

Design Systems in Government

# RESEARCH DATA

資料編



## Design Systems in Government - Research Data

Published on March 31st 2022

Published by Institute of Administrative Information Systems

Produced by Public Intelligence Japan Co. Ltd.

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# INTRODUCTION

This research data document is intended to provide a view of the data that underpins the report “Design Systems in Government”.

This document contains 1) brief summaries of the interviews conducted for the research 2) a selection of notes from our desktop research and 3) the data generated from our online survey. As the summaries and notes of 1) and 2) are exactly that, they are not meant to stand alone, but rather to be perused along with the analysis of the final report.

In each section, we have included “Research Design” part, which outlines which methods were used to obtain the data, and why.

Thank you for reading.





Systems in Government

# GLOBAL INTERVIEWS

諸外国インタビュー



## Global Interviews

### Method

The interviews conducted for this research, were all conducted online after prior agreement. The interviews with the Danish Board of Digitization, the GDS and Australia's DTA were conducted with more than one interviewer, while the rest were conducted with one interviewer. The audio of the interviews were subsequently submitted to AIS for note-taking and review purposes.

All interviews were based on an agreed-upon interview guide (see Appendix 1). The interviews were all of a semi-structured nature, with the interview guide as a backbone and common ground.

The interviews ranged from 60-120 minutes in length.

In the case of the Danish Board of Learning and IT, two interviews were conducted with the same person, as more information was sought on a particular area. The summaries of the two interviews have been combined into one in this document, for brevity.

### Reasoning

For the research at hand, our main source of information was the qualitative interviews, as we have been able to find little to no evidence of our endeavours such as this, to map what is important to take into consideration in the government context regarding design systems.

As the contexts of the interviewees were quite varied, and the status of the different design systems we enquired about were also at different stages of development, we chose to engage in unstructured interviews, as this allows for flexibility based on the responses and the flow of the interview, while providing enough structural rigidity to support a comparison and contrast analysis later on.



## Government Digital Service (UK)

Interviewee: Government Digital Service, Head of Interaction Design, Tim Paul

Interviewer: Public Intelligence Japan Co. Ltd, Esben Groendal. AIS, Chikako Masuda

Date: May 26, 2021

### Design System

- Be careful about only building what's needed in the beginning, so time is not wasted on making components that aren't used.
- Use data from tests to validate prioritization.
- The design system is necessary but not sufficient: designers should be freed up to do service design.
- Frame the design system as a service to maintain funding. It is not a library or codebase, which is too static and object-oriented.
- Most of the system has actually been contributed by others, rather than designed by the team.
- The future of the design system could cover service patterns as well, but it will require a lot of work.
- The design system is not a style guide. The code itself is very important to ensure accessibility standard compliance.

### Team

- They recently hired a community manager, whom they've been wanting for the past 2-3 years.
- Their time is spent on 60% support, 20% contribution and 20% feature development - be aware that these percentages change through the phases of development/maturity of the system.
- Team is typical agile multidisciplinary team that can handle all requests themselves.

### Organisation

- Play well with others, so alliances can be strengthened.
- Encourage contributions and feedback, and make sure that these are supported and cared for, to create ambassadors.
- They have a working group with representatives from different departments, who review new features.
- There is not *one* tech stack in government, so they are relying on good will of the people implementing the design system in the departments to do the necessary translations.

## Denmark Digitization Authority (DK)

Interviewee: Danish Digital Agency, Consultant, Anders Guldman. Danish Business Authority, Consultant, Niclas Colerick

Interviewer: Public Intelligence Japan Co. Ltd, Esben Groendal. AIS, Chikako Masuda

Date: May 19, 2021

### Design System

- Stand on the shoulders of giants, and copy/adapt assets from other, more established systems.
- Free to use for anyone.
- Not only design guidelines, but agencies actually use the code actively.
- Currently built to support design and development of self-service solutions. GOV.UK on the other hand also supports websites themselves.
- In addition to codebase, design guidelines and community, they also offer Figma resources for easy prototyping.

### Team

- Started with very small team of 2 people, who began finding best practices and looking at what was currently being done in Denmark (generalist and UX'er)
- They made a pilot with two agencies to begin with, and build support for their initiative
- Now they are two UX working 50% on it, one external developer on a 4-year contract to ensure continuity, and the two generalists we interviewed, who spend 20% of their time.
- They would like to have full-time people (UX and developer) on it, so they can respond faster and develop the system's capabilities more.

### Organisation

- Try to get continuous funding, so budget doesn't have to get renewed every year
- When it is running as well as it is now, they have the challenge of getting support from continued development, not just maintenance.
- Set up a user panel with citizens, so making user tests becomes easier
- Using the system is not required by law, but by establishing a mutual agreement between agencies.
- They are considering advocacy initiatives like an "education day" for agencies", as well as "code with us" availability to make it more approachable for agencies to use and interact with them.
- They are very aware of not pushing down requirements from above, but seeking to convince the agencies to use it through dialogue.

## BBC (UK)

Interviewee: BBC, Developer, Josh Tuvath

Interviewer: Public Intelligence Japan Co. Ltd, Esben Groendal

Date: August 4, 2021

### Design System

- Big plus that code is common and streamlined, this saves time when rolling out new backend technology fx.

### Team

- Standard team size with about 8-10 people
- Really want a community manager to join, in order to facilitate and support connections
- There are many intangible tasks that team members end up doing, even though it might not be the most effective use of their time or skills.

### Organisation

- The design system team is mostly supervising other teams in how they are deploying the design system
- It's a challenge how people want to switch, but want to adapt design system to current look and feel.
- They had to adapt to a new organizational setup, where teams became about media rather than themes



## ATP (DK)

Interviewee: ATP, Digital Consultant, Tina Linné Olsen

Interviewer: Public Intelligence Japan Co. Ltd, Esben Groendal

Date: August 5, 2021

### User of Design System

- They use the design system in their everyday work
- In previous versions of the design system, they felt components were lacking and descriptions were not detailed enough
- There is a lack of communication, even though they have an online community for support
- There has been a feeling that the system was done, and not supported.
- The big risk is that people branch off and make their own
- They use the examples a lot, and less the components as stand-alone
- Big benefit is that you can focus on the important things such as user-testing, and it is great that accessibility has been baked in from the beginning

### Team

- They share solutions internally.
- In the past they had a document which detailed how someone had solved a particular problem, or covered a need. That document is not really updated anymore, so the design system is getting better.

### Organisation

- ATP mainly delivers services through the citizen-portals where the design system is mandatory
- Usage of the design system is a parameter when measuring deployment of self-service solutions.

## Danish Board of IT and Learning (DK)

Interviewee: Danish Board of IT and Learning, Special Consultant, John Mirland

Interviewer: Public Intelligence Japan Co. Ltd, Esben Groendal

Date: August 5 & October 13 2021

### Design System

- He makes a clear distinction between UX and UI. The design system should ultimately help with improved UX, and ensure a shared UX.
- The design system does not support brands per se, so they had to make the final adjustments themselves
- They use the design system as a Best-Practice library
- Cannot take likely on the update process, as changes in the design system has to be refactored across all incidents.
- Some areas GDS has done very well, particularly their documentation efforts are top notch.
- They aimed at making a center of excellence for public design, but in reality there is very limited flow back into the system

### Team

- They work very closely with external consultants in order to get them on their side.
- External consultants are a kind of glue in Denmark, as they travel from one government department to the next.
- In Denmark they have succeeded in creating a culture of positive contribution, where the work is ultimately about improving the public sector for all.

### Organisation

- Although not mandatory, they made a choice to deploy design system across all new services and sites.
- When The design system works, it will spread organically as people work together through the ecosystem
- The design system works as a place where everyone agrees to look first. This is already a huge mental shift, and very important.
- UI convergence is not only technically challenging, it also doesn't fit with the culture in Denmark

- When you don't have the law behind you, you need the power of example to get people to use it.
- They have it in contracts - "you need to write in this language, you need to use these tools, you have to work agile..and you have to use the design system".  
This can only work because we have competent and knowledgeable people on our side, who can understand and communicate the needs properly. Otherwise there comes too much power in the hands of the supplier, who can de facto define and evaluate their own contract. Internal competence is key.
- Governance without ownership internally is useless.
- They deploy clear and simple governance principles in STIL regarding the design system. 1-page per team role - this is how you use it in your role, and this is what we expect of you.
- The ultimate goal must be to have suppliers have a common goal to improve the public sector. They need to take ownership in this respect, to avoid too much in fighting.



## ICTU (NL)

Interviewee: ICTU, Project Lead, Victor Zuydweg & Project Lead, Angela Imhof

Interviewer: Public Intelligence Japan Co. Ltd, Esben Groendal

Date: August 26, 2021

### **Design System**

- They work with a white label approach with design tokens
- Defining the framework, which others can then build on
- The system itself is not widely adopted or organized yet.
- They are working on a site that gathers information and links to the various services where the design system is stored.

### **Team**

- Team lead, 1 UX, 2 front-end - none full time

### **Organisation**

- The Gebruikercentraal is located in ministry of the interior
- The design system is a project, not a team per se
- The work with a community first approach, because they don't have the buy in and resources to make the system first. This is opposite of the UK approach
- Government is much more autonomous than UK
- They have to build trust in the initiative, and then hope some agency will adopt the system as their own for long-term maintenance and investment.
- There is a growing understanding within government, that they have to work together for the citizen
- The ambition is to continue with the community, and ultimately separate out those who pay and those who make the design system.

## Ministry of Modernization (Fmr.) (ARG)

Interviewee: Kelsus Inc., UX Specialist, Pablo Rocella

Interviewer: Public Intelligence Japan Co. Ltd, Esben Groendal. AIS, Chikako Masuda

Date: August 31, 2021

### Design System

- Was developed as an offshoot of the Buenos Aires system, because the team was taken into government
- Has around 50 components
- The main value add was templates with code, because the users where typically junior front-enders
- System is more or less abandoned due to change in political priorities and the pandemic.
- It is not updated, and implementation is not regimented
- They did project agnostic user testing of patterns

### Team

- Grew to 4 people working full time on design system (UX, research, front-end and manager)

### Organisation

- The system is mandated for all government ([argentina.gob.ar](https://argentina.gob.ar)) domain sites
- Located in the ministry of modernization
- Focussed on training other government agencies in good web practices, as a way to introduce and encourage adoption of design system.
- The worked with fx ministry of health, by pairing a Design System person with a counter part in the ministry, and then worked the design system into the solution.

## DTA (AUS)

Interviewee: Peter Alexander, COO; Scott Cass-Dunbar, Senior Ministerial Adviser

Interviewer: Public Intelligence Japan Co. Ltd, Esben Groendal. AIS, Chikako Masuda

Date: September 8, 2021

### Organisation

The Australian DTA is transitioning into a role of providing strategy and direction, rather than being in charge of delivery. The design system was cut due to this transition. The reasoning behind it is, that the maturity in delivery organizations (the agencies) has come to a point where they can maintain and develop the system themselves. Up until now, DTA has had an agile coaching function, coding solutions and making sure agencies were working better. As this has succeeded, the DTA needed to evolve.

The design system might suffer in terms of consistency, by being “cut loose”, but on the other hand it might open it up to innovation by being more community driven. They will keep an eye on how it develops.

It is a departure from how GDS is thinking about their system, as they are prioritizing a permanent team to support efforts.

The Japanese experience is similar to that of Australia 10 years ago, as they need to build both a design system, AND maturity in delivery organizations.

The hands on adoption approach of the agile coaching, is similar to the approach of Argentina. The community driven approach is similar to NL, but they started in a dramatically different way than Australia, so they can not achieve the same things in the same way.





Design Systems in Government

# DESKTOP RESEARCH

基礎情報の整理

## Desktop Research

### Method

The desktop research was conducted by one researcher, and was based on various online media (blogs, digital books and YouTube videos).

### Reasoning

The desktop research had two primary objectives. One was to establish an overview of practices and insights regarding the areas to be researched around design systems in general, while another was to shed light on design systems in government in particular.

As there was less need for a thorough explanation of the nuts and bolts of design systems in general, being able to give an up to date overview was prioritized, and for this reason digital media and personal materials such as blogs were researched.

