

IBM Center for The Business of Government

Human-Centricity in Digital Delivery: Enhancing Agile Governance

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FOREWORD

On behalf of the IBM Center for The Business of Government, we are pleased to release this new report, *Human Centricity in Digital Delivery: Enhancing Agile Governance*, by Ines Mergel, Professor of Digital Governance and Public Administration at the University of Konstanz in Germany.

In this report, the author discusses how digital service teams bring “service designers” into government to transform service delivery. These designers use human-centered design approaches to help public sector organizations refine strategies, rethink the nature of services, and reflect the way that citizens want to use a public service. The report focuses on how human centricity can help to transform digital service delivery in a way that improves government agility, with results that address principles, mindsets, techniques, and practices.

The report makes recommendations to help governments to work together and with external partners to build competencies for redesigning public services in a way that benefits the users of those services. Key priority actions include:

- Start with small steps to experience what the increase in inclusion and participation feels like.
- Closely look at the types of problems to solve as part of the digital transformation of public services.
- Include managers both in the educational experience as well as in the actual doing.
- Collect data from users.
- Review and check hypotheses based on user data.
- Act in the open if at all possible.
- Test prototypes with users.

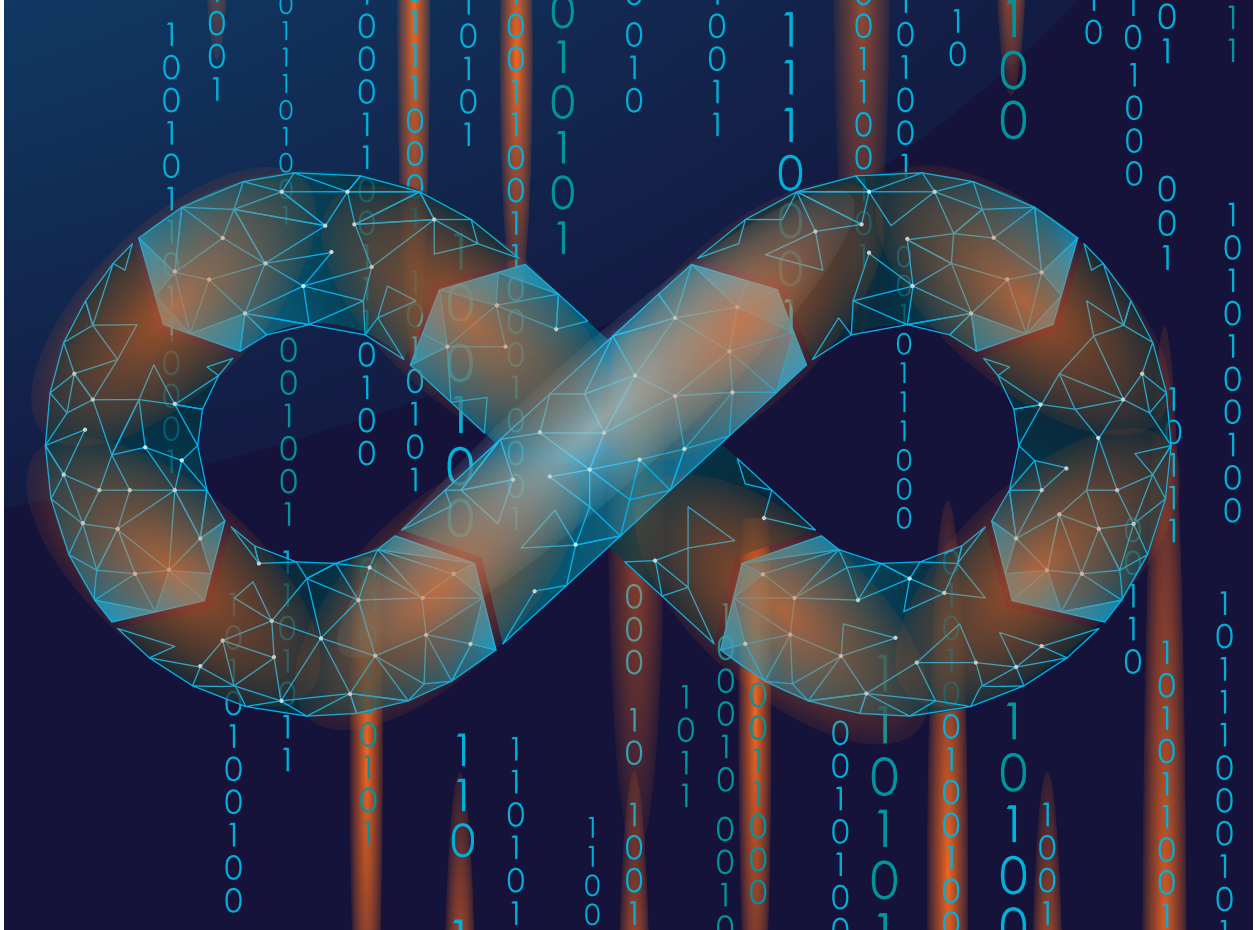
This report builds on prior IBM Center reports focused on user experience, digital services, and agility written by Ines Mergel and other authors, including: *Agile Government: The Role of Public Affairs Administration*; *Adopting Agile in State and Local Governments*; *The Road to Agile Government: Driving Change to Achieve Success*; *Agile Problem-Solving in Government: A Case Study of the Opportunity Project*; *Applying Design Thinking to Public Service Delivery*; and *Digital Services Teams: Challenges and Recommendations for Government*. Mergel’s work also complements current research and action emanating from the Agile Government Center, on which our Center partners with the National Academy of Public Administration.



DANIEL J. CHENOK



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We hope this report provides helpful recommendations for government leaders and partners in using a human-centric approach to improve government services by addressing how people can best access and benefit from those services.

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INTRODUCTION

Governments and public administrators design policies, organizations, services, processes, decisions, and even organizational routines and practices on a daily basis. They traditionally conduct these steps as experts and decision makers based on their role assigned by law or policy.

Designing forms filled out by the public needed by government to administer these functions generally either adds new fields to an existing form to account for exceptions or revisions of policies, or creates a new form when a new policy or regulation requires new modes of data collection from users. Such changes also lead to adjusted administrative processes, or the design of new processes. In some instances, the requirements are defined by law, like the German “DIN” norms on how to design forms.¹ In other instances, government officials have the discretion to design processes and forms the way they deem appropriate as experts.

This complex chain of activity often results in administrative processes with immense bureaucratic burdens that are difficult to navigate even for experts, and which can systematically exclude vulnerable populations who have technical or procedural difficulty navigating convoluted administrative processes. In a worst-case scenario, users can be systematically excluded from access to services that they are eligible for by law—in other words, they drop a current process, or never start a new one. In less extreme scenarios, users can become annoyed, lose confidence in how government conducts business with them, or start to mistrust their representatives as reflecting their negative view of general government performance.

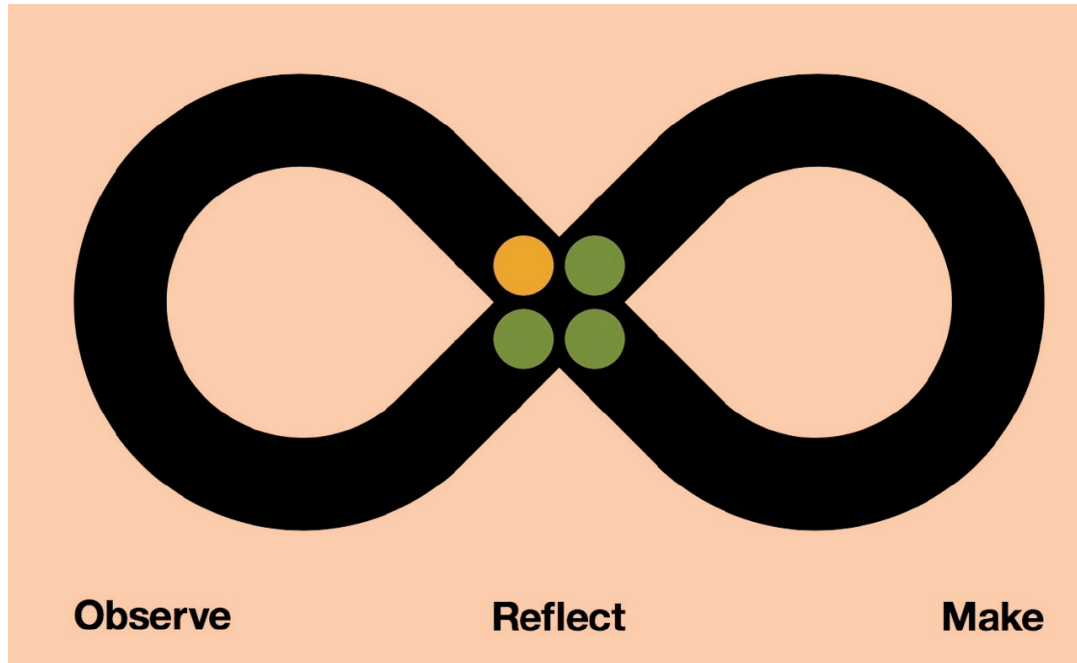
In a world where extreme voices dominate the media landscape with fights against “big government” or the “deep state,” any of these troubling scenarios can be partially mitigated by governments who design public services with a *human-centric* mindset. This approach can make administrative processes and interactions with government easy to access for all types of users, or even automated to reduce administrative burdens.

During the last decade, user-centricity has become a key tenant of digital transformation in the public sector. Governments that bring in external competencies through programs—like innovation fellows or digital stewards, as well as new structures like innovation labs or digital service teams—have increased the application of new work practices to administer government services. They build on a new value set, such as the Agile Manifesto for Software Development (2001), that promotes the belief that individuals best know their needs and should not adjust needs to existing and potentially failing software or processes. Moreover, agile principles promote clients and customers in the design of digital processes and products, instead of leaving the decision solely up to internal experts.

User-focused agile principles have been adapted in the work of the Agile Government Network, hosted by the National Academy of Public Administration: “Customers should be intimately involved in design and redesign of the program and a focus on the customer journey should be ingrained in the culture of the organization.”²

1. <https://www.agilealliance.org/agile101/the-agile-manifesto/>.

