



Sujani Kamalanathan

Digital Service Team Members: A Look at the Canadian Digital Service

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Supervisor: Steven van de Walle

Presented by: Sujani Kamalanathan
Tallinn, Estonia
sujani.kamalanathan@student.kuleuven.be

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Abbreviations

Acronyms

| | |
|------|--|
| ABC | Authenticity-Balance-Challenge |
| ASA | Attraction-Selection-Attrition |
| CDS | Canadian Digital Service |
| CEO | Chief Executive Officer |
| DEG | Digital Era Governance |
| DST | Digital Service Team |
| FTE | Full-Time Equivalents |
| GC | Government of Canada |
| GDS | Government Digital Service |
| HR | Human Resources |
| HRM | Human Resource Management |
| IT | Information Technology |
| KCM | Kaleidoscope Career Model |
| NPM | New Public Management |
| OECD | Organisation for Economic Co-operation and Development |
| PSM | Public Service Motivation |
| SCCT | Social Cognitive Career Theory |
| SHRM | Strategic Human Resource Management |
| TBCS | Treasury Board of Canada Secretariat |
| UK | United Kingdom |
| USDS | United States Digital Service |

Abstract

| | |
|---|---|
| Purpose | While the public sector generally struggles with recruitment, Digital Service Teams (DSTs) are a relatively new public sector phenomenon that have been successful at attracting talent to their teams. The purpose of this paper is therefore to build a better understanding of who DST members are in terms of their previous sector experience and understanding why they are choosing to join DSTs. |
| Research Design | The design used is a case study approach looking specifically at one team, the Canadian Digital Service (CDS). To gather data, a voluntary survey was sent out to all team members seeking background information. Information was also gathered from the internet in order to build an understanding of career backgrounds. Team members who opted to complete the survey and agreed to be interviewed were contacted for an interview. Video interviews were then conducted one-on-one using a semi-structured format with open-ended questions. The responses were coded using an inductive approach and applying thematic analysis. |
| Findings | Team members were found to mostly be recruited externally from the private sector, and that for over half of them, CDS is their first role working for the public sector. Team members were attracted to CDS because of alignment with its mission and values, interest in digital government and interest in working with the team members and structure. Perceptions of the public sector became more positive after working in the public sector. It is recommended that DSTs use employer branding and promote their public sector values to counteract negative perceptions of public sector work and support talent attraction. |
| Research Limitations/ Implications | This study only focused on team members from one DST. The methodology is subject to self-sample bias, and the opinion of those interviewed may not be representative of the full team or other DSTs. As DSTs represent a unique space in the public sector, the transferability of findings are unclear. |
| Practical Implications | This paper seeks to contribute to an understanding of what attracts talent to these digital service teams, particularly those who may be from different sectors and with specialized skills. The detailed insights could prove useful to human resource management in terms of understanding how to attract and retain workers in the public sector. |
| Research Value | This research adds to the growing body of work on DSTs. There is limited research done on the team members themselves. A qualitative approach was used for this research which is common when looking at careers, but which has not been used as commonly in public sector research on what motivates career decisions. Findings provide insights that can be used to support recruitment efforts in the public sector. |

1 Introduction

Digital Service Teams (DSTs) are a relatively new public sector phenomenon that have been successful at attracting talent to their teams. Therefore, the purpose of this paper is to build a better understanding of who DST members are in terms of their previous sector experience, and understanding why they are choosing to join DSTs. The Canadian Digital Service (CDS) will be used as the case study through which the question is explored.

Research Motivation

This research was motivated by looking at changes in public sector careers and challenges of the public sector workforce. Traditional career paths have declined and in their place there are more non-traditional careers paths. These include protean or boundaryless careers which involve self-managed careers in which career decisions are driven by individual values and measures of success (Hall, 1996; Arthur, 1994). There are a number of different career theories that can be used to analyze career decisions and there are also many frameworks that can be used to explain what draws individuals to certain role and organizations including attraction-selection-attrition (ASA) theories or fit theories. With these theories, the assumption is that individuals are selecting themselves into and out of organizations that they do not align or 'fit' with (Schneider, 1987). The study of sector-switching is considered to be in the same realm as studies on ASA theories, and sector switching can be influenced by a myriad of factors including, but not limited to the profession, the quality or type of work, the career stage or opportunities of the individual, or the organization (Hansen, 2014; Bozeman & Ponomariov, 2009).

Not only have the careers within them changed, but the public sector has also changed considerably in the last few decades. Reforms due to New Public Management (NPM) have resulted in outsourcing of work, agencification and less job security in the traditional public sector. The Digital Era Governance (DEG) that has followed NPM has resulted in a different shift, and is working to reintegrate services, introduce agile work processes and support digital transformation in the public sector (Dunleavy et al., 2006).

The digital era requires a new set of skills and new professions to support it, and this era of digital transformation brings unique challenges to the public sector. Among them there are many human resource challenges in the public sector including that the public and private sector are drawing from the same, and arguably limited, talent pool (Light, 2000; Bozeman et al., 2009). In the future, there is the expectation that public sector workers will likely have private sector experience, due to competition with the private sector for talent (Bozeman et al., 2009). There are many challenges that the public sector faces with respect to recruitment, hiring and onboarding. The public sector also lacks the ability to provide financial compensation or the perks that private companies can provide, though

it does have the advantage of appealing to people's intrinsic values (Lavigna, 2014; Collins, 2008).

The growth of IT and the knowledge economy as well as remote-work also mean that individuals have increased opportunities to develop their careers as they wish (Arthur, 2014). Recruiting is made more challenging by the fact individuals leave jobs at different stages of their career and at different levels within the organization (Sullivan & Baruch., 2009a). It has been observed that those with in-demand skills often go from one job to the next, and that the reward of a multi-decade long career in public service is no longer a selling point for these groups (McKinsey, 2020).

One way that some governments are aiming to support digital transformation is through the use of specialized teams such as DSTs. They are a relatively new phenomenon that are aiming to provide digital government services faster, improve user experience and redesign services in a way that is different to previous e-government efforts (Mergel, 2019). The earliest team was the United Kingdom's Government Digital Service (GDS) in 2011, and more teams have since popped up in other places including the U.S. and Canada. While these teams are a part of the public sector, they are unique in the way they operate in that they tend to favour agile processes, are user-centric and focus on service delivery (Clarke, 2019; Mergel, 2019). They have also been able to do something that the regular public sector has struggled with which is attract talent.

Research Objective and Goal

Given all the factors mentioned above, it would be interesting to look at who these DSTs are attracting and why. Therefore, the following research question will be explored:

What was the previous role and sector of DST members and why did they want to join the DST?

Research on DSTs are still relatively new, and this proposed research would also have the benefit of providing information that could be relevant to support public sector recruitment. While some research has been done on what motivated team members to join 18F in the U.S. (Mergel, 2021), at the moment, there has not been such research done in a Canadian context. Therefore, CDS is being used as a case study through which this information is being explored. To this researcher's knowledge, no such career profiling of a DST exists nor have interviews been conducted to explore their motivational insights. While research has been done on careers in public sector more generally, DSTs represent a unique space within the public sector, arguably a growing area of interest as more of these teams continue to emerge. For the purposes of this study, a qualitative approach was used to complete the research and a combination of approaches were used to collect

information including a survey, desk research and interviews. The insights from this research could potentially help with strategies to attract talent and to mitigate some of the workforce challenges identified in the public sector.

The paper is structured as follows. First, the literature review will provide a comprehensive understanding of the different concepts explored in this paper including public sector careers, public sector workforce challenges, digitalization and DSTs. The methodology is explained in detail, including an outline of the limitations. This is followed by a presentation of research findings relating to each theme that was identified when reviewing the results. A discussion relates these findings to previous research conducted in this area, and also identifies additional implications. And lastly, the paper concludes with a summary of results and identifies areas for potential future research.

2 Literature Review and Key Concepts

This section provides background on some of the key concepts and themes that were reviewed, leading to the identification of the research problem and subsequent research question. The literature review was a synthesis of exploring different concepts across different domains and searching through information from a vast number of fields including career and vocational studies, public personnel management, digital government, public administration, public management and psychology.

Several themes were considered, and after reviewing the literature an interesting gap was found, allowing for the identification of the research problem. The table below identifies the key concepts that emerged and are discussed in the literature review in order to identify the research problem.

| Overarching Concept | Subthemes of Interest |
|------------------------------------|---|
| Public Sector Careers | <ul style="list-style-type: none"> • Career theories • Differences between public sector and private sector (including Public Sector Motivation) • Sector switching |
| Public Sector Workforce Challenges | <ul style="list-style-type: none"> • Context of public sector workforce <ul style="list-style-type: none"> ○ Impact of NPM ○ Shift to DEG • Impact of digitalization on public sector (roles, skills, work) • Human Resource (HR) challenges – attracting and recruiting talent |
| Digital Service Teams | <ul style="list-style-type: none"> • History of DSTs • Role of DSTs • Understanding DSTs role in attracting and recruiting talent |

Table 1: Concepts Emerging in Literature Review

The literature review is structured as follows. It will start with an initial section that builds an understanding of public sector careers. It will build a general understanding of public sector careers and a quick background on theories relating to careers and career choices. It will also explore differences between public sector and private sector, and also discuss the phenomenon of sector switching. The second section will look at public sector workforce challenges. It will do so by providing a brief background on NPM and the

impact those reforms have had on the public sector and its workforce. Afterwards, the shift to DEG will be discussed along with what digitalization has meant for careers and human resource management. The final section will discuss digital service teams, identifying why they have been created and how they are attracting talent to the public sector. Lastly based on the research that has already been done in these areas, gaps are identified and the research question that will be investigated within this paper is presented.

2.1 Public Sector Careers

A career is defined as the, “evolving sequence of a person’s work experiences over time” (p. 8), and career theory is seen as the body of all generalizable attempts to explain and learn from career phenomena (Arthur, Lawrence & Hall, 1989). Careers reflect what is happening between an individual and their employer and how these relationships are changing over time; the study of careers looks at individual, organizational and societal change (Van Maanen, 1977; Kanter, Chapter 25 as cited in Arthur et al., 1989). As evidenced in career studies literature, there have been numerous shifts in the way careers are thought of through the past few decades.

When considering careers, one consideration is that of the career path. Traditional career paths are typically defined as those in which one works for a large bureaucratic organization and is given job security, with the expectation that one will work for the same organization throughout their career (Whyte as cited in Reitman and Schneer, 2008). These types of careers, and their conventional career moves of upward mobility, are much more common in large bureaucratic organizations than in other kinds of organizations (Nicholson and West, 1988 as cited in Arthur et al., 1989, p. 190). This is the conceptualization of careers moving along a ladder – onward and upward. This succession of related jobs moving along in a very predictable and ordered sequence has typified the conventional public service career structure (Wilensky, 1960; Smith, 1993 as cited in McDonald, Brown and Bradley, 2004).

Public sector careers have also been impacted by this shift in careers. These traditional careers and the traditional career paths they entailed have, as documented in career literature, declined in the past decades. Changes to these traditional careers have since led to the growth of non-traditional career paths. This change has been attributed to several factors including: the rise of dual-income households, women joining the workplace, changes in psychological measures of success, and economic crises in the past decades that have resulted in large-scale down-sizing, flattening and restructuring of organizations (Uchitelle and Kleinfield, 1996; Rousseau, 1995 as cited in Reitman and Schneer, 2008).

These changes have also resulted in new theories and concepts to explain the shift and has led to a rich background in career studies.

Understanding Career Studies and Theories

A brief background of career studies and theories will be provided in this section. As traditional careers declined, non-traditional career paths have emerged. The term “protean” career describes one such non-traditional path. In *Careers in Organizations*, Hall (1996) described the protean career as differing from the traditional career in several ways. One of the main ones being that the person, not the organization, is in charge of their career, and success criteria is seen as subjective rather than based on ‘climbing the ladder’ (Hall, 1996).

Another non-traditional career is known as the ‘boundaryless’ career. The DeFillippi and Arthur (1994, p. 307; 1996, p. 116) definition of boundaryless careers is, “sequences of job opportunities that go beyond the boundaries of single employment settings” (Arthur, 2014). These boundaryless careers are associated with increased job mobility, more flexible job structures, and fewer hierarchical career trajectories. On this path, employees are expected to be self-directed managers of their own careers (Arthur & Rousseau, 1996; Sullivan, 1999; Arthur, 1994; Rodrigues & Guest, 2010 as cited in De Caluwe, Van Dooren, Delaforty & Janvier, 2014). The below table from De Caluwe et al., 2014 is helpful in outlining the differences between these non-traditional or new career paths and the traditional careers based on the literature review.

| Career Types | |
|---|---|
| Traditional Career | New Career |
| Career in a limited number of organizations | Many positions with multiple organizations |
| Paternalistic employer-employee relation | Self-managed career |
| Vertical career progression | Psychological success, enriching experience |
| Career of service | Employability |
| Loyalty to the organization | Transactional relation |

Table 2: Table of Career Types (adapted from De Caluwe et al., 2014)

All of this background reiterates that the understanding of careers has evolved over time. Having a single employer over the course of one’s lifetime is no longer a common expectation, and it is expected that most people’s careers will involve three to six, or even

more employers (Arthur, 2014). While there is not recent literature on this topic, a look at public sector career trajectories in the early 2000's found that there were still several clear elements of traditional career trajectories among public sector managers, and that the traditional career path is still appreciated in these public sector settings (McDonald et al., 2004). Beyond looking at traditional or non-traditional career paths, there are many other contemporary theories that can be used when studying careers.

One commonly used theory to study careers in the academic sphere is Social Cognitive Career Theory (SCCT). SCCT was created to consider all the various factors within the context of career development (Lent, Brown & Hackett, 1994). Specifically, it was an effort to create a theory that linked together different concepts in career studies and emphasized supports and barriers that impact career choice. It looked at context as well including choice goals, outcomes and individual's agency in the process (Lent et al., 1994). The below figure represents a model of SCCT:

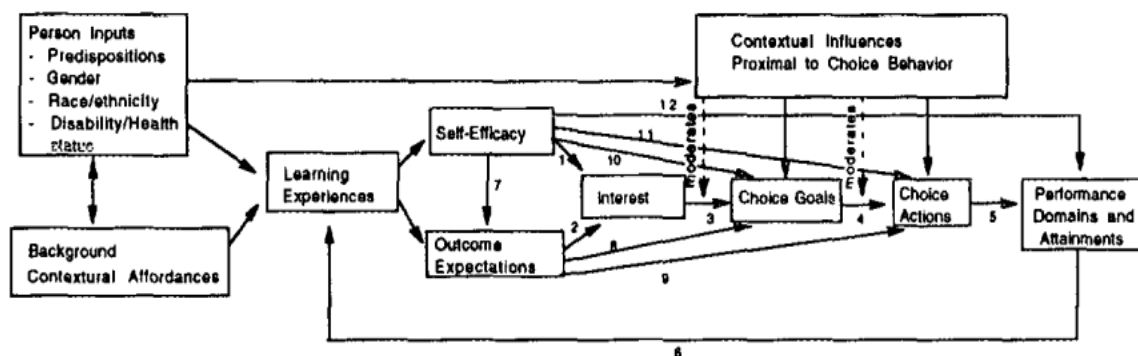


Figure 1: Model of Social Cognitive Theory of Career Development (copied from Lent et al., 1994).

In present day, this theoretical framework is commonly used both in researching and understanding of career choice (Gushue and Whitson, 2006; Inda et al., 2013; Lent et al., 2008; 2016; Singh et al., 2013 as cited in Lloyd-Walker, Crawford & French, 2018). SCCT was built on Bandura's social cognitive theory and focuses on cognitive variables including self-efficacy, outcome expectations and goals and also individual characteristics as well as contextual and environmental factors that can act as either barriers or provide opportunities (Lent et al., 1994).

A more recent career model that is relatively recently developed is the Kaleidoscope Career Model (KCM). This model was initially developed as a way to view women's careers specifically, but it has been found to also offer a relevant lens for exploration of more non-traditional careers as well (Sullivan, Forret, Carraher & Mainiro, 2009b). It

provides a new framework for examining career and decision-making, and its authors have suggested using it to develop and support progressive HR policies. The model is based on three parameters (authenticity, balance, challenge), factors which interact in terms of impacting career decisions, but which also vary in importance depending on the stage and life events one is currently in.

