynamic capabilities essential for responsive and adaptive designs.

Additionally, 9.1% of respondents say they're uncertain about their use, which highlights a potential gap in understanding or implementing these more complex token types. This hesitancy underscores the need for clearer guidelines and educational resources, potentially leading to broader acceptance and optimized use of programmatic tokens in the future.



# What types of programmatic design tokens do you have?

With different capabilities, programmatic design tokens show a much different distribution than the overall tokens chart for respondents who said they use them. Specifically, Space (63.1%) and Size (55.9%) make up the highest percentages due to their nature of needing to be dynamically and programmatically changed to accommodate different screen sizes and devices.



# Figma variables

Figma variables have quickly become a game-changer, making a significant impact on the world of design tokens. This section examines the swift adoption and application of Figma variables, reflecting on their impact and the potential for standardizing design token practices. As we explore the adoption rates and use cases, it's evident that Figma's innovation is not just a trend but a fundamental shift in design system methodology.

### Does your design system use Figma variables?

The biggest addition to the design tokens landscape over the past year has inevitably been the release of variables by Figma. But with less than a year since release and only supporting a limited number of token types, we pondered what people's plans were for adoption.

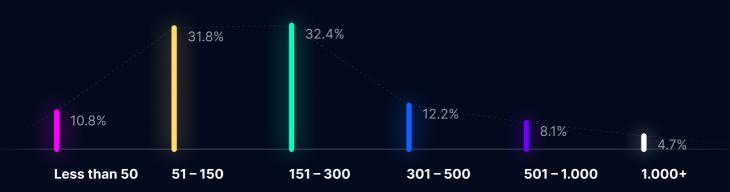
It can't be a complete surprise, but it's impressive to see a whopping 69.8% of respondents have already started using Figma variables and a further 19.3% plan to. If there was any doubt, this shows that Figma variables will only grow in adoption and with more types to come, we could be looking at a new standard for design tokens.



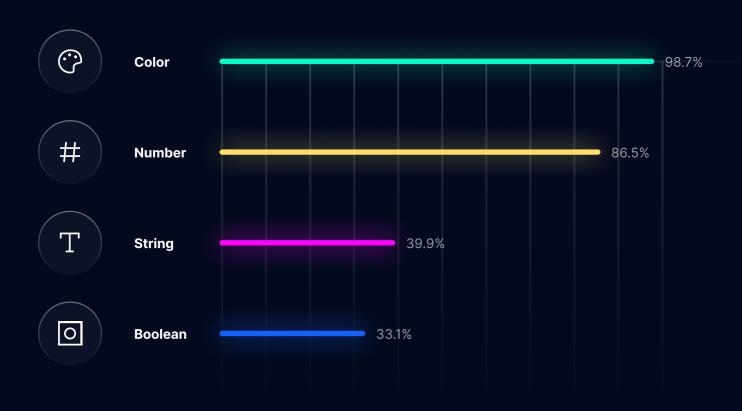
### How many variables do you have?

In a similar distribution to the overall design tokens, respondents who are using Figma variables, report having 32.4% between 151-300 variables, closely followed by 31.8% with 51-150.

On the ends of the spectrum, smaller systems with less than 50 variables make up 10.8%, while 8.1% manage a more extensive collection of 501-1000 variables. A smaller yet notable 4.7% of systems are highly complex, incorporating more than 1000 variables.



# What type of Figma variables does your design system have?



Figma variables were released less than a year ago and are still rolling out support for more token types. In the meantime, we've asked which types of variables people are implementing.

Color variables are the most widely used, with almost 98.6% of respondents indicating their use. This highlights the fundamental role of color in design systems to ensure consistency and ease of theme application. Numbers follow close by at 86.5%.

String Variables and Boolean Variables have moderate usage rates of about 39.9% and 33.1%, respectively, indicating their specific but less universal applications within Figma-based design systems.



Raquel Pereira

Design Ops, Volkswagen

Digital Solutions

"The main feature when it comes to variables is that when you want to use design tokens, a style isn't guaranteed to work as a source of truth, while a variable can do so, which is one of the core goals of having a design system."

<u>Understanding the Differences Between</u> <u>Figma Variables and Design Tokens</u>

### How do you use Figma variables?

Figma variables helped bring key design token functionalities to a wider audience. The biggest use case for variables so far is theming (74.3%), followed by multi-brand support (48.7%), and platform support (40.5%). More accessible theming capabilities could potentially point to a growing number of teams using it; we'll dive more into this in the Theming & Branding section.