2. <https://napawash.org/grand-challenges-blog/summary-agile-government-principles>.



This report provides an evidence-based overview of the core concept of user-centricity, and outlines how all members of digital transformation projects can move toward a user-centric mindset by applying the methods and tools of design thinking and agile governance.

Many dimensions of a user-centric mindset, its approaches, and ways of coordinating co-design with users in multidisciplinary teams differ from traditional administrative procedures, process focus, and hierarchical decision making-processes in government. At the end of this report, a list of hands-on recommendations provides approaches small enough to start quickly, as well as some more substantial and requiring a larger conversation to proceed.

This report is based on qualitative interviews with members of digital services teams in the U.S. and abroad, innovation fellows in government or who work adjacent to government to support the digital transformation of administrative processes, and public service designers in charge of introducing service design mindset and methods to government. The interviews included leaders of digital service teams and colleagues in different divisions or subunits, and focused on understanding general assumptions underlying their goals and requirements to implement a human-centric approach to designing digital public services. Special attention went to those who design digital public services on an operational level and conduct user research as part of their methodological toolbox.

This report complements previous IBM reports, such as Liedtka and Salzman's report on [Applying Design Thinking to Public Service Delivery](#) or Gurin and Rebello's report on [Agile Problem Solving in Government](#), and my own [Digital Services Teams: Challenges and Recommendations for Government](#).

This report first provides an overview of why human centrality matters in the public sector, then elaborates on how government leaders can support a human-centric mindset and further explains operational human-centric. The report concludes with recommendations on how to implement human centrality.

Why User-Centricity Matters in the Public Sector



As part of design science research, public administrators have to carefully think about how they design policies, decision-making and implementation routines in public administrations.³ As policies have to be interpreted for implementation, design continues in the operational process where civil servants must make sense of the law and conduct professional activities as experts to implement the law.⁴

Government service design is a relative recent development. It followed on the digital transformation efforts that many national governments have tried to tackle to improve. Some recent triggers to adopt a user-centric mindset include efforts to move toward single sign-on to access multiple government agencies, e-filing of forms, and also reforms to regulations that constrain user involvement like the Paperwork Reduction Act.⁵ In these efforts, however, digital transformation is often budgeted as a product, with the expectation of completion once delivered. However, public administrations need to build software with planning, budgeting, and design as a long-term program to be continuously improved.

While most of the public uses government services infrequently, evidence shows a clear connection between their assumptions and actual experiences with a government service and their decreasing trust in government. As government transformation in the digital era proceeds in the face of faltering trust in government's ability to deliver timely and high-quality services, digital public service design has received renewed attention.⁶

Many governments have built digital service teams that operate out of the prime minister's or president's offices with comfortably large budgets, and have comprehensive discretion and freedom to onboard experts with skills not readily or explicitly available in to agencies.⁷

These initiatives are based on policy mandates that emerged and are emulated by many different countries. They include:

- In the United Kingdom, former Cabinet Office Minister Francis Maude provided a brief with reasons and instructions on how to form the first Government Digital Service team.
- In the U.S., former President Obama's statements spoke about the need for a digital service team: "What we realized was that we could potentially build a SWAT team, a world-class technology office inside of the government that was helping agencies. We've dubbed that the U.S. Digital Service . . . they are making an enormous difference." Recently, President Biden followed up with an Executive Order on Transforming Federal Customer Experience and Service Delivery to Rebuild Trust in Government—labelled "Putting the Customer First."⁸ The order established human-centered design as a methodology to create public services that customers of all abilities can access.
- In Canada, the Canadian Digital Service was built based on the experiences in the U.K. and U.S. with the goal to "change the way government designs and delivers services to Canadians," and has delivered its first agile methodology approaches.⁹
- Across Europe, the Ministerial declaration of E-Government, also known as the Tallinn Declaration from 2017,¹⁰ focused on investing in accelerating the modernization of the

3. Álvarez, Chisnell, and Graubard (2020); Sinai, Leftwich, and McGuire (2020), Simon and Barenfeld (1969).

4. Barzelay (2019).

5. See <https://pra.digital.gov/> for more information.

6. See OECD's work on trust in government: <https://www.oecd.org/governance/trust-in-government/>.

7. Mergel, 2017, 2Mergel, 2017, 2019; Mergel, Bellé, & Nasi, 2021.

8. See, Facts Sheet: Putting the Public First: Improving Customer Experience and Service Delivery for the American People, December 13, 2021.

9. See, Evaluation of the Canadian Digital Service (2021): <https://www.canada.ca/en/treasury-board-secretariat/corporate/reports/evaluation-canadian-digital-service.html>.

10. Archived: <https://ec.europa.eu/digital-single-market/en/news/ministerial-declaration-egovernment-tallinn-declaration>.

public sector, by increasing the transparency, responsiveness, reliability, and integrity of public governance to strengthen trust in government. An action plan then focused specifically on ensuring the consistent quality of user experience in digital public services as set out in the Annex “User-centricity principles for design and delivery of digital public services.”¹¹ This work was updated with the 2020 Berlin Declaration on Digital Society and Value-Based Digital Government that emphasized democratic values in the digital sphere, social participation and inclusion, digital empowerment and digital literacy.¹²

- In Germany, the chancellery bought the Digital Service 4Germany company and has run it as a government digital service since 2020. Former Chancellor Merkel reflected on the need to lower bureaucracy and access barriers to government services: “How can I make life easier for the person who wants to make use of a government service? And not: How can I make something so complicated that it is used as rarely as possible?”¹³
- Most recently, the United States Digital Response (USDR) network, with more than 7,000 volunteers, has shown that digital response during a pandemic means “building inclusively by creating portals, applications and other access points in multiple languages” in order to future-proof government.¹⁴

Many other countries have followed suit in building or have already established digital service teams to act faster and with new tools and methods to increase human centrality in public service design and delivery.

Types of Human Centrality

The recent wave of digital transformation efforts, combined with the creation of digital service teams that focus explicitly on the redesign of public services for the digital age as well as designers and their methods, are incorporated into the co-design process of digital public services.

User-Centricity

A user-centric approach emerged in the software industry when designers needed to understand user experience to meet their needs in product or services design.¹⁵ These private-sector-like practices were slowly adopted as citizen-centric approaches. This conceptualization reemphasizes the importance that citizens feel a sense of belonging to and participation in the community.¹⁶

Public administrations are becoming more responsive to citizens by actively listening to their needs beyond political processes. User needs are derived from understanding user experience with a service, and refer to awareness, adoption and satisfaction of that service.¹⁷ Individual needs stem from an individual experience for a service, rather than considering the benefits for other citizens. Table 1 outlines different elements of user-centricity relative to citizen-centricity.

11. Annex “User-centricity principles for design and delivery of digital public services, available online: <https://knowwww.eu/nodes/5a01bd769f3d4f00011e9b6a>.

12. Berlin Declaration, available online: <https://www.bmi.bund.de/SharedDocs/pressemitteilungen/EN/2020/12/berlin-declaration-digitalization.html>.

13. See, speech by former Chancellor Merkel (2015): <https://www.bundesregierung.de/breg-de/service/bulletin/rede-von-bundeskanzlerin-dr-angela-merkel-783726>.

14. Quaintance (2022).

15. Forlizzi (2018).

16. Albino, Berardi, and Dangelico (2015).

17. Abella et al. (2019).

Table 1: From human—to user—and citizen-centricity

Umbrella concept	Human-centricity	
Sub-concept	User-centricity	Citizen-centricity
What is a citizen?	User of a public service	Inhabitants, workers, users of a public service
Definitions of the needs	Related to the service Individual level	Related to the community Community level
Role of citizens	Passive (give feedback, get informed)	Active (give feedback, can take initiative, contribute to discussions)
Role of city managers	Take decisions, set the agenda	Empower citizens, coordinator of the public sphere
Goal	Optimization of a service	Public value creation

The applied practice of design thinking emerged in the engineering and information technology fields, where designers reflected on how to conceive a product, system, or service and developed ways on how to innovate based on the input from users.¹⁸

Three different forms of design include:¹⁹

1. Technology-driven design focuses on the technical characteristics of a technology or infrastructure to provide a service, such as smart parking meters.²⁰ However, when designers only focus on the possibilities that technology provides, they tend to neglect the needs of the users of technology and adoption may be low. A pure technology-driven approach neglects social and cultural challenges that users face.
2. Environmentally sustainable design focuses on the socio-ecological system and citizens' interactions with technology, and with stakeholders and their needs.²¹
3. Human-centered design focuses on identifying the needs of many stakeholders.²² Human-centricity focuses on the identification of people's needs and on the empowerment of actors in the decision-making process.

As shown in Table 2 below, the three approaches presented above do not necessarily compete with each other. All recognize use of data and technology to improve experiences and acceptance by its users.

18. Plattner, Meinel, and Weinberg (2009).

19. Giacomini (2014).

20. Peng, Nunes, and Zheng (2017).

21. Shapira, Ketchie, and Nehe (2017).

22. Giacomini (2014), Oliveira and Campolargo (2015).

Table 2: Types of user-centricity

	Technology-driven	Human-centricity	More-than-human & environmentally-sustainable design
Focus	Means (technology)	Decision-making process (people’s needs and experience)	Effect (socio-environmental impact)
Process	Optimization of technology	Co-production, citizen participation	Impact analysis, citizen participation
Goal	Competitiveness, Innovative products/ service	Public value Meet people’s needs	Preservation of the environment



Figure 1: “Civil servants are users too”—Poster GDS (UK)

This report uses human centrality and user centrality as equivalents: both terms incorporate citizens as well as other users who must use government services and cannot choose to access the same service from another source.

The terms include not only the recipient of government services, but also all other parties who interact with the service and are part of the creation and delivery phases. This includes parties involved in creating regulations and policies for public services, and especially civil servants in charge of implementing and delivering services.²³

Even though this deviates from the Biden administration’s use of the term customer experience in a recent Executive Order, human centrality similarly focuses on serving those who interact with government and use its services.²⁴ The Executive Order emphasizes the servicing component more than the actual interaction. All three definitions hold that government services should be designed in ways that reduce administrative burdens to access public services, allow access for those who need them through a seamless process and in the mode they prefer can access, and mitigate technological, data, ethical and political risks.