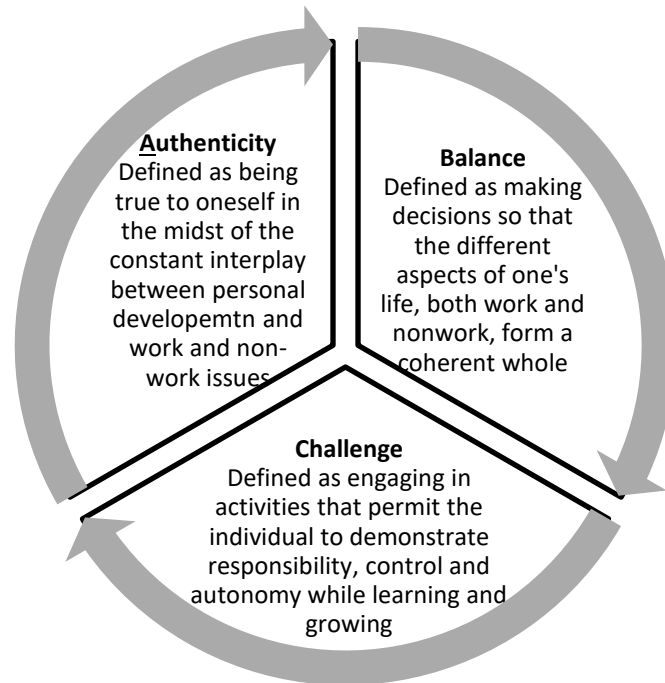


Figure 2: Kaleidoscope Career Model (illustration based on Sullivan et al., 2009a)

When considering the non-traditional protean model and the boundaryless career models, the KCM takes into consideration that individuals realize their career decisions impact those around them, and develop career identities independent of who they work for (Mainiero & Gibson, 2018).

People and Organization

Beyond career theories, there are also theories of psychology and organizational behaviours that help to explain what draws individuals to certain roles and organizations. One is the attraction-selection-attrition (ASA) framework which is depicted below. There are several propositions within the framework, and one of them is that people select themselves into and out of organization (Schneider, 1987).

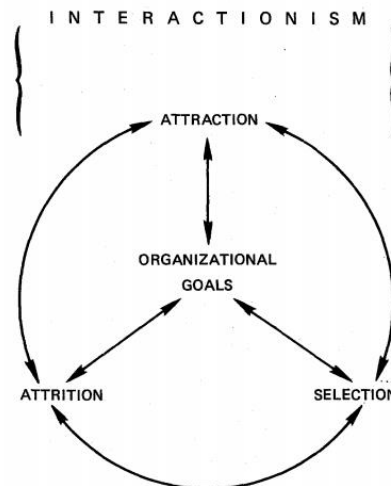


Figure 3: Attraction-Selection-Attrition Framework (adapted from Schneider, 1987)

Essentially, the idea is that individuals select into organizations that align with their values, and opt out of organizations that they do not align, or ‘fit’ with (Schneider, 1987), which often also has implications of its own. Fit theories are similar in that they assume people have a desire to look for congruence and seek out spaces and individuals who they match with (Van Vianen, 2018). There are many different notions of what one ‘fits’ with, for example:

In a work context, fit includes a wide range of fit concepts, such as person–vocation fit (the congruence between individual vocational interests and vocational characteristics), person–job fit (fit between individual abilities and needs and the demands and supplies of the job), person–organization fit (fit between individual and organizational values), person–team fit (fit between individual attributes and those of the work group), and person–supervisor fit (fit between individual attributes and those of the supervisor). (van Vianen, 2018, p. 77)

These theories of fit are helpful for understanding the different factors of alignment between characteristics and can determine job satisfaction and work motivation.

Distinguishing Public Sector and Private Sector Careers

Within the literature, there are distinctions between public sector and the private sector in terms of the organizations, the workforce and work motivations. Public service motivation or PSM is originally defined as, “an individual’s predisposition to respond to motives grounded primarily or uniquely in public institutions and organizations” and is a

construct from Perry and Wise (1996) that is widely studied and used in literature. PSM is also suggested to have a strong impact on sector choice, noting that “the greater an individual’s public service motivation, the more likely the individual will seek membership in a public organization” (Perry and Wise, 199, p. 370 as cited in Vandenabeele, 2008). In a study of final master year students there was evidence that PSM correlates positively with the preference for public sector work, and that government organizations that have more publicness have a stronger effect from PSM (Vandenabeele, 2008). Here, publicness refers to the notion that government is full of different types of organizations, and there are different reasons an organization can be considered ‘public’ i.e. it may be that the services they provide are of public value, the services they provide should be provided by a neutral party or they should be free or part of general social welfare (Antonsen and Jorgensen, 1997; Vandenabeele, 2008).

While PSM is an interesting construct that has been studied extensively, a review of studies done on PSM found more “holistic research needs to be done such as looking at other motives and human needs, or looking at situational factors and contextual factors that relate to the individual, their situation and organizations and influence the impact of PSM” (Perry, Hondeghem, & Wise, 2010).

In a review of the research done on differences in sectors, it was observed that there have been few direct comparisons of work motivation between public and private sectors because there is not a satisfactory way to measure work motivation (Rainey & Bozeman, 2000). In another comprehensive review looking at whether individuals employed in public sector behave differently from private sector, there was no clear pattern that emerged; the only consistent finding was that civil servants show a higher level of community-service motivation (Baarspul et al., 2011).

Discussing Sector Switches

It used to be thought that certain workers were motivated to be in the public sector because of PSM, however, some studies have found that the relationship between public sector motivation and sector employment choice is not always so straightforward (Wright & Christensen, 2010). One study found that PSM may not be a good predictor of someone’s first role, but seems to increase the overall likelihood that an individual will take a future role in the public sector at some point in their career (Wright et al., 2010).

One observation for this is that employees are no longer loyal to the organization, and this can discourage workers from joining the public sector for a life-long role as may have been the case previously (Green, 2002 as cited in Lavigna and Hayes, 2004). Instead, switching between jobs and between sectors is common. This brings us to the concept of sector switching, which is switching between public and private sectors. The study of

sector switching is considered to be in the same realm as studies on ASA theories. There are several propositions within the framework and one of them, as previously noted, is that people select themselves into and out of organization (Schneider, 1987).

While it has not been extensively studied in the literature, it is important to understand sector shifts as there has been a blurring between the boundaries of public and private sector. Sector choice can be influenced by a myriad of factors including the profession, the quality or type of work, the career stage of the individual, career opportunities, co-workers and physical working conditions (Christensen and Wright, 2009b; Moynihan and Pandey, 2008; Vigoda and Cohen, 2003; as cited in Wright & Christensen, 2010). Despite the switching that happens between public and private or vice-versa, there is still a lot of research required in this area which is one reason the concept of sector switching is an interesting one (Bozeman & Ponomariov, 2009). One study looking at why employees move from public to private sector found distinct motives including salary level, but indicated this area needed much further study (Hansen, 2014).

In another review looking at various research comparing the differences between public and private sector, the distinctions between the two are not always so clear and in some ways may not meet these assumptions of what belongs to each domain (Rainey & Bozeman, 2000). An example are studies comparing the work values and motives of public and private employees. These consistently find that public-sector workers place more value than private-sector counter-parts on public service, work benefitting society, self-sacrifice, responsibility, integrity etc. - however, upon closer review there is overlap between respondents in the sector that are often not accounted for and the differences are not always so strong (Rainey et al., 2000).

Interestingly, there is the expectation that in the future the workforce of the public sector will likely have some private sector experience and be more diverse due to a wave of expected retirements and competition with private sector for talent (Bozeman et al, 2009). While sector-switching studies are limited, it was found that

changing sector of employment involves barriers, which, whether real (e.g., possible specific public sector certification requirements) or imaginary (e.g., perceived differences in organizational cultures, importance of different credentials), are likely to discourage ad hoc sector changes. (Bozeman et al, 2009, p. 79)

Therefore it can be seen that understanding why some employees choose to stay and why some choose to leave is of interest for public organizations, particularly when looking to attract and keep talent in a shifting career landscape.

2.2 Public Sector Workforce Challenges

There have been many changes to the public sector and its workforce through the last few decades. There are three main models of bureaucracy emerging in the last several years which are the Weberian model, the New Public Management model (NPM) and lastly the Digital Era Governance (DEG) model. The Weberian model was the earliest one and, in this model, the use of information and communication technologies was limited, even if digital technologies had been introduced in some administrative tasks (Dunleavy & Margetts, 2015). The two more recent ones are of current relevance when considering public sector workforce challenges. The first is the rise of NPM and now the era of digital governance. These models have challenged the public sector workforce in many ways.

The Impact of New Public Management

Organizations have undergone many changes over the last few decades and the public sector is no exception. NPM reforms have impacted public sector, encouraging governments to become more lean, to use market incentives and become more entrepreneurial (Hood, 1991). The rise of NPM was linked to four trends: the first is the attempt to slow down or reverse government growth and reduce public spending and staffing; the second is the shift towards privatization; the third is the development of automation and IT; and the fourth is a focus on general issues of public management (Hood, 1990).

While there were numerous impacts, one outcome of NPM reforms is the rise of Strategic Human Resource Management (SHRM). As defined by the Organisation for Economic Co-operation and Development (OECD):

[SHRM] looks at the processes and tools used to ensure that the capacities of the government workforce are aligned to the mission and core strategic objectives of the government. This means ensuring that right people with the right skills and working in the right places to achieve goal and objectives as effectively and efficiently as possible. (OECD, n.d.)

The rise of SHRM fits well within NPM principles, which incorporate private sector management practices in the public sector (Brown, 2004 as cited in Van de Walle & Groeneveld, 2016). Changes to the public sector resulting from these trends include moving away from some traditional extrinsic benefits for public sector workers such as job security, and moving towards more contracting out, or at-will employment of work (Battaglio, 2010; Hays & Sowa, 2006 as cited in Fowler & Birdsall, 2020). It has been observed that this “changing nature of public service has blurred the lines between economic sectors by intermingling public, private, and non-profit sector missions”

(Durant, Kramer, Perry, Mesch, & Paarlberg, 2006; Haque, 2001 as cited in Fowler & Birdsall, 2020).

This is also inline with a trend towards contracting and outsourcing work more generally. It has been observed that with NPM, many of the skills and tasks related to digital services and digitalization were outsourced (Mergel, 2019). The public sector has experienced many challenges with adapting to the digital era as a result of these reforms. And the OECD has cautioned that “failures of governments to make the transition to the new digital environment can have important consequences including poor service delivery, underperformance of spending, privacy and security breaches, and loss of citizen trust” (OECD, 2014, p. 3). In a global context, there are numerous examples globally of failed IT public sector projects (Clarke, 2019).

Not only did NPM impact HRM as mentioned above, but it also impacted IT in the public sector which was in many instances was outsourced (Dunleavy, Margetts, Bastow & Tinkler, 2006). NPM was strongly focused on finding efficiencies. The approach taken with NPM is interesting because the reforms place more value on money such as pay-for-performance and efficiency instead of public service values which actually counters the motivation research in this area (Rainey et al., 2000).

Digital Era Governance and its Impact on the Workforce

Following this, it has been argued that there has been a shift to DEG which “involves reintegrating functions into the governmental sphere, adopting holistic and needs-oriented structures, and progressing digitalization of administrative processes” (Dunleavy et al, 2006). DEG is happening due to advances in technology, and the change from IT being something that can simply assist with a process to instead being a powerful tool that can change the way government and citizens interact (Dunleavy et al., 2006).

Whereas NPM focused on disaggregation, competition and incentivization, DEG focuses on reintegration, needs-based holism and digitization changes (Dunleavy et al, 2006). Reintegration is about ensuring systems and processes and people can work together, needs-based holism is about being more agile and considering “end-to-end services”, while digitization changes involves using IT to transform processes (Dunleavy et al., 2006).

The digital era brings with it challenges and risks including the changing expectations of society, and a re-examination of approaches and strategies as well as modernization and integration of technologies into government services (OECD, 2014). In many governments the IT function was outsourced to private sector organizations during NPM, often resulting in a lack of in-house expertise, expensive contracts and ineffective services

(Dunleavy et al, 2006). The UK in particular was very much impacted by NPM reforms, as the government lacked internal IT expertise, did not have proper IT governance and was failing when it came to successfully delivering IT projects (Lane, Fox, 2010 as cited in Clarke, 2019). Now in the UK the rollback of this agencification approach of NPM has been seen, as tasks outsourced previously to the private sector are brought back to government. As Dunleavy argues, there is a shift back towards re-governmentalization which includes the “reabsorption into the public sector of activities that had previously been outsourced to the private sector” (Dunleavy et al, 2006 p. 481).

New Skills and New Teams

In the digital era and to support digital transformation, there is a need to build multi-disciplinary approaches that bring together all the different actors – this includes traditional disciplines as well as digital professionals (OECD, 2021). Traditional disciplines includes fields such as human resources, operations, procurement, law, policy etc. Digital professionals, as defined within the OECD’s Framework for Digital Talent and Skills in the Public Sector, include the following:

- User-centred design professionals: includes service design, interaction design, content design and user research; roles involve looking for user-insight and needs and sharing that with the broader team
- Service professionals: focus on and are accountable for the end-to-end user experience across product, service and organizational boundaries
- Product professionals: role is in-between different disciplines and finds a balance between the user needs, the technical feasibility of a solution and the broader context of the organization
- Delivery professionals: support delivery work at the intersection between different disciplines in a team to ensure a balance between the understood needs of users, the technical feasibility of solutions and the broader organisational context
- Data professionals: manage the data collected through the government, monitor performance of services and create insights to support service delivery and/or policy
- Technology professionals: cover front-end, back-end and operations through different roles i.e. technical architects work with teams to ensure the resilience, scalability and security of the work; developers advise on technical feasibility,

maintaining and documenting code, running production services and solving technical problems (OECD, 2021)

Technological changes have also impacted jobs over the years as well. There were the standard jobs where a role performed work that was specific, generally repeatable and organized around a process. However the jobs more highly in demand now are not the standard jobs, but rather “hybrid” jobs which “bring together technical skills, including technology operations and data analysis and interpretation, with soft skills in areas such as communication, service, and collaboration” (Deloitte, 2020, p. 32). These hybrid jobs are themselves expected to give way to what has been termed “super jobs” which combine work and responsibilities from multiple traditional jobs and use technology to change the nature and scope of the work performed (Deloitte, 2020).

It is expected now that over the course of one’s lifetime, there will be many frequent job changes as skills become obsolete and there is need for both continual skills development, and learning and development as people may work in various fields and disciplines over the course of their career (Deloitte, 2019). It is also a changing environment as both workers and leaders are worried about how advances in technologies could change jobs and skills requirements. One thing that is apparent is that in both the public and private sector, there is a need for skilled digital professionals.

Recruitment Challenges

The ongoing challenges of digitalization can only be addressed when the right people with the right skills are in place to address them. However, there are many human resource challenges identified in the public sector. SHRM functions focus on competence and behaviour, with competence management consisting of acquisition, utilization, retention and displacement, and behaviour management strategies consisting of behaviour control and coordination (Wright & Snell, 1991). Within this model, recruitment is a competency acquisition strategy which consists of doing an environmental scan to “locate the relevant competencies and attract them to the organization” (Wright & Snell, 1991, p. 211).

Government at all levels face an enormous challenge in competing for talent. It is argued that the public sector talent pool is ‘dwindling’ along with the talent pipeline (Light, 2000). The issue is that now all sectors are trying to recruit and hire the ‘best and brightest’ from the same talent pool given that no sector monopolizes job tasks or functions, and that employees are choosing their own career paths (Durant et al., 2006; Light, 2000 as cited in Fowler & Birdsall, 2020).

