

Emerging Issues: Wearables!

David Fraser

CIAJ – Privacy in the age of information

15-17 October 2014, St. John's

Atlantic Canada's Law Firm

New Brunswick Newfoundland & Labrador Nova Scotia Prince Edward Island mcinnescooper.com

MCINNES
COOPER
LAWYERS | AVOCATS

Outline

- What is a wearable?
- What information are we talking about?
- Privacy and policy issues raised by wearables.

What are wearables?

- Electronic devices that you “wear” that are used for communication, data creation/collection or both.
- Often have limited storage capabilities, so often data is stored in another device or with a service provider.

Different form factors – Watches



G Watch

Different form factors – Watches



Pebble watch

Different form factors - Watches

Garmin
GPS
runners'
watches



Different form factors – cameras



Looxcie
Camera

Different form factors - cameras

Taser Axon
Flex Camera



Different form factors – camera watch



Samsung Galaxy
Gear Watch

Fitness bands



FitBit

Atlantic Canada's Law Firm

New Brunswick Newfoundland & Labrador Nova Scotia Prince Edward Island mcinnescooper.com

MCINNES
COOPER
LAWYERS | AVOCATS

Fitness bands



Nike
Fuel Band

Multi-function fitness wearables



**Basis
Band**

Shoe sensors

Nike + iPod
Sport Kit

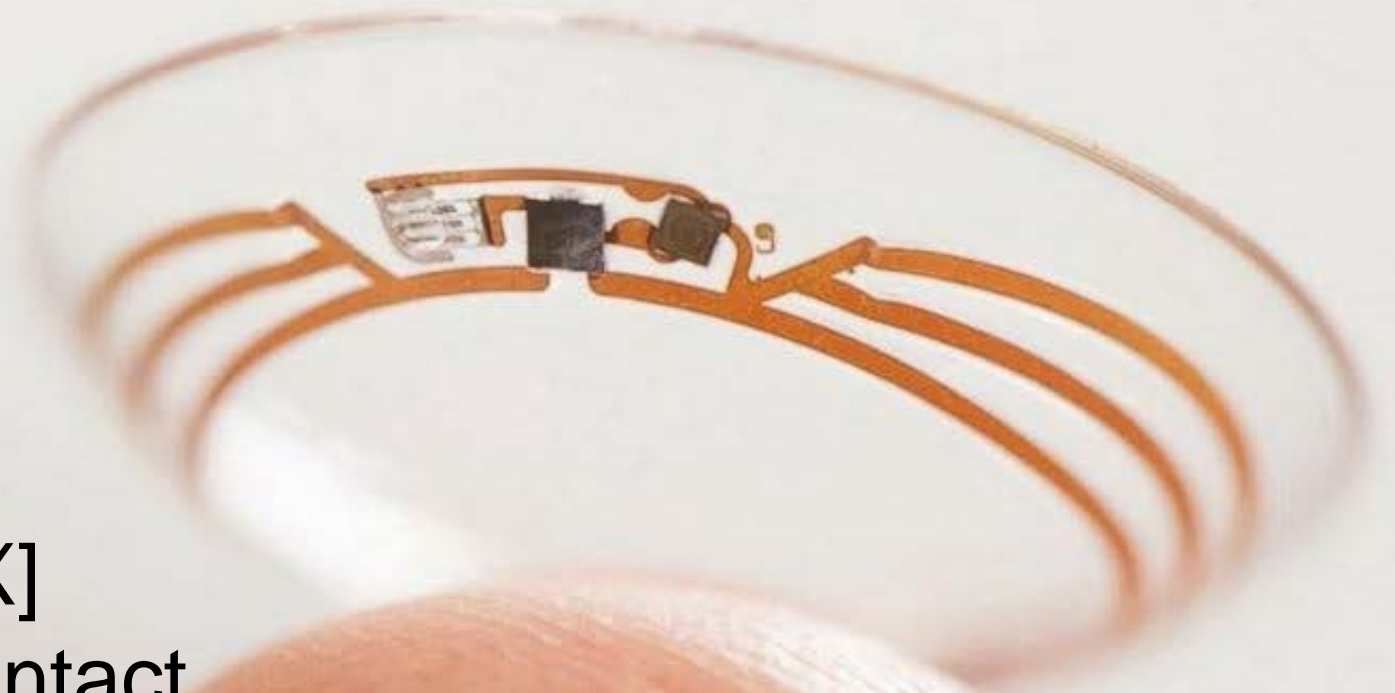


?



