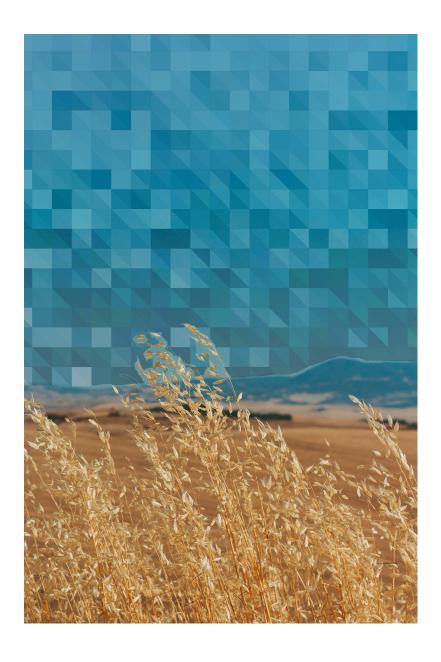
## Reimagining the Field for Emerging Government Digital Service Professionals

Research findings from government digital service leaders looking to support the next wave of professionals.

By: <u>Hayley Pontia</u> November 2020





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## **Table of Contents**

This findings report is organized into research objectives, methods, deliverables, and insights relating to the current and future field of government digital service delivery. It is meant to serve as a resource for those looking to support the current workforce and also to create space for emerging professionals that bring unique perspectives to government digital service delivery. The "Emerging Professional Journey Map" and "Emerging Professional Archetypes" are resources meant to explain entry-level professional exposures to the field, potential paths, and skills necessary in government digital service delivery.

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## Reimagining the Field for Emerging Government Digital Service Delivery Professionals

Research findings from government digital service leaders looking to support future emerging professionals.

## Research Objectives

This project set out to better understand the current environment of government digital services and where emerging professionals fit within the space. We interviewed nine leaders who have experience working in government digital service teams or within government roles of digital service delivery in order to better understand opportunities for entry-level roles and what those roles might look like. In preparation for the interviews, we captured foundational information through a survey. In the interviews, experts provided more context about the government digital service ecosystem, potential pathways for emerging professionals, and relevant skills needed to succeed in these roles.

We define entry-level professionals as individuals who are just entering the field without traditional work experience, although they may have internship experience. We define emerging professionals are those who may have worked either within the field of public interest technology or in another field. For the purpose for this report we will be focusing on entry-level professionals.

## **Objectives**

- Understand what skills, infrastructure, and support are needed for emerging professionals to have successful careers in government digital service delivery.
- 2. Understand what infrastructure and support are needed for current and future government institutional teams in order to successfully carry out digital service delivery.
- 3. Identify the different stakeholders' roles to effectively offer the necessary infrastructure and support.
- 4. Organize research insights into resources that emerging digital service professionals can use to advance their careers.



## Background

## What is government digital service delivery?

Government digital service delivery is an interdisciplinary field made up of innovators, designers, technologists, and policymakers who address problems the American people face when using different products or services. In recent years, governments have increasingly begun approaching service delivery through approaches with modern technology, software development, and service design principles. This has led to the creation of digital service teams in government and the need to designate specialized technologists to fulfill the work of these teams, such as developers, human-centered designers, user-experience researchers, data scientists, and other innovators.

Serving as an important touchpoint in the process of team creation, the pipelines for emerging leaders within this field have yet to be substantially developed.

"I urge you to approach the field with both an open mind and a skeptical attitude, and to see yourself as part of it from your very first steps, with the power to change it for the better."

-Civic Design Consultant



## Research Findings

## **For Emerging Professionals**

- Build your own professional community within the existing network.
- Highlight your interdisciplinary skills and expertise to further inform technology in government. Public interest technology is about bringing diverse identities, learned experiences, and a 'design-for-all' mindset to traditional technology roles.
- There are numerous paths within the public interest technology workforce, but little awareness of effectiveness surrounds those current ecosystems.
- There is a communication gap between current professionals and emerging professionals about the work they're doing and which needs to be done.

### For Researchers

- There are many public interest technology and government digital service delivery programs that exist, but have yet to be researched in any capacity.
- Documenting processes of digital service teams is becoming increasingly popular, but there needs to be more of it in order to understand key nuances.

### **For Current Professionals**

- It is important to establish a strong foundation in order for emerging professionals to be placed in the field.
- Mentorship to emerging professionals is only possible with more ecosystem support.



## Background

It should be startling that less than 5% of federal government employees are between the ages of 22-29. Not only are young professionals willing to adapt and learn, potentially more readily than those fixed in a system, but they may also be more capable of helping governments overcome technological problems by proactively using data and technology to better carry out their missions in this digital age.

