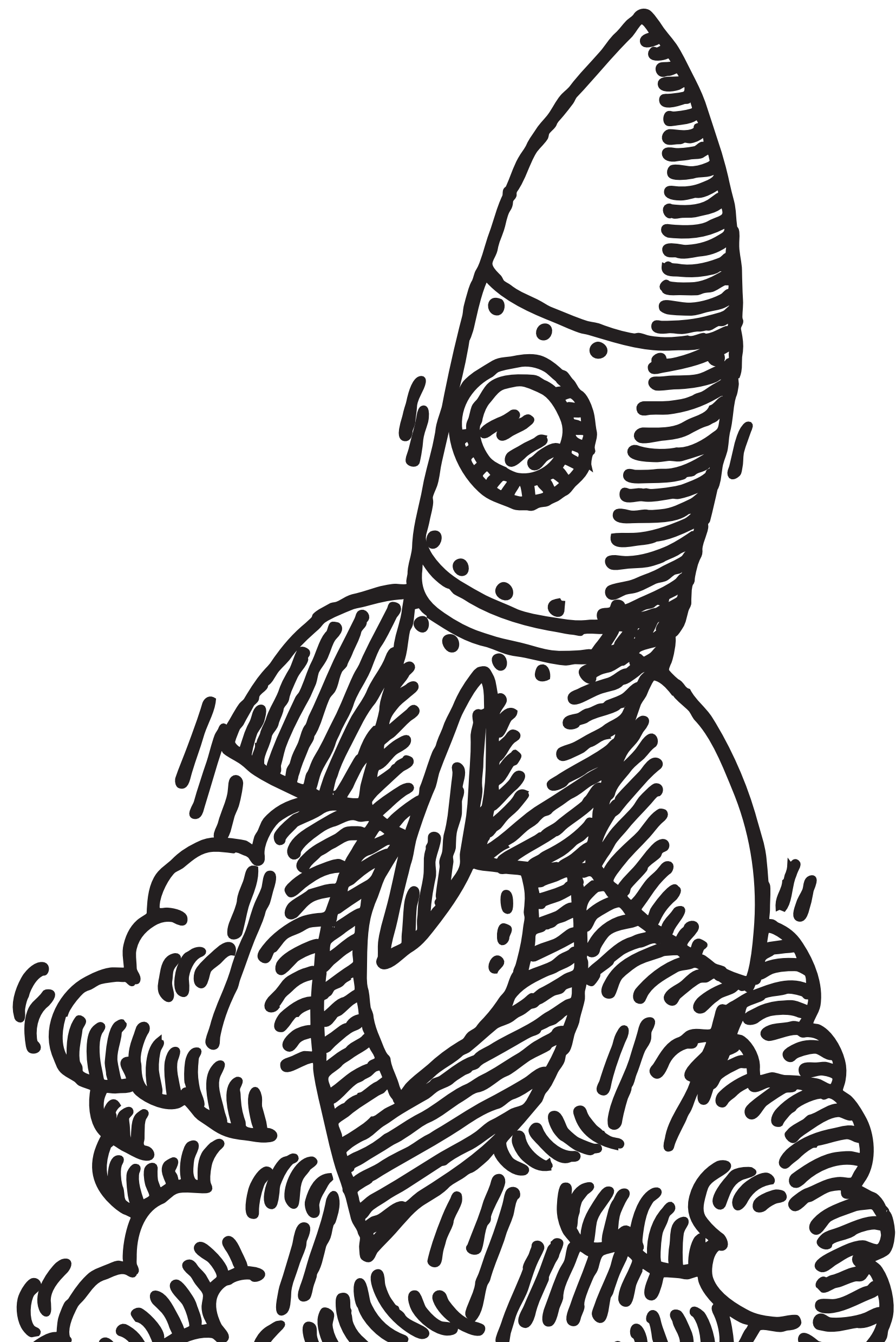


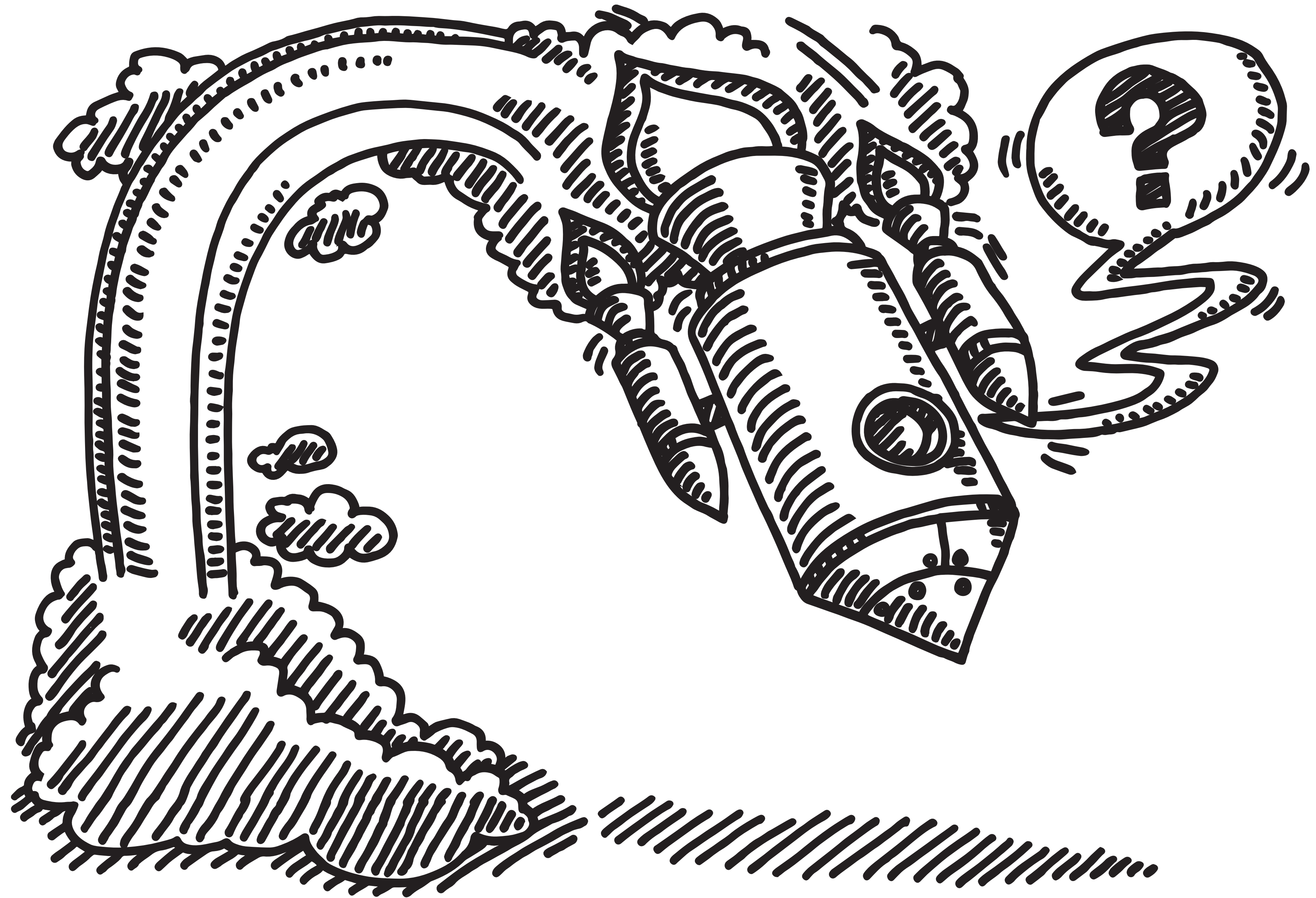
Warning





Potential





96 2016
106 2017

118B

131 2019
145 2020

**Estimated global spend as reported by IDC (11% CAGR)*

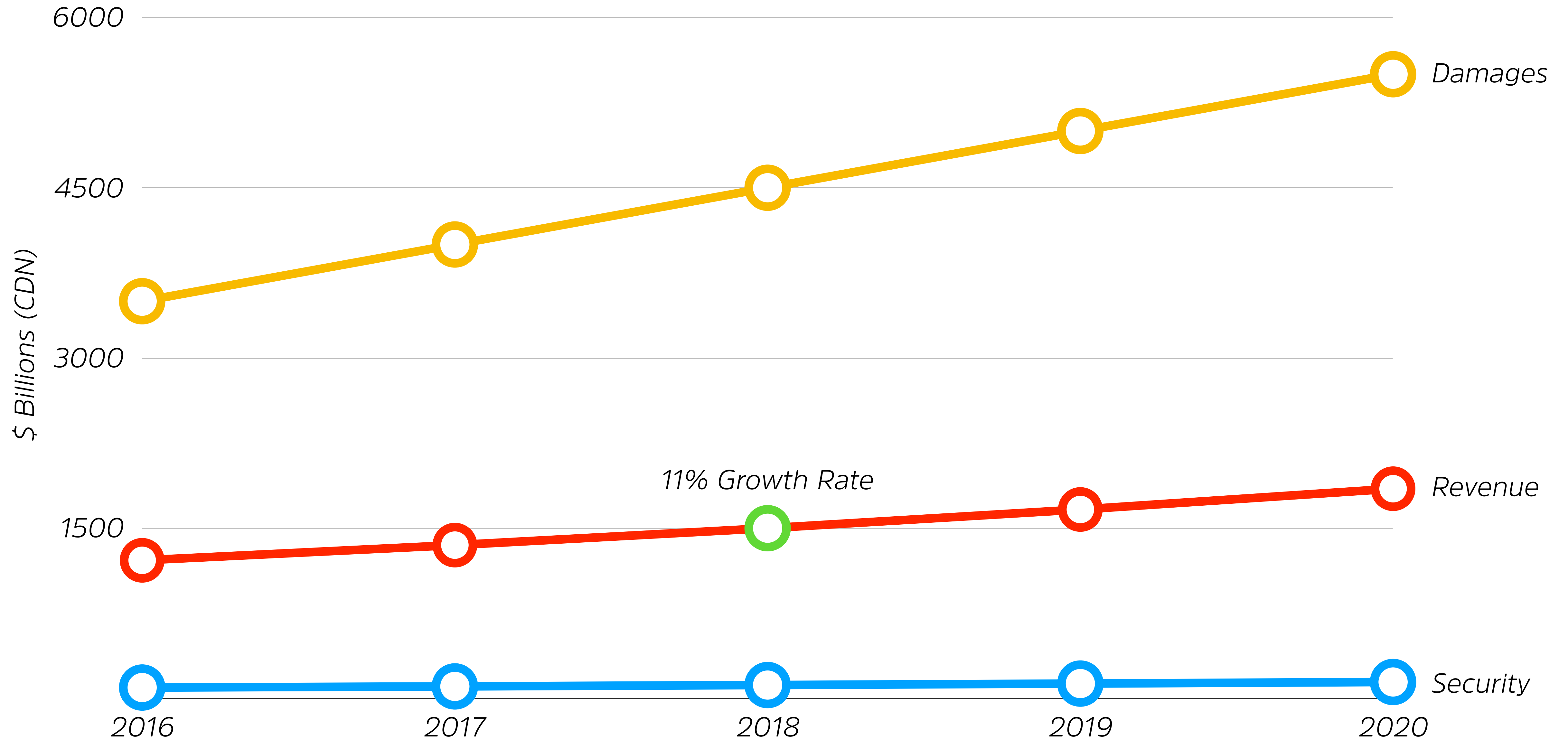
1.5T

**Estimated global cybercriminal revenue as reported by Bromium*

3.5 2016
4 2017
4.5T
5 2019
5.5 2020

**Estimated global damages as reported by Cybersecurity Ventures*

Dollars Related To Cybercrime & Cybersecurity



Recently confirmed Myspace hack could be the largest yet

Sarah Perez @sarahintampa / 2 years ago

 Comment



You might not have thought of – much less visited – Myspace in years. (Yes, it's still around. [Time, Inc. acquired it](#) and other properties when it bought Viant earlier this year.) But user data never really dies, unfortunately. For Myspace's new owner, that's bad news, as the company [confirmed](#) just ahead of the Memorial Day holiday weekend in the U.S., that it has been alerted to a large set of stolen Myspace username and password combinations being made available for sale in an online hacker forum.