## Policy During Planning

From Persuasion to Usability ([https://www.youtube.com/watch?v=\\_20Xik6JijQ](https://www.youtube.com/watch?v=_20Xik6JijQ), Ben Terrett, 2015)

Point about setting up GDS and making “hard” choices. Just be entirely user focussed, because Government allows you to do this in a way that private companies with their logic and language of persuasion does not.

On GDS

"digital by default" - Called for revolution, not evolution. Need huge change.

Create GDS (a place for qualified people to gather and flourish), Fix Publishing, Fix Transactions, go wholesale (open data)

GDS started November 2011. [GOV.UK](https://gov.uk) is a single place for services and information online. Gathers many services.

"Cabinet office in absolute control of the overall user experience across all digital channels." - this is the line that does design. Gives authority, power and justification for design. "User experience must be good", "you don't have to relearn"

Ben Terret is drawing a line between public road projects and the road signs that have to be similar, to [GOV.UK](https://gov.uk) as a public works project.

They had to change procurement, so they were more flexible to update it.

Figuring out what people actually mean. (Infrastructure, Service and design should support what user needs) Design Principle: one typeface, one color.. look at content and understand it. Changes the way people work, to be user oriented.

"We are designing information, not just pushing pixels around the screen"

Design straight in the browser - fx visual designer sitting with coder, and sketching while the coder makes that on the screen. No cut-off process.

"Government Should Only Do, What Only Government Can Do"

Design principles. Digital By Default Standard - web design, how to set up team, how to collaborate, making better contracts, continually updating.

user testing fonts (ended up with "new transport")

Truly work in multidisciplinary teams

"Digital Services so good that people prefer to use them" - We're not doing graphic design, web design... we're starting to do service design. there's a lot of things in the digital strategy you can't do by just redoing the website, or putting a pretty front-end on a thing. It's about looking at the service, and making the service digital. And if we're truly focused on user-needs, we have to all the way back to the service, and ask is this truly the service or thing that government should do, how do we change that?"

They're changing the culture. Fx people checking in to government departments on FourSquare.

They made a "digital efficiency report", which projected savings of up to 1.8b pounds each year.

People visiting from all over the world to see what they're doing.



## MATURITY

A Design System is not a Sticker Sheet (<https://uxdesign.cc/a-design-system-is-not-a-sticker-sheet-caeac93f896a>, Corey Roth, 2020)

If you're seeking mostly to ensure consistency on known UX problems, that is an indicator of low UX maturity. (Known UX problems meaning: "I'm building an eCommerce site and I need a way to display top-level navigation to my users". It's a problem we've solved many times before in the UX discipline.) — (This is an important thought to follow, because just like GDS observed maturity amongst their user-agencies before proceeding, so must the Japanese Digital Agency consider maturity amongst their users. AUS is another example of this)

Roth also mentions design principles, as something that shouldn't be copied, but thought out in the relevant context, so the brand and experience strategy can be native and authentic.

<https://medium.com/ux-power-tools/the-path-to-design-system-maturity-d403daba692a> (Christian Beck, 2017) talks about maturity in terms of different levels: efficiency, consistency and optimization

## User Research for Preparation

[https://s3.amazonaws.com/designco-web-assets/uploads/2019/05/InVision\\_DesignSystemsHandbook.pdf](https://s3.amazonaws.com/designco-web-assets/uploads/2019/05/InVision_DesignSystemsHandbook.pdf) (Invision, 2019) According to Rachel Cohen from LinkedIn, they have a programme called "the Guild" where they take one person from each pillar of the company (Product team?) and then use them as their user research group for the design system - what works, what doesn't, what's needed..

The Design Systems Handbook is an excellent resource on getting the basics right.

## Team Building in the Beginning

Designing a Systems Team (<https://medium.com/eightshapes-llc/designing-a-systems-team-d22f27a2d81d>, Nathan Curtis, 2017)

"The system team behaves as a product being consumed by products (and other teams)"

Nathan Curtis identifies four stages of growth for a design systems team: spare timers, allocated individuals, dedicated team, and team-of-teams

1) Spare timers are people making small experiments, but often face barriers in terms of up take. In order to move on, prove that the nascent system can deliver on appropriate outcomes. This is often about educating others on the benefit of the system. (We have heard this from both DK and UK..NL is working on it)

2) Allocated individuals are people who have had some time carved out (10%? 25%?) by their managers to work on the design system. This is good, but they need to be motivated to create high-quality output, and maintain the processes such as documentation and publishing updates. “For a system to thrive, it must publish high-quality outputs and serve adopters dependably.” (GDS is very good at this)

If the allocated team delivers good and meaningful output, management could consider setting up a dedicated team.

### 3) System Team-as-Product Team

What team to set up depends on the context (especially size) of the organization. Frost mentions example team sizes of 3, 5 and 9.. (We can supplement with questionnaire and interview data here).

The roles are design, engineering, product management and “specialities” like content or accessibility.

To Curtis, design members and engineering are must-haves, as these can more easily cover for the other roles. The other roles become necessary (like community management) when dealing with a certain size). Should-haves include product management and leadership, could-haves are specialties like content, accessibility, performance and the like. Usually-don’t-haves are QA and Research.. it’s interesting to note here how research is something he doesn’t see much of; considering the interviews, it might have something to do with the role of research and contribution too.

He mentions “System Team of Teams” but recognizes himself that it only makes sense when talking about a huge range of products.

In terms of managing design systems teams, his biggest learning has been that design and engineering should be mixed, in the sense that there should be co-ownership of how the organization should proceed systematically. Maintaining federated people (designers or engineers from other teams, contributing x% of their time) is a good practice, in terms of maintaining a strong connection to the teams deploying the design system. (Of course, this is an internal perspective, and in the case of government, there might be other setups to consider, as the users sit in other orgs with other agendas, capabilities and budgets)

## External Resources for Planning

External agencies can be used in different capacities. Brad Frost mentions (in the design systems teams blog) how they had an external agency do the branding work for them, and that then had to be put into a system.

Or the fact that EightShapes themselves are an external team, helping team setting up the design system and the procedures around it for internal teams to eventually take over.

## Development Approach during Planning

### COMMUNITY

Types of community might include: Community of practice (experts) Talking to them for inspiration, Community of users (implementation) people who actually have to use the design system to design and develop services. Political stakeholders End-users (citizens) who have to use the services that has been designed with the system

<http://international.gov-design.com>

How to use and contribute to the GOV.UK Design System (<https://www.youtube.com/watch?v=Ilt0fwJkhE8v>, GDS, 2021)

Contribution - take very serious, and try to integrate into fabric of the service.

“Design system is a suite of tools that help teams in government quickly build usable, accessible services for GOV.UK”

GOV UK presents as a single, big coherent website full of information and services, but under the hood, it's hundreds of separately managed websites and transactional services maintained by different teams in different parts of the countries.

They all need to produce something that looks and feels like GOVUK, accessible and robust.

Challenge is how do we let teams do that quickly? The design system is the answer to this question.

The design system is probably being used for around 900 live services. It's difficult counting users. They found more than 2300 repos on GitHub (this also includes internal things)

Design system itself, design guidance, templates and coded examples for GOVUK. From styles and components, people can build bigger things.

They try to frame patterns in terms of problem that is being solved for users.

Not only how to ask for date of birth, but also how to have users check if they're eligible for a service at all (Best practices, basically...very advanced)

Prototype kit: a tool for quickly creating high fidelity prototypes.

GOVUK frontend: accessible, responsive frontend code library. Pages built with this frontend are about twice as fast.

They also do training, support, community and contribution.

The reason for focusing on contribution is: They were facing the problem of scaling - how are they going to make all the things that people will need. They are one-step removed from front line services. Needed to create a feedback loop from the actual services themselves into the design system. They are the people doing the user research, they know what is needed. Contribution creates this feedback cycle, which enables to scale with quality.

They have a COMMUNITY page with how to do it.

How can people contribute?

You don't need to be a developer, and you don't need to spend a lot of time on it.

- Add research findings or questions to the backlog
- Help other users on support channels - semi open slack channels work as forum. They do have one full-time support staff, but it's often not enough
- Maintain a port of the design system. It's a copy of the design system that works in sketch, figma, or different code languages. They don't control tech stacks, so it's great that people will share and maintain these bases.
- Raising an issue with a component or pattern
- improving an existing component or pattern
- proposing a new component or pattern
- Developing a new component or pattern

The first external contribution they had were tabs-panels and accordions.

Also whole patterns for things like error pages, page not found, page unavailable. It's not just the page itself, it's all the page guidance around you should write the content and when the page should be displayed.

### **What the community manager does**

Imran, community manager for GOVUK

Role is to work with community and get them involved, and help them shape the direction of the design system. It's all about planning for the future.

They're considering how to improve submissions process. They know that contributors want more information about the entire (contribution) process, and how long it will take. They found out through user research. People know they CAN contribute, and speak to the team, but there's no clear mental journey of the process. For some people don't take into account the guidance around a given proposed component. They are creating materials about the process. Blog posts, podcasts, but also considering guidance, training. Potential contributors are unsure of the standards around design, coding, accessibility. They will do a gap analysis to figure out what's NOT there, and what users need. They are trying to be more open about their work, and increasing touchpoints. They are making update calls every Friday about what the DS team has been working on. They take notes and share them in Google Doc via Slack and Twitter.

They want the community to co-create and co-design components and patterns more in the future. Tim says coordination is the big issue in terms of contribution pipeline. Aligning people, across teams, who is not working on it full time, is a challenge. Panel assures both external and DS team contributions. This helps avoid creating a two-tier system, and makes it more democratic.

There is a cross-government Slack account, where people with a government email have access. There is a Slack channel for each of their products.

It's a good way for them to stay in touch with users.

Guidance is often overlooked (in terms of documenting research and rationale) but it is very important, so a good component is not used in a bad way.

On engagement across government: Imran, people have to feel they can and have the expertise to do it. But people need support and guidance. On an individual dept. level, it's difficult to encourage en masse, because pressure levels and freedoms are so different. Their strategy is to engage heads of interaction design, heads of development in each department.. encourage them, but we can't control how they go through with that message.

Longer term, they'd like to create a community of practice.



<https://medium.com/tap-to-dismiss/user-centered-design-system-resources-2df958d90749> (Evan Maeda, Matthew Spiel, Jeremy Dizon, Runi Goswami, and Michael Yom, 2021) They are conducting Design System Engagement surveys in order to gauge awareness, value and ways of use (documentation reference etc.)

## Development and management framework during Planning

### ADOPTION

Make it easy to use. Design systems can range from static PDF documents to open, interactive libraries with code snippets.

The Imposter's Design System (<https://www.youtube.com/watch?v=yOFau-6qUc8>, Ed Chao, 2019)

After launch the system must be adopted. Depending on the size of the userbase using the design system, this can be anything from easy to daunting. Nathan Curtis recommends tracking adoption across teams, so focus areas can be established and conversations had. One of the concrete ways he proposes doing this, is to maintain a spreadsheet of teams subscribing to the design system. Then, they look at which stage they are at on a 0 (non-adopter) — 4 (using all system code and adopted everything they can) scale, and they also list names of stakeholders (developer lead, design lead) of the different products, so they **know who their customers are**.

It is stressed that it is not realistic to assume an organization wide adoption from the day of launch. Rather, design systems are adopted *incrementally, independently and at different times*.

Tim Paul mentioned the broader community, and engaging with people even outside of their own design system, to avoid competition, and to simply get better.

### HOW IT LOOKS

Systematic Design vs Design Systems (<https://bootcamp.uxdesign.cc/systematic-design-vs-design-systems-5e0fb97a1a6a>, David Kippels, 2021) It is important to note that the design must ultimately be about the user experience, and not about individual taste. Terrett mentions this in the video about GDS as well. The design system is a way to align designers on the user experience, that they as a team (or an organization) are pursuing. So the design system becomes about getting people to agree on the parameters they should work within. (We touched upon this in the interview with ATP too)

Lori Kaplan at Atlassian (Quoted in the design systems handbook) says that it was not hard to get people to follow the guidelines, but hard to agree on the guidelines themselves. This issue has been dealt with by GDS for example, through rigorous documentation efforts. Not just by mandating

something from above, but literally making the case for why it should be made like this instead of any other way.

The same goes for accessibility, Kippers argue, because accessibility standards like WCAG 2.0 gives credibility to a design decision over emotional or aesthetic considerations.