From User-Centricity to Public Service Design

In public service design, citizens’ opinions and needs can be collected via surveys and qualitative interviews. Citizens take the role of experts by reflecting on their actual experience with a public service at the point of use. However, as one of the interviewees mentioned: “Approaching services from a user-centered design perspective is a relatively new idea within government.”

Most recently, advanced governments have moved from this passive form of user research to more active forms and include citizens in the co-planning and co-design of public services. Paskaleva et al. suggest that these forms of co-design go through three phases:²⁵

23. See, for example: What is user-centered design anyway? By Clara Greo and Kara Kane on Medium.
 24. <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/12/13/executive-order-on-transforming-federal-customer-experience-and-service-delivery-to-rebuild-trust-in-government/>.
 25. Paskaleva, Cooper, and Concilo (2018).

- Creation of a community interaction environment
- Service co-design
- Community-based service implementation

In comparison with consultation or one-time political participation, co-design focuses on the actual creation of new services. Paskaleva et al. (2018) also found multiple engagement activities possible, with the most common ones being brainstorming exercises, creative workshops, and co-design workshops. In a co-design approach, citizens become co-producers and part of the decision-making with other stakeholders such as city managers, businesses, or universities.²⁶

Purao, Seng and Wu (2013) show that a citizen-centric service needs to respond to five key principles: 1) bridging abstractions, 2) aggregation levels, 3) personalization of services, 4) independent action, 5) accumulation to cases. Citizens can act as human sensors in addressing these principles.

Types of Problems to Tackle from a User-Centric Perspective

Digital Service Teams have consciously taken on a human-centric design perspective to solve some of the most pressing problems in public service delivery. This includes reviews of existing services to establish the number of administrative barriers thrown up and oftentimes impossible to overcome without switching channels, complaints about long delays, or negative feedback. It also includes building public services with a user-first mentality in combination with a digital first approach.

However, this perspective creates a dilemma given the sheer number of public services that exist and the small number of personnel employed to tackle the problem. And the comprehensive approach that many of the policies stated in the previous section require has led some critics to argue that this approach is inherently flawed without reflecting the political will and values.

Lindblom (1959) has advocated for iterative design and incremental “muddling through.” The assumption of a complex and mostly uncertain future calls in Lindblom’s view for a stepwise planning approach instead of large-scale and long-term strategic planning attempts, which have to be adjusted over time. This fundamentally opposes the otherwise linear policy development and implementation assumptions public administrations have to follow based on existing policy and process.

The need to quickly digitally transform public service delivery therefore pushes public administrations to apply new forms of work, which use design approaches that iteratively adapt to the often fast-changing needs of their users. New types of specialists, including user experience (UX), user interface (UI), and service or product designers, are entering an arena that might feel foreign to traditional tech teams—but in reality, public administration has always been a design discipline, and public servants design policy, institutions, organizations, processes, or services.²⁷

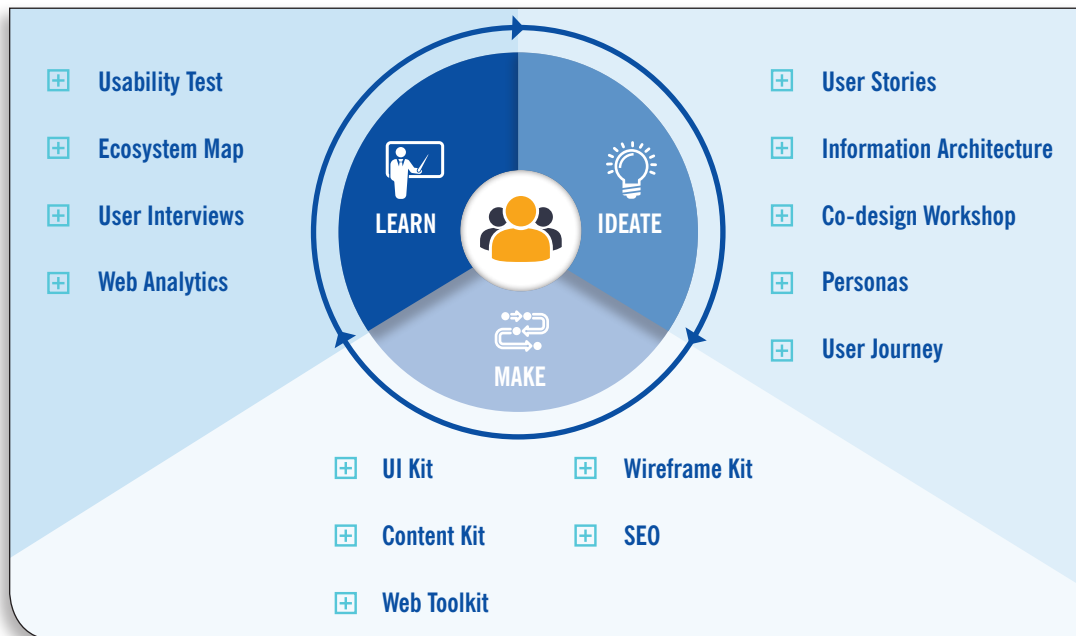
With the digital age, these design requirements have expanded to include new ways of thinking about digital service delivery and the application of practices from software development.²⁸ Rapid prototyping, iteration, and scrum now enter public administrations’ practices and change routines in how governments build or buy technology. An example is the Designers Italia’s design kit that provides an overview of the practices and tools that digital public service teams employ:

26. (Lim et al., 2018a).

27. See, for example, Barzelay and Thompson (2010), Levine, Backoff, Cahoon, and Siffin (1975), Osborne (2018).

28. Mergel (2016).

Figure 2 The new design system for Italian public services available on Designers Italia²⁹



What Can Be Achieved in a Human-Centered Design Project, and How?

Depending on the answers to these two questions, a project will be simple with obvious solutions, complicated, complex, or pure chaos. A simple administrative process makes a clear and easy to fill out form available—for example, to apply for vacation time. A service becomes more complicated with more rules and regulations and when a user has to figure out where to find the data to answer questions in a form—for example, when filing taxes. A service then becomes complex when certain requirements need to be met to even apply for a service. And a service is pure chaos when lacking preset answers or off-the-shelf solutions.

As one of the interviewees explains:



If you take a paper form and you simply convert it into an online form, that's digitizing. If you take a form and you understand that there are pain points to that form, there are moments when a user is unable to continue with that paper form, and then you work with a policy team, or the subject matter experts, to change the form, to revise it, to change the language and the content on the form, if you remove some of those requests on the form, if you remove some of the language, and then you present a new, better digital version, that I'd consider to be a proper digital transformation. Taking something that existed already, applying a user-centered design perspective to it, insuring that we're only asking for the required things, only collecting the required data, and then doing it in a way that's noninvasive, that's user-friendly, with intelligent content design that's comprehensive and easy to read and easy to understand, that is digital transformation for me.

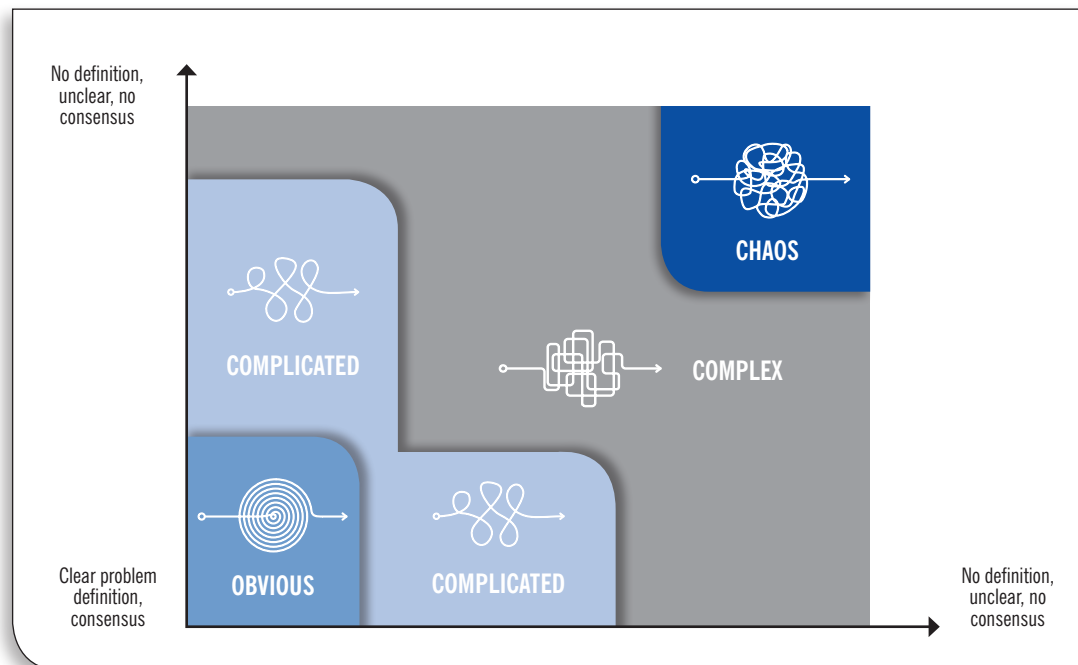


29. Representation of the Team Digitale's design kit available online: <https://medium.com/team-per-la-trasformazione-digitale/design-kit-designers-italia-digital-services-public-administration-eab8d4d1d44f> based on: <https://designers.italia.it/kit/> (in Italian only).

Consider this example: during tax season in Estonia, citizens need only to confirm an SMS with their automatically compiled tax return forms. According to the CEO of the software company supporting tax filing, about 25 percent of Estonians confirmed on day one before noon, 99.9 percent online and 50 percent using their mobile phone. This reduced burdens on day-long efforts to pull together all necessary documents, and wait time until the return requests are processed. The Estonian tax law allows for very few exemptions, so that directly copying this process is not suitable for many countries; this example nevertheless shows how a user-centric service can be designed to ease administrative burdens on citizens.