# "It is important to prepare people for the reality that means to work in a government space."-Former USDS Staff

Some of the most knowledgeable people in the areas of technology and digital services are Generation Z-ers and Millennials who grew up with technology and are newer to entering the workforce—the 22-29-year-olds who are barely represented in state, local, or federal government now. They are the "digital natives" who can quickly adapt and learn new technological skills. They already possess the foundation that many in government may actively be working toward or relying on others to support. And they are eager to jump into public service roles. For these reasons, government technology and innovation leaders should focus more efforts on the recruitment and career development of this cohort of emerging professionals. Digital natives are a valuable asset to any organization and need career pathways towards government digital service.

Current government digital service professionals are often overloaded with their existing work, requiring a

continuation of establishing their place in government. Asking them to also commit to investing in the future of the field becomes a difficult space to navigate. Current leaders within the field are aware of this paradox. Normalizing the process of mentoring in government is an idea that would allow for a stronger pipeline in multiple fields, but the government digital service field needs this foundation in order to allow time for mentoring, training, and considering what work can be done by junior staff as opposed to more senior colleagues.

## "Sometimes the government doesn't know what it's looking for."-Former USDS Staff

## Georgetown's Role

With a <u>cura personalis</u> emphasis at Georgetown, it is a logical step for recent graduates to use their degrees in ways that are useful to large populations. Georgetown's teaching prepares graduates to address longstanding problems with a new set of skills. Instead of academia laced with theory and memorization, classes encourage students to practice problem-solving in the surrounding Washington, D.C. community and around the world, with unique collaboration, openness to new ideas, and an undying sense of curiosity to make the world a better place.

Unsurprisingly, Georgetown students aren't the only ones with an interest in government social impact through technology. In March 2020, a group of student Mozilla Builders launched impactful, an online platform for technologists to develop their careers in social good by



### INTRODUCTION

connecting them with socially impactful opportunities and with other impact-driven technologists. Recently, in the wake of the COVID-19 pandemic, community platforms such as Remote Students serve as a place where students and recent grads can share opportunities, events, resources, and help each other achieve their career dreams within the tech field. The Public Interest Technology University Network is a partnership that fosters collaboration between universities and colleges committed to building the field of public interest technology and growing a new generation of civic-minded technologists. It serves as an important resource for curricula development, experiential learning opportunities, and support graduates who pursue careers working in public interest technology.

Those of us coming out of current university programs are learning cutting-edge skills in human-centered design, focusing on how to put people at the center of systems and processes. These skills mean newer, digital-native workers are more oriented towards public service, but there are still not as many opportunities available as there are in the private sector. Existing government teams that work in these modern ways, such as the <u>U.S. Digital Service</u>, 18F, the <u>Veterans Experience Office</u>, the <u>New Jersey Office of Innovation</u>, and <u>San Jose Civic Innovation</u> team, are still in early days themselves and have not yet been able to fully fill in this part of the career pipeline. <u>Civic Hall</u> does an excellent job at highlighting insights and opportunities for the growing public interest technology field as does <u>Code for America</u>.

"Imposter syndrome is very real, but just trust that you are someone who has experience and has education who is bringing experiences some people don't have."

-Former USDS Staff



## Methods

The research project centered around two sets of research questions aiming to address the objectives above. The first set looked to uncover insights about the ecosystem, skills, and infrastructure from current digital service delivery professionals in order to successfully support emerging professionals.

The second set of questions asked current digital service delivery professionals about their own careers, training, and networking in alignment with the <u>PIT Workforce</u> project goals.

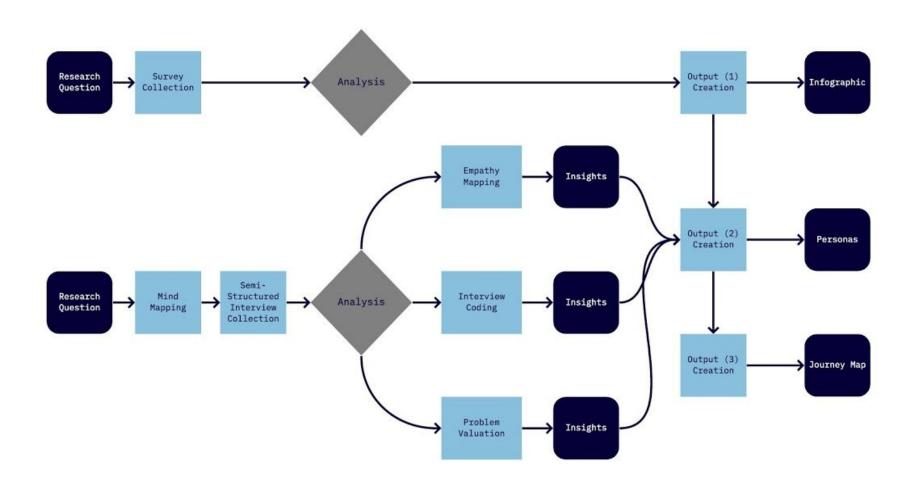
Using these methods, this research is able to better identify gaps in resources, barriers to accessing these resources, and recommendations for training pathways for emerging government leaders.