## PROCESS DOCUMENTATION

<https://medium.com/tap-to-dismiss/user-centered-design-system-resources-2df958d90749> (Evan Maeda, Matthew Spiel, Jeremy Dizon, Runi Evan Maeda, Matthew Spiel, Jeremy Dizon, Runi Goswami, and Michael Yom, and Michael Yom, 2021) states that Lyft has a templated workflow for new projects/components. This include a brief, an audit document, a figma design file, ongoing review deck, guideline document and handoff ressources. Solidifying the development process like this, ensures that it is easier to onboard new members. Communications are a part of this too, in the sense that stakeholders get briefed along the way, so there are no surprises. The whole process can take up to a month.

## Learnings and Future Plans

### SMALL BEGINNINGS

In 2016 GDS held an event to discuss design systems across government. Looking at design systems across government, (<https://designnotes.blog.gov.uk/2016/12/21/looking-at-design-systems-across-government/>, GDS, 2016) At this event, different government agencies came together to share what they were doing, what challenges they have and agree to work together. This was an example of building community very early on, and aligning people around the central design system which would launch later.

This was also where they realized that they were mature enough to begin thinking about collaborating. Maturity here, refers to a shared understanding of and capability within frontend development.

They considered the federated team model outlined by Nathan Curtis, which would allow them to scale flexibly and maintain consistency through user contributions. This is what they ended up with.

According to “Building a large Scale design System” (<https://18f.gsa.gov/2017/10/03/building-a-large-scale-design-system/>, Maya Benari, 2017) the US went through the same process of getting major ministries/agencies into one room to discuss needs and challenges. “The first question we asked ourselves was: what are the components and patterns we’re looking for in a pattern library?”

It’s basically an audit, and this can be done using digital tools like they did with [analytics.usa.gov](https://analytics.usa.gov) or manually.



## Policy for Development

### MEASURING

Measuring the value of the GOV.UK Design System (<https://www.youtube.com/watch?v=eSkVtSEAE98>, Tim Paul, 2020):

The Gov.UK design system makes everything look like one big website.

You have the design system itself (code, templates, high level examples etc.), prototype kit (a tool for quickly creating high fidelity prototypes), Gov.uk frontend (an accessible, responsive frontend code library)... but also offers training, support (GitHub, Slack, ZenDesk), community and contribution - this all pushes for adoption and contribution.

But how do you prove it?

Questions you need to know the answer to, in order to measure it.

Who's using it? No log in, so hard to track. Looked at Google Analytics to see how usage is growing, but not a good measurement. Ended up disabling Google Analytics. Then looking at NPM (Node Package Management). Then looking at GitHub for how many are using it.

How are they benefitting? Interviewed 10 users from 6 different departments, both designers and developers, to find out how they use our products, and how those products help them do their jobs. Easier to maintain, common language and reference, focus on end-to-end service, don't have to make a load of decisions.

They found that half of participants used their products every day, the rest at least once a week - this gave them confidence that people refer to it often. People estimated that they were 3-5 times more productive using their tools.

Worked with economists in GDS to estimate total cost saved by the design system.

They made some assumptions, including:

how many teams currently using tools, How often people on those team use the tools, How much more productive teams are using tools, What people would do if those tools didn't exist, average salaries and churn rates in government.

The found that the GOV.UK Design System saves the government over 17m GBP a year. He underlined that the number reflects the saving as compared to what it would cost to make services of a similar quality without a design system.

But be aware of focussing only on efficiency and cost-saving, and remember that service quality should be the primary mission.

Using a design system means that:

#### **Teams are:**

- More productive
- Able to onboard faster
- Able to share work

#### **Services are:**

- Easier to maintain
- More accessible
- More consistent
- More usable
- Faster

—

Other benefits to be mentioned are : scalability (both of team and offerings), consistency in design, improved team collaboration, better product outcomes, accessibility, cheaper production time, raising quality, increasing speed to launch

“issue for usability and expensive interaction cost for the users. The other obvious issue is the redundancy of the engineering effort.” Design system: LEGO kits syndrome (<https://uxdesign.cc/design-system-lego-kits-syndrome-b5fe6a6ca53e>, Budi Tanrim, 2021)

## Team Building for Development

Team Models for Scaling a Design System (<https://medium.com/eightshapes-llc/team-models-for-scaling-a-design-system-2cf9d03be6a0>, Nathan Curtis, 2015)

Earlier when design systems were less dynamic, they could be managed by a single person, who would decide what would go into it - a sort of gated off miniature. But nowadays things are more complicated because of “the people involved, products it applies to, parts it includes, and practices it employs - are slightly more complicated”

The basic problem is scaling, and having one person in the center does not scale very well. People work across different environments, and in increasingly cross-functional teams.

Several team models exist:

1-Solitary, where a single person or team shares their design system into the org. This is often seen in practice. Perhaps because it can seem intuitive and easy to implement. But problems arise around how it will be updated, and how it will take into consideration needs of other teams. It’s a good place to start perhaps, but then needs flexibility added over time. **Something to note here is how, if other teams experience that they cannot use the design system as is, they will create their own, and the danger is that this is a path to DIVERGENCE.**

2-centralized, where a team is responsible for the design system and pushes adoption. “a centralized team can provide a great service and create value in efficiency, consistency, and capacity. But be careful. **Their position is tenuous,**



**and their desire to prove their worth may undermine their effectiveness serving product teams that want to sustain their autonomy anyway.”**

3-Federated, Google Material Design is an example of this, where designers from multiple product teams decide on the system together. This is good to ensure broad up take. It requires strong relations built on trust, and a commitment to a greater good (a cohesive user journey).

The federated approach can be made in different ways. Nathan Curtis proposes that there is less need to insist on discipline boundaries in mature teams, and instead have people pitch in where they can contribute. Another point was to have representatives on the design system team from each of the main product departments.

Design systems need to be *built, documented and sustained*. This includes communicating the changes. And the federated approach needs to have a team dedicated to the cause.

<https://medium.com/tap-to-dismiss/user-centered-design-system-resources-2df958d90749> (Evan Maeda, Matthew Spiel, Jeremy Dizon, Runi Goswami, and Michael Yom , 2021)

“Systems thinking starts during Week 1 at Lyft. Shortly after newly hired designers and engineers learn about Lyft’s culture and get their tech environments set up, they take Mobile and/or Web system onboarding labs (mini design/engineering projects overseen by onboarding mentors). These labs help new hires learn:

What assets and resources live in the system

How to use existing system assets (and how to adapt them)

How to communicate and collaborate with cross functional team members

Where to get help”

At Lyft they call this “system citizenship”.

(It seems like a good approach to have a setup where new designers on the design system get introduced to how to use it - maybe could go hand in hand with outreach to the user side, like the Danish governments 1-to-1 sit-downs)

## Management framework

The Future of Design Systems (<https://www.youtube.com/watch?v=mq984Mc9UVA> , 2019, Hayley Hughes)

Take care in terms of how the system is defined, because it can limit what can be included in the system. Design is relationships - between people we work with, and between products and users. Driven by small decisions. So many decisions to

make, and they are governed by systems. And it also automates certain things that designers used to do, like drawing certain shapes. **(This is the fundamental thing, a point which Tim also pointed to, it's automation but that doesn't mean you automate out the designer)**. Design Systems can make more efficient, resourceful environments and they help designers create a human impact. Designers are in a relationship with one or more design systems. They either make one or use one, or maybe both.

Trick: Engineers have same naming as design file specs - no matter the platform. This is a bridge between design and engineers.

<https://medium.com/tap-to-dismiss/user-centered-design-system-resources-2df958d90749> (Evan Maeda, Matthew Spiel, Jeremy Dizon, Runi Goswami, and Michael Yom, 2021) states that Lyft has internally developed plugins for Figma, that further speeds up design workflows. Specifically one that checks whether a design conforms to color, typography etc, and another to easily check darkmode. (They can do this because they serve a controlled environment, and this is not to say everyone should have these, but it highlights the fact, that GDS also does, that it is worth considering how you can help users use the design system better - ultimately it is about servicing users)

Another thing they do in this regard is to have decision trees on component pages, so it is easier for people to decide — great illustration for this too.

“On most design system component pages, we include a decision tree at the top, like a Choose Your Own Adventure book. Like in the Toast component example below, the decision trees ask simple “Yes” or “No” questions to help system users narrow options down within a type of component or between related components.

Decision trees help system users:

Understand how and when to use components

Discover related components that might better fit their use case that they might not have previously considered”

## Policy for Expansion

### FRAMING DESIGN SYSTEMS

The mindset of the team is also incredibly important, because it determines how people conceptualize and approach it. A big point of concern here is the focus on users. Design systems are established and seen as investments in an organization's continuous dedication to user-centricity. This means that decisions around the design system should be driven by the needs of the users, rather than personal taste.

Nathan Curtis in System of Systems (<https://www.youtube.com/watch?v=Elpt1i9QldU>, 2020) frames the design system as what products are dependent on. To the product teams that has adopted the design system, it is a single source

of truth. While the design system itself is dependent on or at least informed by brand identity, but also external standards like WCAG accessibility standards.

Nathan Curtis further observes how design systems can tend to evolve at different rates between design elements (assets, guidelines) and the code base. Fusing these two is of critical importance to maintaining the system and keeping it effective and efficient over time.

Tim Paul mentioned how they try not think of their design system as a library, because it has a static feel to it. To them, it should be more dynamic and interactive.

## **FINANCE**

Both UK and DK mentioned how there was a risk of political decision makers allocating budget away from the design system once it was “up and running”. But the design system needs to be continuously maintained and developed.

## **ROADMAP**

Roadmaps for Design Systems (<https://medium.com/eightshapes-llc/what-s-will-your-design-system-deliver-4b81d41be0d4#.vc22hyavl> , Curtis, 2016)

“Don’t discount the power of an effective, concisely communicated system roadmap. It generates awareness, discussion, faith that you’ve got your act together, and trust that what you do provides for what they need.”

This is an important point, because it refers to trust in the system from other teams. Strong communication, which roadmaps are a part of, show that the system will not go away and that someone is in charge. (In NL, we heard that this is exactly an issue they are facing)

## **User Research during maintenance**

Things can quickly get out of hand, and in order to maintain a user-centric perspective on the work that the organization is doing, it is important to have a clear funnel for user research. Not only to see how individual components work, but also to be cognizant of the customer journeys that the design system is being used to service. (marketing, onboarding, servicing..)

## **Development Approach for Expansion**

### **AUDITING**

<https://www.deque.com/blog/auditing-design-systems-for-accessibility/>

*A style guide is an artifact of design process. A design system is a living, funded product with a roadmap & backlog, serving an ecosystem. - Nathan Curtis, Twitter, Oct. 21, 2015*

Once a design system has been set up, there are multiple things to consider in terms of maintenance. Maintenance of design systems covers many varied aspects, and they are all essential to continuously reap the benefits of having the design system in place.

Products and services change, so design systems must naturally change along with them, otherwise they will become obsolete and unable to answer developers questions (this fundamentally one of the goals of the design system. You access it in order to tap into already agreed upon ways of solving the problem a developer or designer can be faced with, so they don't have to do it themselves in a way that is potentially misaligned with what is best (or at least has been agreed on is best).

In terms of team dynamics it is important to **empower** people to note and maybe even modify things they experience as outdated, no longer used or lacking.

Performing audits of your design system is important in order to maintain it.

*There should be an audit process in place—and a person or team responsible for managing it—so you can take a **proactive approach** to maintenance as well.<sup>1</sup>*

## APPROVALS

GOVUK has a committee, and so does Canada (Co-design with approvers at the table, <https://blog.canada.ca/2021/05/10/codesign-with-deciders>, 2021). Canada is working as what they call “co-designing with approvers”. They describe a case on their blog where they created travel guidance during the corona crisis with all involved agencies.

Here are some illustrations on how approvals processes might go:

From Tips for Maintaining Your Design System (<https://www.telerik.com/blogs/tips-maintaining-design-systems>, Suzanne Scacca, 2020)

Figure out who the approvers are for the content and meet with them early in a working session. Clarify what they expect as well as what users need. Establishing this kind of ongoing relationship with approvers can help teams be more efficient at getting content live.

Place new requests into an open queue.

Change manager reviews the request to make sure the request is 100% clear and all information (as well as supporting evidence) is provided.

