

Four Key Influences
On The Future of Privacy

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CONCEPTS OF PRIVACY ARE
CHANGING FAST IN TODAY'S
WORLD, AND SO ARE THE
FACTORS THAT THREATEN IT.
THE OFFICE OF THE PRIVACY
COMMISSIONER OF CANADA
MONITORS A BROAD RANGE
OF CHALLENGES, AND HAS
IDENTIFIED FOUR EMERGING
ISSUES THAT WE PREDICT WILL
HAVE ESPECIALLY POWERFUL
IMPACTS ON PRIVACY IN THE
YEARS AHEAD, THEY ARE:

- INFORMATION TECHNOLOGY
- GENETIC INFORMATION
- PUBLIC SAFETY
- THE INTEGRITY OF PERSONAL

This brochure describes the issues and their associated privacy risks, and explains what the Office is doing to better protect the privacy of Canadians.



Information Technology and Privacy

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GY TO IMAGINE A FUTURE WHERE HOUSEHOLD
FIXTURES AND APPLIANCES ARE SMART
ENOUGH TO ANTICIPATE YOUR EVERY NEED.
IN AN ERA OF "UBIQUITOUS COMPUTING,"
OBJECTS – AND POTENTIALLY PEOPLE –
WOULD BE TAGGED WITH TINY ID CHIPS OR
SENSORS. DATA FROM THE TAGS WOULD
PASS OVER WIRELESS COMMUNICATIONS
NETWORKS, TO BE GATHERED, STORED,
AND PROCESSED SO THAT YOUR SMART
ENVIRONMENT COULD RESPOND INSTANTLY
TO YOUR PREFERENCES AND COMMANDS.

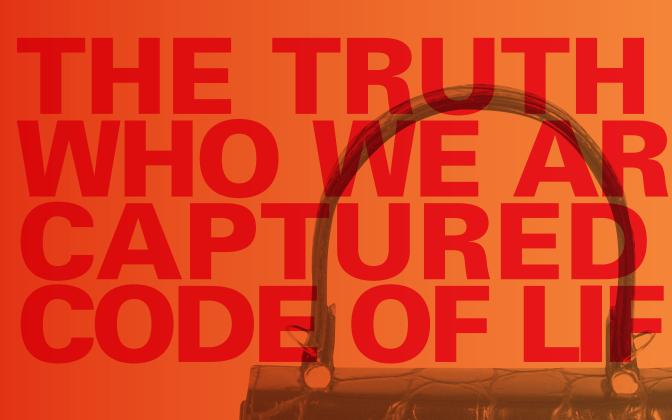
Such a personally tailored world may sound futuristic, but many elements are already reality. Indeed, information and communications technologies have, for many years, been enhancing our lives in countless ways. Most people today can barely imagine a world without the Internet and the many other advances that computers and the digital age have brought.

Challenge to Privacy

But every technological innovation also introduces new risks to privacy. Ubiquitous computing, for example, depends on radio-frequency identification (RFID) chips that are inserted into objects, or even implanted in people. As you walk down the street, those embedded microchips could emit a cloud of data – from you, your clothes, your purse or your backpack. Anyone with a suitable receiving device could conceivably vacuum up vast amounts of your personal information, build a profile, and track your every move.

And you might never even know.

Modern information and communications technologies have given organizations, and even individuals, the ability to collect and process vast amounts of information easily and efficiently. While acknowledging the benefits of these technologies, we also recognize that, if misused, they can cause significant harm to your privacy.



Genetic Information and Privacy

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GENETIC INFORMATION IS THE ULTIMATE IDENTIFIER. IT AUTHENTICATES US AS MEMBERS OF THE HUMAN SPECIES, THEN FILLS IN THE DETAILS OF WHO WE ARE AS UNIQUE INDIVIDUALS. IT DESCRIBES OUR PHYSICAL TRAITS AND MANY OF OUR BEHAVIOURS. AND, WHILE IT BOLDLY DECLARES OUR IDENTITY TODAY, IT ALSO SPEAKS OF OUR ANCESTORS AND ORIGINS, AND WHISPERS OF OUR FUTURE AND THE AILMENTS WE MAY YET COME TO KNOW.