User-centered design approaches help in situations with—according to IBM’s Snowden and Boone (2007)—unclear decision-making or unavailable best practice. Design is straightforward in obvious situations with a clear relationship between cause and effect. However, most situations, especially when users are involved, are either complicated (with known unknowns), complex (unknown unknowns), or even chaotic (where both cause and effect are unclear):

Figure 3: Snowden and Boone’s Ceynfin decision-making model



A user-centric mindset is not only applied to digital services development, but can be employed to many different types of problems in government. As a Finnish designer explains:

Civil servants contact us because they are excited to work with a creative team. They might have a problem that they think we can help to find a solution for, or they just want to start collaborating, or they are interest in service design or they are stocking a digital project. We kind of go and then we start questioning to find the actual problem or the actual client needs. We go through this whole process of identifying what would be possible.



Creating a User-Centric Mindset for Digital Transformation Projects


Underlying the user-centric approach is a framework in which user-centric principles inform the mindset or ways of thinking about a public service problem, and the applied techniques and practices which include the methods and tools that support the principles. Interviews with digital transformation practitioners and public service designers in digital service teams point to four categories of approaches: a) principles, b) mindset, c) practices, and d) techniques.

The **principles** include the overall vision of user centrality: Focusing on user needs and not government needs, and moving away from an internal logic to providing government as a service. User centrality also considers civil servants as users who have to interact with a service. Both internal and external users prefer simplicity rather than complexity in how they want to use future services. One Canadian Digital Service member explains: “A user can be anyone who touches that service. A public servant, someone working in an office, or a member of the public.” Service design seeks to understand the perspectives of all users and is highly context specific.


As part of digital transformation efforts, a “*Digital First*” or “*Digital By Default*” approach emerges. During the implementation, digital service teams then apply the principles to invest no more in existing legacy IT, and to use open-source software so that code can be reused in other agencies. One pithy catchphrase used by the interviewees was “*Fewer codes, more code*”—meaning, moving away from how things were traditionally done in government and toward creating software code that is reusable and open for connection with other code, without compromising safety and data privacy.

The user-centric **mindset** includes empathy toward civil servants and users of their services — the acknowledgement that initial designers did everything they knew and approached the design from a legal and policy standpoint, rather than from a user perspective. Many constraints and a high level of complexity are involved in the move from an analog to a digital mindset. However, in delivering services during a pandemic, civil servants have experienced that digital has become the new normal.

As part of the **practices**, designers are included as project members. One designer mentions, “We as designers are involved in almost all our digital projects, because every project needs design for user interface aspects, content strategy and content design aspects.” For that purpose, the Italian Team Digitale has developed a common designer and developer platform. In addition, the U.K. government initiated the international government design community in order to help government designers to scale up best practices. One international designer explains how he learns across these different communities:



How we interact with the civil service, how we choose our projects, the lessons I learned from the Ministry of Justice when a project went badly or went poorly, I'm able to apply here and were able to see that mistakes have been made elsewhere in the world. We are able to learn from them because we're tapping that talent, and we're able to have really open communication with people from around the world.



Another designer adds:



It would be arrogant and foolish of us if we didn't look to other people's resources first. We have a network of international designers. I have people from across the world who I can actually ask questions around, people in Australia, and New Zealand, the United States, Germany, the United Kingdom, France, and Italy. There are slack channels for these people, they're publishing as well.



As part of the practices, multidisciplinary teams collaborate on delivery, as one of the service designers interviewed for this report says:



We refer to delivery teams as being a couple of different types of programmers or developers, a user researcher, a designer, a product manager. That formation in making sure that you have a set group of people whose only job is to focus on a single area allows us to have, you know, the most reach and the most effectiveness.



In practice, these approaches manifest in new forms of procuring digital service transformation projects and are internally promoted by digital service teams. As a result, many governments now provide service standards in form of playbooks, handbooks, or simply websites that provide a general understanding (mindset), and templates and examples on how to use the methods and tools. This provides clarity, guidance, and most importantly safety in knowing that user centricity has become an accepted practice in an agency, ministry, or potentially governmentwide. The following example shows an excerpt from the Service Design Standards of the German Federal Ministry of Interior responsible for the digital transformation of all 575 citizen-oriented public services:



In order for online services to be used successfully and repeatedly, they should be easy and intuitive to use. Online services can reduce various hurdles for users: for example, appearing in person, long waiting times, and confusing paper-based applications. Focusing on ease of use and intuitiveness helps to reduce hurdles and create a user-friendly online service.

(Source: Federal Ministry of Interior and Community in Germany, Service Design Standards)



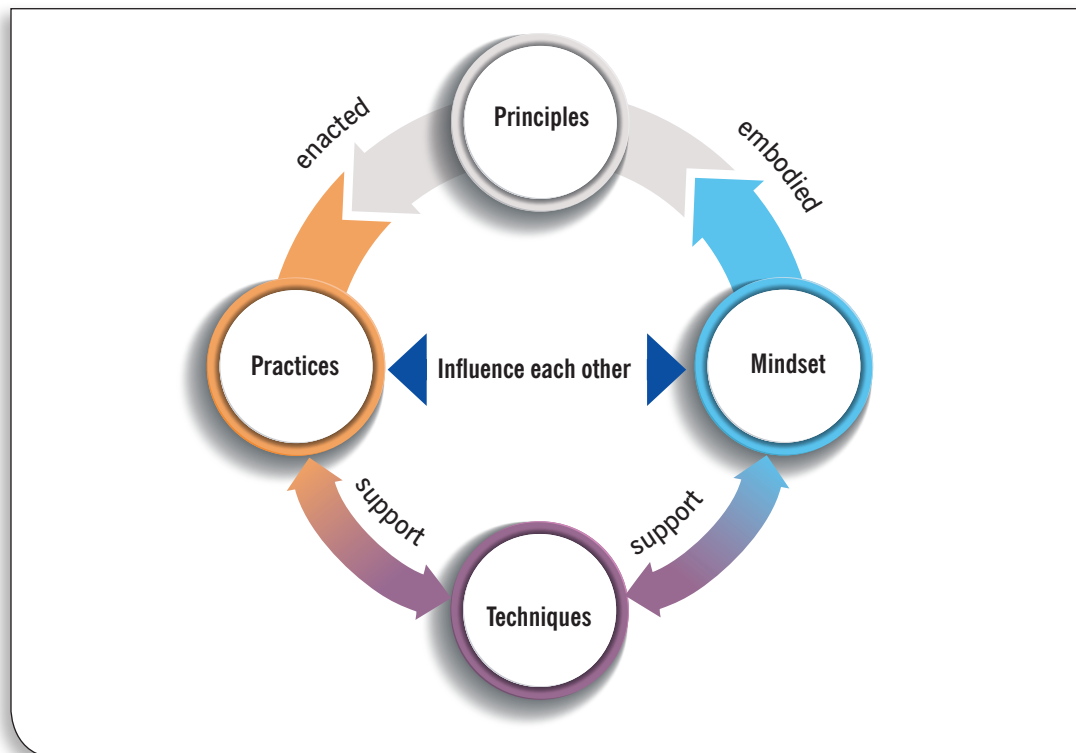
Finally, **techniques** predominantly refer to agile development in collaborative delivery teams that focus on multidisciplinary and potentially even cross-departmental collaboration, representing users and other specialists like software developers, project managers, and civil servants. An agile approach reflects everyone's opinion and develops a common understanding of user challenges. The teams work together in short sprints—shortened development phases

with agile approaches. As soon as the delivery team receives new data through user observations or interviews, they integrate the information in the next iteration. These short iterations, that one interviewee labelled as “fail often and early,” help to understand whether the delivery team stays on track and aligned with the user needs. They then build prototypes of the new process for the users to test. “Let’s try it, and if it works, you keep it. If it doesn’t, you pull it out.” The prototypes might include sketching, visualization, storyboarding, or even physical mock-ups (using scissors and paper).

The techniques include qualitative research to discover user needs, which one interviewee labeled as “being the fly on the wall.” Others include ethnographic observations, intercept interviews, diary studies, or system analysis. These reveal unknown use patterns, bottlenecks, or contradictions along the process. Some digital service teams also use immersive methods such as shadowing, or develop new ideas and concepts through strategic conversations and other participatory design practices.

The principles are enacted and become visible in the way that public service designers work together with public servants and other stakeholders:

Figure 4: Principles, mindset, techniques and practices of user-centric approaches



This user-centric approach needs to be followed by both public managers and civil servants. When people enter the public service with a background or even public service design education, they expect managers to understand how they want to work. Recruits from the IT sector or from start-ups expect that public managers will provide “air cover” and apply flexible human resource instruments to onboard them. As one interviewee from the U.S. stated: “Recruits want to belong to that class of people who make something happen and help the country to change.”

Reflecting One's Own Assumptions, Biases, and Theories

The user-centric approach focuses on user needs rather than on government needs. For decades, however, public managers and civil servants have been trained as the sole experts in designing processes and services. This originates far back, to Max Weber's understanding of politics as a profession, with the notion that public managers need to be trained and protected in their position as experts who can interpret policies and implement them accordingly. For accountability and reliability purposes, this task was to be conducted only by those trained accordingly. This model was supposed to create efficiencies and also neutralize bureaucracy so that bureaucrats were not swayed by one position or another. This also came at a price: only those bureaucrats at a certain salary range and rank in the hierarchy were allowed to represent their organizations to the outside.

All these features of a professional bureaucracy have led to certain assumptions about who experts are, who knows what users need (civil servants only), and who lacks knowledge to make decisions on behalf of the whole citizenry (citizens themselves). Not surprisingly, bureaucrats have certain assumptions, hypotheses, and biases about their own existing routines that have often developed out of tradition or incremental changes over time.

A user-centered approach allows its participants to revise these assumptions by moving the needle toward users as the design experts. While civil servants and public managers need to be part of the user research, they are no longer the sole authority and the process allows them to revise biases and assumptions of user needs. However, the designers are needed to systematically collect user data and then derive insights on how to design a new, simpler process with fewer pain points for the users. Public managers and civil servants can then revise their preexisting hypotheses, review their biases and adapt their thinking. The agency itself becomes a learning organization.



Remember: when people tell you something's wrong or doesn't work for them, they are almost always right. When they tell you exactly what they think is wrong and how to fix it, they are almost always wrong.