The data is several years old, however. It appears to be limited to a portion of the overall user base from the old Myspace platform prior to June 11, 2013, at which point the site was relaunched with added security.

2016

Weebly hacked, 43 million credentials stolen



Kate Conger, Katie Roof 2 years ago

Comment

The web design platform **Weebly** was hacked in February, according to the data breach notification site LeakedSource. Usernames and passwords for more than 43 million accounts were taken in the breach, although the passwords are secured with the strong hashing algorithm bcrypt.

Weebly said in an email to customers that user IP addresses were also taken in the breach.

“We do not believe that any customer website has been improperly accessed,” Weebly said in the notice to users.” The company also said that it does not store credit card information, making fraudulent charges unlikely.

LeakedSource said it received the Weebly database from an anonymous source and notified Weebly of the breach. In addition to the customer notification emails, LeakedSource claims that password resets are being issued — but, if you’re a Weebly user and you don’t receive a password reset, you probably want to change your password anyway.

Meanwhile, LeakedSource also identified data from **Foursquare**, claiming that 22.5 million accounts were compromised in December 2013. The social media company disputes the findings, claiming that email

2016

Meet us at WIRED Smarter this October

BOOK TICKETS



Emails

The security flaws at the heart of the Panama Papers



By **MATT BURGESS** and
JAMES TEMPERTON

Wednesday 6 April 2016



2016

Cyber-Safe

Every single Yahoo account was hacked - 3 billion in all

by Selena Larson @selenalarson

🕒 October 4, 2017: 6:36 AM ET

 Recommend 39



Personal Finance

2017

TECH

[CYBERSECURITY](#) | [ENTERPRISE](#) | [INTERNET](#) | [MEDIA](#) | [MOBILE](#) | [SOCIAL MEDIA](#) | [VENTURE CAPITAL](#) | [TECH GUIDE](#)

Uber hid a hack that exposed data of 57 million users and drivers for more than a year

- Hackers stole data from 57 million Uber users and drivers in 2016.
- The hackers stole names and driver's license numbers of around 600,000 drivers in the U.S., as well as rider names, email addresses and mobile phone numbers.
- The company paid hackers \$100,000 to delete the data and keep the breach quiet, and did not report the breach.

[Anita Balakrishnan](#) | [Deirdre Bosa](#)

Published 5:02 PM ET Tue, 21 Nov 2017 | Updated 9:24 AM ET Wed, 22 Nov 2017



TRENDING NOW



Cramer: Trump's new

2017

Hacker steals data from up to 100,000 Bell Canada customers in second breach in eight months

BCE says hackers got hold of up to 100,000 customer names and email addresses, and a limited number of phone numbers, user names and/or account numbers



FINANCIAL POST TOOLS



Mortgage Calculator
Calculate your monthly mortgage payments



Mortgage Comparison
Compare payments and other costs associated with getting a new mortgage



Mortgage Qualifier
Begin the process of finding out how much you can borrow



Home Budget Calculator
See how much you have left to save and where your money is being spent