In addition to increased competition with the private sector, cross-sector analyses suggest the public sector has additional issues when it comes to both hiring and onboarding

(McKinsey, 2020). A study by Glassdoor found that in the public sector, the interview stage of the hiring process in the public sector took almost 2.5 times as long simply to interview candidates when compared to how long it took on average across other industries in the U.S (Glassdoor as cited in McKinsey, 2020). In public organizations, HRM is “accused of being slow and unresponsive to the more qualified people in the labour pool, which ultimately drives them to the private sector” (Collins, 2008 p. 1594).

There are also challenges specific to motivating employees in public sector. Some factors mentioned include that the goals of public-sector organizations are harder to measure, and that political turnover makes it difficult to sustain engagement as there may be short-term perspectives or specific policy agendas (Lavigna, 2014). As well, government can not provide as much financial compensation or exclusive perks such as what would be seen at a private company due to budgetary constraints (Lavigna, 2014).

There are also numerous challenges to the public service workforce, both as a result of the changing public service and the changing workforce and roles. In Deloitte’s 2019 Global Human Capital Trends survey, it was found that 70 percent of respondents cited recruitment as an issue and of those, 16 percent indicated it was an urgent issue (Deloitte, 2019). Further, as mentioned the growth of IT and the knowledge-driven economy has also shifted career opportunities for individuals (Arthur, 2014) and with the growth of remote work generally and with the ongoing pandemic, it can be argued that the opportunities are no longer limited by location for certain workers. These issues are echoed in much of the literature on public sector HR challenges.

One potential way to counter recruitment issues is to have public managers focus on strategies within their scope of control, such as retention and training rather than focusing on areas where there is less control (Collins, 2008). Research looking at public sector employees have found that they also have a high interest in job security and a relatively strong intrinsic work ethic (Collins, 2008). Motivation to contribute to the public sector could be used by HR managers as an active recruitment tool, and public sector HR managers could better recruit these employees by emphasizing public sector values in recruitment tools and targeting these groups through different tools (Asseburg & Homberg, 2020). Some other proposed steps to combat HR challenges in the public sector include opening up more jobs to competition from the outside, to provide challenging work and opportunity for growth, and to become better at recruiting talent (Light, 2000). Research suggests that public sector managers need more discretion to offer interesting work, incentive-based compensation and other progressive personnel policies to attract future employees and retain their employees (Collins, 2008).

There are also recruitment challenges specific to certain public sectors. In some European countries for example, candidates must undertake costly and time-consuming entry examinations (Hudson, 2017 as cited in Kravariti & Johnston al., 2020). This is in contrast to the private sector which can hire people with little bureaucratic effort and this has resulted in public sector vacancies of key roles not being filled (van den Brink and Fruytier, 2013 as cited in Kravariti et al., 2020).

In a report on hiring in the British civil service, it was found that the strict procedures around recruitment and selection were viewed as “arduous” and long, with one interviewer noting that “it was far too long - I was tempted to go off and do other jobs” (Baxendale, 2014, p. 9). It is indicated that for external hires in particular, the current process as it is in the British civil service is bureaucratic, too formal and disengaging.

A more engaging, personal approach based on informal and formal meetings would not cut across the principle of recruitment on merit. But it would do much to ensure the best people are selected. (Baxendale, 2014 p. 10)

It was therefore recommended to overhaul the recruitment and selection procedures to support a different approach. As a result of the way careers themselves have changed due to contextual and environment factors, employees enter and leave organizations differently than they did in the past. This includes leaving at different career stages and different levels within the organization, and results in making HR processes such as recruitment more varied, adding to the complexity of recruiting and retaining talent (Baruch, 2004 as cited in Sullivan et al., 2009).

Within the recruitment challenges, the recruitment of specialized positions poses an additional unique challenge. In a study looking at lawyers, an example of a specialized career, it was found that

(a) lawyers choose private over public sector employment for mostly extrinsic motivators but public over private sector employment for mostly intrinsic motivators and (b) nonprofit over public sector employment for mostly intrinsic motivators but public over nonprofit sector employment for mostly extrinsic motivators. (Fowler and Birdsall, 2020)

This provides useful insights into employee perception of the public sector and how both extrinsic and intrinsic rewards could be used to support recruitment of specialists in the public sector (Fowler & Birdsall, 2020). In a separate study looking at shortage of dentists in Australia’s public sector, it was found that the reasons cited by public dentists as the main reason for entering the public sector was to work in community-based settings, but

that many that left the public sector cited lower remuneration and frustration with administrative policies as well as a lack of professional autonomy (Hopcraft, Milford, Yapp, Lim, Tan, Goh, Cheng Low, & Phan, 2010). The factors cited by them in their decision to leave are ones that are common critiques of public sector work.

IT is yet another specialized area that has challenges with recruitment both in the general workforce, and also the public sector. The Treasury Board of Canada Secretariat (TBS) in its Digital Operations Strategic Plan: 2018-2022, noted that “this challenge is compounded by the fact that some technology skills are in short supply in society in general, as well as in public service.” Specialized skills in IT are in high demand in the digital era. It has been observed that “digital talents” often go from one job to the next and that the reward of a multi-decade long career in public service is no longer a selling point for these groups (McKinsey, 2020).

Often these groups are in high demand in the finance and tech sectors, and when it comes to salary this is an area that is difficult for the public sector to compete with. Interestingly though, mission and impact may be a higher value proposition that can be used by the public sector when they can not compete on pay alone (McKinsey, 2020) The federal civil service in the U.S was also shown to struggle when it came to hiring digital roles such as full-stack developers, AI engineers, UX designers, data scientists etc. as those talents and skills that are required in the public sector are often also in high demand in the private sector (McKinsey, 2020). Eric Hysen, an early member of the U.S. Digital Service also acknowledged challenges particularly with recruitment stating “You need to be able to actively go out and recruit. The types of people that the government needs in many cases aren’t browsing USAJobs looking for listings, [...] They need to be found where they already are, and then be able to bring them on very quickly. You’re competing with processes from private companies that might try to bring somebody in in a week or two” (as quoted in Mitchell, 2016).

The OECD recognized this and recently developed and shared information in its framework on what supports and attracts talent for a digital workforce to support the transformation to digital governments.

| Attracting the talent for a digital workforce | |
|--|---|
| What supports digital transformation | What doesn’t support digital transformation |
| Establish clear job description and profile needed | Unclear about jobs and roles the organization needs |

| | |
|---|--|
| Proactive recruitment strategies | Bureaucratic and slow recruitment methods |
| Promote public sector as an employer | No branding strategy |
| Put measures in place to reduce biases in recruitment | Unconscious biases in recruitment |
| Ensure diversity and gender equality of teams | Little consideration of diversity and gender equality of teams |

Table 3: Attracting the talent for a digital workforce (adapted from OECD, 2021)

2.3 Digital Service Teams

All of the changes associated with digital transformation changes have created a need to explore new approaches. Existing organizational structures as they are may not support the right environment for digital innovation, and separating parts of the organization is one potential way to help foster innovation (Soto Setzke, Riasanow, Bohm & Krcmar, 2021). Strategies such as these have led to the rise of new ways of working which have attracted workers.

In public sector, this approach can be evidenced in the rise of so-called new organizational structures that have emerged as a result of public sector innovation, and a shift to DEG. One example is in the emergence of innovation labs, with innovation labs being seen as an activity to create organizations for innovation (Tönurist, Kattel & Lember, 2017). These labs reflect ongoing public-sector innovation discourse and related reform attempts (Tonurist et al, 2017). There have also been other structures emerging. Some of these new organizational structures are DSTs. They are a relatively new phenomenon that are aiming to provide digital government services faster, improve user experience and redesign service in a way that is different to previous e-government efforts (Mergel, 2019).

Background on Digital Service Teams

DSTs are a public sector innovation in that are also relatively new to be studied in the literature. The first DST was in the U.K. in 2011, and now a number of national governments have created these teams which combine digital experts and public sector workers in order to “digitize” government (Eaves, 2018; Mergel, 2019). While there is still limited academic research into this topic, Clarke’s (2019) review of six different units found that these teams have similarities among the including their favouring of agile and user-centric design, using data to support decision making, and a focus on service – having a ‘delivery-first’ ethos. These are separate units that are established because,

the task that digital service teams set out to fulfill – the digital transformation of government - is in scale and mandate so massive, that governments have chosen to establish separate units to create networked and agile IT governance structure in addition to the existing IT governance organizational units (Mergel, 2019, p. 2)

It has been around a decade since the first team was started and there is an acceptance by governments of the teams as being a useful way to promote new practices and user-centric design (Eaves, 2018). One could argue that the fact that more teams are emerging, means that the model has certainly piqued interest on a global scale. DSTs are part of a shift in traditional government approaches to IT, and part of this is also the changing language including using ideas and values from the tech sector such as ‘agile’ and ‘user experience’ to name a few (Clarke, 2019). The below table illustrates the shift in approaches between traditional government IT and current approaches.

| Traditional approaches to government IT versus current digital government orthodoxy | |
|--|---|
| Traditional Approaches to Government IT (‘e-government’) | Current Digital Government Orthodoxy |
| Waterfall design, the long release cycle | Agile, iterative design |
| Government-centric (focused on adhering to internal government standards, processes and needs) | User-centric (focused on identifying user needs, and tailoring government standards and processes around these needs) |
| Limited reliance on data in decision making and design | Heavy reliance on data-driven decision making and design |
| Managing legacy contracts with a small number of big IT providers | Building in house and procuring with a competitive, pluralistic marketplace |
| Favors proprietary solutions | Favors open source solutions |
| Siloed (‘one use’, department/initiative specific project development and IT management) | Horizontal, platform models (‘multiple use’, whole of government project development and IT management) |
| Risk-averse, process-first, hierarchical organizational culture | Hacker, delivery-first, ‘flatter’ organizational culture |

Table 4: Traditional approaches to government IT versus current digital government orthodoxy (adapted from Clarke, 2019)

Who are the members of the Digital Service Teams?

Though national DSTs differ based on their governance structures and resources, all have to be staffed in order to achieve their mandates. The staffing of these digital teams often requires team members with different skills, and some that may not be part of the regular HR categories (Mergel, 2019). When reviewing some of the different approaches teams took, it was noted that HR policies were often reviewed and aligned with the needs of the team (Mergel, 2019). This of course also depended on the context of the team, but this is in stark approach to the NPM era when many tasks related to digital services were outsourced and contracted out, rather than brought in. As mentioned in an earlier section, this was a contributing factor to the skills gap in government.

DSTs face a number of challenges at organizational level and cultural levels, and one major challenge identified in a review was that of attracting the right talent, as typically government is not often actively recruiting (Mergel, 2017). One of the challenges that was noted for these DSTs was that of attracting IT talent, noting that “attracting IT talent from high-paying private sector technology jobs has been a long-term problem for the public sector” (Mergel, 2017).

However, a recent article looking at these DSTs observed,

At a basic level, [these units] have proven their worth in the area of talent recruitment. As noted above, by offering the opportunity to work on pressing social challenges in a unit that defies pejorative stereotypes of government bureaucracy, [these units] have generated interest in government careers amongst tech talent that have since the 1980s opted instead for more lucrative and competitive private sector opportunities. This talent is key to reducing the information asymmetries that have traditionally undermined public sector IT procurement, and also enables in-house development, versus the strict contract-out model that has failed for decades (Clarke, 2019).

This is interesting given that recruiting and specifically recruiting specialized professionals is generally seen as a problematic area for the traditional public sector based on the literature review. In the U.S for example, it was surprising that digital service teams were able to attract highly skilled IT professionals into the government workforce (Mitchell, 2016). There was research done into why many wanted to join 18F, an American digital service team to support the federal government. Results indicated a lot

of prosocial motives in these individuals, including the desire to improve government whether by improving the technology or the service and also through making a difference and positively impacting the public (Mergel, Bellé & Nasi, 2021). One respondent quoted in the paper, “I was drawn to 18F because I wanted to make a difference. 18F offers a unique opportunity to have a positive impact across government services and their users—there aren’t many places with more public impact per line of code” (as quoted in Mergel et al., 2021). This article contributed to an understanding of why skilled IT professionals are interested in joining the government workforce using a qualitative analysis (Mergel et al., 2021).

This is also in line with some of the motivations listed above, and previous research that has found that, “public servants find meaning in their work by making a positive difference in the lives of the citizens they serve” and that many of the employees entering public service are already committed to the government’s mission (Lavigna, 2014). It could therefore be interesting to look at how these digital service teams are able to attract individuals when generally, the public sector struggles with talent recruitment. The research also seems to indicate that these teams may attract private sector employees, and sector switching is also an interesting factor to consider as well.

2.4 Tying the Themes Together

There were several themes discussed in the literature review. Public sector careers and motivations have been studied in the literature, and the workforce challenges of the digital era are well documented. While there is growing knowledge about DSTs, the members themselves have not been studied. Sector switching during careers is also an area lacking research, particularly qualitative assessments. A qualitative approach to studying this will also allow for the building of a nuanced understanding.

Research on DSTs is still relatively new, and this proposed research would also have the benefit of providing information on who has been recruited, why and how. While some research has been done on what motivated team members to join 18F in the U.S. (Mergel et al., 2021), at the moment, there has not been such research done in a Canadian context. Further, to this researcher’s knowledge, no such career profiling of a digital service team exists, nor have interviews been conducted to explore motivational and career insights. While research has been done on careers in public sector more generally, digital service teams represent a unique space within the public sector. There are more teams emerging as governments continue their digital transformation journeys.

There is value in understanding the background of these team members and what attracted them to the public service. These insights could provide insights to support attraction and

recruitment efforts across the wider public sector, and address some of the workforce challenges identified.

3 Methodology

This section outlines the research approach and framework, as well the rationale behind the research design and limitations of the methodological approach.

This research has a few goals. The first is to understand who DST members are in terms of their career background, and the second is to look at why they made the decision to join the team, and context around that decision. The approach of looking at one specific team, in this case CDS, was decided on as it will allow respondent responses to be compared against the context and culture of the team.

3.1 Research Design

Qualitative data is being collected for the analysis. Thematic analysis is being used to analyze the data which involves the coding of data related to the research question. Thematic analysis is considered a systematic, orderly and logical way to analyze qualitative data which can lead to “rich descriptions, explanations and theorising” (Saunders, Lewis & Thornhill, 2019, p. 651). An inductive approach will be used, which means that themes will be derived from the data, as opposed to having a framework of themes imposed onto the data set (Saunders et al., 2019). These themes will help guide the coding process and the findings will relate back to the research question as well as any additional emergent themes.

A single case study approach was chosen with the Canadian Digital Service being the DST under review. A case study is defined as investigating a modern phenomenon within its contextual environment (Yin, 2018, p. 46). Multiple case studies were not used for this research as looking at one area would allow for more in-depth research – it is a deeper dive into one team, rather than a shallow dive into several. Given access and resource constraints, the use of a single case study was decided upon.

With accordance to the case study, the following approach will be taken. The research will be planned and designed, the data will be collected and prepared, and then analyzed and shared as per the process outlined below.

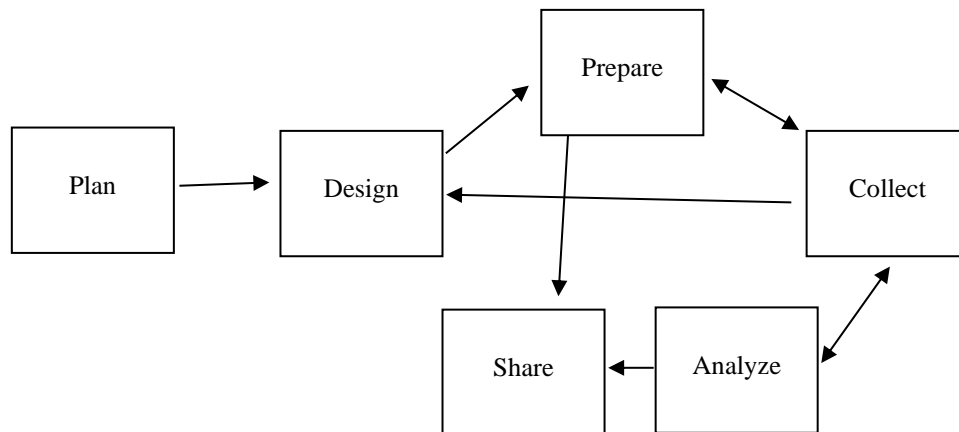


Figure 4: Case Study Design (adapted from Yin, 2018)

Permission was granted from the Canadian Digital Service Team to survey and subsequently interview their team members. Access was limited to those team members that were willing to participate in the survey which was voluntary, and from there, also indicated interest in participating in the interview for which they provided their contact information. Hybrid access was used, which included using internet-mediated access to send out the survey and conduct desk research followed by what would probably be best described as more traditional access for virtual one-on-one interviews with participants (Saunders et al., 2019).