Prototyping features are used by around 27.0% of respondents, suggesting that while prototyping is valuable for product development, it may not be as widely utilized within design systems.

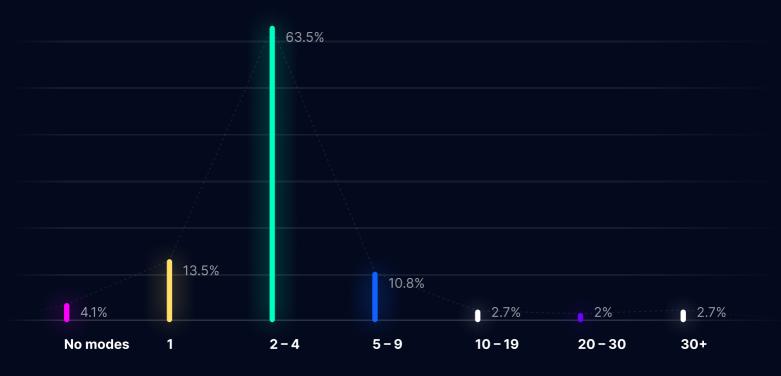
Translations / localization (11.5%) and white-label design system (23.7%) use case are less common indicating these are more niche applications of Figma variables.

Looking deeper at the numbers revealed that larger companies (1000+) showed higher usage of Figma variables for theming. However, the strongest correlation is between multi-brand support and the number of brands in the company's portfolio. Companies with a larger number of brands are more likely to utilize Figma variables for multi-brand support, with 89.9% of reported multi-brand usage being companies with 2+ brands.

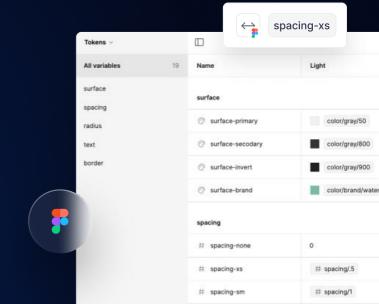
### How many modes do you use?

Figma variables are popular for a lot of reasons, but the most significant reason is the addition of modes. By tokenizing and adding seamless mode capabilities, users were able to theme their variables with a few simple steps, which is a long-requested feature for Figma. This is clearly shown in the 74.3% majority of respondents who chose theming as what they use Figma variables for.

To go into more detail, we asked how many modes users are using with variables. The majority of respondents (63.5%) use 2-4 modes, indicating a clear appetite for theming. While only 17.6% either use one mode or none at all.







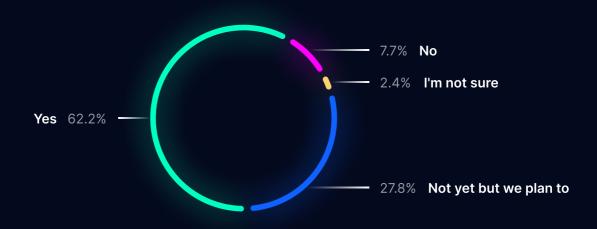


# Theming & branding

In this section, we'll explore how teams accommodate different themes and multiple brands. Theming has always been a key aspect when it comes to design tokens. With the addition of Figma variables and modes making it even easier and more accessible, we anticipated a growth in theming use over the last survey. So let's check out how people responded.

### Do you theme your design tokens?

A majority of 62.2% of respondents said that they already theme their tokens, while a further 27.8% said they aim to. Interestingly, in the last survey, 60.2% of respondents said they had themed their tokens, while 30.7% had been planning on doing so. It shows that the growth in theming has been slow but is still moving towards that directly. We might have to wait till next year to see if Figma variables will have a significant impact on theming.



### What is the purpose of theming your tokens?

Similarly, when it comes to the purpose for theming tokens, the distribution echoed the results from our last State of Design Tokens survey. 46.0% of respondents say they use it for color themes (compared to 40.6% in 2022), while 40.0% use theming for multi-brand or product purposes (compared to 46.5% in 2022). Multi-platform theming had the minority (4.0%).

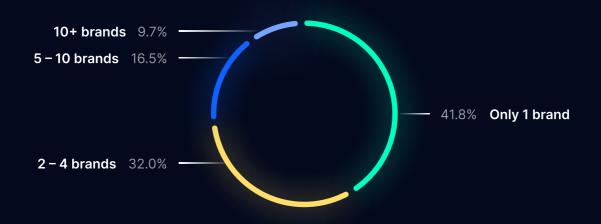
That said, 61.3% of respondents say their design system supports more than one platform. The 21.3% difference between multi-platform support and theming for platform support could indicate that theming tokens isn't sufficient for supporting multi-platform differences or that teams haven't had the opportunity to implement multi-brand tokens.