Investment Calculator
See how much your investment savings could be worth



Savings Calculator
What will it take to help savings goals

2018

The Equifax hack could be worse than we thought

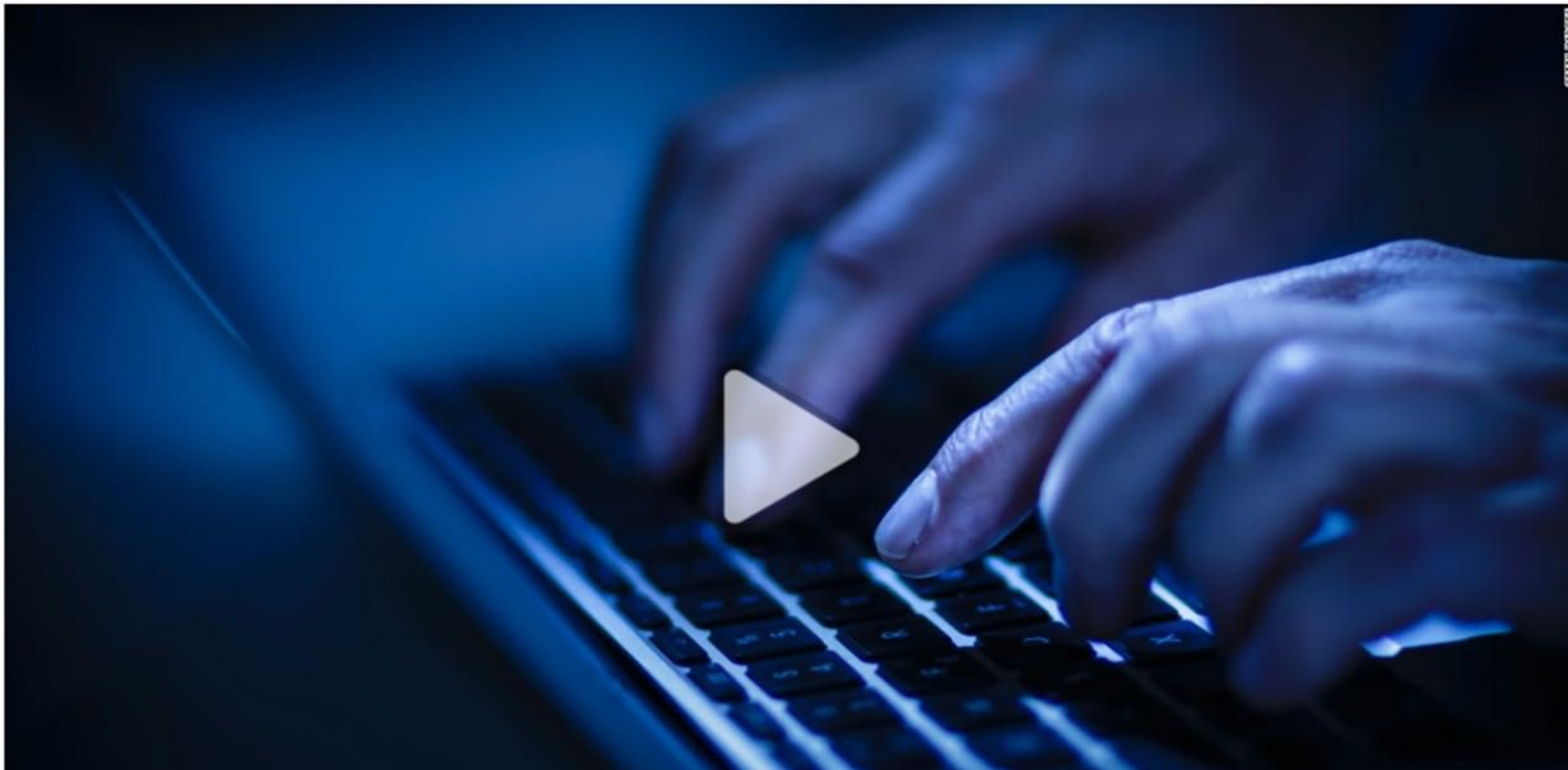
by Donna Borak and Kathryn Vasel @CNNMoney

🕒 February 10, 2018: 10:43 AM ET

👍 Recommend 3



Personal Finance



2018

APPS MOBILE TECH

Twitter advising all 330 million users to change passwords after bug exposed them in plain text

67 💬

There's apparently no evidence of any breach or misuse, but you should change your password anyway

By [Chaim Gartenberg](#) | [@cgartenberg](#) | May 3, 2018, 4:21pm EDT



SHARE



MOST READ



2018

Watch the first trailer for Captain Marvel,

Hackers threaten to reveal personal data of 90,000 Canadians caught in bank hack



BMO and Simplii say thieves stole information, demanded \$1M ransom for safe return