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<sup>1</sup> <https://www.telerik.com/blogs/tips-maintaining-design-systems>

They pass the request over to the reviewer and decision-maker for this specific kind of change.

The decision-maker reviews the request and determines how narrow or broad of an impact the change will have on the design system, the product, and current work.

They set a priority accordingly.

The change is implemented by the design system owner and reviewed by the decision-maker. (Note: This only accounts for changes to the design system. If the change impacts the live product, then another change request should be initiated for that specific workflow.)

The design system update is communicated to the team.

The change request is archived for future reference.

This is another description of a contribution flow: Contributing to Our Design System: The (Happy) Tale of Creating a New Component (<https://medium.com/societe-generale-design/contributing-to-our-design-system-the-happy-tale-of-creating-a-new-component-767c659bf9cb>, Marion Caron, 2020)

## REQUESTING CHANGES

You need to control the flow of changes, whether they come from scheduled audits in an organized internal fashion, or are noted continuously by the team and the community. This can be done with a change request process, where suggestions are logged, prioritized and monitored.

In Taming Design System Chaos, <https://medium.com/societe-generale-design/taming-design-system-chaos-66bcadb43e1> (Henry Daggett, 2020) states that design systems need clearly defined governance and contribution systems, in order to track requests and decision (this links up to the “why” too” - he highlights that contribution processes is a learning process, as teams have to get used to it. So there is necessarily an arc in how it should be dealt with.

At Societe Generale, they considered a core team, but opted instead for a Design System Council, so as to not have the rest of team feel excluded. (There is a balance to be struck between consistency/authority and input/creativity). The idea behind the council is that membership is fluid, and depends on who has time to join and contribute to the tasks of mission setting and overview. (This is perhaps a bit different from the federated model, but not too much in that you have people committing some of their time). The way the council worked is the governance part.

## PROTOTYPES

Working with prototypes instead of documents is encouraged by design teams all across the world, not only in relation to design systems. But in the case of design systems in particular, encouraging and enabling prototypes with the available components, styles and patterns is a way to deliver the promised value.



“Prototypes are a risk-reduction strategy and an excellent change management tool. They allow everyone reviewing them to experience what users will experience, and design accordingly. If you’re using interactive elements within some of your content, it’s much easier to understand how everything works together when you’re working from a prototype rather than a document.” Co-design with approvers at the table, <https://blog.canada.ca/2021/05/10/codesign-with-deciders>, 2021

“Prototypes are often misunderstood to be a deliverable, or something to be worked towards. Instead, it can be useful to think of them as a medium, like a sketch on paper, which will help to think of them as valuable assets as development progresses.” <https://atomicdesign.bradfrost.com/chapter-5/>, Brad Frost

## GOVERNANCE

Governance has been touched on in different places already, in different contexts.

<https://bradfrost.com/blog/post/a-design-system-governance-process/> (Brad Frost, 2019) writes about governance as a way to control or guide users, as they unfailingly will meet barriers when interacting with the design system. Three big issues he highlights are:

“They can’t find a component that does what they need

A design system component gets them 90% of the way there, but not 100%

They have questions or concerns about the design system”

In the post there is a great visualization of a component contribution workflow which can be analyzed and adapted to other contexts. Shouldn’t go into details here, but could be worth mentioning as an activity for the Digital Agency to conduct — government will deploy the design system to many varied stakeholders, and so it is conceivable that there will be a lot of requests and questions. Having a clear, robust and transparent funnel to guide these through is essential to keep clearheaded as a team.

Review the process if you notice unhappy users, or requests/support tickets not decreasing.

## Development and management framework for Maintenance

### CONSOLIDATION

Depending on the scope of the services offered, a design system can cover more or less ground.

As the design system is established, challenges emerge that need to be attended to. Outputs, adoption, generations, competition, hierarchy (Hierarchy is the idea

that we might not be able to actual arrive at the ideal state of a single system with all the answers, but rather will have to agree on the most constructive relationship between different systems serving different functions or teams. ... (System of Systems, Nathan Curtis, <https://www.youtube.com/watch?v=Elpt1i9QldU> 3:56, 2020)


In terms of competition, Nathan Curtis stresses the importance of tracking tools of different teams, and then setting time aside for handling the most severe differences.

## CONSISTENCY VS INNOVATION

<https://uxdesign.cc/design-system-lego-kits-syndrome-b5fe6a6ca53e> (Budi Tarim, 2021) talks about how design systems can have the negative impact of designers, like LEGO kits can do - they oversimplify, and set up instructions that people have to follow, and in turn stops them from being creative or thinking for themselves. This could lead to the system becoming stale. He also points out community contribution as a way out of this. He offers some points for design systems people to consider:

“

- How often do the system users give input about your pattern library?
- How often do the system users propose a new component or pattern?
- If the contribution is relatively low, what stopping them from contributing? Have you considered designing the contribution experience?
- How would you respond to the system users who created a new component without communicating it back to the design system?
- What do the system users think about the design system?



Design Systems in Government

# **SURVEY OF GOVERNMENT TEAMS**

諸外国自治体アンケート

## Survey of Government Teams

### Method

We conducted a quantitative research survey with the online survey tool TypeForm.

The survey was distributed through two avenues. One was direct sharing with people abroad the research deemed to have expert knowledge of the subject matter, and asking them to share with their network as well. The other was sharing in various online forums via the software Slack. This allowed us to reach a broad section of people, who by their membership indirectly has professed knowledge of or at least interest in the subject matter.

The questions included in the survey were partially based on input from the first 2 interviews conducted.

### Reasoning

In order to provide a quantitative perspective to our research, a survey was deemed appropriate. As the topic is very niche, a sub-category of the larger area of design systems in general, we set a goal of 30 respondents, which we reached.

Even with a small number of respondents, we reasoned that it would be enough for patterns to appear, that could provide general insights into design systems in government.

# Design Systems in Government

34 responses

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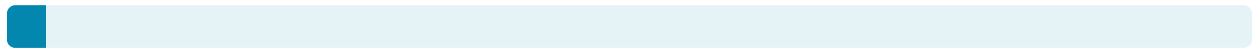
A brief note on how we'll use this questionnaire

32 out of 34 answered

Yes 31 resp. 96.9%



No 1 resp. 3.1%



## Organization type

33 out of 34 answered

Public Sector 20 resp. 60.6%



Design agency / freelance 9 resp. 27.3%



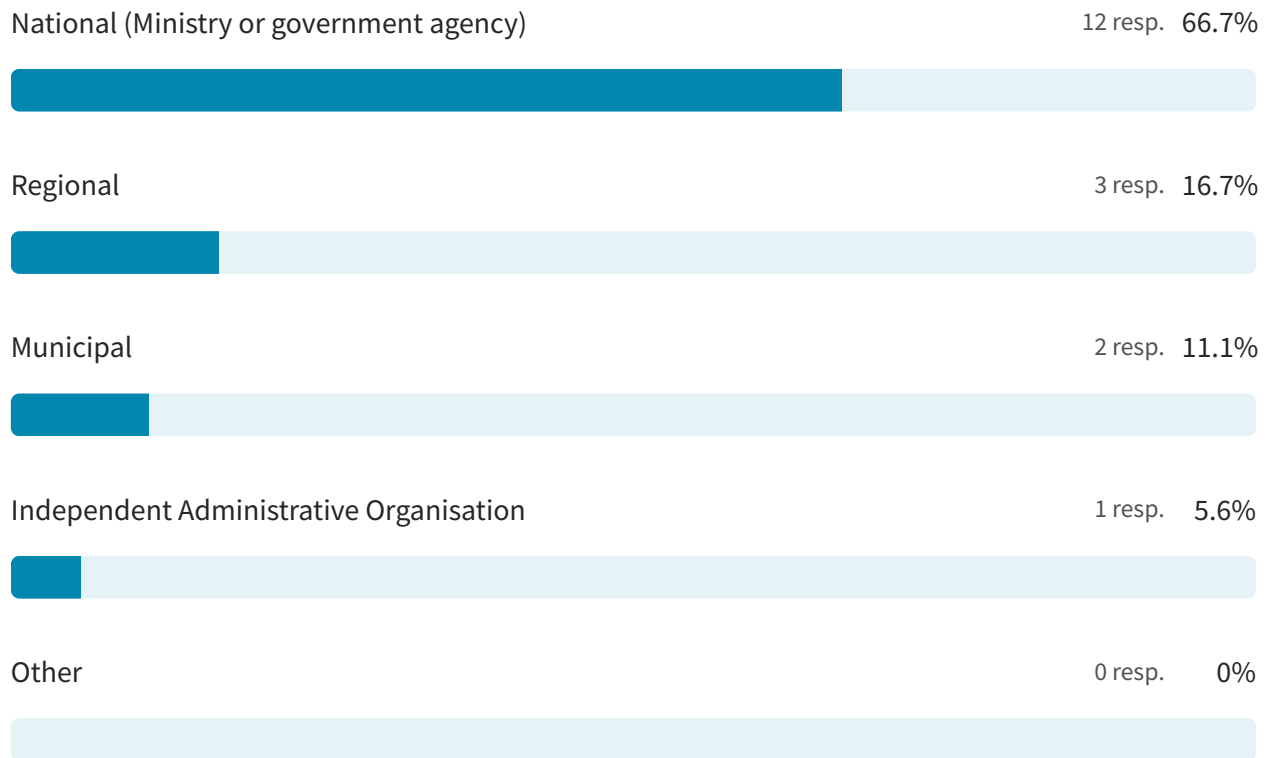
Private Sector 4 resp. 12.1%





What level of government do you work in?

18 out of 34 answered



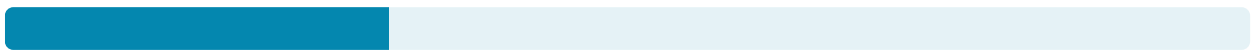
How big is the company you work in?

13 out of 34 answered

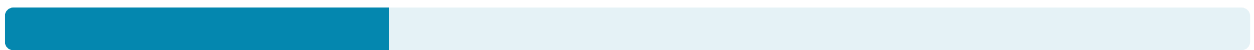
Less than 50 employees 5 resp. 38.5%



Between 50-200 employees 4 resp. 30.8%



Over 200 employees 4 resp. 30.8%



---

Are you a design system user or developer?