The data collection process following the identification of the research problem is outlined below:

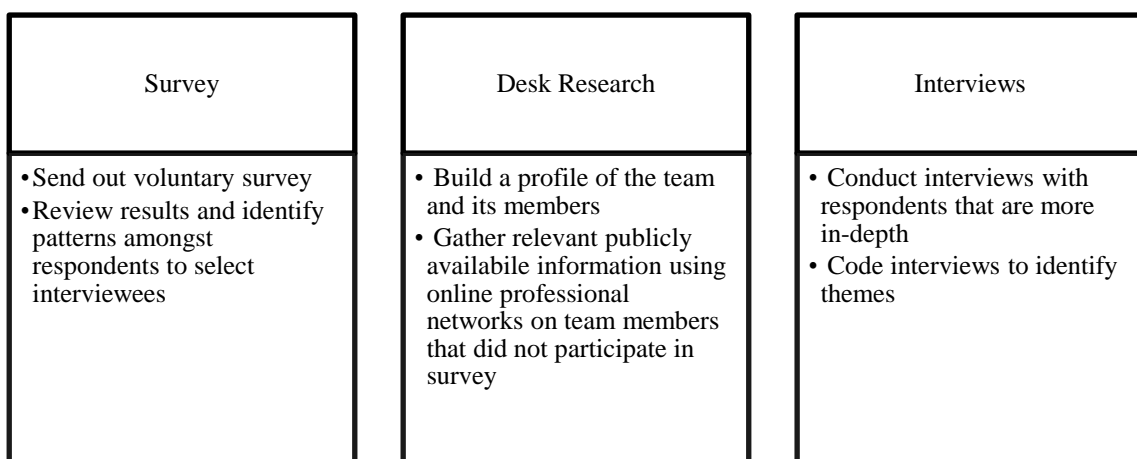


Figure 5: Data Collection Process

The data collection for this research began with a qualitative survey with open-ended questions that can be found in Appendix A. This survey was voluntary and was shared with all team members through the CDS Talent Team. It was constructed in order to also

identify patterns amongst the respondents, as well as identify who may be open to providing interviews. The survey was created based on the literature review and to identify points of interest including recent career history, area of work, sector switches, why they wanted to join and thoughts on the recruitment process.

The first draft of the survey was reviewed by the Canadian Digital Service Team prior to being sent out, and collaborative updates were made to the initial draft. In this particular research design, the survey provided an initial opportunity for participants to discuss not just previous careers but to also provide further insight through the use of open-ended questions.

When survey results were collected, the response rate was lower than anticipated. The survey respondents were those that decided to participate and therefore, this is a self-selection survey (Bethlehem, 2010). A self-selection survey is one in which the researcher is not in control of the selection process (Bethlehem, 2010). As mentioned, responses were limited with only 17 of the approximate ~99 team members responding.

As participation in the survey was voluntary, additional desk research was conducted on career backgrounds of team members using other publicly available information. This included looking at the profile of the teams careers from online sources including LinkedIn profiles and the CDS team page to attempt to build sufficient background profiling the team and its career backgrounds.

LinkedIn profiles in particular have an abundance of career information, including job switches. LinkedIn should be a generally reliable source – findings from one study found that because information on LinkedIn resumes is public, the information on there tends to be less deceptive about information that matters to employers in particular their prior work history (Guillory & Hancock, 2012). This is where most of the information was gathered regarding the team's previous work experiences. While there was not a way to independently verify the information on LinkedIn, it was compared with the CDS's *Meet the Team* webpage¹ to provide an additional layer of verification. The list compiled during the desk research was shared with the Canadian Digital Service Team. As the team is growing, this information is representative of a point-in-time, and also subject to errors based on potential researcher bias, the profile, or the lack of information. Where information on a person was unable to be determined – for example, they are listed on the CDS webpage but missing from LinkedIn – a note was added regarding the missing information.

¹ Information on current CDS team members is updated here: <https://digital.canada.ca/meet-the-team/>

For each team member that could be identified on either the CDS public page of team members, or LinkedIn, the following information was gathered into an excel sheet:

- Their current role and the area it belongs to in terms of job title and program
- Information on when they joined CDS
- Their previous job and sector
- Identification of whether their career background is comprehensive enough to identify any previous work experience in the private sector, public sector (not including CDS) or non-profit sector²

Interviews were used and provided the basis of the majority of key findings. Following the survey, and desk research, interviews were conducted with team members to provide more in-depth analysis on their careers, the choices and the contexts. The approach of using interviews is in line with previously completed research. When researching career paths in career studies often the decisions individuals have taken is best understood through interviews. It has been noted in this field that “previous researchers have successfully used interviews as an effective means of researching careers” and that this helps the researcher understand the attitudes, and motivations of each individual participant (Smith-Ruig, 2008). Researchers in the career studies field have noted the importance of using stories to support research in the career studies field and acknowledged how stories help develop understanding of careers (Cohen & Mallon, 2001).

In this particular research design, the interviews will provide an opportunity for participants to discuss the sequence of their career to-date including why and how they found themselves on the CDS Team. Interviews work as a ‘dynamic sense-making sense-giving process’ during which the participants construct their own version of their career stories retroactively (Cohen et al., 2001). This qualitative approach is also an interesting way to look at the question of “why” they wanted to join CDS, as it was found that only 4.3 % of the studies looking at work motivation use a qualitative approach (Ritz et al, 2016 as cited in Mergel, 2021). This can add rich insights into the field of work motivation.

Every member that participated in the survey and agreed to be interviewed was provided the opportunity to participate in an interview. In total, 13 respondents participated in

² This was determined by the researcher based on whether the data was available and is subject to the limitations of the approach involved with using one researcher and information that could not be verified independently – see limitations in section three

interviews to further elaborate on why they decided to join the Canadian Digital Service and clarify responses from the survey. When permitted, the interviews were recorded using a recording software to support note-taking and subsequent coding with recording mostly being done using otter.ai transcription services.

This is interesting as the qualitative insights can help support human resources practices and add depth to the responses. Similar to other studies on careers, the interviews will be semi-structured questions with open-ended questions. As the survey is voluntary, the interviewees were found using a self-selection sample of those that both participated in the survey and indicated openness to being interviewed.

All survey respondents who indicated interest were provided the opportunity to interview. A total of 13 interviews were scheduled and the breakdown is included in the chart above. Further, in the table below the interview question themes and their supporting rationale, based on the literature review, is provided. The questions were not based on a single theoretical framework, as the qualitative approach and the question being considered were not suitable for any one particular framework. The interviews were scheduled for 30 minutes, on average lasting slightly less than the allotted time. All interviewees were asked the same questions, with clarification and room for discussion where required.

| Interview Guide | |
|--------------------------------------|--|
| High Level Theme of Questions | Relevance |
| Career Journey Before Joining CDS | Allows interviewee to provide further insight into their career journey and decisions and allows understanding of their full career background |
| Brand Awareness | Determining if employer branding or reputation or perception played a role in employee attraction to organization |
| Public Sector Perception | Determining what general perceptions are of public sector and public sector work both before joining CDS |
| Recruitment Experience | Determining how recruitment process was perceived |

| | |
|--|--|
| Goals when joining CDS and whether goal outcomes have been met | Provides further insight into the question of “why” they wanted to join CDS which was asked in the survey; allows response elaboration |
|--|--|

Table 5: Interview Themes

Both the survey responses and the interviews will be analyzed as part of the research design. Coding will be used to analyze the responses in a meaningful manner. The *Coding Manual for Qualitative Researchers* is being used to understand the process. A code in qualitative inquiry is most often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and or evocative attribute for a portion of language-based or visual data (Saldana, 2016). Based on the questions and responses, the data will be coded and categorized based on emergent themes. Each response will be examined and given a code and this will be done for each response using an iterative process (Saldana, 2016). This is important because the coding will allow a review of the responses to see if patterns emerge across the responses that could be reflective of broader themes. The MAXQDA software was used to assist with coding and emerging themes in the research findings were reviewed and analysed against the literature framework.

3.2 Limitations of Research Design

Limitations arise as a fact of the research design. The first depends on who is choosing to participate in the surveys which are voluntary. Another issue is that data analysis by a single researcher leaves open the possibility for bias when coding and categorizing when reviewing the responses. Researchers bring their subjectivities, personalities, predispositions, judgments and quirks to the process of coding (Sipe & Ghiso, 2004 as cited in Saldana, 2016). Further, without a second researcher or reviewer the possibility for bias or error is heightened during the data collection process. Further for the information gathered via desk research there is no guarantee that the information is up-to-date and for those without an online presence, data was not captured.

While there are concerns about generalizing responses from a single case study, they provide a basis from which to being to explore phenomenon. In doing qualitative analysis and a case study approach, the goal is to “expand and generalize theories” (Yin, 2018) and contribute to looking at the phenomenon of studying DSTs rather than create statistics or speak for all DSTs.

Another limitation is that the results are derived from the self-selection sample which is open to bias. While there is possibility for bias, and the sample is limited, it still arguably provides valuable insight into an area that has not yet been fully explored.

There are also several frameworks or measurements that could have been used including career theory models, or PSM measurement scales but instead a more thematic analysis was done. This was because none of the theories fully captured the essence of what was being asked in the research question. A limitation is that there is no comparative framework against which the results could be validated. Though arguably, this allows for more insightful responses that could be helpful in identifying new areas of interest and areas for future research.

In spite of the limitations noted, this approach was decided upon to pursue a further understanding of this issue. As the paper is on a DST, the insights can be used to add to the growing body of work on digital service teams and talent recruitment in the public sector.

4 Case Study: Canadian Digital Service Team

This section provides some background on CDS, which is the organization being used as the case study to explore the research question.

Background

CDS was launched in 2017 in order to provide services and improve delivery processes with a focus on the user perspective and engagement (Canadian Digital Service, 2017a). The launch of CDS was symbolic of Canada's commitment towards a more agile, digital government and while it was not the first national digital service team, it is still one of the earliest. CDS was established to support departments in improving their digital services by working in multidisciplinary teams and with help from experts (Government of Canada, 2021a).

CDS itself is part of TBS which is the central agency for the Government of Canada (GC) that oversees spending and operations. CDS is a part of supporting the GC's Digital Government Strategy. Initially, it was set-up as a pilot project for a 3 year term with \$25.5 million in funding over the three years (May, 2018). Budget 2021 saw CDS receive ongoing funding of \$25.8 M per year, with the budget proposing \$88 million over four years from 2022-23.³

The decision to house CDS within TBS was informed by looking at the experience of other DSTs. Being located within TBS "would allow [CDS] easier access to people who were designing policy areas across government" (Androssoff as quoted in Trendall, 2018). CDS's location within TBS "has enabled [CDS] to use [its] delivery mandate to work with departments on navigating the policies and processes that are put in place" and "being housed in the centre of government has also enabled [CDS] to have a fairly good line of sight to what all the departments are doing" (Elvas as quoted in Trendall, 2018). Through CDS, TBS aims to: deliver critical services (such as the Covid Alert App); improve and scale existing platform components or build new ones that can be integrated with other GC services; provide departments with hands-on help to design and deliver inclusive services and provide guidance to areas to improve service design and reduce risk of IT project failure (Government of Canada, 2021e).

CDS follows a model based on other national DSTs such as GDS, U.S's 18F and US Digital Service (USDS) etc. Similar to other DSTs, it mirrors start-up culture and works in a more agile way, aiming to reduce the amount of bureaucracy and deliver results. As Anatole Papadopoulos, the current Chief Operating Officer of CDS, noted "[It] a very

³ More information on Budget 2021 can be found via <https://www.budget.gc.ca/2021/report-rapport/p4-en.html>

flat, non-hierarchical organization, and we give our team a lot of leeway and room to do their best work” (Papadopoulos as quoted in Ireton, 2017). There are notable ways in which CDS is different from other areas within the GC. Some differences of note are: they have their own branding; they manage their own communications, website and social media; they can use non-standard devices and have policy exemptions to support innovative partnerships, such as those with Code for Canada (Canadian Digital Service, 2019b).

Understanding the Team

With any team, leadership is an important factor. DSTs were, for the most part, led by private sector digital transformation expert executives (Mergel, 2019). For CDS, there was a search to find the right leader for the organization, and Aaron Snow, who is still in the role today, was announced as its first Chief Executive Officer (CEO) (Canadian Digital Service, 2018a). Aaron Snow had served in many notable roles particularly also as co-founder and executive director of 18F in the U.S. 18F was one of the organizations that CDS was inspired by and is made up of a group ‘innovators’ including in-house designers, developers and product people from public and private sectors (May, 2018).

The CDS team has since recruited talent from all over. Initially part of the team’s philosophy was to hire people for “tours of duty” and hire them for specific projects and terms rather than for a ‘forever career’ in government (Canadian Digital Service, 2018b).

The last official overview of the team was shared in 2020 when there were 80 team members:

- 80% were on “tours of service” (term, interchange etc.)
- 80% were from outside federal government
- 10% were international hires
- 30% were distributed outside of the capital region of Ottawa (Government of Canada, 2020a).

The team has continued to grow since that time and has since hired additional staff. They are currently about 100 and continuing to grow. Information on the staffing methods used to recruit the team members is shared below (Canadian Digital Service, 2018b).

| Staffing Methods | |
|-------------------------|---|
| Casual Hire | <ul style="list-style-type: none"> • Hire for 90 business days |

| | |
|-------------|--|
| Term Hire | <ul style="list-style-type: none"> Hired for one year or longer; includes benefits (casual hires can be followed into term hires). |
| Secondment | <ul style="list-style-type: none"> Allows movement of public servants from one area to be contracted into another while still retaining their permanent position |
| Interchange | <ul style="list-style-type: none"> The individual retains their permanent position which may be in either private, public or non-profit and they are ‘seconded’ or contracted into CDS which matches their permanent position’s salary and benefits |

Table 6: Staffing Methods used by the Canadian Digital Service (adapted from Canadian Digital Service, 2018b)

In particular, the interchange is an interesting approach to staffing. It is also a strategy referenced in the Digital Operations Strategic Plan: 2018-2022, where it is noted that

Modelling after the approach of organizations such as Code for America and 18F, the Canadian Digital Service has utilized this recruitment mechanism to attract high-quality candidates from technology firms for a “term of service” in government, allowing the government to gain access to top tech talent while enabling technology workers to give back to government and society. (Government of Canada, 2021b)

The team has grown substantially in the last four years with respect to human capital. The team is expected to continue to grow this fiscal year, as seen below when looking at the number of planned Full-Time Equivalent (FTEs):⁴

| Program | 2019-20 Actual FTEs | 2021-22 Planned FTEs |
|---|---------------------|----------------------|
| Treasury Board of Canada Secretariat - Canadian Digital Service | 67 | 127 |

Table 7: Full-Time Equivalent in CDS

The team has hired extensively but also hired differently, including positions that are common in the private sector but not as common in the public sector. The CDS team noted that “almost every hire we make is different and covers new staffing terrain in one

⁴ Retrieved from GC’s Report Builder: [Actual and Planned Full-Time Equivalent \(FTEs\) for CDS 2015-16 to 2023-24](#)

way or another” (Canadian Digital Service, 2019a). The team itself consists of a wide array of skills including positions in design and design research, a talent team including recruiters, a development team including engineers and designers as well as product managers, operations, policy and partnership experts. Another unique factor is the building of new kinds of teams, multi-disciplinary teams with individuals coming from different disciplines and having different skillsets (Canadian Digital Service, 2021).