Andy Feliciotti via Unsplash



### **Process Flow**





## Research Methods

## . Survey

The survey's objective was to determine what infrastructure and support current government digital service professionals believe is needed for both an individual as well as a government institution to have a successful career in government digital service. It had three main components: first, understanding career ladders and job descriptions within the government digital service field; second, discovering professional organizations and conferences that may be useful resources to those in the field; third, further developing potential pathways for those looking to join the digital service team. This qualitative research highlighted a depiction of the current ecosystem and ways to enter the field. The sample consisted of 10 survey responses representing various levels of government, including respondents holding roles such as software developer. director of innovation, head of design, director of public policy, consultant, and fellow.

## 2. Mind Mapping Potential Responses

To better understand the current ecosystem and potential responses of interviewees, we created a mind map to visually organize our findings. In alignment with research objectives, long-term and short-term goals were predicted as (1) create entry-level roles that gain exposure to government technology service delivery (2) discover potential pipelines for the skills building necessary to work in the current government digital service ecosystem. Key questions that were predicted to arise during interviews with leaders within the field were: (1) What are common entry points? (2) What do entry-level roles look like? (3)



How might those already in the field help emerging professionals? (4) What are some important players in the field? (5) What are the skills needed to succeed in the field? (6) Where are there gaps between government and digital service? (7) How can we create a healthier digital service ecosystem? (8) What are incentives to enter the field? Wethen categorized these questions into larger headers of *What? How? Who?* and *Why?* on the mind map. This was done to better imagine the thought process of those already within the field compared to those who are recently entering the field.

## 3. Semi-Structured Interviews

The interviews had four major objectives:

- Determine what infrastructure and support are needed for an individual to have a successful career in government digital service
- Learn what infrastructure and support are needed for government institutions to successfully carry out digital service delivery
- Understand which stakeholders have a role in achieving these objectives and how they can be effective partners
- Capture the values a professional digital service association may have

The interview sample consisted of nine leaders within the field of government digital service. Survey respondents were all given the option to participate in 30-minute or 1-hour interviews.

## 4. Empathy Mapping of Emerging Professionals

To better understand interviewees' perceptions of emerging professionals, following the interviews we created an empathy map. The exercise explored what current professionals in the field say, hear, do, and feel, as well as their professional needs and motivations. The exercise resulted in general sentiment, representative statements to exemplify the current ecosystem of government digital service delivery. This method established key points within interviewees' narratives by exploring empathy towards emerging professionals. It became clear through the research that each professional had slightly different responses to creating more entry-level roles, but the general consensus was that a stronger ecosystem needed to be built in order to make more roles available.

## 5. Interview Synthesis + Thematic Coding

Using the <u>Dedoose online software tool</u> to code participant data, frequency counts for each categorical code and sub codes were recorded. The code key was informed partially by empathy mapping, mind mapping, and objectives of the research. Before a secondary tag could be attached to a specific word or phrase within interview transcripts, a primary tag was first selected.

It is important to provide a standardized classification of information imperative to research goals, as well as in larger alignment with the Beeck Center's Public Interest Technology Field Building goals. This coding framework serves as a resource for researchers to build off of pattern recognition data already collected or other similar metrics.



## 6. Problem Valuation for Emerging Professionals

To raise awareness for crucial issues for emerging professionals, the next step was problem valuation. This activity identified key pain points in the process of entering the government digital service delivery field in order to better understand the current space available to those emerging professionals and how the space can be improved. Each card, created from discussions with leaders, is compared to each other in order to determine their value or ranking of importance within the scope of research objectives. There are three headers: (1) Not really (2) Important and (3) Crucial. By placing the cards under their respective headers, greater awareness of micro- and macro-level issues can be clarified respective to the responses from those currently in the ecosystem. By creating this awareness of problems within the field, it becomes easier to address the most imperative instead of focusing on those that aren't at the forefront of concerns.

"It's hard to succeed in a place that isn't functional." -Former Chief Digital Officer

Not really	Important	Crucial	
You should aim to put about 50% of the problems you've gathered here. Not all of them are important, so you should only focus on those that mean the most to the project.	Around 30% of the problems you gathered should go here. These are the frequently occurring problems which are important to your users.	This should be the top 20% of the problems you've gathered in your research phase, and must be absolutely essential for your project. These should be obvious, and will	
Technical skills	No standardized training in have echoed through your classrooms or mentorship programs phase.		
no standardized roles	No easily accessible mentorship programs	No clear pathway for entry-level professionals who have minimal experience	
understanding key government nuances	Lack of exposure to government		
Minimal fellowship programs for senior-level	bureaucracy  No upward mobility	reliance on word-of-mouth opportunities	
Minimal support for those already in the field	No easily accessible resources besides exec level	Not a lot of diversity within teams> typically males who are outspoken are rewarded	
Not much awareness of roles	Minimal paid internships		
Minimal social impact career fairs	Minimal fellowship programs for		
location	entry-level		
Financial support during entry-level	no internal training // reliance on private sector		

Lack of programs surrounding gov

tech

size of teams

reliance on vendors

lack of long-term effective relationships with vendors



UX Indonesia via Unsplash



## Research Findings

## Understanding the Current Ecosystem

While there currently aren't many roles in the government service delivery field for entry-level workers, this isn't to say that those already in the field aren't trying to create more opportunities for emerging professionals. It is important to recognize the many barriers that existed for the inception of digital service teams as they exist now. But as those teams mature, agency leaders need to focus more effort on the career development of this junior part of the pipeline.