Sproutling

Smart contacts



Google[X]
Smart contact
lens for
diabetes
management

Platforms

Google Glass



What data do they generate?

Atlantic Canada's Law Firm

New Brunswick Newfoundland & Labrador Nova Scotia Prince Edward Island mcinnescooper.com

MCINNES
COOPER
LAWYERS | AVOCATS

What data? – Basis Band

Activity Details

Tuesday 15 Apr

12:00a

12:30a

3a

6a

9a

12p

3p

6p

9p

11:59p

BIOMETRICS

HEART RATE

63 avg ♡/min

STEPS

10706 ♣♣

7 avg ♣♣/min

CALORIES

1940.1 ⚡ cal

1.3 avg ⚡/min

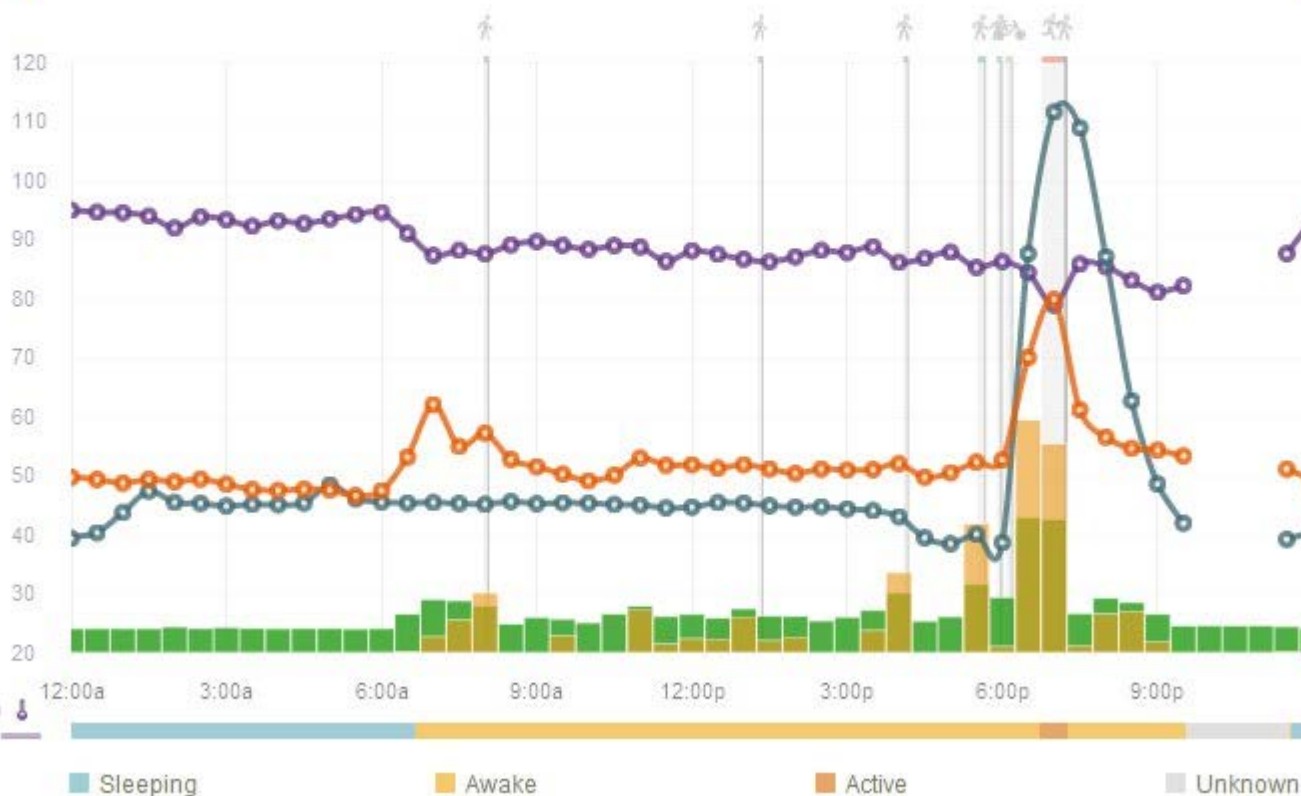
SKIN TEMP

88.9 avg °f

PERSPIRATION

1.3e+3 μS/cm

0.98 avg μS/cm



ACTIVITY

WALKING

2595 ♣♣

87 avg ♣♣/min

24 min total

RUNNING

4281 ♣♣

159 avg ♣♣/min

26 min total

BIKING

12 ⚡ cal

2 avg ⚡/min

6 min total

What data? – Basis Band

Activity Details

Wednesday 16 Apr

12:00

2a

3a

6a

9a

12p

3p

6p

9p

11:59p

BIOMETRICS

HEART RATE

66 avg ♡/min

STEPS

6263 ♣♣

4 avg ♣♣/min

CALORIES

1919.6 ⬇ cal

1.3 avg ⬇/min

SKIN TEMP

88.1 avg °f

PERSPIRATION

33.7 μS / cm

0.023 avg μS / cm



ACTIVITY

WALKING

1800 ♣♣

72 avg ♣♣/min

21 min total

RUNNING

0 ♣♣

0 avg ♣♣/min

0 min total

BIKING

0 ⬇ cal

0 avg ⬇/min

0 min total

What data? – Basis Band

Asleep at **11:15p** Wednesday for **7 hr 9 min**

98%
Sleep Score

LIGHT
20 min
11:15p - 11:35p
● 11:33p

34 times
Toss & Turn

0 times
Interruptions

⊛ THU 6:24a

REM
Mind Refresh

Light

Deep
Body Refresh

Interruptions

Toss & Turn

12:00a

1:00a

2:00a

3:00a

4:00a

5:00a

6:00a

REM 26%
1 hr 54 min

Light 64%
4 hr 33 min

Deep 10%
0 hr 42 min

Unknown 0%