All of these factors are reflective of a new organizational structure within the GC, and provides an interesting case study through which to explore the team member backgrounds and reasons for joining CDS.

5 Research Findings and Discussion

This section will outline the findings found through the data collection process. Given the scope of information collected, the research findings are divided into three separate sections. A brief explanation of each section and the themes reviewed follow. As the process was inductive, and the interviews were semi-structured, there were some additional themes that arose that are also reviewed.

The first section will look at the background of CDS team members. The first theme looks at their reflections on their career journeys. The second looks at comments made regarding previous sectors of work and thought processes around sector switching. Lastly, CDS team members were asked about their perception of public sector work and workers both before and after joining the team.

The second section looks at why CDS team members wanted to join CDS. Themes emerging included alignment with mission and values, an interest in digital government, excitement about the team they would be working with, and branding.

The last set of findings relate to additional themes emerging from the literature review including experience with recruitment processes and organizational challenges. Following each section, a short discussion will take place to explain the findings within the context of current literature on the topic. Implications of the findings will then be presented.

The table below provides background information on the respondents to both the survey and interviews. In total, there were 17 survey respondents, 13 of whom participated in interviews. While a larger sample would have been more ideal, and there are the aforementioned biases due to the self-selection sample used, the sample is surprisingly diverse when considering the roles, genders, and length of service across the organization. The various perspectives had the benefit of providing more depth to the interview findings but also added challenges when it came to reviewing responses across particular demographic categories.

| Categorization of Survey and Interview Respondents | | | |
|---|-------------------------------------|-------------------------|----------------------------|
| Category | Sub-category | Survey Total: 17 | Interview Total: 13 |
| Role Category | Design | 1 | 0 |
| | Internal Operations/ Administration | 0 | 0 |
| | Management | 1 | 0 |
| | Outreach | 2 | 2 |
| | Partnerships/ Growth | 1 | 1 |
| | Policy | 2 | 2 |
| | Product | 1 | 1 |
| | Research | 1 | 1 |
| | Software Development | 6 | 4 |
| | Talent | 2 | 2 |
| Age Group | 20-29 | 7 | 6 |
| | 30-39 | 6 | 3 |
| | 40-49 | 3 | 3 |
| | 50-59 | 1 | 1 |
| | 60-69 | 0 | 0 |
| Gender Identity | Man | 9 | 7 |
| | Woman | 8 | 6 |
| Length of Service in CDS | Less than 1 year | 5 | 4 |
| | Between 1-2 years | 6 | 4 |
| | More than 2 years | 6 | 5 |

Table 8: Categorization of Survey and Interview Respondents

5.1 Background of CDS Team Members

One of the primary research questions being investigated in this research paper is that of the background of the team members – where did they come from? This is interesting as much of the academic research on DSTs have so far focused on how and why the teams were set up, rather than looking who is joining the team and from where. In this first section, the focus is broadly on career journey reflections. The second section will focus on looking at previous sector and sector switching, and lastly, there will be a section focused on perceptions of the public sector, both general and in what ways that perception shifted after becoming a CDS team member.

When looking at the responses regarding their career journeys, there was huge breadth and scope. A full review of career decisions was not the purpose of the question, but rather it was to provide context to the interviewee responses. Overall, there was a sense that the interviewees felt in control of their career paths and their decision to join CDS. There were a few different areas that were mentioned by CDS team members that are explored.

A couple of interviewees mentioned specifically the concept of following their interests, and those interests as a way to guide their career journeys.

It's kind of followed my interests and it's not, it has not been a linear path at all. - Interviewee #13

I didn't really have any specific goals. I don't think I have any specific goals [...], it's like, whenever people ask like, oh, like “what is your five year plan?” or like, “oh what do you want to do for a career?” It's very much like interest-based like you very much just follow things that interest you. - Interviewee #3

Another interviewee mentioned that the decision to join government is not seen as a permanent shift to another path in terms of sector or future career. It is viewed by this individual as simply a career decision to explore a different area, rather than one made to climb the ladder as typified in the traditional career paths.

From what I've heard from like older generations and I guess some contemporaries as well as like, ‘oh you're getting into this for like the longer term like you want to get into it for the pension and you're going to be there for a while’, kind of thing which is not really the mindset that I have going in. – Interviewee #6

Another interviewee, who is younger, explicitly mentioned that their interest in joining CDS was that it offered the potential to promote their career. Another individual noted that they are a “government lifer”, having spent their entire career in the Canadian federal service. Interestingly, even with this individual there were a number of career moves throughout and work on projects that appeared to be interest-based, rather than directly promotional moves.

While the research goal of this paper was not to analyze career journeys, the question was important for providing insight into general backgrounds. As the interview group was a broad spectrum that included those early in their career, and others that were further along, it was difficult to analyze commonalities across. Often the job changes were simply seeking a change or looking for something different, and the idea of looking to see what is out there and if it would offer a better fit in terms of interests, work-life balance or career shift. The variety of roles, sectors and experiences indicated by interviewees is also reflective of a broader shift towards more frequent job switches, particularly for those with more years of professional experience. These themes align with the idea of employees being self-directed managers of their own careers (Arthur, 2014).

Job hopping is also very common along career journeys and analyzing this behavior is important both for understanding career progressions and job preferences (Oentaryo, Lim, Ashok, Prasetyo, Ong, & Lau, 2018). A younger individual mentioning the potential for promotion as a career decision is interesting and a study of online professional networks found that it is more likely for younger workers to “job hop” than older ones in order to seek career progression (Oentaryo et al., 2018). One way to potentially encourage younger employees to stay longer at their jobs is to increase opportunities for promotion amongst that cohort (Oentaryo et al., 2018).

But overall the reflections on career journeys were helpful for understanding the background of the individuals. This part of the discussion was not meant to be a key point of analysis as this itself would be a research topic on its own. The discussions did confirm that all organizations both within and outside public sector should be cognizant of the ever-changing and dynamic factors impacting career development; individuals often have different needs and seek different things at different points in their career cycle (Mainiero & Gibson, 2018).

5.1.1 Sector Switches - Findings

When looking at the background of who the CDS team members are, it is apparent that the background in terms of sector is quite varied. There are approximately 99 team

members in CDS⁵. Based on the desk research compiled on the team member backgrounds, it was interesting to see that many team members had varied backgrounds that included working across public, private and non-profit sectors.

One clear finding when viewing the data is it shows that the majority of CDS team members were recruited into CDS from outside the public sector. The idea of having recruited many team members from ‘outside’ public sector was mentioned in a couple of the interviews. The average figure mentioned in interviews was around 80%, which is the same figure that was shared publicly in the 2020 Briefing Book. The data from the desk research is slightly lower than 80%, but still mirrors what was mentioned by interviewees during the conversation, and also what has been reflected in media reports in terms of more team members being from ‘the outside’. This also mirrors what happened with other DSTs such as Italy’s Digital Transformation Team where external experts, who were hired for short-term contracts of three years made up 70% of the team (Eaves, 2020).

| Previous Sector of Employment Before Joining CDS | Total: |
|---|---------------|
| Indeterminable | 6 |
| Non-Profit | 7 |
| Private | 53 |
| Public or Broader Public Sector | 33 |
| Grand Total | 99 |

Table 9: Previous Sector of Employment Before Joining CDS

Sector switching is interesting but as mentioned in the literature review, sector switching is a phenomenon that has yet to be really explored. As can be seen from the below charts, the CDS team members as a whole have experience working across various sectors.

Interestingly, of the 99 profiles reviewed there were 15 individuals who had experience working in all three sectors (private, public and non-profit) before joining CDS. The below charts detail the work experience of team members across sectors:

⁵ Note: The team has recently undergone a reorganization and is also anticipated to continue to grow so this number is a point-in-time reference.

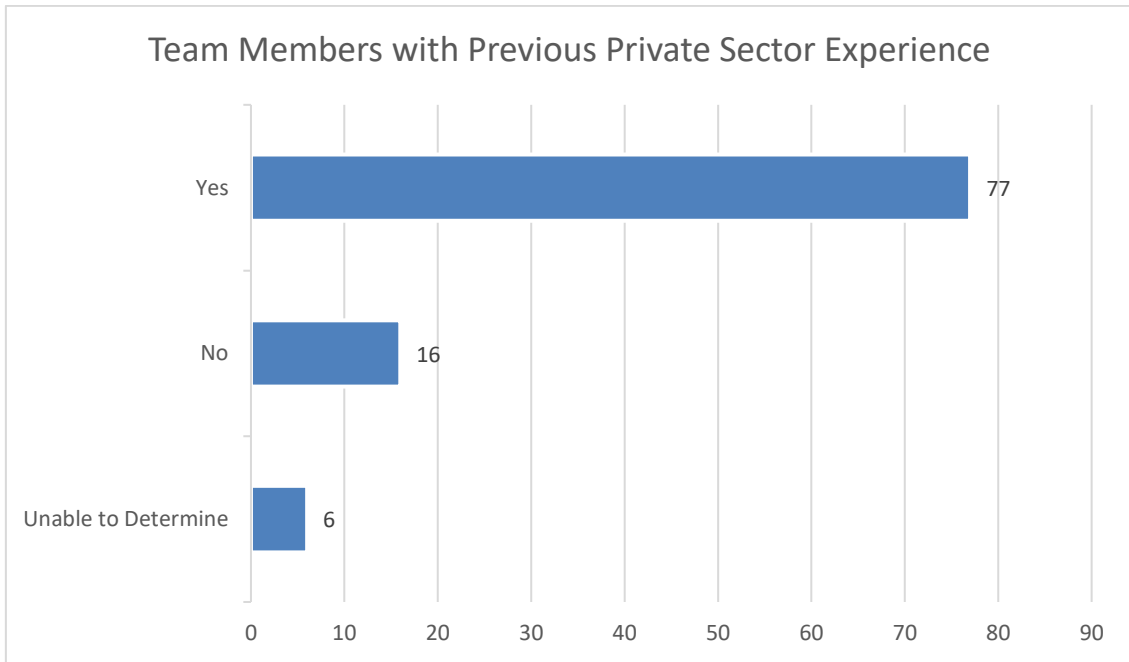


Table 10: Team Members with Private Sector Experience in Career Background

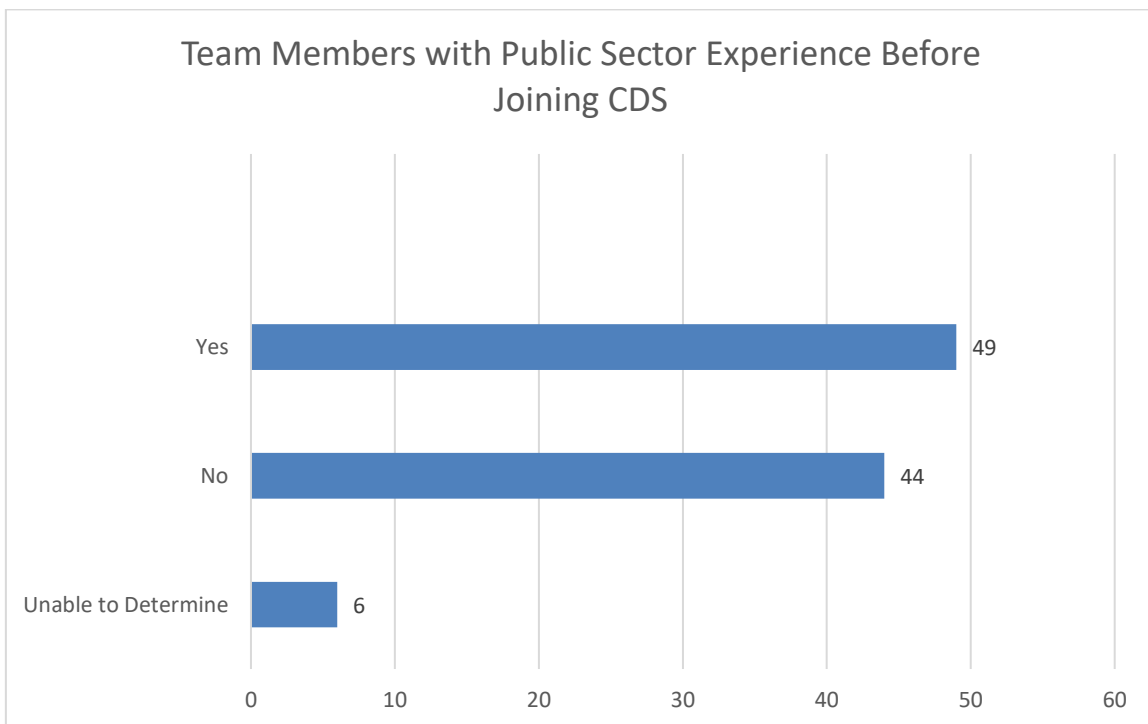


Table 11: Team Members with Public Sector Experience Before Joining CDS

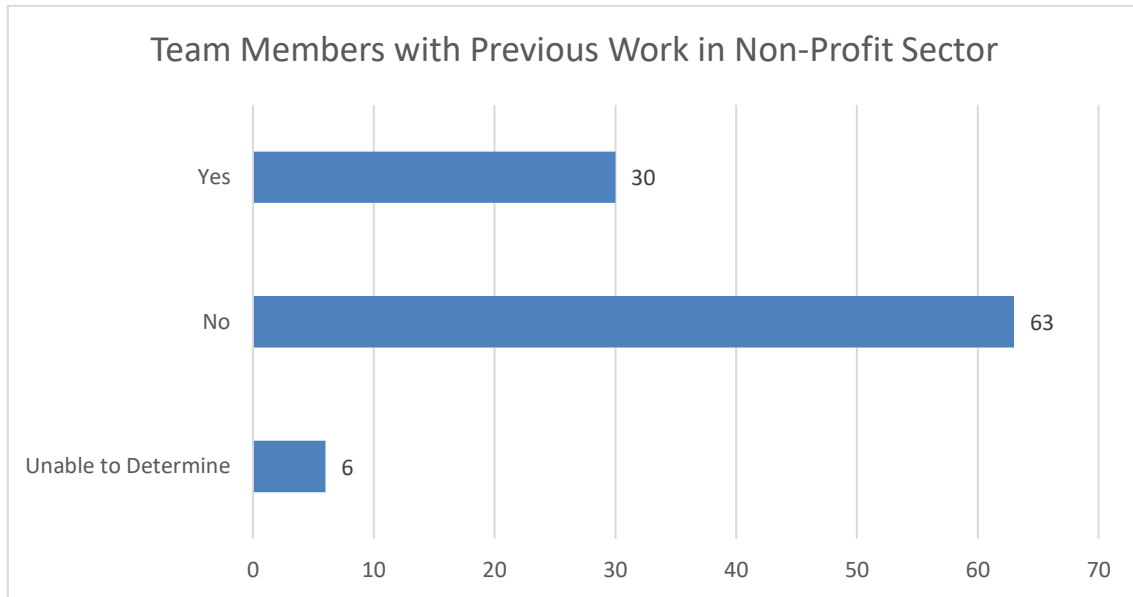


Table 12: Team Members with Non-Profit Sector Experience Before Joining CDS

The interviewees that had previous background in private sector mentioned some different things regarding the decision to join CDS. One reason was curiosity, as seen from these two interviewee explanations:

For me it's taking a break from the private sector and seeing what it's like to work for the government, but I don't see this as like a commitment. I don't see it as in my case personally like I'm like gunning to climb the ranks or anything like that. This is really just to see what I can offer and what CDS as a unique unit can offer as well. – Interviewee #6

I worked in private sector before and honestly I never had an interest in anything, government before, [...] But, when I heard about the Canadian digital service [...] I was like, oh, this, this seems fun – Interviewee #3

Two interviewees mentioned making the choice to switch from the private sector to the public sector more intentionally during their career. One for the purpose of obtaining work-life balance, which was missing for them in the private sector. The other because they no longer wanted to serve profit-maximization. Others were drawn to what CDS was offering as an organization in terms of how it operates.

