

FIPs and Fibs

SPISE Camp

Miti Mazmudar

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- Complete a privacy risk assessment questionnaire.

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- GDPR: General Data Protection Regulation. Europe's privacy law.
- COPPA: Children's Online Privacy Protection Act. US's federal privacy law for children.

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Principle 1: Accountability

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- Who has access to or uses it?
- Who do we share it with?
- When is it deleted?

Example: Google

- An engineer at Google designed a feature that had a privacy problem (see later¹)

¹<https://www.priv.gc.ca/en/opc-actions-and-decisions/investigations/investigations-into-businesses/2011/pipeda-2011-001/>

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- ✓ All external-facing products had to go through a “Product Counsel Review” program

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- An engineer at Google designed a feature that had a privacy problem (see later¹)
- ✓ All external-facing products had to go through a “Product Counsel Review” program
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- ✓ OPC: Google, make your tech leads of your teams do a privacy design document for each feature.

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 - verifying a person's creditworthiness;
 - providing benefits to employees;
 - figuring if a customer is eligible for special offers or discounts.

Principle 3: Consent

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- People need to know what data items are **collected**, **used**, or **shared**,
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- They need to be able to consent **meaningfully**.

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- People need to know what data items are **collected**, **used**, or **shared**, as well as which other parties their data items are being shared with.
- They need to know the **purposes** for which their data is collected, used or shared.
- They need to be able to consent **meaningfully**.
- **Opt-out** by default, not opt-in

Example: Google Settings



A guide of your privacy choices

Take a guided tour of key privacy and security controls. For more options, go to individual settings.

Example: Google Settings



Choose your search and browsing quality

Make searches and browsing better



When on

-  You'll browse faster because content is proactively loaded based on your current web page visit
-  You'll get improved suggestions in the address bar

Things to consider

-  URLs that you visit are sent to Google to predict what sites you might visit next
-  If you also share Chrome usage reports, those reports include the URLs that you visit

Example: Google Settings



Choose your Safe Browsing protection

- ☐ **Enhanced protection**
Faster, proactive protection against dangerous websites, downloads and extensions. Warns you about password breaches. Requires browsing data to be sent to Google. ▼
-
- ☒ **Standard protection**
Standard protection against websites, downloads and extensions that are known to be dangerous ▲

When on



Detects and warns you about dangerous events when they happen

Things to consider



If a site tries to steal your password, or when you download a harmful file, Chrome

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When on



Predicts and warns you about dangerous events before they happen



Keeps you safe on Chrome and may be used to improve your security in other Google apps when you are signed in

Things to consider



Sends URLs to Safe Browsing to check them



Also sends a small sample of pages, downloads, extension activity and system information to help discover new threats

Example: Google Settings

General settings

☒ Allow all cookies



Sites can use cookies to improve your browsing experience, for example to keep you signed in or to remember items in your shopping basket



Sites can use cookies to see your browsing activity across different sites, for example, to personalise ads

☐ Block third-party cookies in Incognito



☐ Block third-party cookies



☐ Block all cookies (not recommended)



Clear cookies and site data when you close all windows

When on, you'll also be signed out of Chrome



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- when *revoking* consent is as easy as granting it (bad e.g., opting in with a click, cancelling with an email, phone call)

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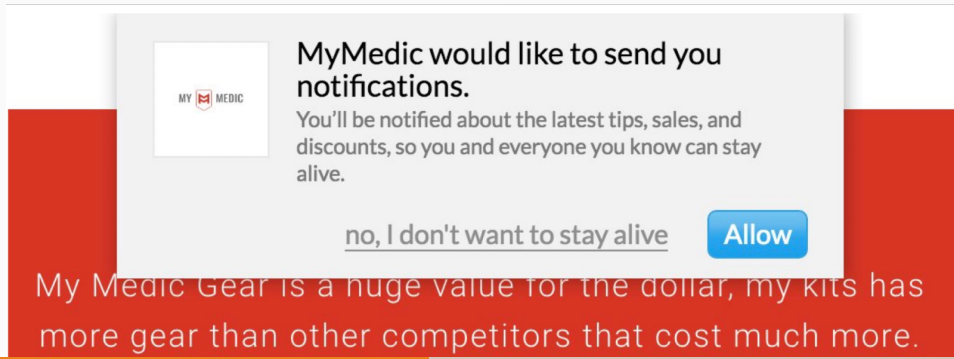
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- Following examples from <https://www.deceptive.design>
- Other resources: <https://darkpatternstipline.org/>

