DATA COLLECTION & USE

Quayside Civic Labs

3

The Quayside Civic Labs Info Sheet Series

This is the third in a series of Info Sheets that Waterfront Toronto has developed to support a meaningful public discussion about the potential future of Quayside – specifically, its digital future.

Info Sheet 1 explains some of the ways and places that technology can influence a city. Info Sheet 2 identifies relevant information laws and regulations, and Info Sheet 3 goes into more detail on data collection and use.

Many uses for data

Data has been collected and used in planning and managing cities for centuries. Why? Because it can lead to more informed decisions and more responsive services. For example: if there are ten cars waiting at an intersection and zero cars going in the other direction, this could be a sign that the city's traffic lights are not programmed to provide the most efficient service. If city planners collect and use data about traffic patterns, they can tweak the timing of the lights to provide better service. This same logic can be used for pedestrian crossings, bike crossings, etc.

Collection, storage, use, and consent

What has changed with smart cities is that people have the potential to be personally identified by digital infrastructure. Some of the big issues that come up in talking about smart cities and personal information are:

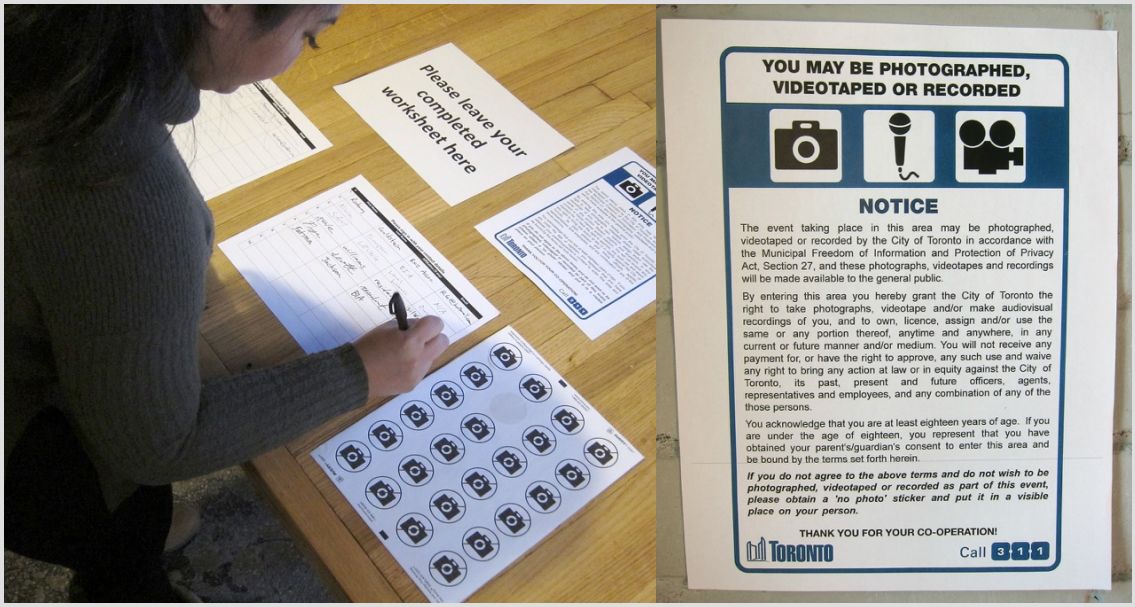
- Collection and storage. Who is collecting what information about me? Is the storage of data absolute essential to providing these services? How and where are they storing that data? How secure is data about me? Who has access to it?
- Data use. What are they using data about me for?
- Consent. How do I provide or revoke consent for the use of my personal data?

Thinking about smart cities involves thinking about how to best take advantage of the benefits they offer while thinking through these kinds of questions. In others word, how do we decide and do what's best for everyone?

Read on to find out what feedback Waterfront Toronto needs from you. To learn more, please visit our website: www.waterfrontoronto.ca

Example of Public Data Collection and Use by a Municipal Government

In public meetings in Toronto, participants often see a notice informing them that they may be photographed or recorded. Participants can opt out of having their information used by placing a "no photo" sticker on themselves.



Data collection and storage

In order to make data driven decisions, the data must first be collected. Some service providers say that data must also be stored so that they can train the software that drives smart city services. Big issues in data collection and storage are data residency and the right to be forgotten.

What is data residency? How does it impact me?

While digital data is held on virtual rather than physical platforms, the technology storing the data is physical: data is stored on data servers. Data servers are held in data centres around the world. The term data residency refers to the physical or geographic location of data servers and data centres, though they connect across borders.

Regulatory Requirements

In Canada, there are some legal provisions that require storage of personal data in Canada, but in general, storage abroad is allowed. In fact, in the new USMCA, which will replace NAFTA, Canada, Mexico and the US have agreed that, in general, they will not impose data residency requirements in their territory.

The difference of storing data in Canada, versus storing it abroad, is that while the data remains in Canada, it remains fully within the protection of Canadian laws. When data is stored abroad, the laws of the country where the data is stored also apply, and they may not correspond to the privacy protection level we want. That makes data residency relevant to individuals.