There are many reasons for switching, and this is an interesting area because as noted by Jorgenson (1999) there is a blurring between public and private organizations. This can be seen with CDS, which is a part of the government but has a unique ‘start-up’ culture which seemed to appeal to a cross-section of interviewees from different sectors and seemed to incentivize sector switching. One interviewee observed that while CDS has

been a great space for them, they are not sure if other government spaces would be the right fit - whether they would be as “effective” or “impactful” in more of the traditional government IT spaces.

5.1.2 Sector Switch – Discussions

This information is interesting in that it shows the majority of team members have experience working in a number of different sectors and their backgrounds vary considerably which shows a diversity of experiences that are being brought into CDS. It also confirms that the relationship between choosing to work in public sector or private sector is not always so straightforward (Wright et al, 2010). There are of course a number of factors that go into determining which sector that one wants to work for beyond just the sector itself, and this may be reflective also of broader societal trends. Sector choice can be influenced by so many factors including the career opportunities, the type of work and working conditions to name a few. It also reinforces that the decision to switch jobs or sectors is a complex one, that is not easy to determine solely based on work experience, job or skills.

This finding confirms what the literature has been suggesting - that the future workforce of the public sector will likely have some private sector experience as there is increased competition with private sector for talent (Bozeman et al, 2009). This can be seen with the CDS team which has an incredibly varied career background in terms of sector experience. It could also be seen in the majority of CDS hires being hired from the private sector. While it can not be determined from one individual’s comment alone, there is the question of whether these individuals would have joined the general public sector if CDS was not set-up in the way that it is. However, this seems to confirm in the literature the idea of DSTs helping attract talent into the public sector that otherwise may not have joined the public sector, even if for a term.

The general research suggests that some are reluctant to change from private sector to public sector or vice versa based on perceived or real barriers to change (Bozeman et al, 2009). There was no reluctance mentioned by the interviewees regarding issues with barriers to change. But while there is a lack of research in this area, it is interesting to look at how DSTs sit in a unique space within the public sector. Also, as about half the team did not seem to have any public sector experience before joining CDS, it also offered CDS the chance to make a “first impression” on what it is like to work for the federal public sector. This is interesting as CDS benefits from its unique space and culture, and may not be indicative of the broader GC culture.

As CDS grows larger and potentially more formalized, longitudinal studies or exit survey data may be helpful to determine whether individuals end up staying in public sector, what roles they end up in, or what prompts their exit. One study found that public sector employees with higher education that moved to private sector did so because they were looking for an organization where they could be more creative and have autonomy (Hansen, 2014). It is therefore interesting to consider what CDS needs to continue doing to attract talent, and likely continuing to be a flexible organization with a ‘flat’ structure would be one factor. Potentially also public organizations could reduce sector switch by helping employees better understand how their tasks are related to end-users (Hansen, 2014). Public sector also focuses more on serving society, while private sector focuses more on serving the end-user but digital service teams like CDS also emphasizes focus on user design and on the end-user.

5.1.3 Public Sector Perceptions - Findings

Interviewees were also asked about their general perceptions of public sector before joining CDS. This was asked because knowing that many of CDS’s team members have come from different sectors, it would be interesting to see what the general perception is of this type of work. They were asked to provide their perceptions both before joining government and after working at CDS.

Interestingly, there were a few themes that emerged among almost all interviewees regardless of their personal backgrounds when asked to describe their public sector perceptions before joining the public sector. Some of the common themes emerging include identifying the public sector as “laggard”, “slow”, “subject to bureaucracy” “unproductive” “red-tape” and “not diverse”. The general perceptions were, generally speaking, not positive.

I think one of the concerns I had about coming to government, is that it would be like this detour that would make me not as valuable - I don't know if that's exactly the right word, but like not as current, if my skills would stay as current in government as they would have been in the private sector. -

Interviewee #5

Another interviewee noted that “*there's like the typical portrayal of government as slow and not a particularly exciting place to work.*” Interestingly, none of the interviewees mentioned primarily or mainly positive perceptions of the public sectors initially.

Following up on this, interviewees were also asked to reflect on their own experiences working in the public sector, rather than just general perceptions. With this question, the response of interviewees was markedly differently. Many mentioned that while public

sector is bureaucratic and slow, they also showed a greater appreciation for the work and workers of public sector.

I had a federal government perception that turns out not to be true which is that the people are not motivated to do good work, and are not driven or ambitious or hardworking. In my experience in federal government that is not true at all. So that was a complete misperception. - Interviewee #7

Many interviewees also brought up the fact that understanding the nature of the work has led to greater appreciation for the challenges. They are more sympathetic to the challenges after understanding the restrictions that are faced both by government and public sector workers. This is a changing attitude as they may not have understood all the restrictions that public sector faced prior. Based on the responses, one can conclude that there is more appreciation gained for public sector once interviewees themselves become public sector employees.

The challenges that I face and like the work that I have done, I feel like I've got to do a lot of the same work, and the pace and the complexity is so difficult that I think like anywhere I go after this will be it will be a really useful experience and more valuable experience than I could have ever appreciated from the outside looking in. – Interviewee #5

Even in instances where some of the general negative perceptions were confirmed i.e. in terms of government being “slow” or “bureaucratic”, the perceptions after working were significantly more positive.

5.1.4 Public Sector Perceptions - Discussion

This is an interesting issue for DSTs in general, because it has been argued that based on the general public perceptions of public sector, through association, there is the possibility they may not be seen as an attractive place to work. While there are positive perceptions of the work and the value of the work being done at CDS, it is interesting that the general perception of public sector is still initially one with a negative bias.

These findings confirm what has been previously found in the literature regarding perceptions of public sector. The negative general perception of the public sector is particularly concerning given that Canada’s public service is already facing a potential shortage of skilled workers (Templer & Armstrong-Stassen, 2005) and these negative general perceptions of the public sector could make it more difficult to attract talent. There is what is considered “an uphill battle” when considering the public attitude towards public sector performance and this has been perpetuated, particularly by the American

media (Marvel, 2015). It is assumed that the perceptions in American media would have an influence on the Canadian public as well, given the consumption of American media in Canada. But this is not limited to just North America, as, the OECD has identified the negative image of public sector as an area of major concern for its workforce development. The OECD is working on ways to mitigate the damage of these stereotypes on public sector careers which will also likely require rebranding exercises on the part of the public sector in order to be seen as an attractive employer (OECD, 2021). After joining the public service, a lot of the misperceptions went away, but the insights from the interviewees reflect an area of serious concern with respect to the GC being perceived as an employer of choice and competing for talent. It will also be interesting to see the OECD's forthcoming recommendations in this area as it explores how the public sector can rebrand itself as an attractive employer (OECD, 2021).

These findings confirm the discrepancy that exists between common perceptions of public service versus actual public service experiences which are diverse, and dynamic and incredibly varied (Public Policy Forum, 2017). Public service recruitment will be key to attracting and recruiting talent in the future because while public services receive a number of job applications, there is a question of whether the quality and diversity of talent that is necessary for the government of the future is seeing the public sector as its employer of choice (Public Policy Forum, 2017).

5.1.5 Skillsets - Findings

Another key to understanding DSTs is looking at the roles that team members occupy. The CDS team has an interesting mix of skills and a variety of roles that are perhaps less common to the public sector.

When you're the person doing it [...] you're learning the craft by yourself, and there's not a lot of experts within your organization so I'm constantly having to go outside and find peers and colleagues, but to be able to sit in an organization that has that expertise in that craft, [...] it's having that skill set, internally

– Interviewee #13

The fact that like I would be able to work with people that were experienced in the field, ...I was seen as like an expert in my organization, whereas at CDS like I'm just like another person so I have people that I can learn from and grow

- Interviewee #1

The chart below outlines the broad categories used to capture the roles within CDS for those that could be determined. The limitations to the approach used to gather the data are stated in the methodology, however, this should still provide a general understanding of the team.

| Categories for Roles within CDS: | # of Staff |
|--------------------------------------|------------|
| Design | 13 |
| Design Research | 4 |
| Development | 21 |
| Internal Operations | 3 |
| Outreach | 10 |
| Partnerships | 5 |
| Policy | 6 |
| Product Management | 7 |
| Senior Management | 18 |
| Talent | 9 |
| <i>Areas could not be determined</i> | 3 |
| Total Staff | 99 |

Table 13: Categories of Roles

5.1.6 Skillsets - Discussion

The categories listed cover a wide array of skills. It was observed that with NPM, many of the skills and tasks related to digital services and digitalization were outsourced (Mergel, 2019). DSTs are one way in which that talent can and is being brought back internally. It is also important for digital transformation as this is one way in which digital professionals can potentially be attracted into the public sector.

In its Annual Report 2018-19, the Public Service Commissioner noted that there is a changing future of work.

While the nature of work is shifting, this has not yet significantly altered the types of jobs for which the federal public service is hiring. Almost half of all hires continued to be within the clerical, administrative services and program administration fields. However, driven by technological advancements and

escalating expectations for digital services, the Computer Systems group continued to grow, with external hiring into this group increasing by 71% over last year. Executive level hiring from outside the public service also increased, by 13.9% to 115 hires, bringing in mid-career professionals with valuable experience and ideas to navigate the future of public service work. (Government of Canada, 2019)

The required skills for digital transformation necessitate a different skillset in the public sector. Digital transformation has created new jobs while disrupting old ones, and created the need for digital government professionals (OECD, 2021). The make-up of the CDS mirrors the expectations for digital services. There are areas that are not as common within government including more technical positions such as software developer positions and positions in design and design research. For these workers, the chance to work with other staff in the same discipline and to work where they feel their work is valued is a motivating factor and can promote retention of skilled staff in public sector. This presents one way to attract and retain talent as those with unique skills can see the value in their contribution, but also in their continued growth by working with other experts in their field and creating an environment of growth and learning.

5.2 Why did CDS team members want to join?

This section explores the second part of the research question. Now that some background has been provided on the team members themselves, the question that will be explored in this section is “why”. Why did these team members want to join this particular organization? The question was asked explicitly in the survey that was sent out, and respondents that agreed to be interviewed had the opportunity to provide further insight into their responses. A summary of the responses from the survey that were permitted to be shared verbatim are below.⁶

| Why did you want to join CDS? |
|--|
| A chance to work with other people interested in changing government with modern IT practices. |
| I love the civic tech space and CDS is an opportunity to work on civic tech on the scale of the nation |
| Mission and the ability to give back to a country |

⁶ Note that minor edits/ exclusions were made in order to ensure anonymity where potentially personally identifiable information was provided as part of the response

| |
|--|
| Work on modern tech while helping the government of Canada move faster |
| I wanted to have a job I was passionate about and that allowed me to be creative. And because they have multi-disciplinary teams, I get to learn a lot about other areas of our work |
| I want to improve how government develops software |
| I wanted to give back to my fellow citizens and use my skills for good |
| I wanted to understand more of how government works, I am interested in civic tech and digital government from a personal side |
| CDS presented a compelling mission. It was apparent on the website that CDS, though part of the public service, has its own modus operandi. |
| Civic tech background, good team |
| The mission: change government to serve people better |
| Because of the mission of the org; because I wanted to serve people instead of shareholders of a private corporation |

Table 14: Survey Responses to Question “Why did you want to Join CDS?”

When reviewing these responses, and collating this with the information from the interviews as well, a few key themes emerged. The themes that will be explored in this section include the following:

- Mission and values
- An interest in digital government
- An interest in the people

5.2.1 The Mission and Values - Findings

As seen in the table above, many respondents explicitly mentioned the organization’s mission and values as a reason for their “why” when asked about joining CDS. Many mentioned the word mission outright in the survey and it also came up in several interviews.

A mission statement is an explanation of the organization’s reason for being, describing its purpose and overall intention (University of Minnesota, n.d.). CDS’s mission

statement is to “change government to serve people better” (Government of Canada, 2020a). In addition to its mission, CDS is guided by the following values:

- Putting people at the heart of their services
- Delivering measurable outcomes
- Doing the hard work to make things easier
- Building for learning and iteration
- Working in the open to help clear a path
- Taking care of one another (Canadian Digital Service, 2017b).

Values are the beliefs in which the organization is invested in, and they are used as the guiding principles (University of Minnesota, n.d.). The mission and values seemed to really resonate with the team members who responded to the survey and who were interviewed.

One interviewee when expanding upon this in their interview indicated that they anticipated the people working at CDS would be “*super mission-obsessive*” and that they found this to be true. Another mentioned keeping the “*mission in mind*” and knowing that at the end of the day, “*we’re doing the hard work to make things easier for people.*” This is interesting as just in the context of the interview it was clear that this individual had internalized the language and beliefs of CDS.

Regardless of length of service, mission was a common theme throughout the interviews. When one interviewee was asked to expand on their survey response regarding the mission, they emphasized:

The mission really to improve services for services in Canada - I still feel as strongly about that as I did when I joined, I believe in the promise of it, I've seen the evidence of it.- Interviewee #7

Another key is to ensure as much alignment as possible between the work and the values as the organization continues to grow. While many interviewees mentioned alignment between their goals and the work, one interviewee mentioned that while before they “*couldn’t believe this was their job*” and feeling “*so happy*”, they did mention feeling that there had been work done recently that did not align as well - “*I think there was a lot of work we were doing to get our name out there rather than as opposed to doing work because it’s good work.*” While only mentioned by one interviewee, it could signal that

as the organization grows, there may be relevance to checking that employees feel continued alignment between the work, the stated values, and the mission as that was one of the biggest factors influencing their decision to join CDS. Other interviewees also mentioned the positive culture at CDS. Though one interviewee mentioned that maybe this is to a fault as perhaps that level of positivity is not necessary to keep everyone going.

There were also a few comments that came up that were indicative of the wider culture of CDS, including that of promoting diversity. One female mentioned that in her previous work it was “old” and “white” and that while being at CDS she is happy to not be one of the only women working, and to see the team become more diverse during her time there. Another interviewee mentioned that in terms of demographics, “*CDS has done a really good job, diversifying its teams in the past few years.*”

5.2.2 The Mission and Values – Discussion

These findings confirm what is found in the literature. When it comes to attracting candidates, the importance of the mission and organizational values in attracting the workforce has been evidenced in a number of studies. Many of the CDS team members were attracted by the mission and values, and this could also be a crucial selling point for other areas of government as they seek to attract talent. One study looking at millennial graduate students found that they are motivated by the desire to make a difference in society and that many identify a public service career as a “call to serve” (Henstra & McGowan, 2016).

The mission and values seemed to really resonate with the team members who responded to the survey and who were interviewed. The implications of the importance of having employees that believe in the mission is that they find the tasks to be meaningful and have higher job satisfaction. A mission aligning with individual values that they are interested in, could potentially be a substitute for something that may be more financially incentivising but less of a value match (Smith, 2016). This is important as the public sector can not compete on pay with private sector resources. In another study looking at a non-profit, it was found that mission statements that employees feel positive about can support their satisfaction and their intent to remain with the organization, so long as they are also being compensated fairly (Brown & Yoshioka, 2003). This is evidenced in the responses - one interviewee who is happy in their role indicated that the while the pay at CDS is good, they did take a pay-cut to join the organization and understand they could attract a higher salary elsewhere. That being said, mission statements are a useful tool for attracting employees, though the research is less clear about their impact on retention (Brown et al., 2003).

Further, for prosocial workers, it may be more important that the mission aligns with their values (Smith, 2016). A study looking at why individuals wanted to join 18F, one of the organizations which inspired CDS's foundation, found that many of the workers have prosocial motives (Mergel et al., 2021). Hence, the mission is important both for the employees, and also for the organization. This could have implications for the way that employees are selected and screened into the organization, with a recommendation to place a high degree of emphasis on the mission and values of the organization in job postings and online (Smith, 2016). CDS does in fact do this through its hiring page, which is very different from the traditional GC job portal.⁷

Alignment of values also suggests strong person-organizational fit which has been shown to have a strong correlation to job attitudes when there is alignment (Arthur et al. 2006; Kristof-Brown et al. 2005; Van Vianen, 2018). The comments interviewees made regarding diversity were indicative of the organization's commitment to its values, and seeking diversity within its team as part of its hiring process. CDS also embodies these values of diversity in its hiring practices, including in its statement on its job postings, in part: *we proudly, passionately, and actively strive to make CDS more reflective of the society that we serve. We will only be able to deliver better, more accessible, and more inclusive public services if we harness diverse thoughts, experiences, and skills.* This is also important as the technology sector has a well-known gender gap, and as of 2019, only 25% of the Computer Science field positions were women in the GC (Government of Canada, 2020b).