Consent Dark Patterns

- Only the opt-in option is present on the initial cookie dialog
- The background colour of the opt-in button leads to it being highlighted more compared to the opt-out button
- Dialog obstructs most of the window
- Dialog text is difficult to read
- Dialog hides some options behind a “more options” button
- Ambiguous close (×) button is present on the dialog (does that mean opt-in or opt-out?)
- Multiple distinct cookie dialogs present on a page
- At least one preference slider is enabled by default

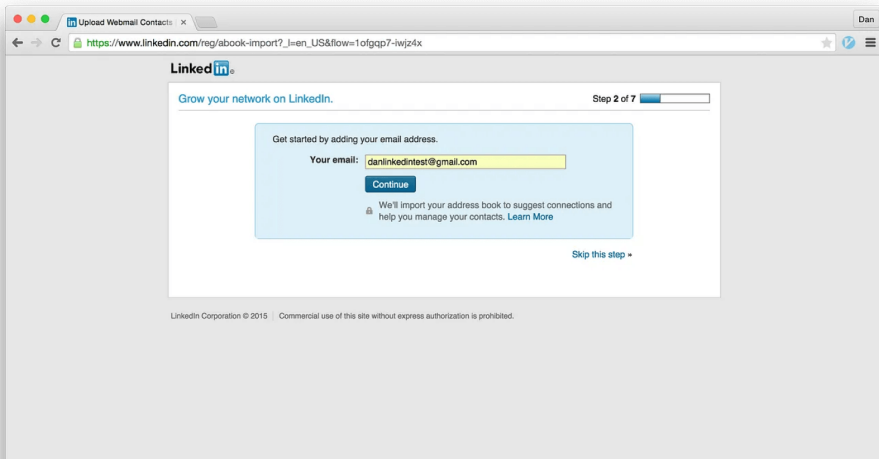
Dark design pattern: confirmshaming

Use uncomfortable emotions to influence decision making



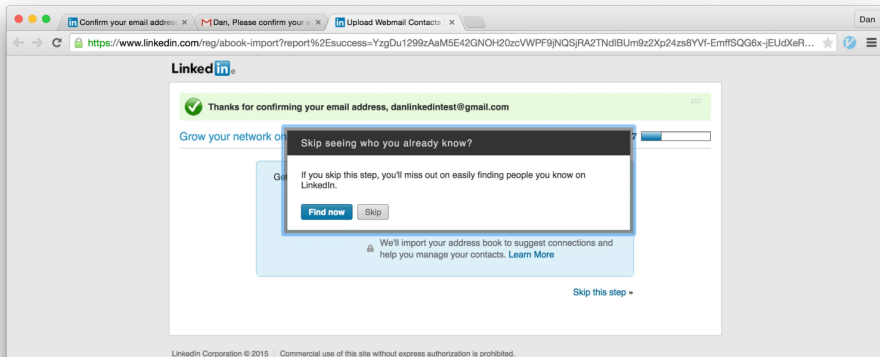
Dark design pattern: forced action

Offer users something they want but make them agree to something in return.



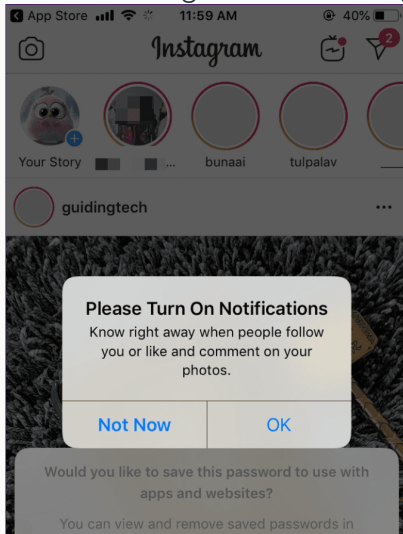
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Dark design pattern: nagging

Repeatedly remind users who haven't agreed to something until they finally relent.