Canada's Personal Information Protection and Electronic Documents Act (PIPEDA) has been interpreted to require that individuals be informed, through a privacy policy for example, that their data is being stored abroad.

What is the "right to be forgotten?"

The "right to be forgotten" means the right to have one's data deleted upon request, if it is no longer necessary. In Europe, it has been enshrined in the General Data Protection Regulation (GDPR) as the "right to erasure." In this sense, it means the right to have one's personal information de-indexed and therefore made non-searchable on the internet when it is no longer accurate, for example, through the passage of time.

In Canada, the Office of the Privacy Commissioner of Canada is currently before the Federal Court requesting a determination as to whether the right to erasure exists in Canada.

Data use

How data is used is a key issue in smart cities. Is the personal information being collected about me being used to inform decisions about traffic planning, for example? What else is it being used for? Is it being used to assist law enforcement? Or make money for a private company through advertising? One topic that comes up often in discussions about data use is algorithms.

Algorithms

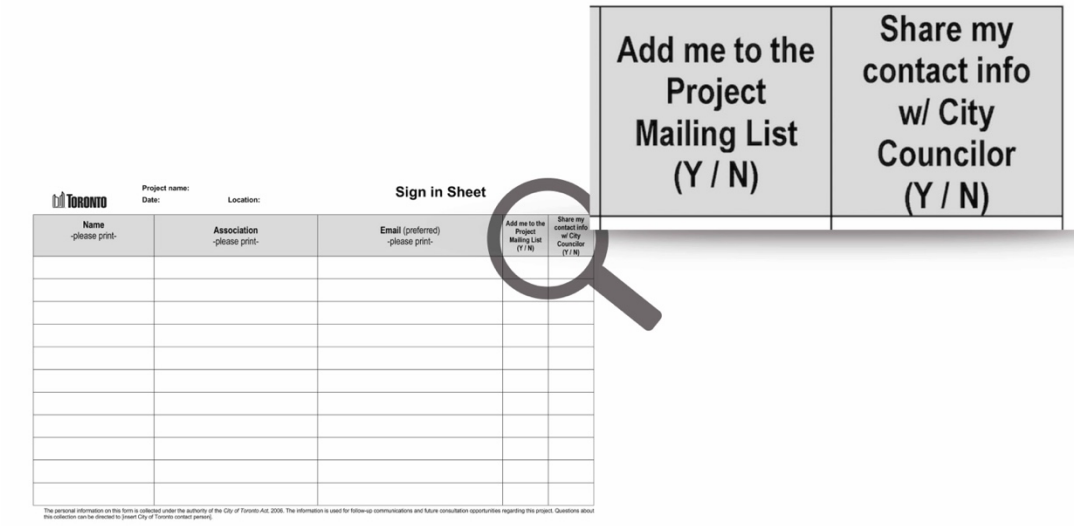
Algorithms are instructions that can be understood by a computer to solve a problem or complete a task. Algorithms are also referred to as the logic models that machines use to analyze data. Machines (i.e. computers) use algorithms to make decisions and those decisions depend on a number of different factors — including the quality and representatives of the data the algorithm is using. There are many discussions happening around the world exploring how to ensure the ethical and accountable use of algorithms in decision-making. This includes ensuring that mechanisms are in place to detect and address any mistakes or unintended consequences of decisions that computers make using algorithms.

Consent

With products like smartphones and smart thermostats, individuals consent to sharing personal information to receive the benefits the products offer. Often, individuals feel obligated to consent to the collection and use of their data by third parties in exchange for access to an app or service. Many times, the terms and conditions surrounding that consent are so complex that users simply accept them without reading the details, therefore surrendering any form of meaningful consent. Many feel this approach is unacceptable in the context of a smart city, so there are important discussions to have about how personal data can be collected, stored, analyzed, and transmitted in smart cities, while ensuring users have the ability to meaningfully consent to participate (or not) in these actions. Organizations also face challenges managing consent, such as when individuals revoke consent after having already provided it.

These are some of the solutions adopted in Glasgow: excluding or including information such as traffic notifications, structuring the smart city according to a “menu” of services based on the use of personal data with express consent (and providing direct consent withdrawal as well as the option of deletion of personal data collected with consent).

The form below is an example of how the City of Toronto seeks consent to use personal information (in this case a name, association, and email address) on a sign in sheet at a public meeting.



WHAT DO YOU THINK?

Waterfront Toronto will be reviewing the Master Innovation and Development Plan that will be submitted by Sidewalk Labs and will need to determine how well it reflects the public interest. Our questions for you:

1. What issues would you like to see Waterfront Toronto consider as they review digital proposals related to Quayside?
2. How do you think Waterfront Toronto can best determine what's in the public interest when dealing with the opportunities and challenges that are associated with smart cities?
3. Do you have any other feedback or advice related to smart cities that you'd like to share with Waterfront Toronto?

You can provide this feedback by emailing us at CivicLabs@waterfrontoronto.ca with a written submission. **Please send your thoughts by December 21, 2018** so that we can feed them into our decisions making process. A summary of all written feedback received will be shared publicly early in early 2019.