5.2.3 Interest in Digital Government - Findings

Another theme that came up when answering the question of “why did you want to join CDS?” was the idea of supporting a digital government through expertise and modernization. A few interviewees mentioned that they wanted to support technical work and bringing that back into government.

In Canada, one major public IT failure that was brought up explicitly in a couple of interviews was the Phoenix Pay system. By way of background, the Phoenix pay system was an initiative to centralize pay services which an external company, IBM, was hired to design, implement, and deploy. The system resulted in many issues, and was met with widespread negative media attention in Canada. The issues with payment were also seen to “affect the reputation of the federal public service as a place to work” (Office of the Auditor General of Canada, 2017). One interviewee confirmed this when they mentioned that Phoenix was a factor that made them initially not want to join government as they

⁷ The CDS “Join our team” webpage can be found via <https://digital.canada.ca/join-our-team/>

personally knew people who had been impacted by missing payments and incorrect payments. Another mentioned the sheer scale of spending on Phoenix,

*I got the sense that like oh my goodness you look at how much money flows through this space to find technology and it just didn't make sense—
Interviewee #8*

Interviewees saw issues with the use of consultants, outsourcing work and relying on external vendors to deliver products. Interviewees involved in technical work noted there is a perception in government that you can successfully contract out the technical work. In their experience though this is not true, the myth seems to persist. This idea of having this technical work done in-house seemed to be more of a comment amongst those involved in more technical roles:

I want to show that the government can deliver IT services, it's not just some mysterious magic that can only happen when the private sector gets involved. There's no reason government can't do this – Interviewee #12

CDS has had a lot of notable successes with delivery of projects, and during the pandemic it launched the COVID Alert App and helped speed up the development of GC Notify which both served Canadians. Interviewees in more technical roles indicated that they enjoy the fact that they get to do more technical work at CDS, and exercise their IT skills. In their experience, they also find the technical component to be more appreciated within CDS, more so than in other areas of federal government

CDS recognized technical skills impact service delivery and you need skilled people to deliver the services - Interviewee #12

Another theme that came up under the umbrella of the “why” was the concept of “civic tech”. Civic tech does not have one definition, but based on the current literature, it can be described as:

a convergence of fields or a system that includes community organizing, social networking, opening data, participatory or collaborative governance that makes use of emerging digital technologies, and resident-to-resident collaboration. (Patel et al., 2013:6; McNutt et al., 2016 as cited in Chatwin & Mayne, 2020)

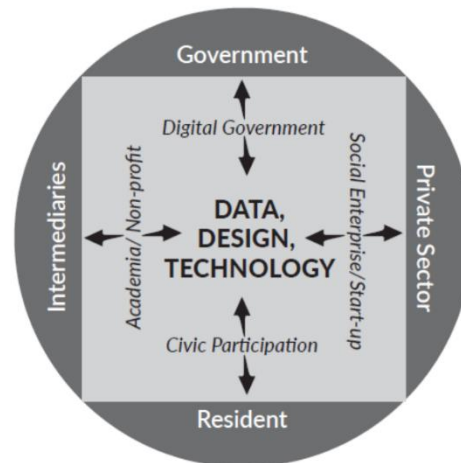


Figure 6: Civic Tech Ecosystem (adapted from Chatwin & Mayne, 2020).

When looking at why people join CDS, an interest or involvement in the civic tech space seems to indicate someone who may also be interested in the work that CDS does.

At the same time, you know I was seeing sort of also the civic tech movement emerge, right, so we had different groups popping up [..]I was a regular participant more or less from the start. And so through there, I kind of, you know, had a network of people that either were starting CDS or were doing similar work in a roundabout way - Interviewee #8

These individuals indicated that they were familiar with these digital spaces, and were in part drawn to CDS because of this notion of civic tech and participating in start-ups and meet-ups with other like-minded individuals. A few interviewees also indicated that these spaces were an opportunity to network and keep a pulse on what was occurring within the “gov tech” space of Ottawa, the nation’s capital. It appears that those working within government or familiar with Civic Tech spaces are more likely to be familiar with CDS through networking, as opposed to those that were outside of both government and civic tech space environments.

5.2.4 Interest in Digital Government – Discussion

Interest in civic tech has grown in the last several years i.e. Code for Canada is working to grow the civic tech ecosystem in Canada by connecting groups and supporting community organizer efforts including developing toolkits for organizers (Code for

Canada, 2021). Fellowships have also taken place, allowing collaboration and exposure of experts to public sector processes to develop products. Of the 13 interviewed, there were three interviewees who were previously from the private sector who indicated their involvement in civic tech space. They indicated they had become familiar with CDS through these spaces. This could potentially be a useful space from which to recruit future employees as there appears to be an alignment between the values and interests of those in “civic tech” spaces and CDS’s goals.

A key notion with DSTs and digital transformation in general is the idea of bringing back IT work to the government. This mirrors what some of the interviewees in more technical roles indicated. It was found when looking at other DSTs that there is a “substantial amount of enthusiasm for innovating government operations and upgrading to industry IT standards” (Mergel, 2017, p.27). A famous example is the work that the GDS did on producing its GOV.UK website in “less time and at a higher quality” than what typically would have been the case (Clarke, 2019), and also the major projects that CDS has been supported such as COVID Alert. There are many other DST success projects, and there is the potential that these successes could pique interest in others who may want to support this type of work, and also support pride in the work being done.

5.2.5 Interest in the People - Findings

The other broad category for why CDS team members wanted to join the organization is the people – the individuals, the leaders and the teams. The reason many cited for joining were the people they would be working with, and the teams they could be part of, with mention of multi-disciplinary teams and working with experts or those whose skillsets are perhaps not typical of public sector workers.

CDS uses multi-disciplinary teams which is a common approach for DSTs. The idea being that, in order to be successful the team should have a broad mix of skills and roles, the ability to change and adapt, be able to make decisions quickly and the team should be resourced to be able to deliver on the end goal (Government of Canada, 2021d). CDS published a blog in 2018 about building a workflow across different disciplines (Canadian Digital Service, 2018d). This is an innovative idea within the GC as noted by one interviewee who had been employed with the federal government for several years prior to joining CDS:

The idea of having these really multi disciplinary teams from the get-go seems really, like something that maybe should have been done before but it's so innovative and new. - Interviewee #13

CDS built these teams within the GC classification system, working with the appropriate areas of government to bring these different positions together. Information on how they did it was shared in a blog from earlier this year, and could help spark the growth of multidisciplinary teams throughout the GC:

While this is not new, they confirmed that teams can include positions from different groups, working together on a multidisciplinary team....If it makes organizational design sense, fits within the mandate of the unit, and reflects the work assigned, it may be possible. (Canadian Digital Service, 2021)

The concept of the multidisciplinary team is a commonality among DSTs. The GDS, the Australian team, and the U.S team all have made available their resources on supporting team establishment, and on the importance of having a multidisciplinary team. In fact, this concept is a service standard within the GDS as it is noted that the best solution is likely to come from a team with a diversity of skills, perspectives and roles (GOV.UK, 2019).

I very much like the people and the culture at CDs and the other colleagues are great people are smart and, you know, you learn a lot from people and it opened up a whole new world to me right like in terms of how the multidisciplinary teams are structured, some of the disciplines that we have no concept design and accessibility and things like that are super important too. That's what keeps me here. – Interviewee #9

While the multidisciplinary team is a draw for many, so is the leadership. One interviewee mentioned specifically the leadership of the CEO, Aaron Snow as a reason for wanting to join CDS, “*I knew I really wanted to join the team that he led*”. Aaron was a co-founder, Director of Delivery, and ultimately Executive Director of 18F. Hiring him as the CEO mirrors what happened often in other digital service teams. At GDS for example, Mick Bracken was the first head, and he was a former director of digital development at The Guardian, while Italy hired Diego Piancentini who was a former Vice-President at Amazon.com (Mergel, 2019). It can be assumed that hiring well-known leadership can also serve as a way to attract talent to the team, as the reputation of these individuals precedes them. Also by appointing these individuals, industry standards that are common to the private sector such as software development and human-centred design can be brought into the public sector (Mergel, 2019).

5.2.6 Interest in the People - Discussion

This is an important factor in attracting individuals and links to concepts of fit-theory. For example, person-team or person-group fit is the match between a person and their

immediate coworkers and person-team fit is one factor that impacts job satisfaction (Werbel & Johnson, 2001). The theory of person-team fit is an interesting one to look at in terms of understanding the role of what attracts those CDS team members that explicitly stated the multi-disciplinary teams as an attraction factor. While not measured as part of this research, in the future, this could be analyzed through more formal research. There is also an emphasis on work teams and working together. Person-team fits that are congruent with one another influence both individual performance and group performance which in turn can positively impact organizational effectiveness (Werbel et al., 2001). This also mirrors what was found when looking at those wanting to join 18F i.e. *“I joined 18F to help build great digital tools for government **with a team of amazing people**”* (as quoted in Mergel, 2021 – emphasis this author’s own). Research on the use of fit in recruitment demonstrate that fit influences attraction and intentions to pursue or accept a job. One study found that perceived -group fit leads to positive results with group outcomes (Young Seong & Kristof-Brown, 2012). One way to take advantage of diverse teams is to emphasize shared values which will support team compatibility (Young Seong et al., 2012). CDS seems to do this through emphasis of its values. Also, in terms of attracting talent, the CDS Meet the Team Page is also an interesting space as it features an active space indicating who is on the team with links to their online profiles. This is a unique approach that upon a cursory online search is not seen on the websites of other GC sites, and could also help applicants assess person-team fit when submitting their applications online.

5.3 Additional Themes Emerging During Interviews

The two previous sections answer the primary research questions of looking at who the team members are and why they wanted to join. There were also other themes that emerged from the interviews in response to the questions asked, which were based on the literature review, as well as emerging from the conversations themselves. These include:

- Recruitment; and
- Organizational challenges of the public sector (including bureaucracy and risk aversion)

Covid was also another theme mentioned in the interviews (an inescapable one in 2020 and 2021) as CDS was involved in high profile projects related to the pandemic. However, this was not reviewed in the research paper as the comments were outside the scope of the research question and literature review.

A general overview of these findings indicate that although CDS is “different” than government, it has to deal with issues that are common to the public sector including bureaucracy, issues with slower recruitment and a risk-adverse culture. Even if the team is smaller and set-up in a way that promotes agile practices and a start-up mentality, it is still part of the larger bureaucratic organization within which it has to work and operate.

5.3.1 Recruitment - Findings

The first theme being explored is recruitment, as all interviewees were asked explicitly about their experience with recruitment. Experience with recruitment was something that was specifically asked about as it came up frequently as a problematic area for public sector. As previously noted, recruitment is a competency acquisition strategy which consists of doing an environmental scan to “locate the relevant competencies and **attract** them to the organization” (Wright & Snell, 1991, p. 211).

Similar to what has been noted in academic literature, CDS acknowledged that:

competition is particularly fierce for software development and design talent. Developers and designers have a lot of job options, and making the Government of Canada an attractive place to work for digital professionals is a key part of CDS’s mandate (Canadian Digital Service, 2018e)

Given the varied backgrounds, it is interesting to see how people classify their experience with the recruitment process at CDS. It is also important to note that CDS is an organization that has grown quite rapidly since its inception, with the staffing having more than tripled and still set to continue growing. Based on the responses, there are differences between participants experience with recruitment, based on their previous sector, their field, and also notably when they joined CDS. This may be due in part to the way CDS has itself adapted and updated its recruitment process as the organization has evolved.

The first item to mention is branding, which is part of attracting candidates. It has been shown that in order to support recruitment and engagement in competitive labour markets, firms use their brands in two ways – both to potential applicants and internally to employees already employed within (Tumasjan, Kunze, Bruch & Welpel, 2020). DSTs have generally received favourable coverage in the media, and are seen as innovative in a sector that is generally not known for being innovative. Interestingly, one of the authorities that CDS received upon establishment was the ability to have a “visual identifier” or brand that is different from the typical GC (Canadian Digital Service, 2019b). CDS is branded differently than the typical GC. Employer branding is one way to communicate the benefits of employment to potential employers, and is based on the

idea that employees have perceptions of an organization's brand (Wallace, Lings, Cameron & Sheldon, 2013). Images below show the branding used on both the twitter page, as well as the logo.



Figure 7: A screenshot of the CDS Logo on its twitter page

CDS has also been covered online in media with positive media headlines like “Canadian Digital Service takes startup approach to building better IT for government”⁸ or “Six reasons were excited by the launch of the Canadian Digital Service”.⁹ The Canadian Digital Service itself maintains an arguably unique online presence for the GC through a series of blog posts that provide updates, a separate job application page that feels very modern. The content has a unique feel and sound to the rest of the GC, as the team manages its own communications, and social media.

Branding helps set employers apart from one another. Therefore, interviewees were asked about was regarding what, if anything they had heard of CDS before joining. Even more broadly, they were asked if they were aware of DSTs more generally prior to joining the organization, to see what role, if any, brand recognition played in attracting them to the role.

One interviewee noted that while they were not aware of CDS from before, they saw it as different from other areas of government from the way CDS branded itself online:

I just came across CDS, just like online from poking around, I had no idea that it existed...My impressions were mostly from the website, which I could

⁸ <https://www.cbc.ca/news/canada/ottawa/canadian-digital-service-recruiting-it-brains-prevent-phoenix-1.4445010>

⁹ <https://medium.com/code-for-canada/six-reasons-were-excited-by-the-launch-of-the-canadian-digital-service-a1be899aee8e>

tell was very different from how other federal government ministries department, agencies, present themselves. Usually it's like a very standard looking website with a copy that's like not human friendly, very long-winded so already seeing that the signals there were like 'okay, things are a little different here'. – Interviewee #6

Of the 13 interviewed, there were three respondents who were from the private sector and indicated they had not heard of CDS prior to coming across it in a random way online. Two indicated that they found CDS online through the website, and another indicated that they became aware of it through a twitter link that was shared with them. In these instances, the website and branding created the first impression of the organization, which they have since joined.

Within government, for those aware of CDS but not directly involved, the organization may have stood out due to its branding as well and the potential implications associated with its unique branding. One of the interviewees who was familiar with CDS from before and worked in the public sector noted that:

*It was interesting was that what I was hearing around with their branding didn't fit the Government of Canada branding, and so there was a lot of assumptions that they were breaking all the rules and, and they were kind of getting away with whatever they want because they were the shiny little objects in the corner. And so knowing a lot of people already there, and knowing the truth of the matter is that they aren't breaking the rules.
- Interviewee #13*

Some of the interviewees who were already working in the public sector prior to joining also commented that CDS was perceived differently than other federal government areas. This same interviewee, indicated that within government, many people may not be aware of CDS or where it sits in government, *“I mean there's across the government, most people don't even know who we are. So, you know, there's a huge brand awareness issue [...]. But people conflate us with other groups within TBS and other areas...People don't realize we're part of TBS.*

Another interesting area was respect to the recruitment strategies used by the organization. Initially, the recruitment strategy used by CDS followed a similar model to the U.S, including “tours of service” where they recruited talent for specific projects, rather than for full-service careers in the federal government (Canadian Digital Service, 2018b). CDS also has partnerships with different areas, one of which is Code for Canada, “a national non-profit that connects government innovators with the tech and design

community, with three main program areas: a fellowship program, a community network that supports the growth and formation of civic tech groups across Canada, and a suite of education and training workshops” (Canadian Digital Service, 2018c). The team size has since grown considerably and the approach to the “tours of service” have changed as CDS has moved from a pilot to a more regular fixture.

In 2018, CDS published a blog detailing the different hiring practices it was using to recruit and an updated blog was shared a year later, as the team had grown from 15 to 60 people by then (Canadian Digital Service, 2018b, 2019a). CDS also shared that it does not have special staffing authorities and therefore must do its hiring within the current existing rule system for the Federal Government (Canadian Digital Service, 2019a).