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- Also known as **data minimization**

Example: Driver's license & shopping

- Person: Goes to register at a store or buy something from a store.

²https://www.priv.gc.ca/en/privacy-topics/sins-and-drivers-licences/drivers-licences/guide_edl/

Example: Driver's license & shopping

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- Store: Show us your drivers license. We will write down your drivers license number.

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- OPC²: No, they don't — the employee can check that the name on the credit card and the driver's license match.

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- OPC: The employee can then place their initials on customer forms, confirming that they have checked the customer's driver's license.
- OPC: "Recording the licence number does not provide any further authentication of the individual's identity."

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- OPC: Okay but the driver's licence number was not supposed to be a numeric identifier for statistical analysis of shopping return habits.
- OPC: Any other unique identifier that you can generate and record for each consumer, is sufficient.

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Principle 5: Takeaways

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Collected data item for purpose X?

- Limiting use: Only use it for purpose X.
- Limiting sharing: Got users' consent to share it with party Y? Only share it with party Y for purpose X.
- Limiting retention: Retain it only until purpose X is fulfilled. Delete it afterwards!

Principle 7: Safeguards

- Question: What security controls do you know?

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- Question: What security controls do you know?
- Encryption. Access control. Firewalls. Passwords.
- Not enough to just set them up — maintain them, do security audits.

Example: Canada Computers breach



r/bapccanada • 5d ago

Extension-Fly1044

...

Canada Computers online card skimmer

If you have made a purchase recently on Canada Computers' online store, you should immediately freeze or cancel the card you used.

I found a card skimmer on Canada Computers' online checkout page. This malware steals any information you enter on the page and sends it to the attacker's website.

The malware is a Magecart-style script that listens to any input on the payment form fields, validates them, and steals them. It's obfuscated and loads from CodePen through a disguised Google Analytics script (something a real payment processor would never do). The malware captures credit card number, CVV, expiration date, first name, last name, billing address, billing city, billing province, billing postal code, phone number, email address and the Canada Computers account you're logged into.

I found this on January 18th when buying something on the website with DevTools open. I saw a suspicious WebSocket connection to `rozenfeld[.]xyz`. This domain isn't related to Canada Computers or any payment processor in any way. It looks similar to `rozenfeld[.]ca`, which I believe is a legitimate e-commerce related company. This could be an attempt from the attackers to seem legitimate.

Keep in mind I'm just a person who does web development as a hobby, I'm not a cybersecurity expert. I have opened two support tickets with them via email to try and tell them about this privately and they have closed both with no response. I'm assuming this is because they thought it was a scam or prank. I'm posting this publicly because they're closing my support requests and because the skimmer is still on the website, stealing data.

I have frozen my card that was stolen and have reported this to the Canadian Anti-Fraud Centre.

Example: Canada Computers breach

UPDATE (Jan 22, 4:54 PM EST):

The skimmer seems to have been removed from the live site. As of 4:54 PM EST, the checkout page no longer contains the malicious script or connections to `rozenfeld[.]xyz`. However, there is archived proof of this on Archive.org from December 31st 2025 that confirms the skimmer was on the checkout page.

Archive link: <https://web.archive.org/web/20251231195438/https://www.canadacomputers.com/en/>

Archive timestamp: Wed, 31 Dec 2025 19:54:38 GMT

This means the skimmer was active for at least 3 weeks.

Canada Computers has yet to acknowledge this breach or notify customers at all.

The latest snapshot I found on Archive.org that didn't have the skimmer was made on December 8 2025. If you bought anything on their online store between Dec 8 and Jan 22, your card info has been stolen and you should take the precautions I recommended at the top of the post (cancel/freeze). Even if you bought something before December 8 on the online store, I'd watch my bank statements very closely since their website has a history of data breaches and bad practices.