Over the past decade, the <u>federal government has</u> <u>prioritized</u> digital service implementation and transformation. Under the Obama Administration, a greater awareness of digital service delivery impact included establishing policies and guides as well as creating new and expanded teams including USDS, 18F, and other agency-wide efforts. The federal teams have <u>created resources</u> and services that address policy issues, rethinking procurement, and scaling using user-centered design techniques. Cities and states have led the way in this work with dedicated teams that possess a strong focus on hiring individuals with more data and technology-focused skills than before.



## "Government has two speeds—nothing at all or light speed." -Former USDS Staff

As these innovative technologists, data scientists, and designers change the way government approaches carrying out its mission, those individuals are also acknowledging the importance of creating entry points to civic tech-related jobs for recent graduates. But this, too, has its own challenges. In order to change the narrative that emerging professionals equate to a lack of relevant experience, government leaders need to provide incentives and pathways obtainable for those seeking digital service in the public sector.

This requires supporting the current ecosystem of professionals in order to allow space to mentor those entering the field, a space that's still very limited. Coding it Forward launched in 2017 to establish summer fellowships for current students in the federal government and those students are matched with mentors working in the public interest technology field. It's a great model, but is limited in scope and duration. Roles in places like USDS, 18F, and the Presidential Innovation Fellowship allow mid- and senior-level professionals to focus on following created pathways through these organizations' roles. But what is missing from the equation are pathways for people looking to gain experience in the more interdisciplinary field of public sector technology as junior- or entry-level professionals as well as the mentorship support systems they will need. Using the framework from research conducted by fellow students last summer, and through the Public Interest Technology Field Building work we've been leading at the Beeck Center, we are supporting public sector and public interest teams to prepare to bring in a younger generation digital service skills and ensure both the teams and the entry-level workers are adequately supported.

"It would be really smart to create more entry-level positions from a government point of view."

-Senior Software Engineer + former 18F Innovation Specialist



## **Key Findings**

## **For Emerging Professionals**

- 1. Build your own community within the network.

  There are many professionals willing to talk about their own experiences and how they ended up where they are today. Get curious and talk to people whose careers you admire.
- 2. Highlight your interdisciplinary skills and expertise to further inform technology in government. Technology in government is about bringing diverse identities, learned experiences, and a 'design-for-all' mindset toward historically traditional technology roles. Most problems may seem to be technical in government spaces, but a lot of time processes (or intractable personalities) are what is holding back the potential solutions.
- 3. There are a diverse range of paths within the government digital service delivery workforce, but little awareness surrounds those current ecosystems. It is impossible to know what the current landscape is without talking to those currently in the field. Ask questions and find out the root of what connects the roles you're interested in. Creating awareness for current resources available is also a key component in strengthening the success of an emerging professional pipeline. There are many differing paths that each leader in the field has taken to arrive at similar positions within government digital service delivery. Highlighting each



through the use of our survey was important in giving discrete information to those looking to enter the workforce. Synthesizing interview data through thematic coding allowed for macro-level insights into better understanding how skills, experiences, and training can influence success in government service delivery.

4. There is a communication gap between current professionals and emerging professionals. Limited mentorship programs are available and accessible to those who aren't currently within the field of government digital service delivery, so we may need to be entrepreneurial and create our own mentor relationships for now.

### For Researchers

There are many public interest technology and government digital service delivery teams within the government, but they don't have heavy research coverage or capabilities. There is a need to help gather this information in order to share workforce descriptions, training, and processes. Instead of trying to focus on all of the pain points for entry-level professionals, the problem valuation helped hone in on three crucial problems within the government technology ecosystem. Focusing on these three insights informed the creation of personas and a journey map for emerging professionals.

2. Documenting processes of digital service teams is getting more recognition, but there needs to be more of it. Highlighting the importance of recording the systems and processes of the government digital service delivery workforce is in direct alignment with the government's traditional way of operating.

### **For Current Professionals**

It is important to establish a strong foundation in order for emerging professionals to be placed in the field. Having a clear understanding of what roles encompass, what skills are required, and a tentative timeline of projects will help establish a more clear understanding of opportunities in government. Government technology is a complex, emerging system. There are opportunities for multiple pipelines of technology talent to funnel into government upon first glance, but there seems to be a small set of opportunities for those considered entry-level. Making more entry-level roles available is important for the process of standardization of roles and defining what skills are necessary for those roles.