Pete Evans · CBC News · Posted: May 29, 2018 11:25 AM ET | Last Updated: May 30



CONSUMER

August 29, 2018 9:50 am

Updated: August 29, 2018 8:38 pm

Air Canada says 20,000 mobile app users affected by data breach



By Maham Abedi

National Online Journalist, Breaking News Global News

Comments 3

Facebook 743

Twitter

LinkedIn

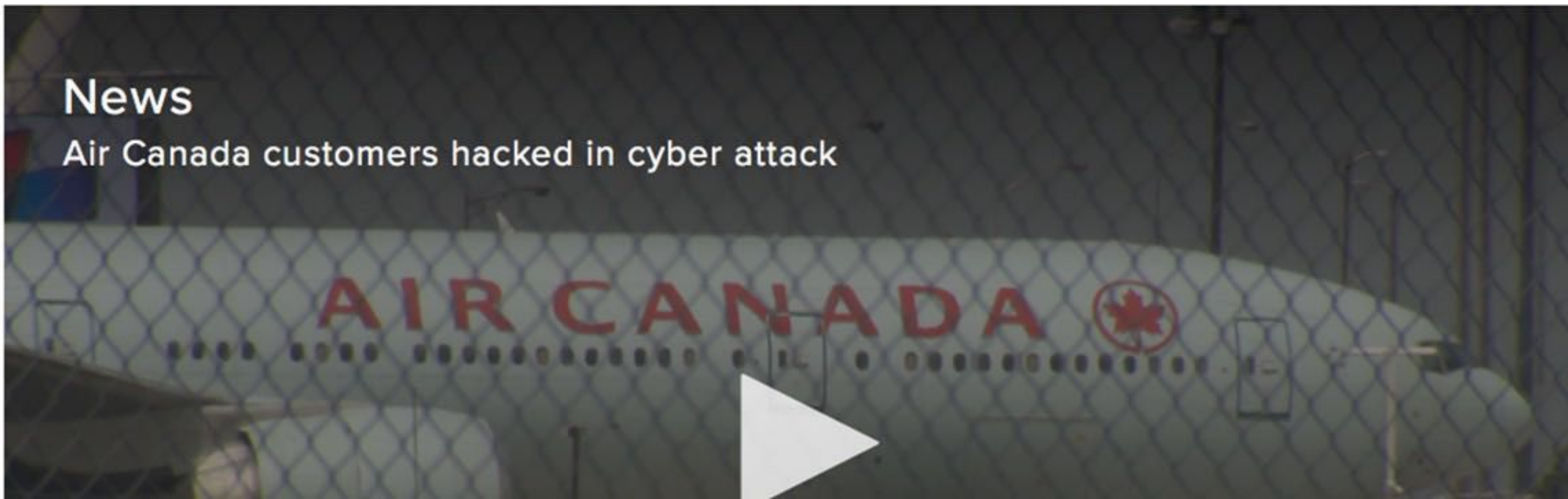
Email

Print

...