# How many brands are in your company's portfolio?

Design tokens and theming play a significant role in empowering teams to support multiple brands within their company's portfolio. When asked, respondents had an even distribution over the number of brands their company supports. Understandably the largest percentage (41.7%) say they only support the one brand. Surprisingly, there was a notable increase of 10% over the last survey's 31.5% of respondents, who said they support only one brand.

Next in line comes the companies supporting 2-4 brands (32.0%) followed by 16.5% saying they support 5-10 brands, and finally, 9.7% saying they support more than ten brands.



To get a better sense of what types of companies support multiple brands, we compared the numbers with company sizes. Smaller companies (<250 employees) unsurprisingly supported the least number of brands, with only 4.4% supporting more than four brands. Larger companies (1000+ employees) were much more likely to support five or more brands (33.6%).





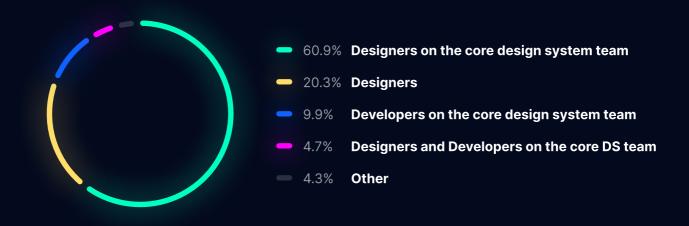
### Governance

In the final segment of our report, "Governance," we turn our attention to the management of design tokens, highlighting the structures and processes that keep them updated. This section will look into ownership and probe the practices that ensure the sustained relevance and efficiency of design tokens within evolving design systems.

# Who is responsible for managing your design tokens?

Ownership of design tokens shows a clear preference for designers. Specifically, the majority of respondents (60.8%) say that designers on the dedicated design system team are the ones who own tokens. This is similar to the last survey's number of 63.2%.

Designers follow in second place, with 20.3% of respondents saying they are the ones who manage design tokens. That number is down around 7% from 27.6% in the last survey. 9.9% of respondents say developers on a core design system team own their design tokens. However, no one selected developers outside design system teams as managers of design tokens. Of the 2.4% other responses, 9 different respondents say that a combination of designers and developers manage and own their design tokens.



When looking at managing design tokens with company sizes. The larger companies tend to rely more on dedicated design system teams, while smaller companies have a higher portion of general product designers in charge.



# Which of the following naming conventions did you reference for your design tokens?

A big topic in the design tokens space is whether the industry will adopt a standard and when. Standards can help design systems get to a more consistent and modular place, where practitioners don't need to learn and relearn aspects of design tokens that vary from company to company.

One such aspect that has been hotly debated is the naming conventions of design tokens. There have been plenty of attempts to provide a universal standard for naming, like the category-type-item-subitem-state from Style Dictionary or the namespace-object-base-modifier from Nathan Curtis' EightShapes. We went ahead and asked what people use, and this is what respondents had to say.



From the data, a universal standard for naming doesn't seem to be here just yet, with a majority 48.1% of respondents saying they still create their own naming conventions. However, of the standard options, category-type-item-subitem-state from <u>Style Dictionary</u> is by far the favorite, with 33.0% of respondents saying they use it despite only 14.0% of respondents saying they use Style Dictionary to manage their tokens.

Coming in after that is <u>EightShapes'</u> naming standard with 8.2%, and just 2.4% saying they use <u>Spectrum's</u> context-commonunit-clarification. Another 5.8% say they don't follow any naming conventions, which means that with more education on the importance of naming standards could lead to a different distribution next year.



Beatriz Novais

Design Systems

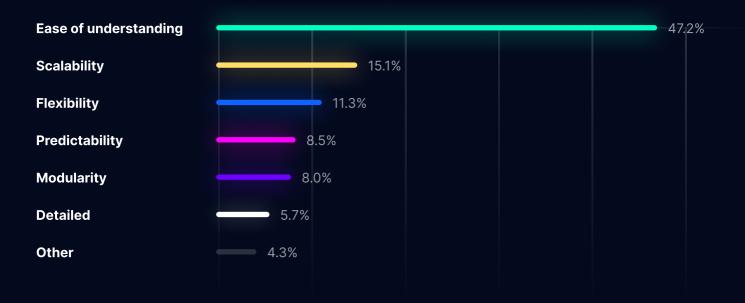
Advocate, Supernova

"Naming conventions will heavily depend on your company's context, and there is no one-size-fits-all. However, as design tokens became more streamlined, it became more evident that some patterns can be applied universally. Usually, token structures rely on specificity and aliasing precisely to enable scale, avoid a lot of rewriting, and be ready for change in a sustainable way."