2. In order to become available for mentorship to emerging professionals, the ecosystem needs more support. Providing current professionals the resources and infrastructure they need to share knowledge must be recognized before a strong pipeline of emerging professionals becomes established. Current professionals want to help emerging professionals enter the field, but they may be unsure how best to do so due to the current ecosystem and infrastructure. They aren't confident that there is capacity for mentorship, skills building, or exposure to government technology roles, but expressed great empathy for this need.



You X Ventures via Unsplash



## Lessons

## **For Emerging Professionals**

- Get involved in professional organizations that surround yourself with like-minded individuals, leading to potential mentorship opportunities
- Familiarize yourself with all the different roles and responsibilities of each person on a government

### For Researchers

- Harness the information from public interest technology trainings (academic programs, professional development, etc.) to better inform pathways for emerging professionals
- Talk to more emerging and entry-level professionals
- Keep assessing the current ecosystem of digital teams and what is needed to provide a stronger support system

### For Current Professionals

• Whenever you have the opportunity, mentor those looking to enter the field

- digital team
- Look for positions on USAjobs.gov, civic organization job boards, and civic tech Slack groups
- Story share don't storytell
- Learn from the successes *and* mistakes of professionals you admire
- Expose yourself to as many government opportunities (local, state, and federal) as you can through volunteering
- Find an issue you care about and want to fix
- Develop technical and non-technical skills
- Pride yourself on being a problem-solver with an adaptable set of methods
- Develop a standardized process of accessing a diverse talent pool of applicants for roles within each team
- Rely less on word-of-mouth processes for filling roles
- Document your processes (good and bad)
- Share your knowledge
- Think about what creating a pipeline or a strong training program for those entering the field realistically looks like
- Harness Slack groups, the <u>PIT University Network</u>, and teaching opportunities to better inform opportunities and benefits of working in government



## Background

As a part of the Beeck Center's Public Interest Technology Field Building work, this research set out to identify high-level themes in the ways emerging professionals are thinking about the current field, experiences with finding roles, training, and their own needs for success. Based on these patterns, we have created a set of four profiles, or archetypes, that represent the kinds of users whom we are addressing.

Each archetype is based on commonalities observed while conducting semi-structured interviews with leaders in the field. They are not categorized by positive or negative experiences, but by shared expectations and needs.

These archetypes are designed to better understand that the career pipeline should benefit multiple types of experience, training, and familiarity with the field. For this research, we assessed training, work experience, professional goals, needs, and ways to successfully design for specific cohorts of individuals in a standardized way.

## **01** THE EAGER GRADUATE

recent grad with no work experience

## **02 THE CHANGER**

entry-level with parallel experience

## **03** THE INTERN

recent graduate with experience in an internship

## **04** THE CURVE BALL

emerging professional with non-traditional background





### THE EAGER GRADUATE

Recent grad with no work experience

The Eager Graduate is a recent graduate from a 4-year university where they studied a subject related to government, technology, design, or innovation. They may be focused on bridging the gap between technologists and social impact professionals or policymakers. They were an active member of various clubs and volunteer groups on campus. They may aspire to be a part of the United States Digital Service or other government service delivery teams.

#### 0 years



CAREER EXPERIENCE

#### **PROFESSIONAL GOALS**

- · Create user-centered digital resources
- · Modify existing systems
- · Social impact at scale
- · Understand + adapt government use of technology
- Translate complex technical problems into plain-language

#### **NEEDS**

service | responsibility | openness | fairness | creativity | social impact

#### **OPPORTUNITIES**

- Advance accessible programs or junior fellowships for recent graduates
- · Less reliance on word-of-mouth opportunities
- · Standardize roles that align with training



#### THE CHANGER

Entry-level with parallel experience

The Changer is a recent graduate they may have studied a humanities subject with a focus on technology. They may have a background in design and sociology where they curated their knowledge on human-centered design. They may be looking to get involved in a local government Code for America brigade in order to hone their skills as a user experience designer. They may have become interested in public sector opportunities after witnessing differing government bureaucracies in action.

### 0 years 1 year

CAREER EXPERIENCE

#### **PROFESSIONAL GOALS**

- · Create user-centered digital resources
- Understand how government affects human behavior
- Social impact to underrepresented groups
- · Bring HCD to local government teams

#### **NEEDS**

service | responsibility | openness | ethics | creativity | social impact

#### **OPPORTUNITIES**

- Create a clear pathway for entry-level professionals
- Less reliance on word-of-mouth opportunities
- Allow easy discovery of roles that align specifically with training
- More diverse talent pool when hiring



#### THE INTERN

Recent grad with intern experience

The Intern is a recent graduate from a technical program with various internship experiences. They may aspire to work within government on a specific issue. They may dream of using their knowledge about complex systems in order to contribute to a team that makes services accessible for all. While studying in a field related to or similar to Information Technology and Political Science, they may have also been an active member of their student government and the Tech for Good movement.