0 hr 0 min

What data? – Google maps opt-in



Google Latitude

+David



Share



Location history



October 2014						
«	Sun	Mon	Tue	Wed	Thu	Fri
	28	29	30	1	2	3
	5	6	7	8	9	10
	12	13	14	15	16	17
	19	20	21	22	23	24
	26	27	28	29	30	31
	2	3	4	5	6	7

Show: 30 Days

September 17, 2014 to October 16, 2014

Show timestamps

Export to KML

Delete history from this time period

Delete all history

Some points have been hidden from view. [Show All Points](#) [Learn More](#)



Distance from starting location (farthest distance: 3,030.575 miles)

Move mouse over graph to show location on map



Atlantic Canada's Law Firm

New Brunswick Newfoundland & Labrador Nova Scotia Prince Edward Island mcinnescooper.com

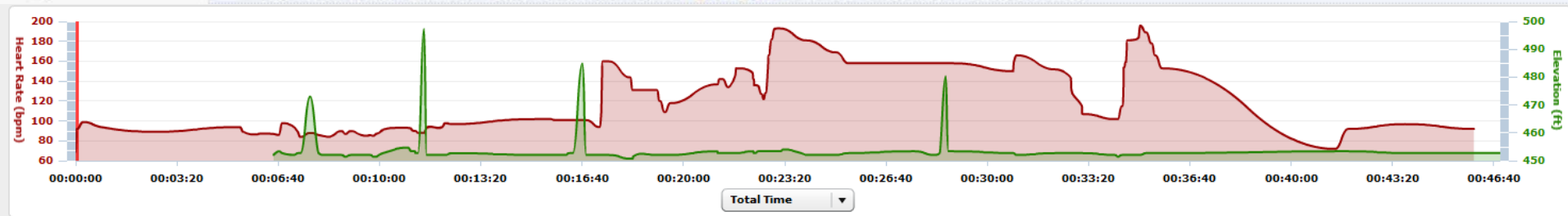
MCINNES
COOPER
LAWYERS | AVOCATS

GPS + Heart rate monitor

So, my wife wore a heart rate monitor and GPS watch during Sex. 0.15 miles, new record. (i.imgur.com)

submitted 2 years ago by worklists

719 comments source share unsave hide give gold report hide all child comments



Atlantic Canada's Law Firm

New Brunswick Newfoundland & Labrador Nova Scotia Prince Edward Island mcinnescooper.com

MCINNES
COOPER
LAWYERS | AVOCATS

Privacy and policy issues

Atlantic Canada's Law Firm

New Brunswick Newfoundland & Labrador Nova Scotia Prince Edward Island mcinnescooper.com

MCINNES
COOPER
LAWYERS | AVOCATS

Why? What's driving this trend?

- Because you can ...
- “Quantified self” –
 - if you can't measure it, you can't manage it
 - Self-discovery, self-actualization
- Tendency to record everything in one's life

Zomg! Panic!