The story told by our genetic material has tremendous symbolic value because it captures the essence of our selves. It also has great practical value – for law enforcers who use DNA to connect criminals to crime scenes, for doctors and medical researchers searching for ways to improve and extend our lives, and for employers and insurers looking to distinguish the sickly from the robust.

Challenge to Privacy

At the frontiers of science, genetic technologies challenge our capacity to grasp their full implications. The science is evolving faster than the surrounding laws and ethical frameworks. What, for example, are the implications of creating "designer babies" by preselecting desirable traits, such as beauty and intelligence?

Privacy rights are often ensnared in the ensuing social debate. How can patients give meaningful consent for the use of biological tissue if it can be stored and reused, decades from now, in ways we cannot even imagine today?

Consider, too, that while DNA is unique to each individual, the genetic information of close relatives is often similar. One consequence is that your brother's DNA in a police databank could throw entirely undeserved suspicion on you. From a privacy standpoint, moreover, personal information that is shared with relatives raises questions about who owns and controls it.

Public Safety and Privacy

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THE FAMILY RUSHES TO THE AIRPORT CHECK-IN COUNTER WITH LITTLE TIME TO SPARE, ONLY TO BE TOLD THEIR TEENAGER MAY NOT BOARD THE AIRCRAFT BECAUSE HIS NAME IS ON CANADA'S NO-FLY LIST. THEIR TRAVEL PLANS IN A SUDDEN SHAMBLES, THE FAMILY'S DISBELIEF MELTS INTO HORROR AS THEIR PREDICAMENT DEEPENS. DESPITE MONTHS OF EFFORT, THEY NEVER LEARN WHY THEIR CHILD IS A TARGET OF NATIONAL SECURITY AGENCIES, OR HOW TO MAKE THE NIGHTMARE STOP.

Canada's public safety and national security agencies are dedicated to protecting citizens against those who would threaten our safety and way of life. To carry out their work, they collect information on individuals through surveillance and other means.

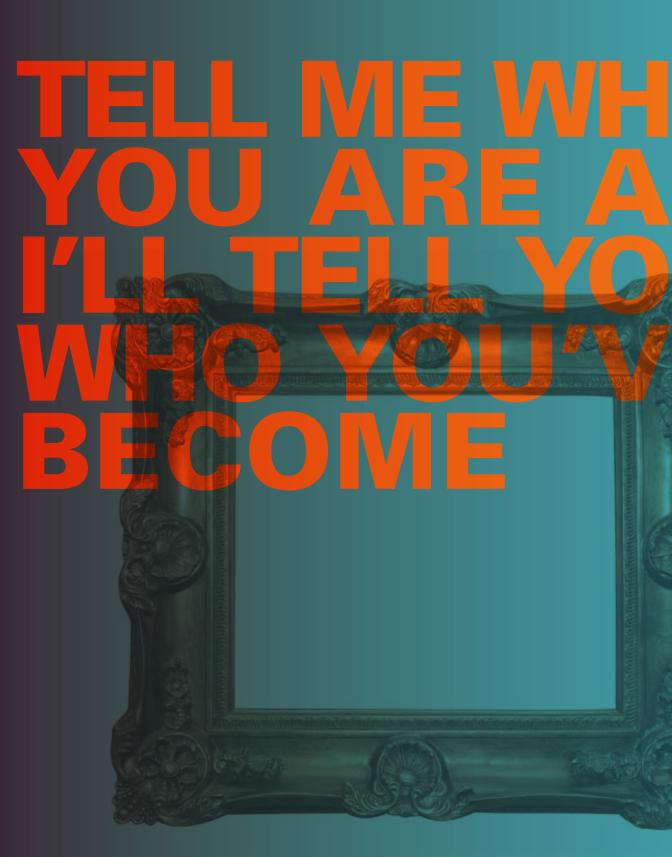
Analysis of the accumulated data may lead authorities to take action against suspects, including banning them from commercial flights, restricting their movements and other liberties, apprehending them, or even deporting them.

Challenge to Privacy

Law enforcement agencies typically work in secret. While secrecy is often justified, it also presents unique problems for individuals caught in the dragnet.