33 out of 34 answered

I'm a user of the design system 18 resp. 54.5%

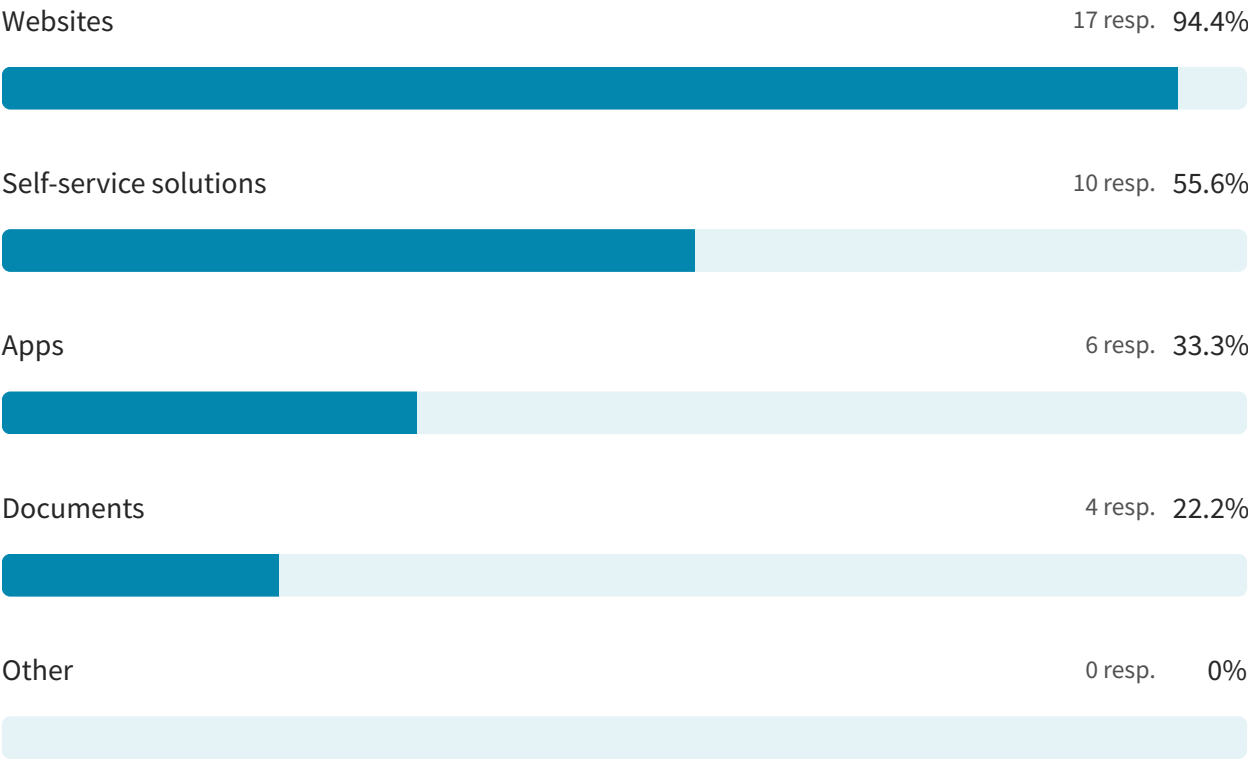


I'm part of the team in charge of the design system 15 resp. 45.5%



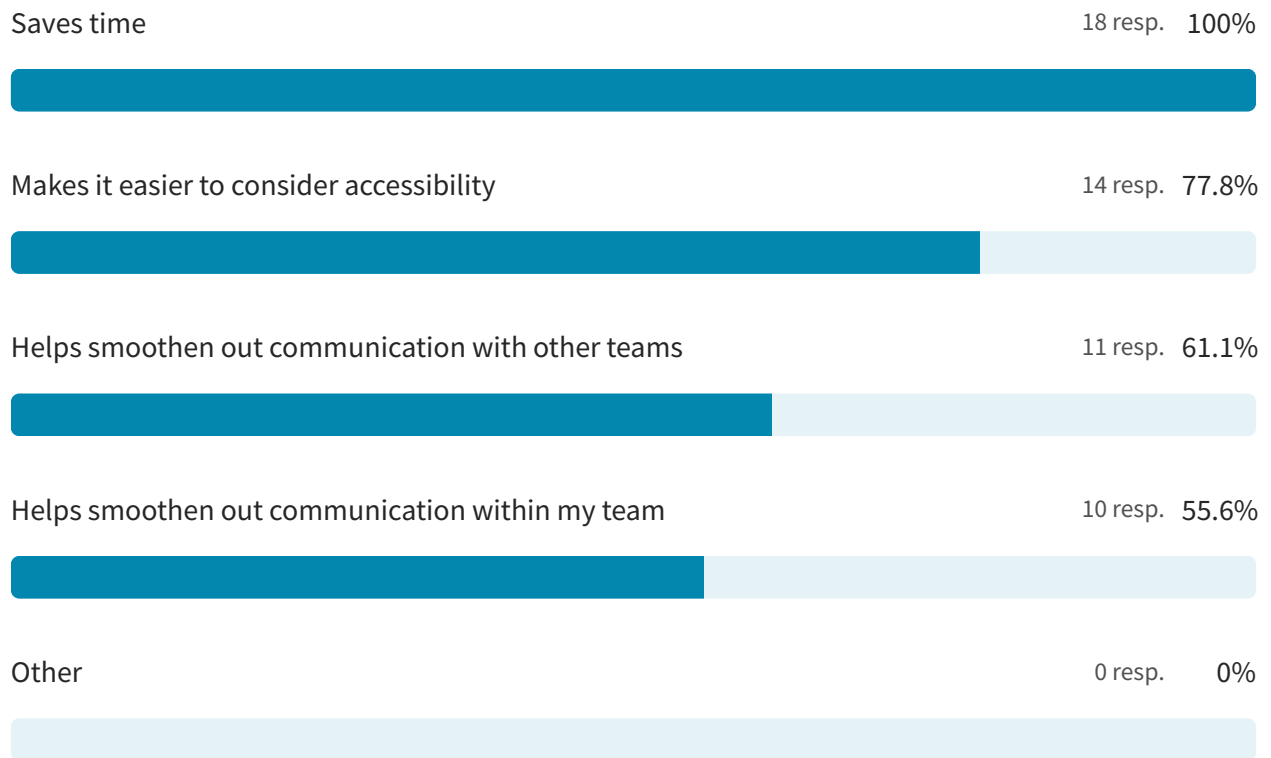
What do you use it for?

18 out of 34 answered



What value do you get from the design system?

18 out of 34 answered



What issues or challenges do you experience around the design system?

16 out of 34 answered

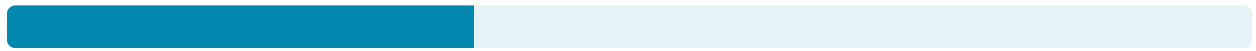
Lack of documentation

7 resp. 43.8%



Misalignment on how to use it

6 resp. 37.5%



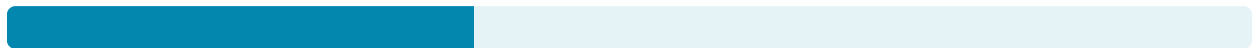
Too simple examples

6 resp. 37.5%



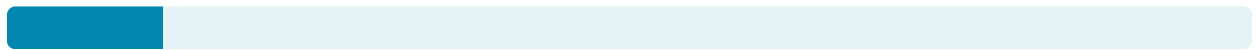
Too static

6 resp. 37.5%



Lack of communication from the design system team

2 resp. 12.5%



Changing too often

1 resp. 6.2%



Too complex/difficult to use

0 resp. 0%



Other

2 resp. 12.5%



Lack of communication in the new changes

My department and team's technology stack means I can't use the provided frontend templates directly

How would you characterize your own participation in the community around the design system?

18 out of 34 answered

I use the design system to do my job 16 resp. 88.9%



I participate in and encourage user testing 11 resp. 61.1%



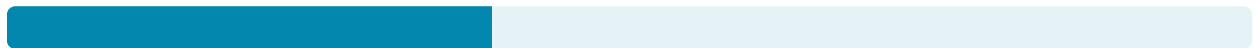
I push for adoption of the design system in my own circles 11 resp. 61.1%



I join meetups 9 resp. 50%



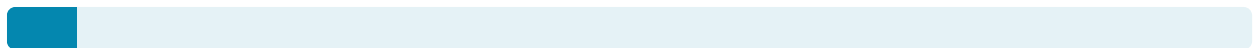
I provide frequent feedback and flag bugs 7 resp. 38.9%



I provide suggestions for new components or patterns 7 resp. 38.9%



Other 1 resp. 5.6%



[Get involved in development of some components](#)

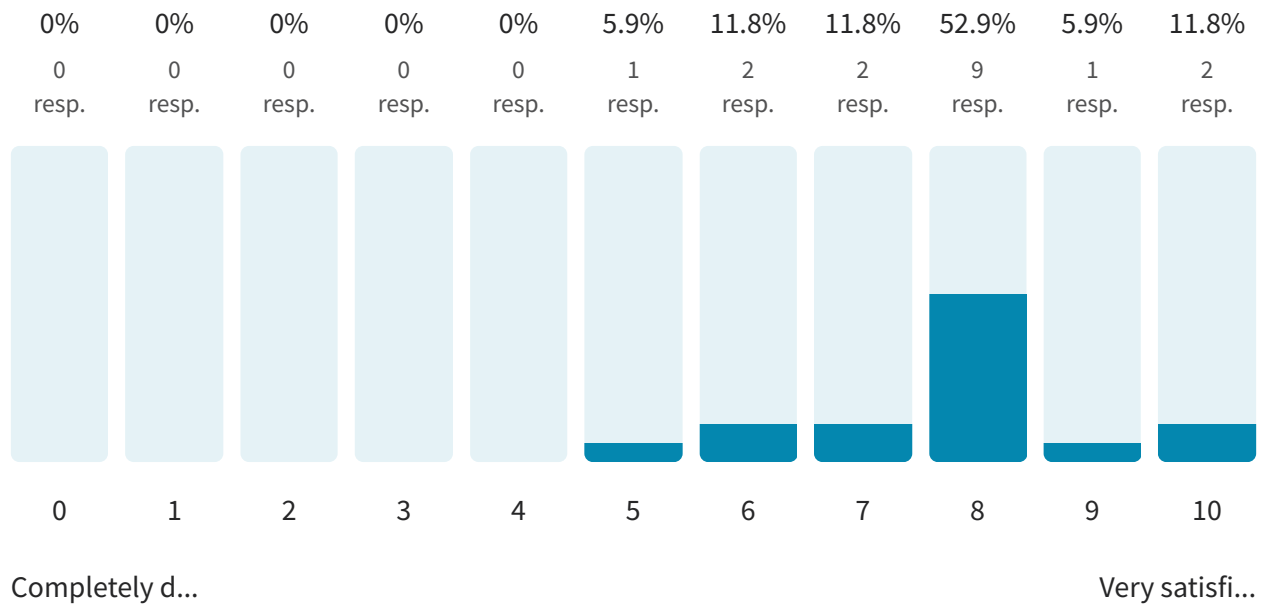




On the whole, are you satisfied with the design system?

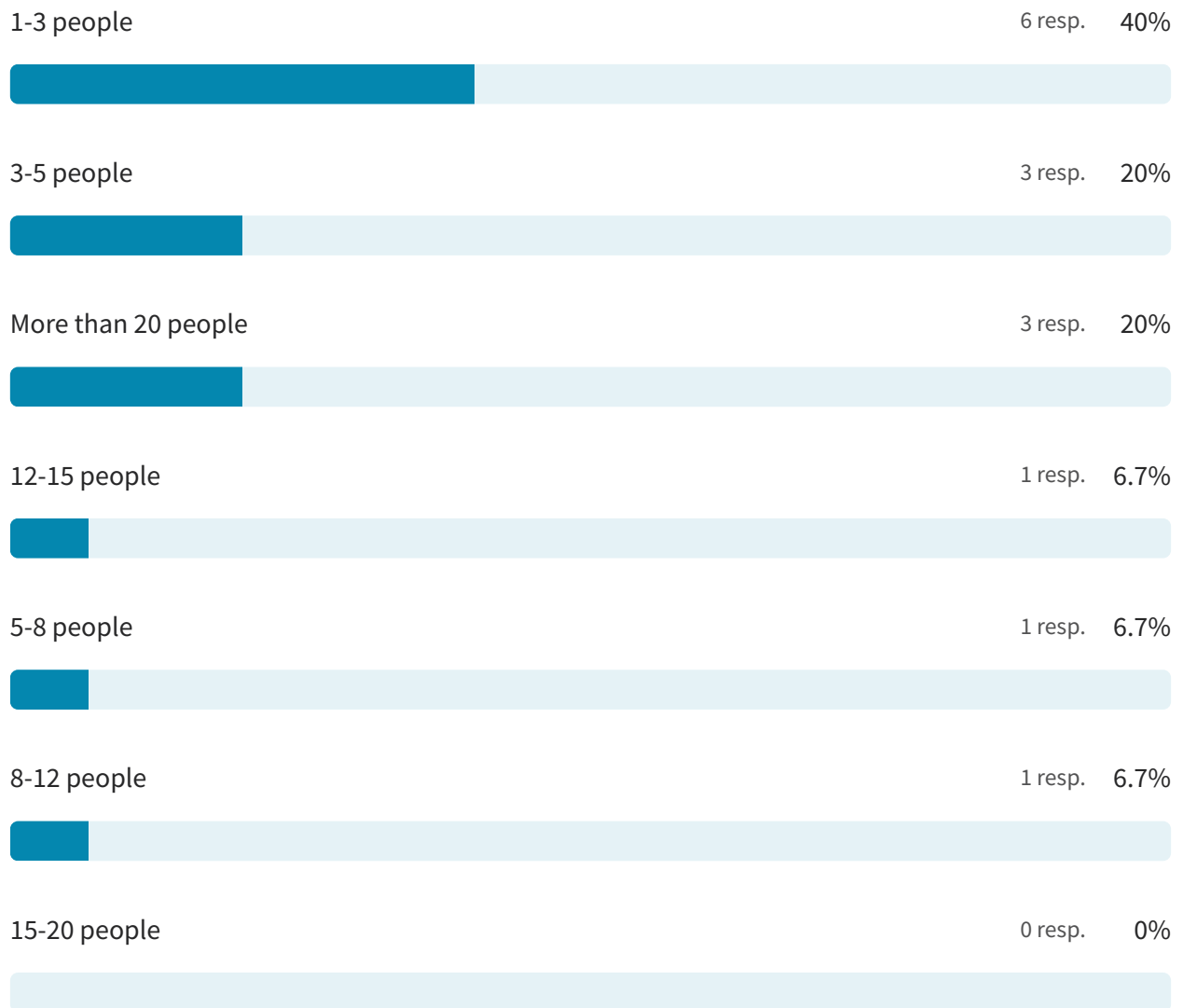
17 out of 34 answered

## 7.8 Average rating



What is the size of the team working full time on the design system?