—Neil Gaiman³⁰



Diverge and Converge

At the core of most user-centered approaches lies the design thinking process.³¹ This moves through four phases of discovery of user needs by conducting behavior-led design research, defining a design challenge through creative workshops and idea generation approaches, developing answers to the problem and co-design of solutions with different users, and delivering prototypes that can be tested by users to improve the final product.

The double-diamond model of U.K.'s Design Council (see below) captures the steps in two diamonds, moving from an initial challenge on the left through the first discovery and definition

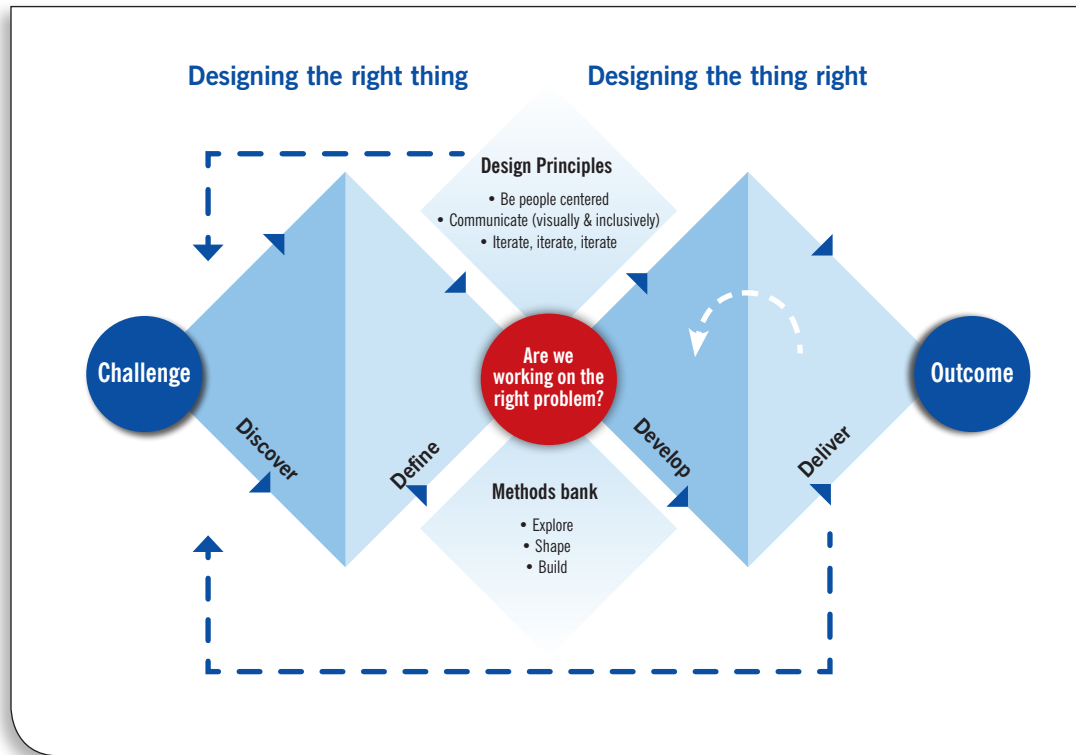
30. Quote by Neil Gaiman: <https://www.themarginalian.org/2012/09/28/neil-gaiman-8-rules-of-writing/>.

31. Liedtka (2018).

steps to understand whether the team is working on the right problem and can design the right thing. In the second diamond, they develop and deliver a prototype that can be tested.

Important in this model are the phases to allow for flexible approaches of exploring challenges and exploiting ideas to converge on a solution that meets user needs:

Figure 5: Double diamond model of the U.K. Design Council³²



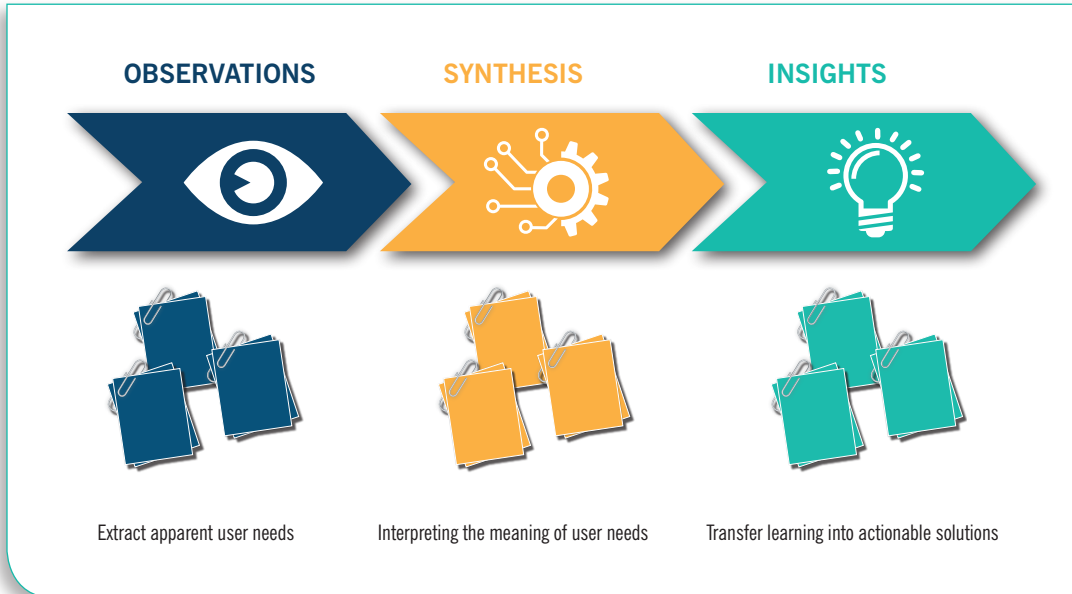
32. Design Council (2019): <https://www.designcouncil.org.uk/sites/default/files/asset/document/Double%20Diamond%20Model%202019.pdf>.

Implementing a Human-Centric Skill Set in Digital Transformation Projects



The implementation of a human-centric skill set follows roughly three steps: 1) observing user needs, 2) synthesizing and making sense of evidence collected from users, 3) transferring insights into prototypes and testing them early with users.

Figure 6: Learning from user insights



One interviewee provides the following justification for the steps:

When you approach a problem with a significant research phase, so that you can fully understand the landscape, when you make sure to take your findings from the research and develop intelligent solutions that you can then test with the users, and again that's anyone who touches the service, so that you understand how it is being used, and you can then change and iterate and take their feedback and develop something. I find that's where you can actually deliver digital transformation.

However, most civil servants still lack training in user research. One interviewee explains how they approach the dissemination of skills and practices to non-designers:

We have a course on introduction to user-centered research, which is aimed at people that might start working with a designer, may just want to find out more about these words "user-centered design" that they have been hearing. It is just a very general overview over what the roles are that we have in government, what it looks like to work with those people on your team, how designs in agile, and kinda going into different types of design and what they mean.

Conducting User Research

User research is similar to market research, but much less expensive and costly for teams venturing out to talk to users. In **market research**, researchers aim to draw a representative sample among all potential users. For government services, this can involve a huge number of users including different types of user groups and specialized needs. Market research would, however, lead to relatively general and superficial insights.

Consider the following thought experiment:³³ Conducting market research ends up with socio-demographic data including data like:

- Male
- Born in 1948
- Grown up in England
- Two children
- Married
- Successful and rich
- Likes dogs and vacations in the Alps

Which fits to



but also to



* King Charles photo from Wikimedia Commons, the free media repository

These data, anonymized, would fit the description of two different personalities: Royalty King Charles and rocker Ozzy Osbourne. While their socio-demographic data provide the same insights, their user needs will profoundly differ from each other, and designing services based on this data would therefore not match their actual needs.

In contrast to market research, **user research** therefore dives much deeper and aims to understand why users have a certain need and how they currently try to fulfill that need. A small sample of no more than 3-5 users is often sufficient to dive into an in-depth conversation with a user and extract their needs.³⁴ This will lead to specialized and deeper insights than a large-scale study that can only generally focus on what people want and currently do. In user research, designers can ask why people have specific needs, how they currently go about fulfilling them, and what they experience along the way in terms of functional and emotional pain points. Based on these insights, they can extract how this need can be better filled by a future solution.

One designer explains: “The user researcher is the person on the team who brings back the insights and brings the voice of the user to you. The user researcher is the one that is always keeping the user top of mind.”

Understand Who Your Users Are

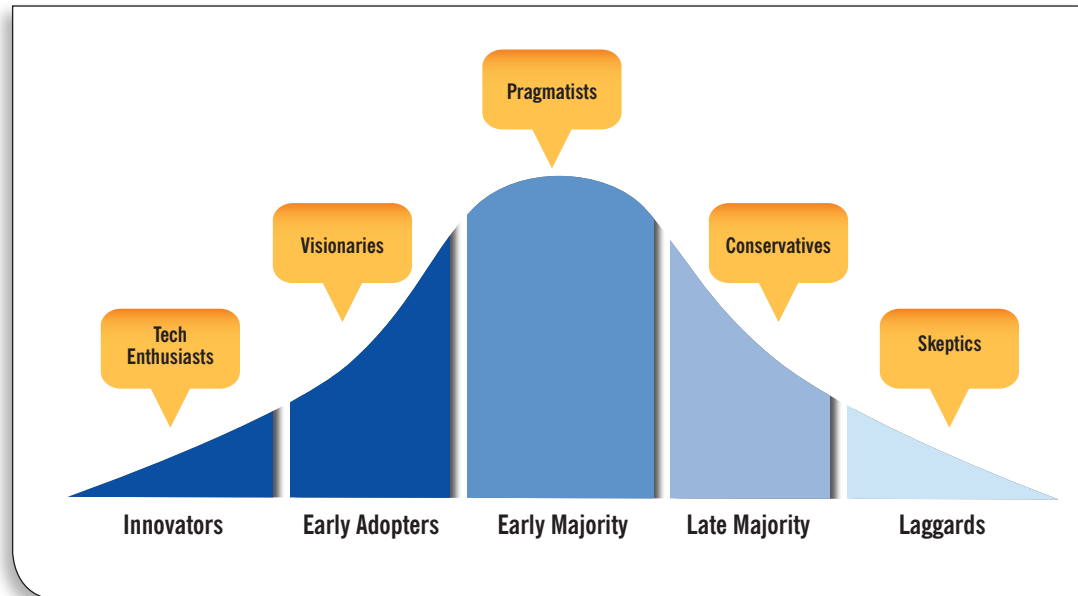
Users of administrative processes and products can come from all walks of lives with vastly different user needs. They can include daily users of a service, regular users who return to a service and use it on behalf of others, or average users who might need to return occasionally to use a service because of their life phase. Extreme users might also include those rejecting to use a service completely—because they don’t know whether they are eligible, don’t know how to access it, or are not able to access it at all.