How, for instance, do you prove your innocence if you cannot find out what the authorities know about you? How did they get the information? Are they sharing it with others? What if they're misinterpreting it? What if it's dead wrong?

In today's world, privacy laws give you the right to know when others are collecting your personal information, to verify that it's correct, and to have some say over its use. When it comes to public safety measures, however, those rights are being sidelined, to the point where, in some instances, they have vanished altogether.



Identity Integrity and Privacy



GONE ARE THE DAYS WHEN YOU COULD STROLL ANONYMOUSLY ALONG A BUSTLING CITY STREET. TODAY, WITH SURVEILLANCE CAMERAS, SMART PHONES AND GLOBAL POSITIONING SYSTEMS, THERE'S A GOOD CHANCE THAT SOMEBODY YOU DON'T KNOW WILL KNOW A LOT ABOUT YOU, INCLUDING WHERE YOU ARE AND WHAT YOU'RE UP TO. MERCHANTS, TOO, TRACK YOUR BUYING BEHAVIOUR, IN THE HOPE OF LURING YOU TO THEIR PRODUCTS. YOUR IDENTITY – WHO YOU ARE AND WHAT YOU THINK AND DO – HAS BECOME A VALUABLE COMMODITY.

Even if you've never posted a single word or image on the Internet, there's a good chance you're still leaving an electronic footprint.

After all, a friend could post a picture of you at a recent party. Your use of customer loyalty cards is feeding databases with detailed information on your buying habits and product preferences. And, every time you use your smart phone or personal digital assistant, you're leaving a trail of information about yourself, your whereabouts and your activities.

Challenge to Privacy

Each bit of data alone may mean little. But, gathered up, cross-referenced and analyzed, all these pieces could yield an extremely detailed profile. Taken together, this can become your identity.

Managing your identity is a challenge, especially when you don't really control how it was created, or how it's being used or shared with others.

And it can be used for good or ill. You might, for example, enjoy VIP treatment at a shop you visit often. Or you could find yourself bombarded by irritating ads and wondering what happened to your privacy.

PREPARING TODAY FOR CHALLENG OF TOWORR



Protecting Privacy And The Road Ahead



THE OFFICE OF THE PRIVACY COMMISSIONER
OF CANADA IS FOCUSING ON THESE FOUR
PRIORITY ISSUES IN ORDER TO MONITOR THE
PRIVACY RISKS THEY POSE.

We are conducting extensive in-house research. We are also engaging outside expertise from academics, researchers, industry, governments and international authorities, to ensure we have the most complete understanding of the issues. We are, moreover, working with other regulatory bodies, both in Canada and abroad, to identify emerging trends that cut across borders and to develop complementary approaches to common issues.

Concern for the privacy implications of our four strategic priorities pervades all aspects of our work.

We explore the issues through our complaints investigation process and our privacy audits. Our priorities also influence how we review privacy impact assessments for new or significantly modified federal government programs.

And we review draft legislation on such issues as DNA, fingerprinting and the interception of online communications, in order to propose ways to better respect the privacy of individuals.

We would never stand in the way of progress, but we hope to encourage people involved in each of our priority areas to think about privacy.

Technology developers, for example, could build privacy-sensitive refinements into their products. Industry and governments could reflect on ways to roll out national security measures in ways that take people's privacy into account.

And every organization should consider the privacy of individuals in the way it collects, uses, discloses and disposes of personal information.

We also want to help people understand the value of their personal information, and to recognize when it is at risk. The insights developed through our work on these priority areas inform our outreach activities and help focus our public education activities. Equipped with the right tools and knowledge, individuals can take steps to protect themselves against intrusions on their privacy.

More About How We Work THE PRIVACY COMMISSIONER OF CANADA, AN OFFICER OF **PARLIAMENT WHO REPORTS DIRECTLY TO THE HOUSE OF COMMONS AND THE SENATE,** IS AN ADVOCATE FOR THE **PRIVACY RIGHTS OF CANADIANS WITH THE POWER TO:**

- Investigate complaints, conduct privacy audits and pursue court action under two federal laws:
- Publicly report on the personal informationhandling practices of public- and privatesector organizations;
- Support, undertake and publish research into privacy issues, and Promote public awareness and understanding of privacy issues.

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