



Power to the people

Driving digital transformation of Human and Social Services delivery

Martin Joyce

Partner, National Human & Social Services Leader,
KPMG in Canada

Much has been discussed in the marketplace about how digital disruption is rewriting the rules in the worlds of finance, manufacturing, telecommunications, and even entertainment. While innovations like machine learning and predictive analytics are often associated with bigger profits and greater market share, these disruptors are also changing the way the public sector supports our most vulnerable population.



By understanding the opportunities that technology provides, and thoughtfully addressing the challenges, governments can make a transformational shift from slow and fragmented service delivery to a more inclusive and efficient one.

Better delivery through stronger data



Historically, governments would invest significantly in vulnerable people who, despite their best efforts, were unable to become independent of government assistance. Now, these organizations are starting to use big data to inform how services are delivered and measured in order to be more effective and have a greater impact. ”

The good news is that government ministries possess client and program data from decades of delivering social services. The challenge is that if the data is not leveraged more effectively, it is useless.

In the past governments were hesitant to use data due to public skepticism, but more recently, there has been a shift in the public's thinking towards the benefits of open data and the technologies that

facilitate data sharing and predictive analytics. That is largely being driven by the evolving expectations of citizens who want a more customized experience and administrators that want to streamline processes.



By using technology to share information, connect users and services, and work collaboratively across service areas, governments can optimize their resources and transform the experience of constituents. ”

Data collection, interpretation and sharing relies on the quality of the data – and on the application of the information. For predictive analytics to be transformative, decisions must be data-driven. The challenge is that most individuals find the operation of algorithms and data models too complex to interpret. This can create confusion and skepticism around available and useful data. To address this challenge, KPMG identified the four ‘anchors of trust’ that must underpin the successful application of analytics.

The ability to rely on and share data securely between stakeholders is paramount. With the right systems in place, government organizations can eliminate the departmental silos that cause unnecessary delays and duplicated efforts.



In New Zealand, ministries and service providers have created a secure data system called Data Exchange, where governments can upload program data to be cleaned, organized, and analyzed to assess where services are hitting the mark and where gaps exist. The system manages over a billion lines of data per month, currently across four ministries, contributing to a more connected, efficient, and tailored client journey. More ministries and co-service providers will be joining the exchange over the coming months.¹

Canada is already heading down a similar path. The Ministry of Community and Social Services in partnership with the Institute of Clinical Evaluative Sciences (ICES) are working on an initiative bringing together multiple data sources, analyzing the data and making it available in an open data environment.²

While government organizations seem to be trending towards an integrated and open program delivery model, others are still challenged by rigid governance structures.

¹ Eight Wire Security White Paper

² As presented to the Ontario Municipal Social Services Association (OMSSA) Policy Conference in December 2017: [http://omssa.com/education/conferences/2017-policy-conference/3.2%20Data,%20Analytics%20and%20Evaluation%20Strategy%20\(DAES\).pdf](http://omssa.com/education/conferences/2017-policy-conference/3.2%20Data,%20Analytics%20and%20Evaluation%20Strategy%20(DAES).pdf)

The four anchors of trusted analytics

- 1 **Quality:** Are the data and analytical models good enough? How well do service agencies understand the role of quality in developing and managing tools, data and analytics?
- 2 **Effectiveness:** Do the analytics work as intended? Can agencies determine the accuracy and utility of the outputs?
- 3 **Integrity:** Does the use of data and analytics follow regulations and ethical principles?
- 4 **Resilience:** Are long-term operations optimized? How well are good governance and security being managed throughout the analytics lifecycle?



Self-serve models

One of the promises of digitization has always been to enhance the customer experience. That promise is also true for human and social services. Automation, mobile technologies, and digital channels can work in unison to give clients more control over their program and better access to supporting partners.

Perhaps more importantly is the role digital disruptors can play in empowering recipients to make decisions about the services they receive. If you can give clients the tools to navigate their way through the system, or to have their forms automatically filled out and be able to apply for multiple programs at once online, then you start to reduce waiting times and get people into the programs they need much sooner.

Mobile technology can make interacting with government easier for the general population. The ability to deliver essential services to vulnerable citizens such as the elderly, the homeless, children at risk, and people with disabilities, whilst improving work processes for service providers is one of the critical benefits.



In Denmark, the mobile app **Be My Eyes** connects visually impaired

individuals to sighted volunteers using live video chat via a smartphone camera. The visually impaired person ‘borrows’ the volunteer’s vision to navigate new surroundings, read product instructions, check the expiry date on a carton of milk, or get any other needed visual information.³



The implementation of AI and automation in client services has the potential to increase productivity and cost-effectiveness. Whether it’s phone support, email follow-up, scheduling, or the processing of paperwork, AI will allow service providers to focus and prioritize their service offering.”

Investing in self-serve models allows resources to focus on our most vulnerable. As technology is adopted, the question becomes, how do governments use technology in a way that serves constituents who don’t need person-to-person service? The answer to this question is critical to elevating the resources burden and addressing service delivery gaps.

Beyond big data

Data analytics and mobile innovations aren’t the only disruptors. The rise of automation systems and artificial intelligence (AI) has the potential to significantly increase the processes by which today’s services are delivered, while removing duplication.

³ About Be My Eyes



AI is already being used to support our most vulnerable:

- **The DoNotPay program collects information about a homeless client and will automatically generate letters and applications for social services on their behalf, and connects programs to the people who need it most.**
- **Blockchain technologies have been adapted to facilitate online donations to homeless people through providers such as BlockCrushr Labs.⁴**

Technology is further enhancing the day-to-day lives of the people who need it most. The Internet of Things, for example, is giving way to “smart” living environments that allow for the control aspects of living spaces such as lighting,

temperature, automated cleaning machines, touchscreen devices or even eye-tracking technologies to be managed automatically. Moreover, GPS and connected systems like Google Home are augmenting care for those with dementia, and self-driving vehicles are providing more mobility options for those who don’t have the ability to drive.

When harnessed correctly, technology makes life better for us all. Technology is freeing up program resources by reducing the need for human assistance and empowering those who need support to live. When a person can live independently, both the patient and the system win.

The role of government

A Canadian public service advisory committee aptly pointed out that a digital population cannot be well served by an analog government.⁵ Without a doubt there are valuable opportunities for integrating and digitizing service delivery.

The role of disruption also doesn’t fall squarely on the shoulders of government. Third party stakeholders and partners who work with government ministries are by-in-large driving these innovations and bringing them to life.

In order to achieve true adoption, collaboration is needed on both sides of the equation: service providers driving the delivery of technology, and governments enabling a culture and environment for innovation to thrive.

⁴ About [BlockCrushr Labs](#)

⁵ Government of Canada, [Seventh Report of the Prime Minister’s Advisory Committee on the Public Service](#), March 2013.