4

⁴[https:](https://www.reddit.com/r/bapccanada/comments/1qk4axy/canada_computers_online_card_skimmer/)

[//www.reddit.com/r/bapccanada/comments/1qk4axy/canada_computers_online_card_skimmer/](https://www.reddit.com/r/bapccanada/comments/1qk4axy/canada_computers_online_card_skimmer/)

Takeaways: Responsible Disclosure

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- Described the attack vector.
- Mentioned when the attack was discovered.
- Estimated when the attack might have occurred.
- Informed the business about the attack.

Example: Canada Computers response

[Received Jan 26th:](#)

We are writing to tell you about a data security incident that may have exposed certain of your personal information to an unauthorized intruder.

What Happened and What Information was Involved

On Friday, January 23, 2026, we discovered that there had been unauthorized access to portion of our system, which may have compromised the security of a few of our online customers' information. We believe that an unauthorized user may have gained access to certain customer information, including email addresses, first and last names and possibly credit card numbers. We do not have any evidence that this information has been used fraudulently.

What We Are Doing to Protect You

Our systems have been thoroughly vetted and further enhancement to our security systems have been implemented. Our systems were put through vigorous testing by our IT team to ensure there are no current vulnerabilities.

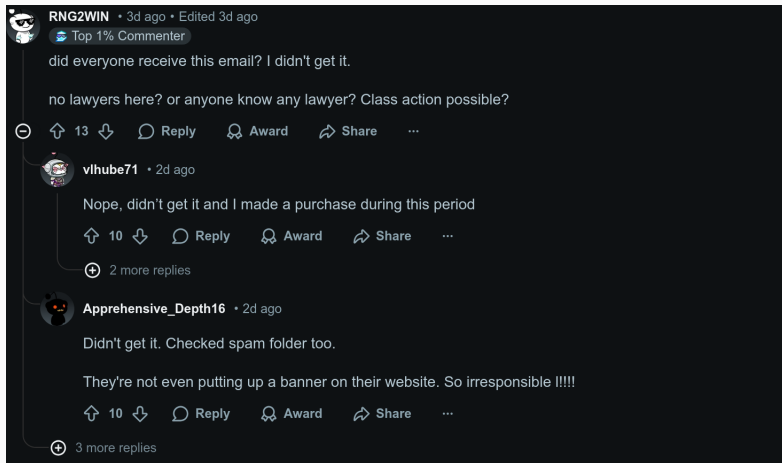
What You Can Do

We strongly encourage you to be vigilant in protecting your personal information by changing all of your website and computer passwords and check your bank and credit card statements to see if there have been any unusual or unauthorized transactions or activity. You may also wish to contact your bank or credit card company to cancel your card and request a new one.

Please rest assured that our customers' well-being and the security of their personal information are our highest priorities. We apologize for any inconvenience this incident may cause you and thank you for your understanding and patience.

For More Information

Example: Reactions to Canada Computers response



Example: Reactions to Canada Computers response



Mindshard • 2d ago

"We strongly encourage you to be vigilant in protecting your personal information..."

How insulting is that? Especially after multiple people reported fraudulent charges on their cards, and CC admitted all that information was taken, but then had the nerve to say "We do not have any evidence that this information has been used fraudulently."

Example: Reactions to Canada Computers response



Apprehensive_Depth16 · 2d ago

Expected that crappy response. Typical of a company that does not care.

By law they need to report it to OPC

https://www.priv.gc.ca/en/privacy-topics/business-privacy/breaches-and-safeguards/privacy-breaches-at-your-business/gd_pb_201810/

Section 10.1

The report must include:

- The circumstances of the breach
- The day or period when it occurred
- A description of the personal information involved
- Steps taken to reduce harm
- Steps taken to prevent future breaches
- How affected individuals were or will be notified

Takeaways: Security Incident Response

What did Canada Computers do wrong?

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- ✘ Put responsibility of securing account & financial information onto consumers.
- ✘ May not have informed OPC of this breach — even though there's "real risk of significant harm".

Principle 8: Openness

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- Your privacy policy should be available, .

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- Include how a user can correct this information about them (Principle 6 on Accuracy).

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2. Read through the background of the case, and at the end of the activity, you'll be asked to role-play each case and answer the questions for each case. You will figure out which FIPs are violated in that case.
3. **Every group** also solves the last question (Canada Computers). In this question, you'll complete a privacy risk assessment questionnaire.