15 out of 34 answered



Are there people working non-full time on the design system?

15 out of 34 answered

Yes

14 resp. 93.3%



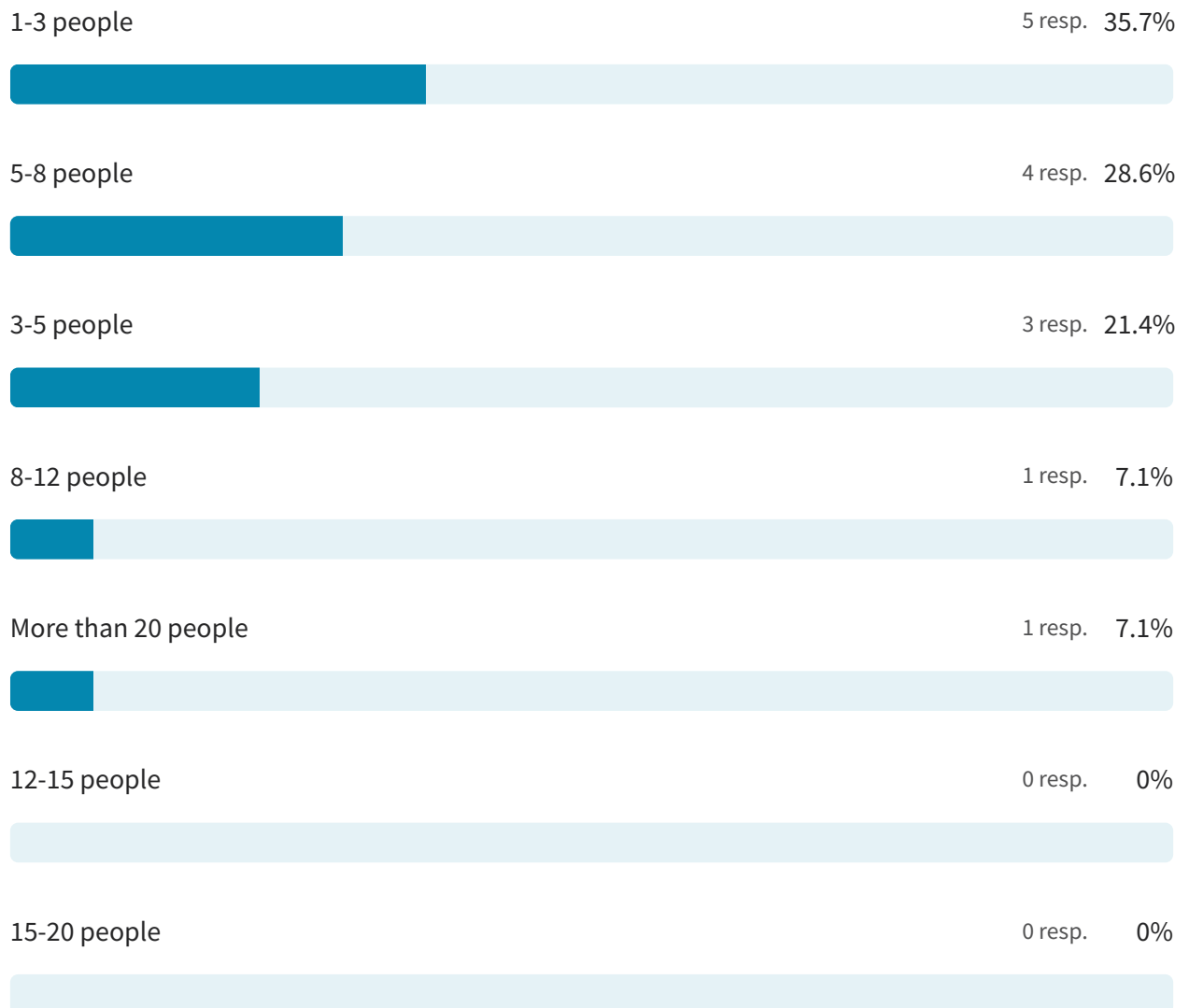
No

1 resp. 6.7%



How many non-full timers are working on the design system?

14 out of 34 answered



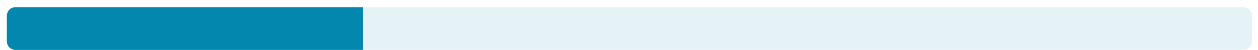
What stage is your design system in?

14 out of 34 answered

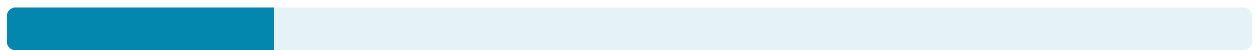
Stage 3: Launch and Adoption 5 resp. 35.7%



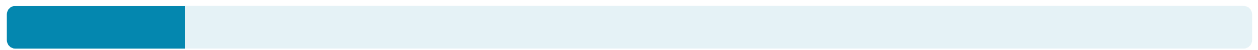
Stage 4: Maintenance and Expansion 4 resp. 28.6%



Stage 2: Pre-Launch Development 3 resp. 21.4%



Stage 1: Pre-Launch Planning and Experimentation 2 resp. 14.3%



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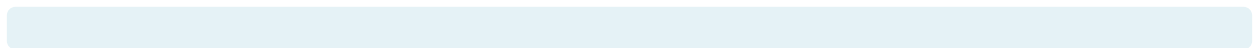
How long have you been planning the design system for?

2 out of 34 answered

More than 2 years 2 resp. 100%



Between 1-2 years 0 resp. 0%



Less than a year 0 resp. 0%



How long have you been developing the design system for?

3 out of 34 answered

Less than a year 3 resp. 100%



Between 1-2 years 0 resp. 0%



More than 2 years 0 resp. 0%

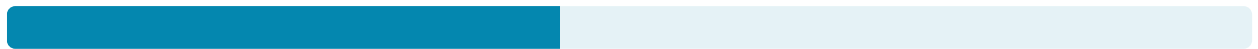


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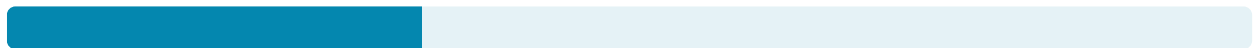
How long has it been since you launched?

9 out of 34 answered

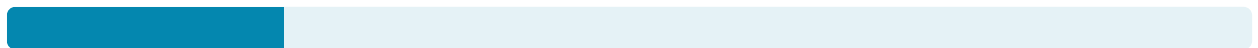
Less than a year 4 resp. 44.4%



More than 2 years 3 resp. 33.3%



Between 1-2 years 2 resp. 22.2%





Do you work with external people?

2 out of 34 answered

Work with external design agency

2 resp. 100%



Work with freelancers/independent contractors

1 resp. 50%



Other

1 resp. 50%



Other government agencies, foundations, international orgs.