News

Air Canada customers hacked in cyber attack



WEATHER

Toronto, ON



26°

Hi 24°
Lo 13°

Weather

Few Clouds



Traffic

Travel times & Incidents



ADVERTISEMENT

2018

Facebook Network Breach Impacts Up to 50 Million Users



2018

THOUSANDS of hours wasted

BILLIONS of records breached

BILLIONS of dollars spent

TRILLIONS of dollars lost

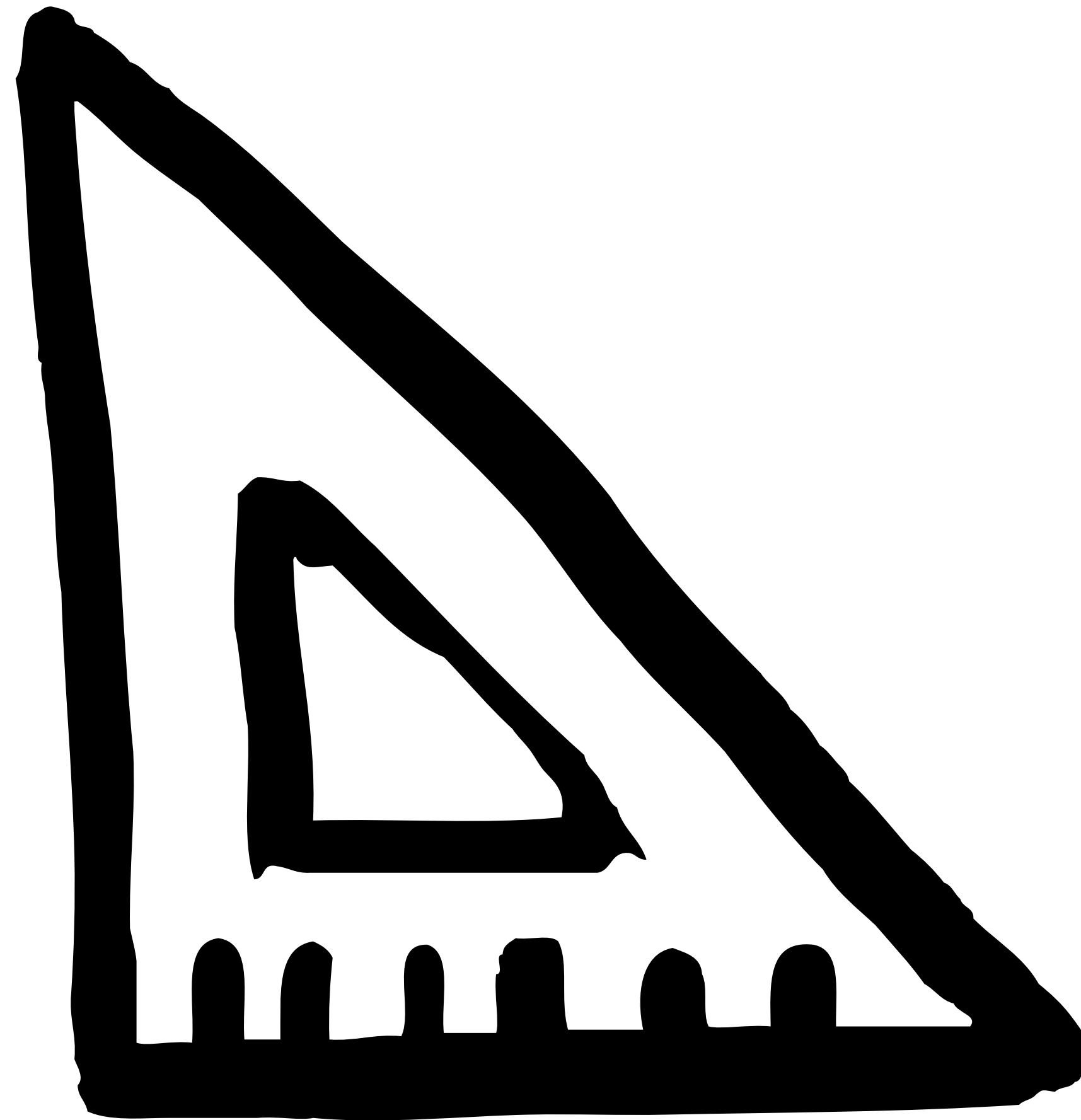
TENS of convictions

Is this what
SUCCESS
looks like?