Interestingly, an interviewee indicated that an issue with government hiring typically is that it is the idea of *“hiring people based on what they’ve done, not what they can do”* and that in some ways it feels *“the system is set up in such a way that it’s very hard to determine if somebody can do the work or not.”* Therefore, it was interesting to see how interviewees perceived their experience with the recruitment process, as every member of the team had to deal with the process at one point or another. It would appear from the responses that the process has changed as it has become more formalized. One interviewee, who was previously from the private sector indicated that in terms of the application process, it stood out from other areas of federal government for its ease.

The application form itself was like, within most government of Canada jobs it's like you need to write up the statement to like, 20 different questions and then its like a whole application. This one was just like, “what's your motivation?”, 300 words, a link to your LinkedIn and off you go. – Interviewee #6

Another interviewee mentioned that CDS focuses on recruiting people into more technical roles from private sector, particularly at higher and more senior levels which is in contrast to general government recruiting of technical staff - *“most government recruiting is through very junior employee[.] tends to be mainly students hired in, and not people that have experience in the industry”*. Technical recruitment is an area that government typically struggles with in terms of hiring. The interviewees in more technical roles also had different experiences from one another. One interviewee in a more technical role indicated,

it's been a very similar experience to the private sector which is not what you would typically get in government. They had actually a technical interview, there wasn't, like, sort of a whiteboard coding exercise that you'd normally get in a private sector but they did have a technical question, which, even if you're being interviewing for a technical

position in the government you normally wouldn't have
 - Interviewee #11

Another interviewee in a technical role, indicated that

the interviews and types of questions they asked, are very, they were, it was very standard ...what was interesting was there was nothing other than the oral interview. There was no other way of like demonstrating your technical skills.
 - Interviewee #13

Some interviewees also indicated that the recruitment process was similar to other processes they had been through, particularly in public sector. One interviewee indicated it was far better than their experience in other levels of government. But again, this was a mixed bag in terms of responses. When asked to describe their experience with the process there were comments about the speed - “slow” or “delayed” - and one interviewee even described it as a ‘bumpy’ process. Public sector recruitment being slow is one of the challenges to its workforce, and also one way in which talent can be lost to generally private sector which moves much faster. It is recommended that the process in the public sector needs to become faster so that the offer can go to the best candidate (OECD, 2021).

5.3.2 Recruitment - Discussion

As the responses were so varied, this is an area that is difficult to assess. It may be helpful to survey new hires about the recruitment process shortly after they are onboarded and to evaluate the process then. A few of the interviewees had experience supporting the hiring process at CDS which provided further insights into the recruitment process. The process could be described as a “*hybrid between private and public sector*”.

One key difference between CDS and other areas of the GC could be its effort on branding. While there is a belief that branding is more about recruitment focused activities, it actually has positive effects on current employees and their level of engagement as well (Tumasjan et al., 2020). So it can serve to potentially attract talent, but also motivate those internally around a sense of identity and purpose. The comments regarding the user-friendliness of the applicant portal speaks to a technique that actually represents a best practice according to Lavigna et al., (2004) which is to make the entry procedure to recruitment more user-friendly and transparent.

An implication is to continue to use employer branding as a primary HR tool. One study found that more attractive ads led to an increase in perceived person-organizational fit possibly because these ads encourage more information processing, and emphasizes the

importance of design when sharing content (Uberschaer et al., 2016; Barrick & Parks-Leduc, 2019). CDS also implements several engagement initiatives recommended by the Public Policy Forum (2017) which indicate allowing flexible work arrangements, using new technologies and drawing people through a social impact message. On their webpage, this can be clearly seen through their concise message to attract potential candidates:

Join our team

Work anywhere in Canada. Make government services better.

Join our team

When you join CDS, you can work from anywhere in Canada, with flexible hours to enable a strong work-life balance. We have people working from coast to coast to coast.

We provide the latest tools and technologies to help you do great work.

You will be part of a team that does meaningful work on services that help people, alongside wonderful, highly-skilled people.

Meet the team →

Figure 8: “Join our Team” page (screenshot from <https://digital.canada.ca/join-our-team/>)

Actively recruiting candidates is not a part of the general HR practices (Mergel, 2017). One concept that came up was that of having more of a talent team, and actively sourcing candidates which is different from the passive recruitment that has typified government hiring. Actively recruiting candidates is not a part of the general HR practices (Mergel, 2017). Generally, the hiring process in government is posting a position and waiting for the candidates to apply whereas here, as indicated by some interviewees there is encouragement to apply and a little bit more advertising of positions, all while still respecting the public sector process. There is also an acknowledgement of trying to create a more “human-centric” process at CDS, and on its hiring page, the steps that follow the application process are outlined in a clear way, with a contact link for questions. By loudly

communicating its mission and values on the hiring page, CDS should theoretically be benefitting fit perceptions in the recruiting process (Barrick & Parks-Leduc, 2019).

While many of the best practices noted in literature are being implemented, another approach CDS can consider is to adopt online systems that allow applicants to track their application status so that there is more clarity around the status, “as public service recruitment tends to take much longer than hiring processes in other sectors, applicants often accept other job offers before receiving a response from public service employers.” (Public Policy Forum, 2017).

5.3.3 Organizational Challenges - Findings

Organizational challenges such as bureaucracy and risk were also mentioned during the interviews.

The one mentioned by almost all interviewees was the idea of bureaucracy - “bureaucracy” “red-tape” “slow processes” were all a challenge cited by many interviewees. CDS, while a new organizational structure is still part of the GC, and still subject to government bureaucracy. Bureaucracy-busting was a theme that came up a few times and from the interviews, an area that is noted as a continuing challenge for both government and organization. Arguably, many from the private sector went in aware of this fact, as seen from the general perception of public sector.

I anticipated that it would be difficult, and that it would be like a lot of bureaucracy, busting alongside or like product delivery that can only be done if you are doing that bureaucracy-busting pieces. - Interviewee #2

There is also a perception that CDS maybe has less bureaucracy than other areas of government but that may be subject to change, “*I guess, certainly in CDS, there's been way, way less red tape, I wouldn't say there's no red tape and I think the direction is to start to reintroduce that red tape.*” CDS is continuing to grow and must do so within the bureaucratic environment of GC. With this growth, there is the potential for more bureaucratic processes to embed themselves within the organization.

It is also understood that the task and the challenges at hand are large when it comes to bureaucracy but that it is a necessity to work within and around it in order to get the work done. This may require some creativity and “bureaucracy busting”.

People that have never worked in government don't understand all the rules that we're playing with and how to play with the rules which is the best part, I think you're

*learning your box and figuring out what you can do within your box it's so much fun. _ -
- Interviewee #13*

Despite being on a small team, the work happens in a large organization. A couple of different interviewees mentioned the metaphor of a mountain, and another mentioned a marathon. That sometimes, it is simply moving a mountain an inch and while it may not feel like a lot of work was done, it is all part of a bigger picture and a monumental task. With the marathon metaphor, it is the idea that it is not a quick sprint to the finish line but rather, it is incremental progress in a long race.

And I don't know why I just like never really like knew how big it was. Or like, I never really understood like how many people are involved in, like, like even just thinking about all the services, and the more I think about, the mesh of how everything's connected and like, just the magnitude of how big this job is.

- Interviewee #3

Another idea mentioned explicitly by two interviewees, and implied by others is around the concept of risk. Public sector organizations are seen as more risk-averse and “organizations with more red tape, weak links between promotion and performance, and high involvement with elected officials tend to have a less risky culture” (Bozeman & Kingsley, 1998).

I would say, like it's still heavily bureaucratic, heavily governance-based and very risk-averse very top down, command and control type. And, like, you know I know CDS is trying to change that, but it's not a thing that's going to change overnight, so like small pockets are changing but it's still pretty much business as usual in most places.

- Interviewee #1

Perceptions of risk matter for organizational culture, because if the organization promotes risk-taking, particularly if leaders are seen as supporting risk-taking, then it is seen as something that is legitimate, and more likely to be accepted and approved (Bozeman & Kingsley, 1998). For risk-oriented cultures to thrive, it is important for clear communication about the purpose and goals (Bozeman & Kingsley, 1998). This may be the case at CDS as noted by one interviewee:

Working with my leaders, it's been like people who really figured out like how to manage risk and how they look at risk and they look at risk differently than some folks. And that has been, it's that part has been like super aligned with how I see risk .. I am not optimizing to zero I'm optimizing to, you know what's appropriate risk for the

situation and what does that actually look like.

- Interviewee #5

These two themes are reflective of general public sector challenges that potentially negatively impact the organizational culture and innovation.

5.3.4 Organizational Challenges – Discussion

The bureaucracy within a large organization is a challenging factor. However, based on general perceptions of the public sector, it should not be a surprise to those joining the public sector for the first time. One way to maintain engagement may be to allow public service employees to observe the positive impact of their work, as the desire to make an impact is one of the most powerful motivations (Henstra et al., 2016).

The literature also shows that public employment is designed in a way that it tends to attract risk-averse individuals which then results in a more risk-averse culture within public sector organizations (Chen & Bozeman, 2012 as cited in Dong, 2017). It was found that an aversion to risk by both individuals and public organizational culture is an impediment to increasing innovation in public sector organizations (Townsend, 2013). CDS may have an advantage here as it is attracting many that have not worked in public sector before and therefore have experience with all different types of organizational cultures. Innovation requires a certain level of risk-taking, and while CDS is considered an innovative organization it is still working within the government structure but perhaps with less risk-averse individuals. While risk aversion is still seen as an issue for government by the interviewees who mentioned it, they also acknowledged the ways CDS is trying to differentiate itself and promoting a more risk-tolerant culture. Interestingly, one strategy to encourage more risk-tolerance is to use narratives to celebrate innovators and acknowledge risk takers (Townsend, 2013). CDS appears to be doing this internally as seen through the interviewee comments, and also through media blog posts where stories of lessons learned are shared on its blog. As they noted in their blog, “as public servants, we too often limit ourselves based on unwritten rules, perceived or imagined consequences, and narrow interpretations” but acknowledged that there is plenty of room in government for doing things differently (Canadian Digital Service, 2019b). It will be interesting in future studies to look at what impacts DSTs have on the overall organizational cultures within which they work.

5.4 Implications of Findings

There are a few different implications covered through the many themes explored and discussed in the findings. When looking at who is on the team, sector switching is an

interesting area to conduct future research in as this is a phenomenon that has not been studied, and it also links to ASA theories. But looking at the career patterns, there is a lot of sector switching, and more than the sector, individuals were drawn to the organization's mission and values. Therefore, this confirms previous research in this area about the importance of using the impact of the work as a way to attract and recruit talent. It confirms some of what the literature has indicated regarding motivations for public sector employees which is that there is an intrinsic work motivation, and that public sector could attract more team members if they offered interesting work or progressive personnel policies (Collins, 2008). CDS is in many ways already doing these things as can be seen and can perhaps continue to promote its work and success stories as a way to attract talent. CDS already in many ways places an emphasis on its mission and values, and this is a major factor indicated by its team members when asked why they joined. Regardless of which sector interviewees joined from, there was a sense of people selecting into the organization because they agreed with the values which mirrors in with theories. It is interesting to see in what ways these findings could be adopted by other public sector organizations to support recruitment efforts within the greater GC. These findings may also be helpful for other emerging DSTs as best practices and lessons learned.

6 Conclusion

This research aimed to explore digital service teams by looking at their members – who are they and why did they join? – and to use that research to support a broader understanding of public sector careers and talent and recruitment attraction. The aim of this research paper was to gather a better understanding of the background of DST members by looking at one case study as an example, the Canadian Digital Service (CDS).

These results can be useful for supporting attraction of candidates and perhaps also for doing more targeted recruitment campaigns to bring talent into the public sector, particularly from the private sector. There may also be a need to support re-branding efforts in the public sector and better advertise the work that is done by the organizations in order to attract talent and become an employer of choice.

This study and its findings include several limitations. DSTs are each unique and this study was limited to only looking at a few members from one organization. Given the wide range of categories within which the interviewees fell, it is difficult to compare across age, gender, category and length of service within CDS. There is also the self-selection bias mentioned earlier, and results would have been more representative if a larger percentage of the team had chosen to participate.

While there are frameworks and approaches to measure motivation and also career paths, given the purpose of this research, neither of those approaches were used. As a theoretical framework was not used, the questions were left open-ended and given the researcher's lack of interview experience, the responses were varied. It may be interesting to review the background of members using the career frameworks which will allow the motivations to be compared with other studies done in the career studies field.

Regardless of the shortcoming, the qualitative approach used provides unique insights. Further research can be done to expand on this area by looking at whether these motivations are similar across other public sector organizations within Canada, and also within a global context. As there are more digital service teams emerging globally, it is a chance to explore whether the backgrounds of the workers are similar to one another and whether motivations are similar. It is also interesting to note which factors are different in a cross-cultural context, and how they differ across teams as well as looking at the different strategies used by DSTs to attract talent.

As this research was broad and looked more for themes across areas, it explored the concepts that were found in the literature review. While it validated some of the literature,

additional areas for future research are also identified. It may also be worth doing a longitudinal study to see the job moves of those moving into and out of DSTs to determine whether the talent that is attracted into the public service continues to stay in the public service or moves elsewhere and to which roles.

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Appendix

A. Survey – Career Profiles and Motives of Canadian Digital Service Team Members

Individual Background

- Which category best describes your role at CDS?
 - Management
 - Design
 - HR
 - Development
 - Product Management
 - Outreach
 - Internal Operations
 - Policy
 - Partnerships
 - Other (please describe)

- To which age group do you belong?
 - Under 20
 - 20-24
 - 25-29
 - 30-34
 - 40-44
 - 45-49
 - 50-54
 - 55-59
 - 60-64
 - 65 and over

- Do you describe yourself as a man, a woman, or in some other way?
 - man
 - woman
 - <blank>

- When did you start your current position in CDS:

Career Profile

- Please provide information on your previous two career roles before joining CDS. For each role, please identify the (1) position title (2) the sector and whether it was public, private, non-profit, self-employed or other and (3) length of time in the role.

- Over the course of your career, how many years of experience do you have in the private sector?
- Over the course of your career, how many years of experience do you have in the public sector?
- Over the course of your career, how many years of experience do you have in the non-profit sector?
- Over the course of your career, how many years would you say you were self-employed?

Motives

- Why did you want to join CDS?

Recruitment Process

- How were you recruited into your current role at CDS:
 - From within CDS
 - From the public sector (federal, provincial, municipal or broader public service)
 - Externally (from the private sector, non-profit, self-employed or other)
- How would you describe your experience with the recruitment process at CDS?
- If you had previous experience with public sector recruitment, how was the recruitment experience at CDS similar to, or different from those previous experiences?

Approval on use of Responses

- How can we use your comments when preparing the research paper?
 - Please only use them in aggregate (themes, trends etc.)
 - You can share and quote them verbatim in the research paper
- How can we share your comments when reporting to the CDS Management Team?
 - Please only use them in aggregate (themes,trends etc.)
 - You can share and quote them verbatim with the CDS Management Team

Interest in Further Participation

Thank you for filling out the survey so far!

A small sample of respondents may be contacted for interviews to elaborate on their responses and provide further insights. Please indicate if you would be open to a short (15-30 minute) interview below.

- Would you be interested in participating in an interview?
 - Yes, I am open to participating further (if so, please provide contact info)
 - No, I do not wish to participate

Declaration of Authorship

I hereby declare that, to the best of my knowledge and belief, this Master Thesis titled “Digital Service Team Members: A Look at the Canadian Digital Service” is my own work. I confirm that each significant contribution to and quotation in this thesis that originates from the work or works of others is indicated by proper use of citation and references.

Tallinn, 09 August 2021

Sujani Kamalanathan

Consent Form

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Given Name: Kamalanathan

Student number: 0772757

Course of Study: Public Sector Innovation and eGovernance

Address: Roseni 9-6, Tallinn, Estonia, 10111

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