## How do you approach maintenance?

4 out of 34 answered

Ad hoc/Continually

4 resp. 100%



Scheduled audit every 12 months

0 resp. 0%



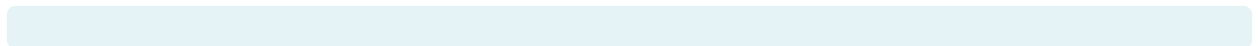
Scheduled audit every 6 months

0 resp. 0%



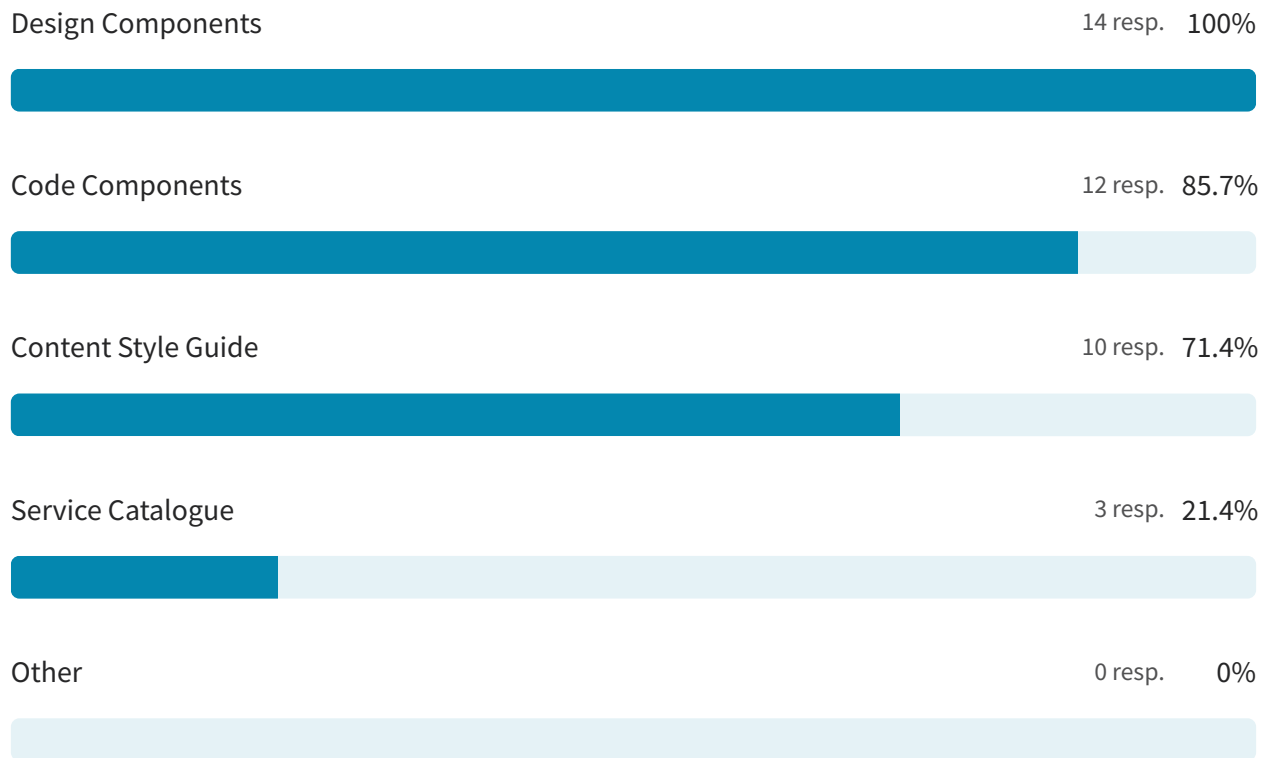
Other

0 resp. 0%



## Scope of the design system

14 out of 34 answered



## Who are your users?

7 out of 34 answered

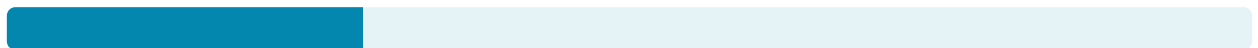
Whole organisation

5 resp. 71.4%



One department

2 resp. 28.6%



One product

0 resp. 0%



Other

0 resp. 0%



## Who are your users?

6 out of 34 answered

Regional or State Government

5 resp. 83.3%



Central or Federal Government

4 resp. 66.7%



Municipal or local government

3 resp. 50%



Independent Administrative Organization

2 resp. 33.3%



Other

1 resp. 16.7%

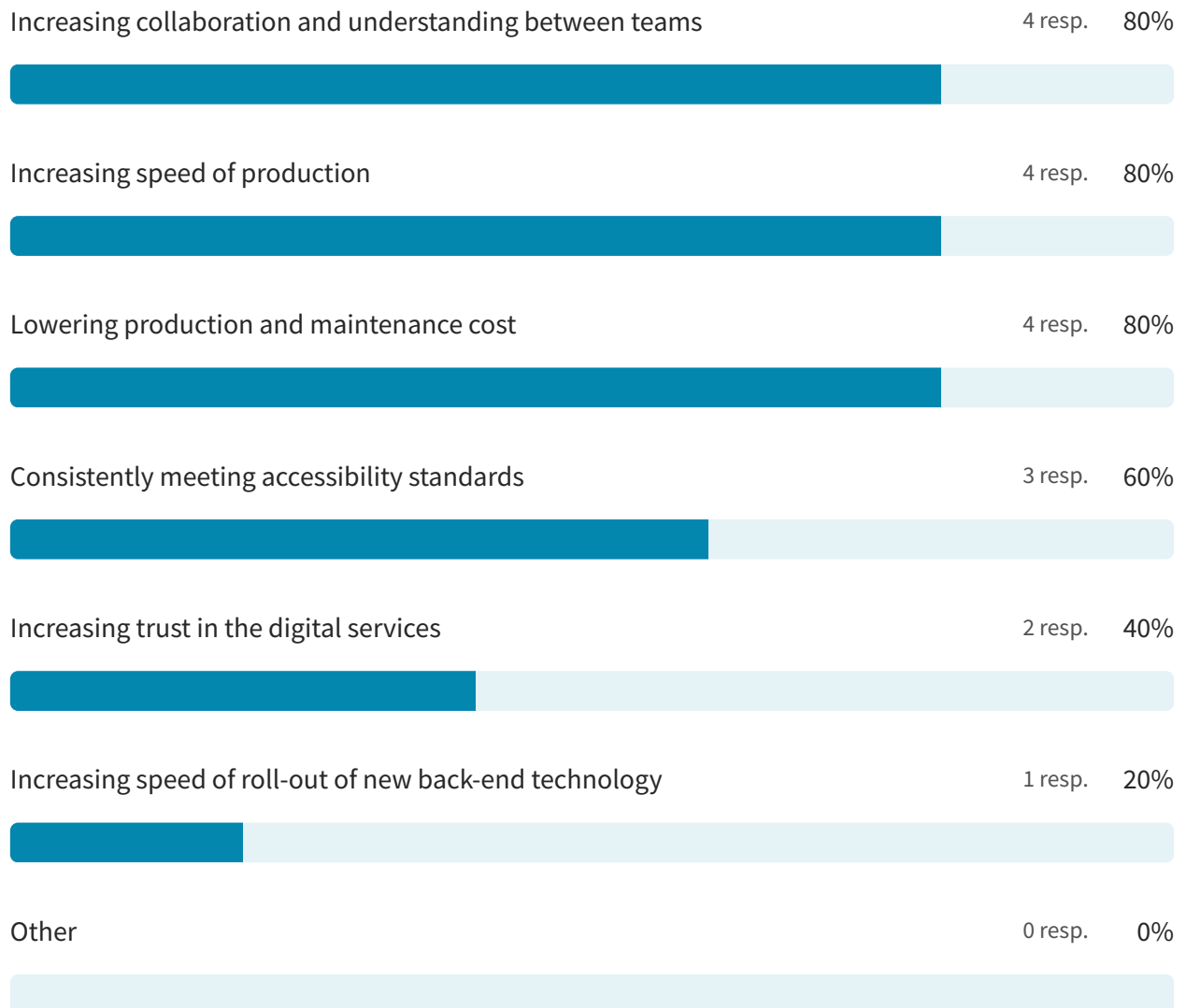


Business, int'l orgs.



## Expected benefits

5 out of 34 answered





## Perceived benefits

8 out of 34 answered

Increasing collaboration and understanding between teams

8 resp. 100%



Increasing speed of production

8 resp. 100%



Consistently meeting accessibility standards

7 resp. 87.5%



Increasing trust in the digital services

7 resp. 87.5%



Lowering production and maintenance cost

6 resp. 75%



Increasing speed of roll-out of new back-end technology

4 resp. 50%



Other

0 resp. 0%



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## Challenges in terms of development and launch

13 out of 34 answered

Difficulty in promoting adoption

7 resp. 53.8%



Difficulty attracting necessary talent

6 resp. 46.2%



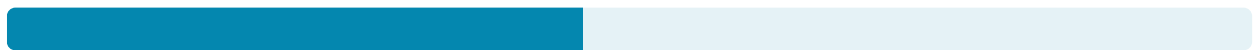
Difficulty in getting teams to collaborate or follow spirit of the guidelines

6 resp. 46.2%



Difficulty securing funding

6 resp. 46.2%



Understaffed

5 resp. 38.5%



Difficulty securing management backing (User orgs.)

4 resp. 30.8%



Insufficient discussion early on

4 resp. 30.8%



Lack of clear management or leadership

3 resp. 23.1%



Difficulty securing management backing (Own org.)

1 resp. 7.7%



Too many people involved

1 resp. 7.7%



Other

1 resp. 7.7%



Managing, encouraging and prioritising outside contribution



## Challenges with regards to maintenance and expansion

7 out of 34 answered

Difficulty maintaining adherence to the design system 4 resp. 57.1%



Difficulty maintaining cohesive team 4 resp. 57.1%



Difficulty expanding the design system (Content, service patterns etc.) 3 resp. 42.9%



Difficulty continuously securing funding 1 resp. 14.3%



Difficulty maintaining management backing 1 resp. 14.3%



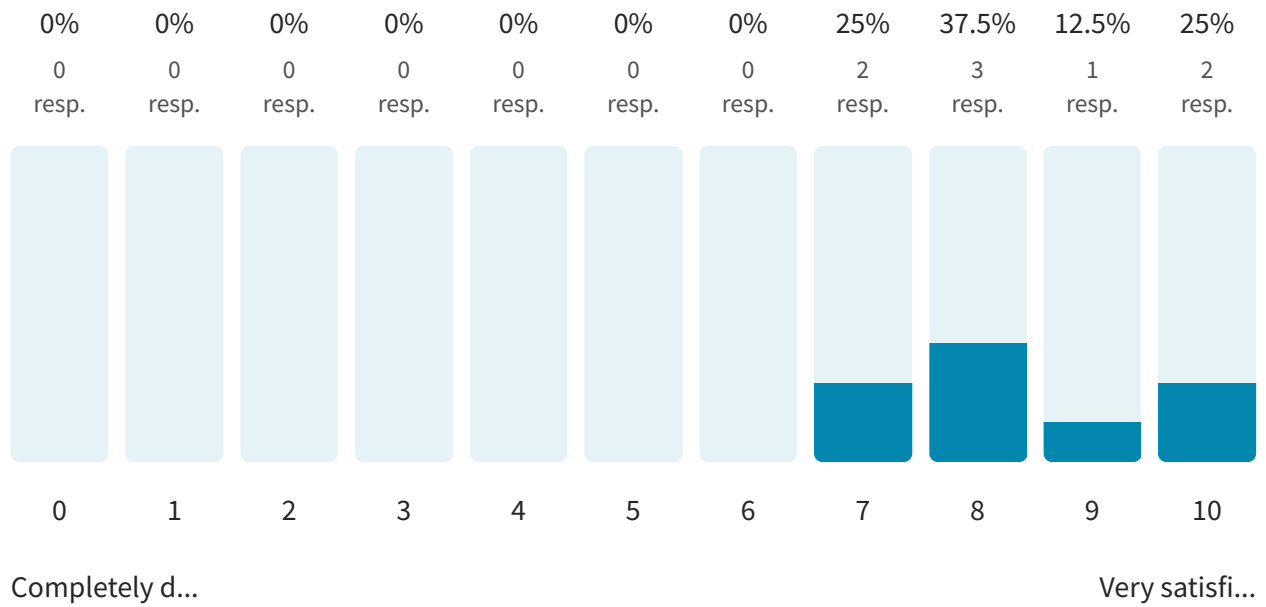
Other 0 resp. 0%



Do you consider the design system a succes?

8 out of 34 answered

## 8.4 Average rating



## User Community Engagement

11 out of 34 answered

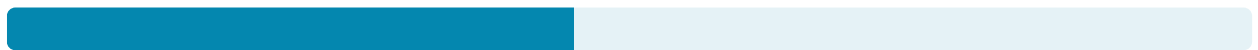
Slack Channels 10 resp. 90.9%



Email Support Requests 7 resp. 63.6%



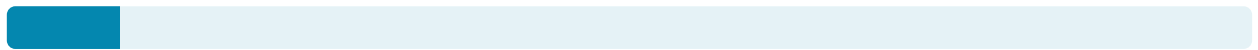
Meetups 5 resp. 45.5%



GitHub 4 resp. 36.4%



Other 1 resp. 9.1%



[Service Desk](#)



**The End**

# APPENDIX 1

## Interview Guide

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Thank you for taking your time to participate in this interview.

### Background

We are doing a project for the Japanese government, where we research global experiences with (public sector) design systems. We appreciate your contribution to this effort.

- Are you ok with recording the interview for reference?
- We will publish a report in the early Fall 2021 which will be publicly available, but tailored to the teams working on setting up the Digital Agency of Japan.
- Esben Groendal from Public Intelligence Japan will be the main interviewer, while Chikako Masuda and Eiji Kano from the public think-tank IAIS might add questions throughout. We might also have an employee from the Japan Digital Agency present.
- We might have Japanese translation going on in the background to aid in review afterwards.

The questions for this interview are structured around the fact, that we would like to learn about how the design system came to be, how it is currently being run and what's ahead. We would like to shed light on this through the lenses of the design system itself, the team building it and the organisational structure(s) surrounding these.

### Introductions

1. What do you do?
2. When did you join?
3. Why did you join?



# 1. The Design System Itself

## 1.1. Past

- 1.1.1. Where did it start? And how?
  - 1.1.1.1. Did you have points of reference? Private systems?
- 1.1.2. How did you prepare the architecture?
- 1.1.3. How did you make the framework for content management?
- 1.1.4. Examples of obstacles to be overcome in setting up and proliferating?
- 1.1.5. Looking back, what would you wish you knew when you started?
  - 1.1.5.1. How should the ideal process look like for setting up a Digital Agency or Design System?

## 1.2. Present

- 1.2.1. What is the scope/boundaries of your design system? To what extent should it accommodate everyone?
  - 1.2.1.1. Who can use the design system? Who is it for?
  - 1.2.1.2. What services does it cover? Do you work with other public service providers, like local governments around it?
  - 1.2.1.3. Is the system actually being used? Is it voluntary or obligatory? How is it enforced?
- 1.2.2. What are the procedures around managing and developing/improving the system? Prioritizing components to build and test for example.
- 1.2.3. Is it distinctly British, or are you tapping into/feeding international design trends?
- 1.2.4. How are you adapting broader, global trends into development?
- 1.2.5. What are the major issues facing the team today?
- 1.2.6. Do you see any demerits to having a centralized design system?
- 1.2.7. How does terminology, metadata standards and service catalogue relate to international standards and British data strategy

## 1.3. Future

- 1.3.1. What is the future of the design system? Is there an end-goal?

## **2. Team**

### **2.1. Past**

- 2.1.1. How did the team look in the beginning? (Who was on it and what did they do?)
  - 2.1.1.1. Did you work with outside consultants in the beginning? Still?
- 2.1.2. How did it grow and progress?

### **2.2. Present**

- 2.2.1. How many are on the team now?
- 2.2.2. What kind of people are working on it, and how are they working on in a day to day capacity? (I can imagine it started with simply putting stuff out, and then iterating through user testing?)

### **2.3. Future**

- 2.3.1. Where is the team headed?
- 2.3.2. New roles? Growing?

## **3. The Organization**

### **3.1. Past**

- 3.1.1. Who had to be convinced first?
- 3.1.2. Who took initiative and ownership and gave the go-ahead?
- 3.1.3. What were the major problems organizationally, and how were they overcome?

### **3.2. Present**

- 3.2.1. How integrated is the digital agency? Where is it placed within the governance structure?
- 3.2.2. Where is the design system located, and how is it funded?
  - 3.2.2.1. What role does the design system play in the digitization agenda as a whole?
- 3.2.3. How do you maintain or increase organisational buy-in? And what have been milestones around this?
- 3.2.4. How do you measure ROI? (Saw your Gov Design talk on measuring value. Developer time saved is an interesting metric)
  - 3.2.4.1. What are the goals, evaluation process and criteria?
  - 3.2.4.2. How are they decided upon, and in what way are they updated?
- 3.2.5. I can imagine advocacy was and is a big point of interest. How is it done? Formal/systematic processes or initiatives?
- 3.2.6. What are the major organizational issues you are looking at?