0 years	1 year	2 years

CAREER EXPERIENCE

#### **PROFESSIONAL GOALS**

- · Create user-centered digital resources
- · Modify existing systems
- · Exposure to technology teams in government
- Adapt governments use of technology
- Translate complex technical problems into plain-language

#### **NEEDS**

service | responsibility | openness | fairness | social impact | recognition

#### **OPPORTUNITIES**

- Create a clear pathway for interns to transition into full-time workforce
- · Encouragement of wearing multiple hats in work
- · Clearer role descriptions



### THE CURVE BALL

Recent grad with non-traditional role

The Curve Ball is a recent graduate of a Master's program with prior career experience. They may come from an interdisciplinary background, previously working in private sector tech as well as non-profits. They may see themselves as a creative technologist looking to make an impact in government by supplying teams with the research and support they need to make informed decisions to better serve the public.

0 years	1 year	2 years	3 years	4 years
				_

CAREER EXPERIENCE

#### **PROFESSIONAL GOALS**

- Modify existing systems using private sector knowledge
- · Impact large groups of unique users
- Help establish proper training + mentorship programs for people similar to them
- · Creation of accessible resources
- · Eventually serve as a Chief Technology Officer

#### **NEEDS**

Leadership | responsibility | authenticity | boldness | contribution | social impact

#### **OPPORTUNITIES**

- Create a clear pathway for private sector professionals to transition into public sector
- Further develop academic courses addressing public interest technology and government digital service delivery



## Background

Emerging professionals can use this journey map in conjunction with the four archetypes created that describe themes, professional goals, needs, and designing for the specific archetype. This journey map is not intended to provide a comprehensive overview of every journey emerging professionals may take, but one that they may find while being exposed to government digital services firsthand. The map features what emerging professionals may be doing, feeling, and thinking about while being exposed to the field, researching the field, and pursuing a career within the field. It can be a resource for emerging professionals as well as those already in the ecosystem. In order to enter the field, it is important to listen to entry stories of those who have led the way.

## **Exposure**

How an emerging government digital service professional may first experience the effects and underpinnings of a government digital service.

### Research

How an emerging government digital service professional may use various platforms to explore the field of government digital service and discover if it aligns with their values, skillset, and interests.

## Pursuit

How an emerging professional views the current space available for their entrance into the government digital service field and what hopes they may have for the future of the field.



## **EXPOSURE**

How an emerging government digital service professional may first experience the effects and underpinnings of a government digital service.









## **RESEARCH**

How an emerging government digital service professional may use various platforms to explore the field of government digital service and discover whether it aligns with their values, skillset, and interests.



They conduct a web search in order to

interested in using keywords such as

better understand what they are





## **PURSUIT**

How an emerging professional views the current space available for their entrance into the government digital service field and what hopes they may have for the future of the field.







Emerging professionals may be exposed to their first direct involvement with government digital services while applying for student aid through an online system. Once at school, they are surrounded by peers who share their interests of social impact. A professor may show them potential career opportunities.

find it hard to navigate the information that is presented to them. They may seek information from various other sources.

"It's hard to navigate the

While completing coursework,

they may encounter outdated

government webpages. They may

"Who is working on these websites and other digital projects within government?"

"Can I work on problems like these with a non-traditional tech background?"

"digital service", "government", "technology", "civic technology", "user experience". After many differing results they are overloaded with information that stretches across fields. They decide to look to platforms like LinkedIn to narrow their exact field label.

"There are so many keywords for a job

"Where do I fit in? Do I have the skills

else?"

They start reflecting on their own experience and interests. They look for resources to help them understand the titles of each role and what they mean, if there are any types of training that may be required. They may look at private sector work within the space of digital service delivery and compare the two types of work.

They struggle with finding available roles. They seek out advice from current senior-level people working in the roles they aspire to have in the future.

"How can I enter the field?"

"Do I have to know the right people?" "Are there jobs being posted or is it all just word-of-mouth?"

"Where do I go from here?" "Who can I look to for help?"

"I really like the way the website provides unfamiliar information."

"This information is a little

"Am I doing this right?"

intimidating."

"I'm excited to learn more at my university."

information on the website." like this."

needed? Will I need more training?"

"Is there anything new I can bring to a role like this?"

"Should I have majored in something

"How can I learn about roles?"

"Am I qualified to work in

government?"

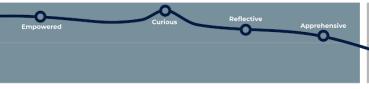
"Who are the leaders in the field?"

"Are there any entry-level positions?"

"What companies could I work for?"

"Can I talk to anyone for advice?"