33. Example courtesy of Martin Jordan, former Head of Service Design, Cabinet Office, U.K., now head of Service Design at Digital Service Bund, Germany.

34. For different viewpoints on the number of required user interviews, see: <https://uxplanet.org/the-writers-guide-to-user-interviews-2dd4d4d590bc> or <https://medium.com/@mitchelseaman/the-right-number-of-user-interviews-de11c7815d9>.

Designers recommend thinking carefully who users might be and mapping them on a stakeholder map along a continuum of service use. One way to map users is along Rogers' diffusion curve, where tech enthusiasts cannot wait to be part of the next new thing and skeptics who will never be convinced to use a service or the new medium it is provided on:³⁵

Figure 8: Identifying stakeholders along their likely adoption of a digital service



The Government Digital Service (GDS, in U.K.) also highlights that “Civil servants are users too—it’s important they have access to services that are easy to use.”³⁶ As one service designer interviewed for this report says:

At the heart of the work is putting users first. And when I say users, I mean anyone who is involved with that service. This could be members of the public, it could be civil servants, it could be staff in offices processing applications.”

This shifts away from the standard way of considering the business or process owner as the default user in government. Rather, those government employees administer the process and control how to deliver the service.

By interviewing different types of civil servants across government, GDS created profiles of users who work behind the scenes, at the front of house, as cross-team collaborators, technical experts, in the field, or always on.³⁷ These profiles are based on how civil servants work:

35. Rogers (2003).

36. See, services for government users in Service Manual: <https://www.gov.uk/service-manual/design/services-for-government-users>.

37. GDS provides an overview of “How cross-government user profiles of civil servants can help you.” Available online: <https://userresearch.blog.gov.uk/2018/06/07/how-cross-government-user-profiles-of-civil-servants-can-help-you/>.

- Do they serve different locations and have to be mobile as part of their job?
- Do they directly interact with (different types of) users?
- What are their requirements to respond quickly to inquiries?
- Are their jobs quickly changing?
- Are they using standard tools or do they decide on the fly which methods and tools best fit the solution to a user problem?
- Is their work protected by certain security classifications?³⁸

Define a Research Strategy Based on a Problem Statement

In the first planning phase of a user research project, it is necessary to define the problem or the research question.³⁹ In the beginning, this can be broad and driven by anecdotes heard from users or press coverage of a failed service. Over the course of the research project, this will most likely become more specific and should be revised.

The problem statement and the identified users can define the methods to conduct user research: full immersion, or shadowing through observations that reveal certain user patterns, artifacts, events, and behaviors resulting from interactions with a service or process. This is a highly time-consuming but at the same time rewarding method. It focuses on what most digital service teams do: user interviews to understand individual contexts, and user journey maps that uncover the sequence of service engagements and interactions and their resulting touch-points—especially channel switching activities in cases where users become frustrated or there are breaks in provision. As one of the designers explains:



There are a lot of labs across government. We use all sorts of different user research methodologies, from face-to-face interviews, to doing usability testing in our labs. There's doing things like diary studies with users, going and doing actual visits for teams that are working with admin interfaces. Teams will go to a call center and interview people and also observe some people and see how they work. It also depends on the phases of the project: in the discovery, it will be a lot more contextual interviews, trying to find out about what the pain points are. What are the things, where in the journey are we? Doing some journey mapping, trying to figure out what the service is and what is going on: where are the points where we can make an impact?



User Interviews


An important tool to identify user needs are user interviews.⁴⁰ This will also lead to the identification of different user groups, but most importantly interviews will help to identify blind spots of designers and current administrative experts and fill them with data. By observing user interactions, experiences, and expectations, designers can draw insights about the current quality of a service and improve its use by including insights into future iterations. They

38. See, GDS U.K.'s blog entry on "Discovering user profiles." Available online: <https://gds.blog.gov.uk/2016/01/11/discovering-user-profiles/>.

39. Crouch and Pearce (2012).

40. Marsh (2018); Portigal (2013).

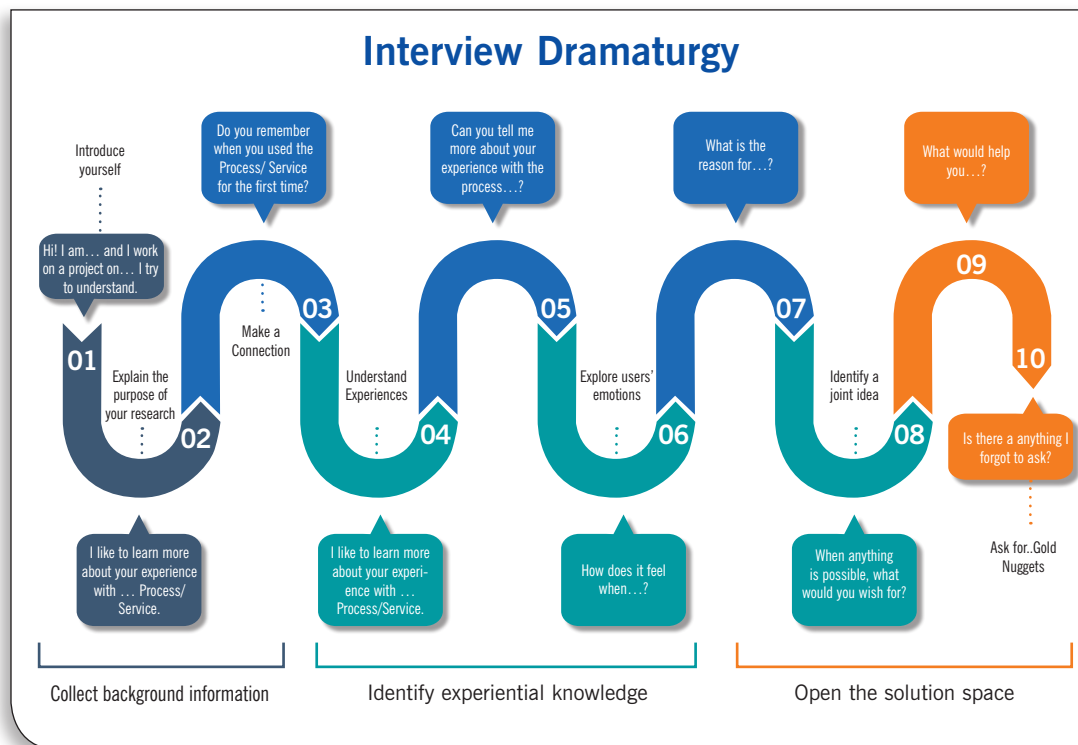
understand which user needs should be fulfilled and which parts of the service are not used, to improve overall service quality. Understanding hidden assumptions or worldviews of what governments think that users want, relative to actual user needs is a practice rarely observed in public administrations. This might be because citizens only interact on average 1.3 times per year directly with public administrations, and initial service design did not focus on return visits, customer loyalty or retention. Nevertheless, badly designed public services lead to lower trust that government can conduct business, and it is therefore important to uncover the mindset and expectations users have toward service quality. Based on these insights, public service design can be iterated and improved.



Check your own worldview at the door. Look for surprising responses and also show humility toward the experiences of the users: they are the experts!

User interviews should follow a certain script to increase trust in the interaction, but also to dive deep into user stories so the interviewer can elicit experiences and pain points. The following graphic shows suggestions for questions to ask throughout the three phases of a user interview, with the goal to (1) collect background information, (2) identify experiential knowledge, and (3) open the solution space for new ideas:

Figure 9: Flow of a user interview



The Canadian Digital Service provides an outline for user research interviews based on Portigal's suggestions:⁴¹



Ask productive questions about the sequence, quantity, specific examples, complete lists, types of relationships, or organizational structure.

1. Listen to what people say (the “rapport engine”) and provide insights on active listening practices.
2. Manage the flow and follow up on loose ends.
3. Don't only ask questions, but also let people complete tasks, record their reactions to sketches, websites or objects, sequence cards.
4. Look for patterns and not outliers.

User interviews can be transcribed or recorded, especially when trying to understand how users behave when they use an existing service or a digital product. In cases where privacy or data protection concerns do not allow the recording of a user's statements, an additional note taker can capture memorable quotes or observations of their behavior, body language, and other reactions. For each user, user interviews can then identify:

- Type of user
- Their individual context
- Their assumed need as supported by a direct quote
- Any other issue they experience

Example: A designer from the now former Team Digitale in Italy explains how he has worked on a project with users:

 *I worked with a teacher, with parents, with the office, minister of education and worked on needs, user stories, and basically a user journey, the basic requirements you need when you have to run a digital project. Then we decided we had the necessity of developing a broader approach to research and so we launched a research project in which we had to run broader interviews with parents and kids to better understand their needs.* 

Synthesizing the Findings of User Research

After collecting user data, synthesis of findings can begin. In this phase, user interview results are first shared with the design team in a structured manner. From each of the interviews, issues are extracted, surprising findings outlined, and possibilities for problem solutions highlighted. Among many different possibilities to conduct this synthesis, this report highlights the following: (1) story sharing and (2) user journeys.

41. Canadian Digital Service: A guide to research interviewing. Available online: <https://digital.canada.ca/guides/guide-interviewing/> based on Portigal's seventeen types of interviewing questions: <https://portigal.com/seventeen-types-of-interviewing-questions/>.

Story Sharing

Story sharing helps digital service design teams unpack user interviews, by extracting different types of insights, such as socio-demographic user data, user needs supported by significant quotes from the interviews, and observable behavioral preferences.