### **3.3. Future**

- 3.3.1. What is your growth strategy around gaining trust within government?
- 3.3.2. Where are you headed?

# APPENDIX 2

## Survey Data

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*See tables on the following pages*

Project ID	Project Name	Project Manager	Project Sponsor	Project Description	Project Start Date	Project End Date	Project Status	Project Budget	Project Revenue	Project Profit	Project Risk	Project Complexity	Project Scope	Project Deliverables	Project Milestones	Project Key Dates	Project Key Contacts	Project Key Documents	Project Key Metrics	Project Key Risks	Project Key Issues	Project Key Comments	Project Key Notes
1001	Project Alpha	John Doe	Jane Smith	Project Alpha Description	2023-01-01	2023-12-31	Completed	\$1,000,000	\$1,200,000	\$200,000	Low	Medium	Project Alpha Scope	Project Alpha Deliverables	Project Alpha Milestones	Project Alpha Key Dates	Project Alpha Key Contacts	Project Alpha Key Documents	Project Alpha Key Metrics	Project Alpha Key Risks	Project Alpha Key Issues	Project Alpha Key Comments	Project Alpha Key Notes
1002	Project Beta	Jane Smith	John Doe	Project Beta Description	2023-02-01	2024-01-31	In Progress	\$800,000	\$900,000	\$100,000	Medium	High	Project Beta Scope	Project Beta Deliverables	Project Beta Milestones	Project Beta Key Dates	Project Beta Key Contacts	Project Beta Key Documents	Project Beta Key Metrics	Project Beta Key Risks	Project Beta Key Issues	Project Beta Key Comments	Project Beta Key Notes
1003	Project Gamma	John Doe	Jane Smith	Project Gamma Description	2023-03-01	2024-02-28	On Hold	\$600,000	\$700,000	\$100,000	Low	Medium	Project Gamma Scope	Project Gamma Deliverables	Project Gamma Milestones	Project Gamma Key Dates	Project Gamma Key Contacts	Project Gamma Key Documents	Project Gamma Key Metrics	Project Gamma Key Risks	Project Gamma Key Issues	Project Gamma Key Comments	Project Gamma Key Notes
1004	Project Delta	Jane Smith	John Doe	Project Delta Description	2023-04-01	2024-03-31	Planned	\$400,000	\$500,000	\$100,000	Medium	High	Project Delta Scope	Project Delta Deliverables	Project Delta Milestones	Project Delta Key Dates	Project Delta Key Contacts	Project Delta Key Documents	Project Delta Key Metrics	Project Delta Key Risks	Project Delta Key Issues	Project Delta Key Comments	Project Delta Key Notes
1005	Project Epsilon	John Doe	Jane Smith	Project Epsilon Description	2023-05-01	2024-04-30	On Hold	\$200,000	\$300,000	\$100,000	Low	Medium	Project Epsilon Scope	Project Epsilon Deliverables	Project Epsilon Milestones	Project Epsilon Key Dates	Project Epsilon Key Contacts	Project Epsilon Key Documents	Project Epsilon Key Metrics	Project Epsilon Key Risks	Project Epsilon Key Issues	Project Epsilon Key Comments	Project Epsilon Key Notes
1006	Project Zeta	Jane Smith	John Doe	Project Zeta Description	2023-06-01	2024-05-31	Planned	\$100,000	\$200,000	\$100,000	Medium	High	Project Zeta Scope	Project Zeta Deliverables	Project Zeta Milestones	Project Zeta Key Dates	Project Zeta Key Contacts	Project Zeta Key Documents	Project Zeta Key Metrics	Project Zeta Key Risks	Project Zeta Key Issues	Project Zeta Key Comments	Project Zeta Key Notes
1007	Project Eta	John Doe	Jane Smith	Project Eta Description	2023-07-01	2024-06-30	On Hold	\$50,000	\$100,000	\$50,000	Low	Medium	Project Eta Scope	Project Eta Deliverables	Project Eta Milestones	Project Eta Key Dates	Project Eta Key Contacts	Project Eta Key Documents	Project Eta Key Metrics	Project Eta Key Risks	Project Eta Key Issues	Project Eta Key Comments	Project Eta Key Notes
1008	Project Theta	Jane Smith	John Doe	Project Theta Description	2023-08-01	2024-07-31	Planned	\$25,000	\$50,000	\$25,000	Medium	High	Project Theta Scope	Project Theta Deliverables	Project Theta Milestones	Project Theta Key Dates	Project Theta Key Contacts	Project Theta Key Documents	Project Theta Key Metrics	Project Theta Key Risks	Project Theta Key Issues	Project Theta Key Comments	Project Theta Key Notes
1009	Project Iota	John Doe	Jane Smith	Project Iota Description	2023-09-01	2024-08-31	On Hold	\$12,500	\$25,000	\$12,500	Low	Medium	Project Iota Scope	Project Iota Deliverables	Project Iota Milestones	Project Iota Key Dates	Project Iota Key Contacts	Project Iota Key Documents	Project Iota Key Metrics	Project Iota Key Risks	Project Iota Key Issues	Project Iota Key Comments	Project Iota Key Notes
1010	Project Kappa	Jane Smith	John Doe	Project Kappa Description	2023-10-01	2024-09-30	Planned	\$6,250	\$12,500	\$6,250	Medium	High	Project Kappa Scope	Project Kappa Deliverables	Project Kappa Milestones	Project Kappa Key Dates	Project Kappa Key Contacts	Project Kappa Key Documents	Project Kappa Key Metrics	Project Kappa Key Risks	Project Kappa Key Issues	Project Kappa Key Comments	Project Kappa Key Notes
1011	Project Lambda	John Doe	Jane Smith	Project Lambda Description	2023-11-01	2024-10-31	On Hold	\$3,125	\$6,250	\$3,125	Low	Medium	Project Lambda Scope	Project Lambda Deliverables	Project Lambda Milestones	Project Lambda Key Dates	Project Lambda Key Contacts	Project Lambda Key Documents	Project Lambda Key Metrics	Project Lambda Key Risks	Project Lambda Key Issues	Project Lambda Key Comments	Project Lambda Key Notes
1012	Project Mu	Jane Smith	John Doe	Project Mu Description	2023-12-01	2024-11-30	Planned	\$1,562	\$3,125	\$1,562	Medium	High	Project Mu Scope	Project Mu Deliverables	Project Mu Milestones	Project Mu Key Dates	Project Mu Key Contacts	Project Mu Key Documents	Project Mu Key Metrics	Project Mu Key Risks	Project Mu Key Issues	Project Mu Key Comments	Project Mu Key Notes
1013	Project Nu	John Doe	Jane Smith	Project Nu Description	2024-01-01	2025-01-31	On Hold	\$781	\$1,562	\$781	Low	Medium	Project Nu Scope	Project Nu Deliverables	Project Nu Milestones	Project Nu Key Dates	Project Nu Key Contacts	Project Nu Key Documents	Project Nu Key Metrics	Project Nu Key Risks	Project Nu Key Issues	Project Nu Key Comments	Project Nu Key Notes
1014	Project Xi	Jane Smith	John Doe	Project Xi Description	2024-02-01	2025-02-28	Planned	\$390	\$781	\$390	Medium	High	Project Xi Scope	Project Xi Deliverables	Project Xi Milestones	Project Xi Key Dates	Project Xi Key Contacts	Project Xi Key Documents	Project Xi Key Metrics	Project Xi Key Risks	Project Xi Key Issues	Project Xi Key Comments	Project Xi Key Notes
1015	Project Omicron	John Doe	Jane Smith	Project Omicron Description	2024-03-01	2025-03-31	On Hold	\$195	\$390	\$195	Low	Medium	Project Omicron Scope	Project Omicron Deliverables	Project Omicron Milestones	Project Omicron Key Dates	Project Omicron Key Contacts	Project Omicron Key Documents	Project Omicron Key Metrics	Project Omicron Key Risks	Project Omicron Key Issues	Project Omicron Key Comments	Project Omicron Key Notes
1016	Project Pi	Jane Smith	John Doe	Project Pi Description	2024-04-01	2025-04-30	Planned	\$97	\$195	\$97	Medium	High	Project Pi Scope	Project Pi Deliverables	Project Pi Milestones	Project Pi Key Dates	Project Pi Key Contacts	Project Pi Key Documents	Project Pi Key Metrics	Project Pi Key Risks	Project Pi Key Issues	Project Pi Key Comments	Project Pi Key Notes
1017	Project Rho	John Doe	Jane Smith	Project Rho Description	2024-05-01	2025-05-31	On Hold	\$48	\$97	\$48	Low	Medium	Project Rho Scope	Project Rho Deliverables	Project Rho Milestones	Project Rho Key Dates	Project Rho Key Contacts	Project Rho Key Documents	Project Rho Key Metrics	Project Rho Key Risks	Project Rho Key Issues	Project Rho Key Comments	Project Rho Key Notes
1018	Project Sigma	Jane Smith	John Doe	Project Sigma Description	2024-06-01	2025-06-30	Planned	\$24	\$48	\$24	Medium	High	Project Sigma Scope	Project Sigma Deliverables	Project Sigma Milestones	Project Sigma Key Dates	Project Sigma Key Contacts	Project Sigma Key Documents	Project Sigma Key Metrics	Project Sigma Key Risks	Project Sigma Key Issues	Project Sigma Key Comments	Project Sigma Key Notes
1019	Project Tau	John Doe	Jane Smith	Project Tau Description	2024-07-01	2025-07-31	On Hold	\$12	\$24	\$12	Low	Medium	Project Tau Scope	Project Tau Deliverables	Project Tau Milestones	Project Tau Key Dates	Project Tau Key Contacts	Project Tau Key Documents	Project Tau Key Metrics	Project Tau Key Risks	Project Tau Key Issues	Project Tau Key Comments	Project Tau Key Notes
1020	Project Upsilon	Jane Smith	John Doe	Project Upsilon Description	2024-08-01	2025-08-31	Planned	\$6	\$12	\$6	Medium	High	Project Upsilon Scope	Project Upsilon Deliverables	Project Upsilon Milestones	Project Upsilon Key Dates	Project Upsilon Key Contacts	Project Upsilon Key Documents	Project Upsilon Key Metrics	Project Upsilon Key Risks	Project Upsilon Key Issues	Project Upsilon Key Comments	Project Upsilon Key Notes
1021	Project Phi	John Doe	Jane Smith	Project Phi Description	2024-09-01	2025-09-30	On Hold	\$3	\$6	\$3	Low	Medium	Project Phi Scope	Project Phi Deliverables	Project Phi Milestones	Project Phi Key Dates	Project Phi Key Contacts	Project Phi Key Documents	Project Phi Key Metrics	Project Phi Key Risks	Project Phi Key Issues	Project Phi Key Comments	Project Phi Key Notes
1022	Project Chi	Jane Smith	John Doe	Project Chi Description	2024-10-01	2025-10-31	Planned	\$1	\$3	\$1	Medium	High	Project Chi Scope	Project Chi Deliverables	Project Chi Milestones	Project Chi Key Dates	Project Chi Key Contacts	Project Chi Key Documents	Project Chi Key Metrics	Project Chi Key Risks	Project Chi Key Issues	Project Chi Key Comments	Project Chi Key Notes
1023	Project Psi	John Doe	Jane Smith	Project Psi Description	2024-11-01	2025-11-30	On Hold	\$0	\$1	\$0	Low	Medium	Project Psi Scope	Project Psi Deliverables	Project Psi Milestones	Project Psi Key Dates	Project Psi Key Contacts	Project Psi Key Documents	Project Psi Key Metrics	Project Psi Key Risks	Project Psi Key Issues	Project Psi Key Comments	Project Psi Key Notes
1024	Project Omega	Jane Smith	John Doe	Project Omega Description	2024-12-01	2025-12-31	Planned	\$0	\$0	\$0	Medium	High	Project Omega Scope	Project Omega Deliverables	Project Omega Milestones	Project Omega Key Dates	Project Omega Key Contacts	Project Omega Key Documents	Project Omega Key Metrics	Project Omega Key Risks	Project Omega Key Issues	Project Omega Key Comments	Project Omega Key Notes