# Recommendations for the Future

Efforts to understand emerging professionals in the government digital service delivery field should revolve around both those entering the field and those currently in it. It is imperative to understand the environment and establish an understanding of the infrastructure and government nuances that go into creating each team before actively creating a pipeline for younger professionals.

Using the resources available, it is important to research current training programs within government as well as academia that may point to establishing a standardization of roles and mentorships. Speaking with those who will be affected is an obvious key component of ensuring success in an entry-level position. Integrating ideas of those already within the field through questioning of emerging professionals will better showcase where gaps are present. To further inform steps necessary for emerging professionals, researchers should highlight patterns found from the unique paths of individuals that led to the same or similar outcomes of current leaders in the field.

Our work at the Beeck Center is meant to serve as a springboard for other research. Creating preliminary research will only enhance our own and others' understanding of the field. We are always learning more about our role within the space of government digital service delivery and public interest technology overall, and we have been working to strengthen the network in order to conduct research beneficial to the current leaders of the field as well as those looking to enter it.



### RECOMMENDATIONS FOR THE FUTURE

There is much work to be done before the government digital service delivery ecosystem is mature enough to support emerging professionals, but this doesn't mean emerging professionals should be ignored. They are a key part of shaping the future of the field and bring many sought after skills and learned experiences that will only compliment the work already being done to better serve the people. Until then, government teams should work with internal and external researchers to better understand key pain points in the structure of the field, in hopes to evolve into a successful platform for every level of professional.



Hannah Olinger via Unsplash



## Resources for Academic Programs, Trainings, and Conferences

Co-author Siddharth Muchhal

Working alongside New America and the Mozilla Foundation, Freedman Consulting has published annual reports on the state of the public interest technology space, and provides insights and recommendations for the future. Their 2018 report, titled "Building the Future: Educating Tomorrow's Leaders in an Era of Rapid Technological Change," highlights the growing training and curriculum within this space, but also the need for structural and community changes for future growth. Most importantly, the Appendix to their report highlights a

few training programs and curriculums that have been developed in this space.

## **Academic Programs**

**Arizona State University -** <u>School for the Future of Innovation in Society</u>

**Boston University -** <u>Technology and Policy Research Initiative</u>

Carnegie Mellon University - <u>Policy Innovation Lab</u>
Georgia Institute of Technology - <u>Computer for Good</u>
(C4G)

**Georgetown University -** <u>Technology and Society</u> <u>Initiative</u>

**Harvard University -** <u>Kennedy School</u>, <u>digitalHKS</u>, <u>TAPP</u> <u>program</u>

Massachusetts Institute of Technology - Internet Policy Research Initiative

**Miami Dade College -** <u>Engineering, Technology, and</u> Design

New York University - The GovLab

**Princeton University -** <u>Center for Information Technology</u> <u>Policy</u>

**SUNY Stony Brook University -** <u>Department of</u> Technology and Society

**University of California, Berkeley -** <u>Center for Law and</u> <u>Technology</u>

**University of Chicago -** <u>Public Service and Public Interest</u> <u>Law</u>

**University of Maryland -** <u>Science and Technology Policy</u> Initiative



**University of Michigan -** <u>Center for Ethics, Society, and Computing</u>

University of Oxford - <u>Government Outcomes Lab</u> University of Virginia - <u>Science, Technology, and Society</u> <u>program</u>

University of Washington - <u>Tech Policy Lab</u> Stanford University - <u>PIT Lab</u>

## **Professional Training**

Free

<u>Digital.gov University</u> has a model offering a range of free online and in-person training and events for people and teams across the U.S. federal government.

Digital IT Acquisition Professional Training (DITAP) was created through USDS and the Office of Federal Procurement Policy (OFPP) partnering to develop a digital IT acquisition professional community (DITAP). The first component of this community is a training and certification program for contracting officers, which is currently in its second round of piloting this effort. The goal of this effort is that this development program will be offered in multiple agencies, by various training providers, or by the Federal Acquisition Institute. There is currently no open course at this time, but check back to see more information about upcoming offerings of this program.

<u>UK Government Digital Service</u> (GDS) introduced the GDS Academy with multiple courses offered to any member or staff working in a public body who wants to digitally transform how government works with users in mind. The

GDS offers a range of courses and programs including digital and agile awareness for leaders and teams, introduction to artificial intelligence in government, introduction to user-centered design, and more specific courses for product managers, analysts, or policymakers. They also offer masterclasses conducted by academics and industry experts, the Emerging Technology Development Programme, and the Data Science Accelerator.

The Canada School of Public Service (CPSC) Digital Academy formed in 2018 to help federal public servants gain the knowledge, skills and mindsets they need in the digital age. Their offerings include a suite of courses designed for different skill levels and practice areas as well as a newsletter and other ways to learn about government data and digital technology.

### Costs a Fee

<u>General Assembly</u>, although not as public-sector focused, has courses available in user experience design among others.

McKinsey & Company and Deloitte provide resources available through their consulting firm training.