Take the redesign of the driver's license experience in Ontario, Canada:



If you'd like to renew your driver's license, there are certain conditions that make it very difficult. You have to end up going in in person and speak to someone, show your driver's license, and then the renewal process can happen. You end up waiting in the queue in order to try and speak to someone, you have to have supporting documents. The supporting documents are difficult to find and the information around them is not entirely clear. Something like that is digital transformation could allow us to do things like and this is just a hypothetical situation, you could photograph your driver's license for example or input the details from your driver's license into a system. It could then be sent to a central processing agency. People working a call center, they could process it. Even when a digital service, so if you're renewing your driver's license and it's straightforward, you have to go and you have to sort of figure out the user interface, you have to understand the system, it asks for certain pieces of information, and then it confirms it for you. Digital transformation can be optimized in those systems. Understanding that rather than having the user input those things into a desktop application, that they have to use from a laptop computer, there's no reason why we couldn't transform it digitally, so that they can do it from their smartphone, or they could scan their driver's license, or read the barcode number directly from their smartphone camera, and then go through the process that way. Digital transformation could be many different things, but it's always around optimizing a service with a user-centered design once.



Systematically sharing findings with the team can identify any “golden nuggets” that users mentioned, focus the interpretation, and address the question: What was surprising to hear, that contradicts or adds to existing team assumptions or adds opportunity areas and solutions?

Story sharing allows understanding spectacular points of view: what elicits emotions, where did users use especially strong language, or make non-obvious leaps? These insights generate design possibilities.

The following worksheet can help to extract findings during story telling:

Figure 10: Synthesis of user interviews

Socio-demographic user data	Important interview quotes	Behavioral preferences
 <p>Name:..... Age:..... Occupation:..... Family Status:..... Living Situation:..... Income:..... Expenses:.....</p> <p>Communication technology & social media use</p> <p>..... </p>	 	<p>Character/istics:</p> <p>.....</p> <p>Preferences:</p> <p>.....</p> <p>Worries:</p> <p>.....</p> <p>Preferred media to use:</p> <p>.....</p>

User Journey Maps

The second tool to extract and synthesize insights from the user observation and interviews involves visual maps of user interactions with a product or service. User journey maps help to gain a coherent understanding of experiences in each phase, and highlight user touchpoints with the product or service. From the initiation point of user interactions to reaching their goal (such as applying for a new passport, pay a parking ticket, etc.), all relevant difficulties and needs are captured.

Mapping the user journey includes direct and indirect touchpoints, interaction channels (can everything be done seamlessly online, do users have to switch to the phone, ask questions by email, or even have to physically walk into an agency?). The user journey helps service designers engaged in a digital transformation project:

If you take a service that was typically paper-based or telephone-based, which was difficult and cumbersome and required a concerted amount of effort to do, interacting with different touchpoints, possibly call centers, possibly a mailing office, digital transformation is around taking that service and adjusting it accordingly, often with digital tools and digital capabilities, in order to make it not only more user centric, so better for the people using that service, but also to create efficiencies around how things are processed and understood.

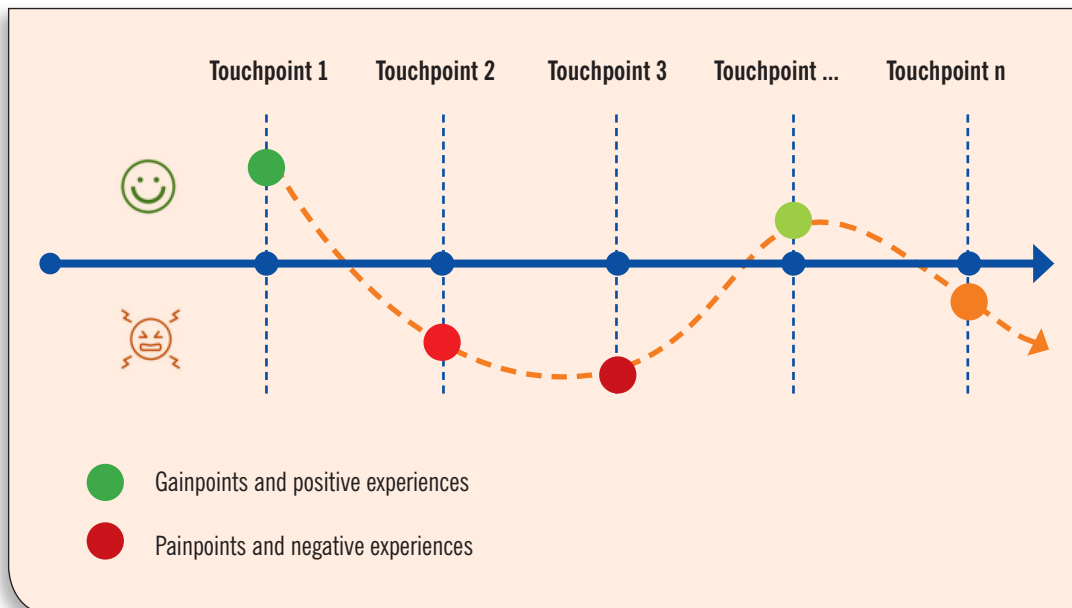
Some user journey maps display the emotional journey at each touchpoint next to the functional steps. Emotions can provide important insights for the team to create empathy for users, and reveal needs and pain points. Important questions to ask when mapping user journey include:

- What steps does the user go through to reach their goal?
- What does the user's interaction with the product or service currently look like, or what could it ideally look like?
- What factors influence the user during their interaction with the product or service?
- What difficulties does the user face along the user journey? ("Pain Points")
- How can the product better support the user in reaching a goal?
- At what points can the user experience be optimized to strengthen the customer relationship over time?
- How does the use of the product/service differ between the target groups?

User journey maps are tools to derive opportunities for future interventions. An important question in discussing the map: how can we prevent a user from feeling frustrated with our service or process? Alternatively, reverse the ideas to highlight what could go wrong: what would make the life of the user even more miserable?

The following figure shows a schematic of a user journey map, including functional and emotional stages of the user experience:

Figure 11: Schematic representation a user journey



An interviewee in a service design function explains the value in digitally transforming a service or a form using insights from a user journey:



There is a difference between simply digitizing a paper form and digitally transforming a service. If you take a paper form and you understand that there are pain points to that form, there are moments when a user is unable to continue with that paper form, and then you work with a policy team or the subject matter experts to change the form, to revise it, to change the language and the content on the form, if you remove some of those requests from the form, if you remove some of the language, and then you present a new, better digital version, that I'd consider to be a proper digital transformation. Taking something that existed already, apply a user-centered design perspective to it.



Three different types of user journey maps include:

1. Hypothetical 'as-is journeys'

These sketch out how a service may work now (what is supposed to happen), and can help pull out assumptions from internal stakeholders about how things work (that can later be challenged through research).

2. Research-based journey map (what actually happens)

These can give a starting point from which to begin design work; help to capture and synthesize the current experience of real users (this might mean changing the structure from a hypothesis); show how things work (or don't) and the interdependencies; highlight pain points and where things break; and uncover significant opportunities for change.

3. To-be journeys that show how things could be



These maps are built and developed without forgetting the user's point of view, and as a consensus about aims that flag who to talk with about changing other aspects of the service. They can show what should work and how things can be connected and used to convince decision makers about what needs to be done to build a delivery roadmap.



Example: From paper form to digital forms in the prison system, U.K.



We examined how people visited their loved ones in prison in the United Kingdom: there was a paper form that had to be filled out by the prisoner. That paper form was then also filled out by a prison officer, and sent in the mail to the person who the prisoner wanted them to visit. So, there were three different users for this paper form. And because it was a paper form, everything was done by mail, and only in certain cases could the visitor actually call the prison and request to book a visit. Typically, they had to do it by paper and it led to long correspondence chains. If you say, I would like to visit on the 14th of October, and the prison writes back to you five days later, saying I'm afraid the 14th of October is booked, you just end up with so much delay.



 *The benefit that prisoners get from having someone visit them is lost and delayed. The statistics around prisoners who receive visits and prisoners who don't receive visits is incredible. I don't have the exact numbers right in front of me, but I believe it's close to 76 percent. 76 percent of prisoners who received visits were less likely to reoffend and more likely to rejoin the community. When we transformed that service, we did it with digital means.* 

 *We created an online booking system that allowed people to choose a series of dates that they thought would work for them, and then submit that request to the prison. The prison officers were able to access our system as well, confirm those dates, and then make the appointments. We removed that correspondence chain, we removed the delay, we also removed the necessity to interact with call centers, and we literally put the power to visit people in the hands of the visitors. I think this is an excellent example of digital transformation.* 

Other mapping tools include service blueprints that show user actions in relation to logistics and organizational actions by the service provider organization, or system maps that show the service in relation to the involved stakeholders.⁴²

Derive Personas

After identifying different types of user groups, certain types of target groups may have their own set of needs. These personas are model users, or exemplars of a user group described based on their characteristics. They are evidence-based and derived from user interviews that the design teams conducted and made part of the synthesis of the data.

Personas usually represent an archetypical user of their group or even of a service—described based on socio-demographic characteristics, expressed needs, or a life phase creating the need for a government service. The design team can use personas going forward, and refer back to them to make sure that solutions meet user needs.


The U.S. Usability.gov website provides a list of elements of a persona with the following information:⁴³

- Persona group (i.e., web manager)
- Fictional name
- Job titles and major responsibilities
- Demographics such as age, education, ethnicity, and family status
- Goals and tasks users trying to complete using the site
- Their physical, social, and technological environment
- A quote that sums up what matters most to the persona as it relates to the user site
- Casual pictures representing that user group

42. see, Penin (2018:218-220).

43. US Usability.gov: Elements of a Persona. Available online: <https://www.usability.gov/how-to-and-tools/methods/personas.html>.