The Essential Principles of a Scalable Token Architecture

# When naming design tokens, what is the most important principle that you took into consideration?

We talked briefly about the different benefits of standardizing token names, but we also wanted to get respondents' perspectives on what they take into consideration when naming their design tokens.



Ease of understanding (47.2%) saw the majority of responses for the most important principle when it comes to naming. Taking a closer look, we found that of the respondents who prioritized ease of understanding 44.2% created their own naming conventions to tailor it for their team. However, if there does eventually become a standard for tokens, it would help alleviate the need for ease of understanding as a priority.

Following ease of understanding, scalability (15.1%) came in second, followed by flexibility (11.3%), predictability (8.5%), modularity (8.0%), and detailed (5.7%).

### What tools do you use to manage your tokens?

A major factor in managing your design tokens is tooling. Dedicated token management tools can help you save time, centralize a source of truth, and connect design to code more effectively. But, teams have widely different needs, capabilities, and budgets and what they choose for tooling reflects that.



A majority of respondents (74.5%), say they manage their design tokens using Figma, a notable increase from the last survey's 62.9% of respondents. With the addition of Figma variables as a new way to create and manage your design tokens, it's no surprise that Figma saw an increase.

On the other hand, Tokens Studio (formerly Figma Tokens Plugin) saw a sharp drop from the last survey's 50.9% to 34.3% this year. Again, this could potentially be due to Figma launching their own tokens solution with variables. Style Dictionary came in next at 24.1%, showing a similar drop to Tokens Studio from 35.3% the last survey. On the other hand, Supernova as a tokens management solution stayed consistent at 15.0%.

In the other category, eight respondents said they manage their tokens from code or GitHub. And five respondents are still using some form of spreadsheet to manage their tokens. For the 7.1% who still don't have a tool to manage their design tokens, hopefully, this data can give them some inspiration for which tools they can use.



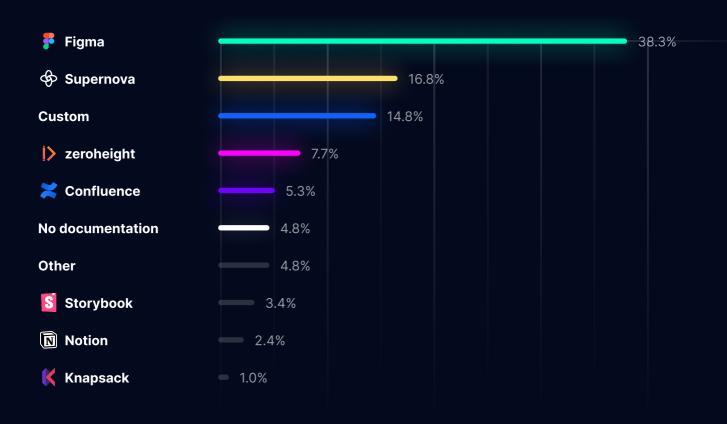
Nathan Curtis Co-Founder of EightShapes

"The future of tokens at least the near-term future for me over the next two to three years is designer and developer tool integration and maybe a period of acclimation as our ways of working on systems begin to just make it an assumption and that everybody in our industry becomes increasingly literate on how it all works."

Future of Design Tokens Fireside Chat

### Where do you document your design tokens?

Another critical step in the design tokens journey is documentation. Similar to managing tokens, dedicated documentation tools help you create a tailored instructional manual for your team on how to use them. Design system documentation can save your team time, ensure consistency, and improve the quality of the end product.



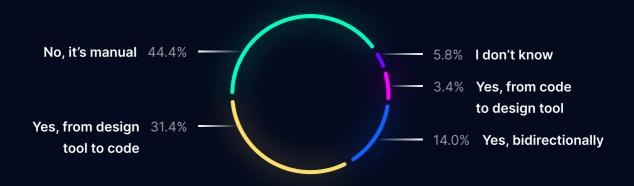
Unsurprisingly, Figma continues to dominate tooling, with a majority of 38.3% of respondents saying they use it for documenting their tokens. However, other tools are growing in their share, pushing Figma's share down considerably since the last State of Design Tokens survey when 71.2% of respondents reported they used Figma for documenting design tokens. Another noticeable drop is zeroheight, going from the dominant documentation tool in the last survey with 76.0% to fourth on the list, with only 7.6% of respondents saying it's their tooling of choice. Notion and Tokens Studio also saw sharp drops, going from third and fourth in the prior survey to 8th and off the list in 2024.