<u>Udemy</u> connects professionals with courses to learn and understand new subjects, topics, and skills that might be relevant to their role. Udemy has courses such as "Intro To Big Data, Data Science, and Artificial Intelligence," "Information Technology Essentials," and "Cyber Security



Operations and Technology Solutions," to help employees such as government officials learn technical skills.

## Conferences, Convenings, and Networks

While the space around government digital services is growing, there are a few summits or convenings focused specifically on helping government officials connect with technologists and ultimately improve digital services in government.

Agile Government Leadership (AGL) Summit holds large, annual summits as well as smaller events throughout the year to showcase work led by government service delivery professionals.

<u>Code for America</u> is the most prominent summit hosted each year, bringing together policy officials from various levels of government to discuss issues pertaining to data and digital in government.

<u>FWD50</u> explores how technology and digital connectedness affect both the public and private sector. It looks to attract citizens, public servants, elected officials, technologists, and other innovative thinkers on exploring issues around technology in government and society.

<u>GovTech Summit</u> features a number of European-based senior public sector leaders as well as leading-edge entrepreneurs to explore how technology can improve the way public services are offered.

Internet Freedom Festival is an un-conference focused on "the fight against censorship and surveillance due to its spotlight on diversity of ethnicity, gender, regions, and thoughts represented." Attendees include NGOs, activists, government agencies, media organizations, large internet platforms, and others. In addition to a large, annual conference, the IFF community also holds regular meetups and workshops.

Internet Governance Forum is a platform hosted by the United Nations that facilitates discussions on public policy issues pertaining to Internet governance.

MozFest is a unique hybrid: part art, tech and society convening, part maker festival, and the premiere gathering for activists in diverse global movements fighting for a more humane digital world. In 2021, MozFest will be held online starting March 8.

The Non-Profit Technology Conference is meant for those in the non-profit and public sector space to get a better understanding of how to incorporate technology into their work, ranging from building websites to digital fundraising and marketing. It will be held online in 2021 from March 23-25.

The <u>Personal Democracy Forum</u>, created and hosted by <u>Civic Hall</u>, has helped foster a world-wide conversation about technology's impact on government, politics, media, and democratic societies in general since 2004. In 2013, it began a spinoff event in Eastern Europe.



## **RESOURCES**

RightsCon is the world's leading summit on human rights in the digital age. It looks to bring together business leaders, policy makers, general counsels, technologists, government officials, advocates, and others to tackle issues at the intersection of human rights and technology.

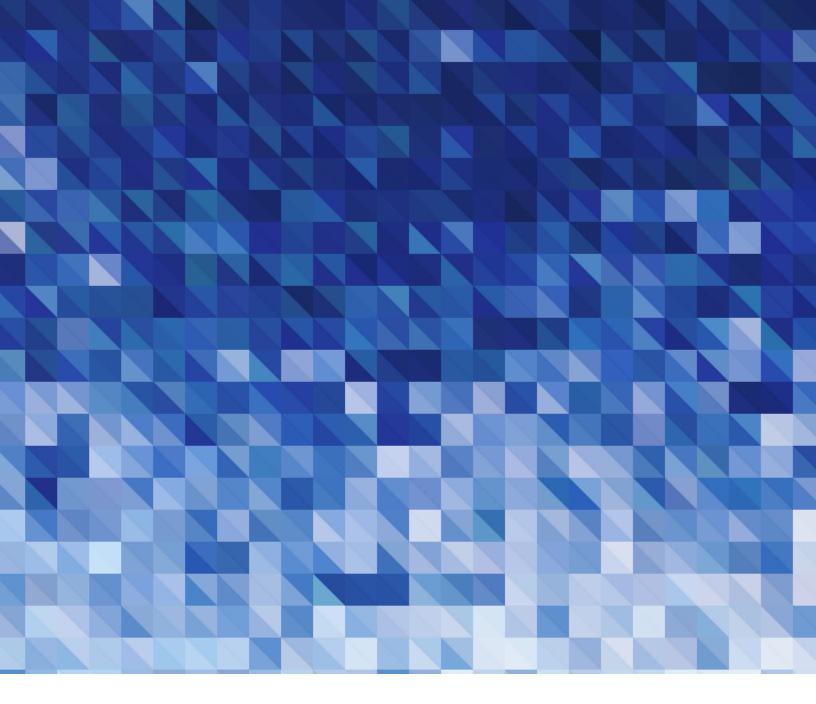
<u>TicTec</u>, which stands for "The Impacts of Civic Technology Conference," has met annually in various European capitals since 2015 and explores the impact that civic technology and digital democracy has upon citizens. It looks to bring together individuals from academic and applied backgrounds, as well as businesses, public authorities, NGOs, funders and educational institutions to build a network of those interested in the civic technology landscape.

<u>UK Gov Camp</u> is a free, public sector unconference for government workers in the UK. Its next meeting will take place Jan. 23, 2021.



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