- New technologies that may be disruptive or cause unease often lead to
 - Techno-panic...
 - Worst case scenarios...
 - Calls for law reform ...
- Disasters almost never come to pass

“KODAK FIENDS” AT NEWPORT.
Protests Against Their Practices
About the Cottage Colony.
Special to The New York Times.

NEWPORT, Aug. 17.—If the laws of this State can reach the “kodak fiends,” some of the married men of the cottage colony will take the cases into the courts, and action will be brought against the aforesaid “fiends” and their employers. All over the avenue the women are constantly brought face to face with a kodak and snapped, and a few days afterward the newspaper sending the kodak operator here, prints the alleged pictures, which, in some cases, have not been flattering. According to common report, one of the cottagers went to his lawyer this morning to ascertain if the laws were so framed that an assault could be charged against those who use a kodak against the will of the people who object to being so photographed.

About the cottage colony there is a decided rebellion against the promiscuous use of photographing machines, and threats are being made against any one who continues to use cameras as freely as has been done in the past few weeks especially. About the Casino entrance kodak fiends have been very numerous during the week, snapping pictures of the ladies coming out from the tennis tournament.



Google Glass Is Banned On These Premises

Atlantic Canada's Law Firm
New Brunswick Newfoundland & Labrador Nova Scotia Prince Edward Island mcinnescooper.com

MCINNES
COOPER
LAWYERS | AVOCATS

Recent techno-panic

- Remember the panic about camera phones ...
 - In workplaces?
 - In locker rooms and change rooms?
- Did it come to pass?



Commissariat
à la protection de
la vie privée du Canada

Office of the
Privacy Commissioner
of Canada

OFFICE OF THE PRIVACY COMMISSIONER OF CANADA

[Français](#) | [Home](#) | [Contact Us](#) | [Help](#) | [Search](#) | [canada.ca](#)

[Home](#) ▶ [News Room](#)

Search

[Search](#)

[Advanced search](#)

Sections

- [About Us](#)
- [Legal Corner](#)
- [Commissioner's Findings](#)
- [Parliamentary Activities](#)
- [Resources](#)
- [News Room](#)

[Frequently Asked Questions](#)

[A-Z Index](#)

Transparency

- [Completed Access to Information Requests](#)
- [Proactive Disclosure](#)

HOW TO FILE

[A privacy complaint](#)

[GO](#)

MYPRIVACYAPP

[Privacy Mobile](#)

News

News

Year [View](#)

Speeches

Year [View](#)

UPCOMING EVENTS

[GO](#)

News Release

Data protection authorities urge Google to address Google Glass concerns

Ottawa, June 18, 2013 — Privacy Commissioner of Canada Jennifer Stoddart and 36 of her provincial and international counterparts have issued a joint letter urging Google Inc. to respond to questions and concerns related to Google Glass, the company's new Internet-connected glasses.

"Google Glass raises significant privacy issues and it is disappointing that Google has not engaged more meaningfully with data protection authorities about this technology. We are urging Google to take part in a real dialogue with us about Google Glass," says Commissioner Stoddart.

The letter is as follows:

Mr. Larry Page
Chief Executive Officer
Google Inc.
1600 Amphitheatre Parkway
Mountain View, California
USA 94043

Dear Mr. Page:

We are writing to you as data protection authorities to raise questions from a

Media Relations

Contact:
[Anne-Marie Hayden](#)

Non-journalists are invited to contact our Information Centre. Please call 1-800-282-1376 (toll free) or [\(819\) 994-5444](#) and ask to speak with an Information Officer.

Address:
30 Victoria Street
Gatineau, Quebec
K1A 1H3

To do

- Calm down, take a deep breath
- Remember, our privacy laws are technology-neutral and are intended to be applied to a diversity of technologies
- Go back to first principles

First principles ...

- What is really different?
- Subtract the new technology and think about
 - What information is being collected?
 - By whom?
 - Under what circumstances?

Privacy analysis

- Technologies are not subject to privacy laws ... technologies and tools are neutral.
- Can be used for good or evil.
- Statutes ... Collected, used and/or disclosed in the course of commercial activities
- Torts ... Intrusion upon seclusion ... “highly offensive”?

But ...

- Digital data trail – digital exhaust
- If it exists, it can be produced, discovered, etc.

MCINNES
COOPER
LAWYERS | AVOCATS

Atlantic Canada's Law Firm

New Brunswick Newfoundland & Labrador Nova Scotia Prince Edward Island mcinnescooper.com