Figure 12: US Usability.gov: Elements of a Persona⁴⁴

Example Persona	
Some personas are incredibly detailed, whereas others simply offer a brief sketch of each type of user. Here is an example of a portion of a larger persona developed by the U.S. Department of Agriculture's (USDA) Economic Research Service (ERS).	
Persona:	USDA Senior Manager Gatekeeper
Photo:	
Fictional name:	Matthew Johnson
Job title/ major responsibilities:	Program Staff Director, USDA
Demographics:	<ul style="list-style-type: none"> • 51 years old • Married • Father of three children • Grandfather of one child • Has a Ph.D. in Agricultural Economics.
Goals and tasks:	<p>He is focused, goal-oriented within a strong leadership role. One of his concerns is maintaining quality across all output of programs.</p> <p>Spends his work time:</p> <ul style="list-style-type: none"> • Requesting and reviewing research reports, • preparing memos and briefs for agency heads, and • supervising staff efforts in food safety and inspection.
Environment:	He is comfortable using a computer and refers to himself as an intermediate Internet user. He is connected via a T1 connection at work and dial-up at home. He uses email extensively and uses the web about 1.5 hours during his work day.
Quote:	"Can you get me that staff analysis by Tuesday?"

44. Example of a persona developed by the U.S. Department of Agriculture's (USDA) Economic Research Service (ERS) available online: <https://www.usability.gov/how-to-and-tools/methods/personas.html>.

Prototyping and Testing: Integrating User Research into the Design Process



Based on the findings of the user research, digital transformation experts then include what they learned in early prototypes that can be tested with users. One designer of a digital service team explains the process: “We use design thinking as well as skills and tools like co-design workshops, interviews, extensive quantitative and qualitative research and then we have **low-fi prototyping**.” Here the designer refers to a computer-based visual representation of a digital product with low fidelity (low-fi), because they do not resemble the final product. This represents a general concept, rather than content design that might help solve the challenge users face. Starting from user needs, designers then build a digital environment representing the building blocks of the project, which helps start conversations on how to address user needs in the final digital product.

As a next step, design teams take the results of discussions surrounding the low-fi prototype to create a **hi-fi prototype** (high fidelity): a computer-based interactive representation of the product in close resemblance to the final design and functionalities. This is interactive with artificial links between building blocks, but not yet developed in HTML; it can be used for further discussions with the design team, or the start of user tests before full development.



Testing only requires a handful of users, and allows for learning actual user needs before spending additional money, time, and other resources (which can lead to finding out only at the official launch of the project whether it is usable and meets user needs).⁴⁵ Testing also helps to review the team's assumptions and biases, and to check whether their interpretations of the users' needs were aligned early on in the process. One of the government service designers explains:

45. Nielsen (2000).



In alpha, we are doing user testing: watching how someone uses a thing. Trying to understand where the barriers are. And then in beta we go live, look at the data that is coming in from a service and doing data analysis on the data. Trying to see what that says and seeing where else more of the research needs to happen based on the data.



As Reid Hoffman, founder of LinkedIn said:⁴⁶ “If you are not ashamed of your early prototype, you’ve launched too late.” Waiting too long also risks no money might be left in the budget for substantive changes which might require a new procurement process for additional services, delaying service launch—and delays can increase the costs of error. By collecting user input, iterations with smaller adjustments will cost less money than costly follow-up contracts after a service or process fails.

Usability or user testing can check whether the new service hits the sweet spot mentioned in the double-diamond model: “Make sure you build the right thing.” Checking whether the right thing is built then provides evidence from users, and the design process can continue with higher fidelity prototypes built before the development and implementation phases.

Testing focuses on core functionalities and can take on different formats, which include storyboards, arrangements of user interactions in physical spaces, development and representation of user needs based on personas, or representations of future services. This can happen face-to-face where the team explains how to use the prototype to users, or remotely without intervention by the team.⁴⁷

46. See: <https://twitter.com/reidhoffman/status/847142924240379904>.

47. For more forms of usability testing, see, for example, Marsh (2018); Rubin and Chisnell (2008).

Understand the Opportunities of User Centricity



In linear, process-oriented bureaucracies with clear roles and responsibilities, a project- and user-oriented mode of working needs to be learned over time. Top-down support can allow for the freedom to experiment. If civil servants do not see the added value of moving toward human-centricity, they will not add these methods and tools to their repertoire and likely revert to their standard operating procedures. This requires a) a sense of cultural humility of how public administrations work, and b) a lot of work to show the opportunities that human-centric approach might add.

Approach User-Centric Design with a Sense of Cultural Humility

Many digital champions continue to move into government—either temporarily on a tour of duty on digital service teams, or working adjacent to civil servants and lending their technological and design skills to digital government projects.⁴⁸

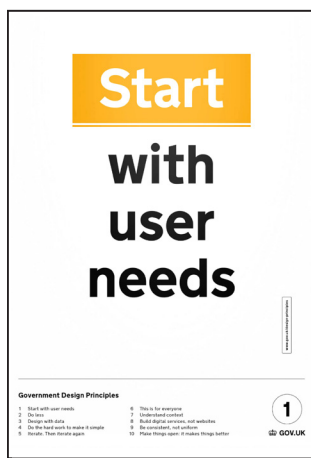


Figure 13; Government Design Principle 7: Understand context

However, many join these projects from different walks of lives, including start-ups or software industry settings with different bureaucratic environments and contexts. Digital experts are often offended by the strict rules and regulations—even though larger organizations in the private sector have developed similarly well-functioning bureaucracies to create accountability and responsibility structures that adapt to fast changing trends and adhere to rules and regulations.⁴⁹

The human-centric mindset needs to be developed and expanded beyond individual administrative processes or services design teams, and must include a sense of humility for the context and settings designers work in. Similar to multidisciplinary teams that value individual backgrounds, skills, and knowledge, designers from outside government need to understand the larger context in which they aim to design. This includes:

1. Understand that bureaucracies are built to be resilient and aim to survive fleeting trends and fads.
2. Understand why a service or administrative process evolved in the way it is currently used—what is set in law and what is common practice and has simply evolved out of internal convenience or tradition?
3. Consider civil servants and front-line workers as users, too. What are their needs and who is allowed to make decisions on which aspects of the process?
4. Continue to ask “why?” in many different forms—while laws can be changed, the process takes years and involves legal and coordination processes.
5. Consider the role of individuals along the hierarchy—what are they losing, and how will they feel about their new roles and expectations working toward a human-centric mindset?

48. Wilson and Mergel (2022).

49. Mergel (2016).

As one of the designers explains:



One thing that we are doing is training: We are helping designers understand the context in which they are working in government. It also includes a prototype kit. We also run training in user research, so we have an introduction to user research, which is for people that are user researchers or people due to use that research. Again, setting the government context of how we use user research in government. There is still a lot of government work to do: why it's important, why the kind of background and the law, and why we have to build accessible services. It's kind of empathy-building in a way.



Create A Sense of Social Affordances of New Methods and Mindsets

Public administrations can also prevent—consciously or unconsciously—the adoption of a human-centric mindset and its corresponding practices, especially if they cannot identify the added value from their current way of working. Helping the design team to understand the social affordances might shift practices toward a change to agile practices. Affordances are opportunities that public administrators can identify, socially and culturally shaped and interpreted in the context of each individual organization. They need to reflect the following prerequisites in order to be adopted:

- **Applicability:** While agile methods and tools can be adopted into individual project management practices, the bulk of the organization might continue to operate as before. If public administrations cannot perceive how to integrate human-centric practices into linear bureaucratic organizations, they will not adopt them.
- **Combinability:** Can human-centric practices be combined with current organizational routines? Do they fit with the existing administrative culture and context and ultimately improve existing work practices?
- **Visibility:** Artifacts such as storyboards in offices or along hallways can make human-centric work visible. They support developing awareness of team member actions and might serve as conversation starters without calling attention to their work.

Leaders can build teams ready to recognize the social affordances of user-centric methods, to promote a sense of psychological safety. This enables teams to experiment and test new practices, have the time to find out whether agile and user-centered design practices can be combined with existing routines, and start adapting small changes. Teams could start with asking a handful of users for input before writing their next memo, or think about new ways of running meetings.⁵⁰

50. Bresman and Edmondson (2022).

SUMMARY

Summary of Key Recommendations to Move Toward User-Centric Agile Governance.



Start with small steps to experience what the increase in inclusion and participation feels like. User centrality is often dreaded for fear of public exposure before a final product is ready. To address this concern, ask team members to participate in putting together meeting agendas, or rotate chairing meetings and circulating the minutes. Gradually understand that expertise does not come with seniority and rank, but derives from the sum of experiences and competencies available. That will help to broaden a user-centric mindset to experience value in different opinions, experiences, and needs.



Closely look at the types of problems to solve as part of the digital transformation of public services. Are there already trusted and proven ways to create digital solutions as part of standard problem solving? Or are there chaotic and complex problems for which no good or best practices exist? If the latter, include users to understand needs first based on data, then start the design process and explore new practices.



Include managers both in the educational experience as well as in the actual doing. Just nodding along does not make for an agile manager who can support their team to gain experience, or support team decision making and provide top cover for results. Middle managers especially need to increase agile self-efficacy to host teams instead of continuing to lead top down. They need to understand what agile leadership means and might benefit from separate training sessions.



Collect data from users, a skill set not part of standard operating procedures for most civil servants. Begin with small-scale interviews inhouse to experience how to design gathering of data from users. Inhouse users or other civil servants have to use an administrative process or service as well, and can share their pain and gain points. Data collection does not have to be a huge task, but can be limited to 3-5 interviews.



Review and check your own hypotheses based on user data. Does evidence show what was expected or did new insights emerge that would not have otherwise arisen in the digital service design process? Celebrate insights and iterate the digital designs based on user feedback.



Act in the open if at all possible. Given that user centrality remains relatively new for most civil servants, they need to be observed by peers. An agile practice officially sanctioned in the agency or ministry, will make it easier to jump on the bandwagon and get started. Open observations can serve as breadcrumbs that lead to conversations and the exchange of knowledge about a user-centric approach. An observable approach can include posters of user journeys or displays with tasks completed (Kanban boards).



Test prototypes with users. Prototypes can be done with a paper and pen, and don't necessarily need to involve fancy wireframe drawings. Testing before a service turns on allows creating intelligent failures before they become public. User feedback can make it relatively easy to adjust a design and allow interpreting user data correctly, to include the information in the new design.

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