In the gainer's column, Supernova has become the second in overall tools and first in dedicated documentation tools, with 16.7% of respondents, up from 6th place in the last survey. Custombuilt solutions still maintain their popularity with many teams.

Documentation tooling has seen the most volatility since the prior State of Design Tokens report. With big changes and updates constantly to different tools like Supernova's new multiplayer editing, it's no surprise that results changed so much.

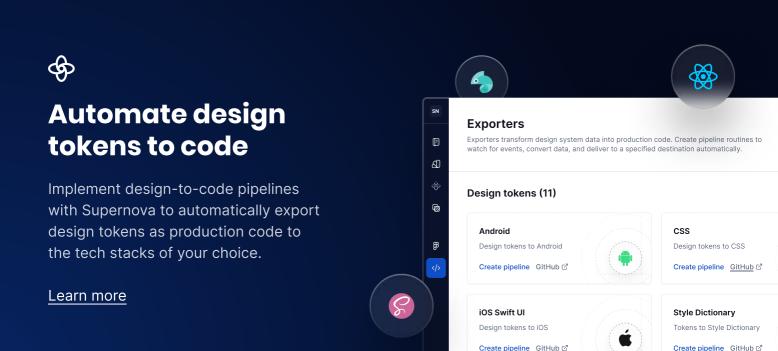
### Are your design tokens automated between design and code?

A key way design tokens help accelerate product development is by connecting design and code. As a relatively newer concept in the space, automating that process and connection is still something not yet explored by many teams.



The majority of respondents (44.4%) still only have a manual connection between design and code. Followed by automation from design to code at 31.4%, then bi-directionally at 14.0%, and last but not least 3.4% from code to design. Interestingly, this distribution is almost identical to the last survey's results, with manual (44.5%), design to code (28.7%), bi-directional (17.1%), and code to design (1.8%).

While automation is present across various company sizes, manual processes still persist in a significant portion of companies — even larger companies serving 3+ platforms. This highlights potential areas for improvement in streamlining the design-to-development workflow.



### How do you version your tokens?



Versioning design tokens is a best practice that helps with maintainability and compatibility as a product evolves and design system scales. While it doesn't come as a surprise that the majority of respondents still don't version their tokens, it is surprising that this number grew by 18% from 44.5% in the last survey. As a result, both kinds of semantic versioning saw a drop, with 22.1% for those as a part of the design system, down from 29.9%, and 11.3 for those separate from the design system, down from 24.4%.

Again similar to automation, these best practices aren't as established as something like theming, so more education on their benefits and better tooling exposure could help grow the number in the future.



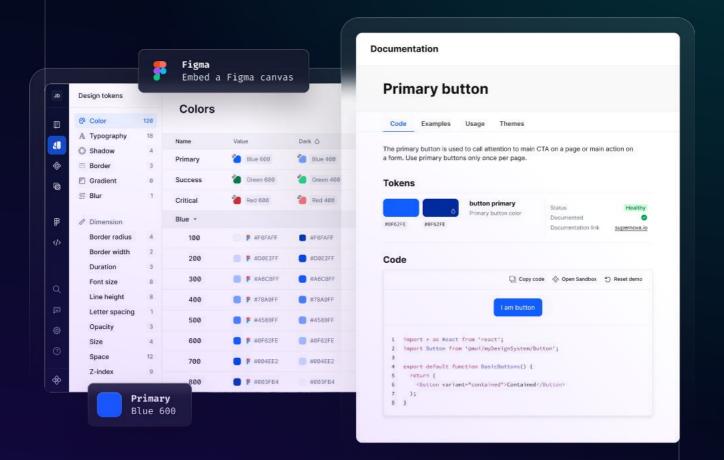
### Conclusion

Design tokens are the foundation of scalable and consistent design systems. They are essential for enabling designers and developers to implement a unified visual language across products and platforms.

The State of Design Tokens 2024 report delves into how design teams create, manage, apply, and evolve design tokens. It underscores the importance of design tokens in bridging the gap between design and development, facilitating more efficient and cohesive workflows.

Thank you to everyone who participated in the survey! We hope the report will help shape how you approach tokens moving forward, and we look forward to seeing how the landscape of design tokens continues to evolve.

### supernova



# Unlock the potential of your design tokens with Supernova

Connect, manage, and document your design tokens — including Figma Variables — in one place. Supernova automates token imports, updates, and delivery to code.

Sign up for free

Request a Demo