No

Pause

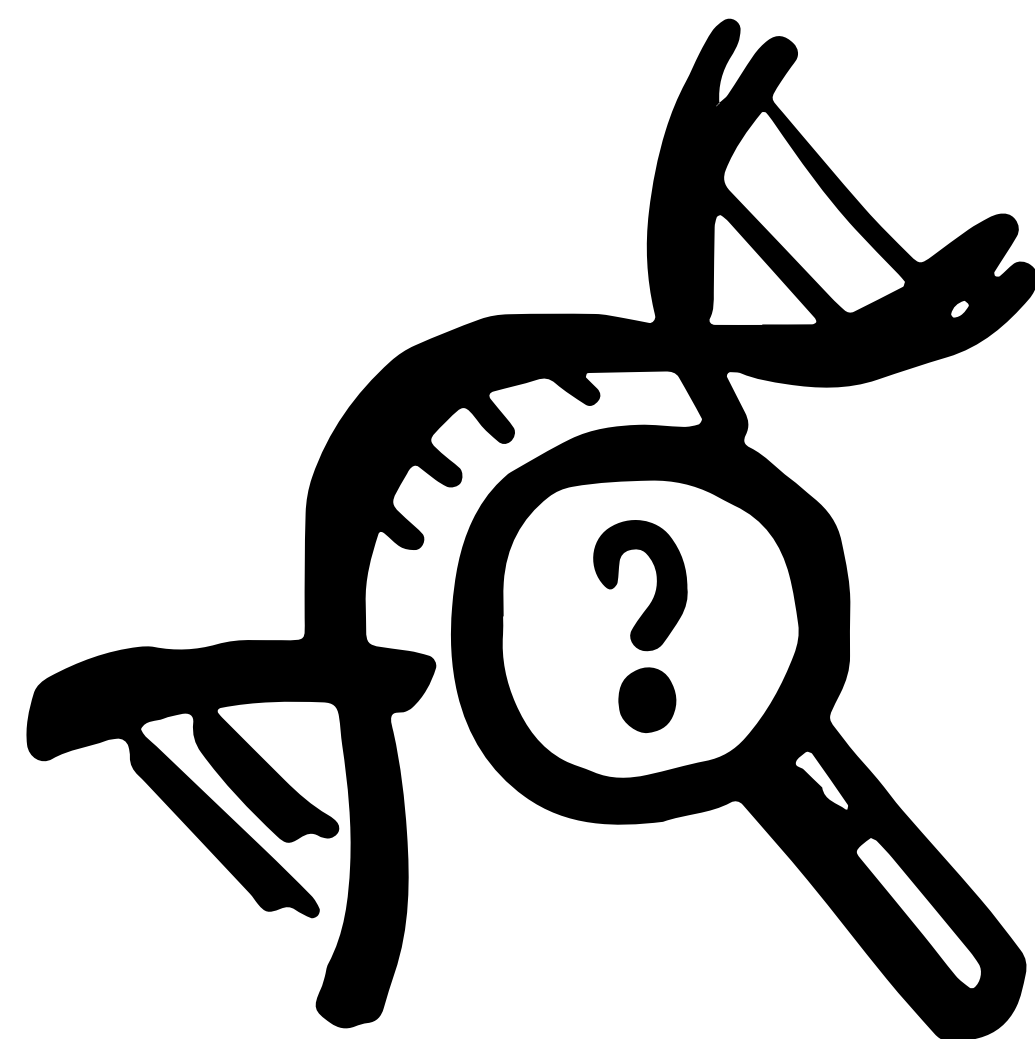
A short tangent...



@marknca



<https://markn.ca>



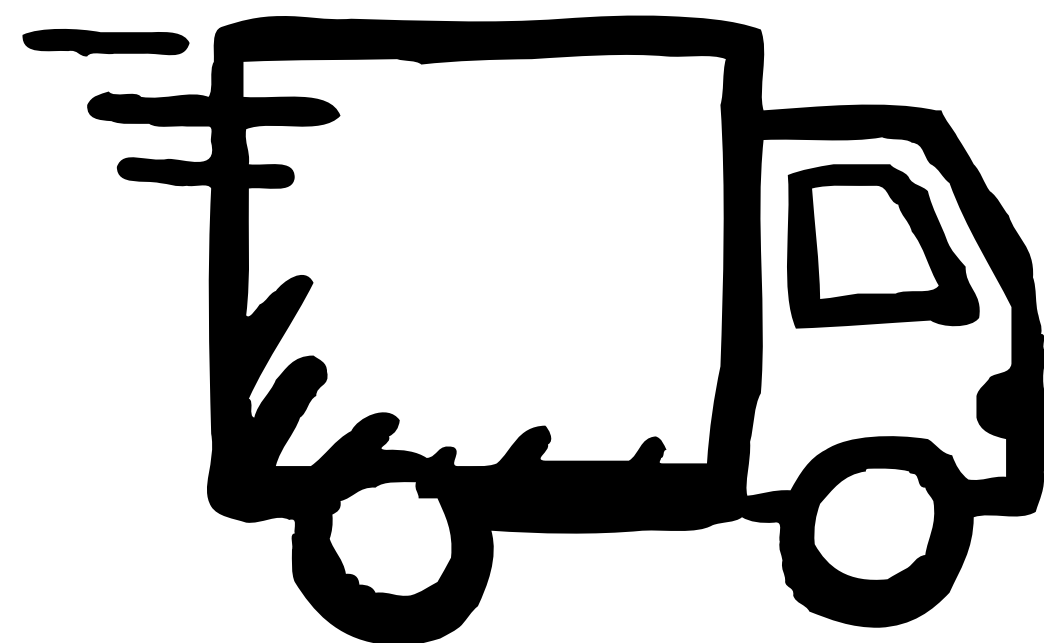
*Large Research
Organization*



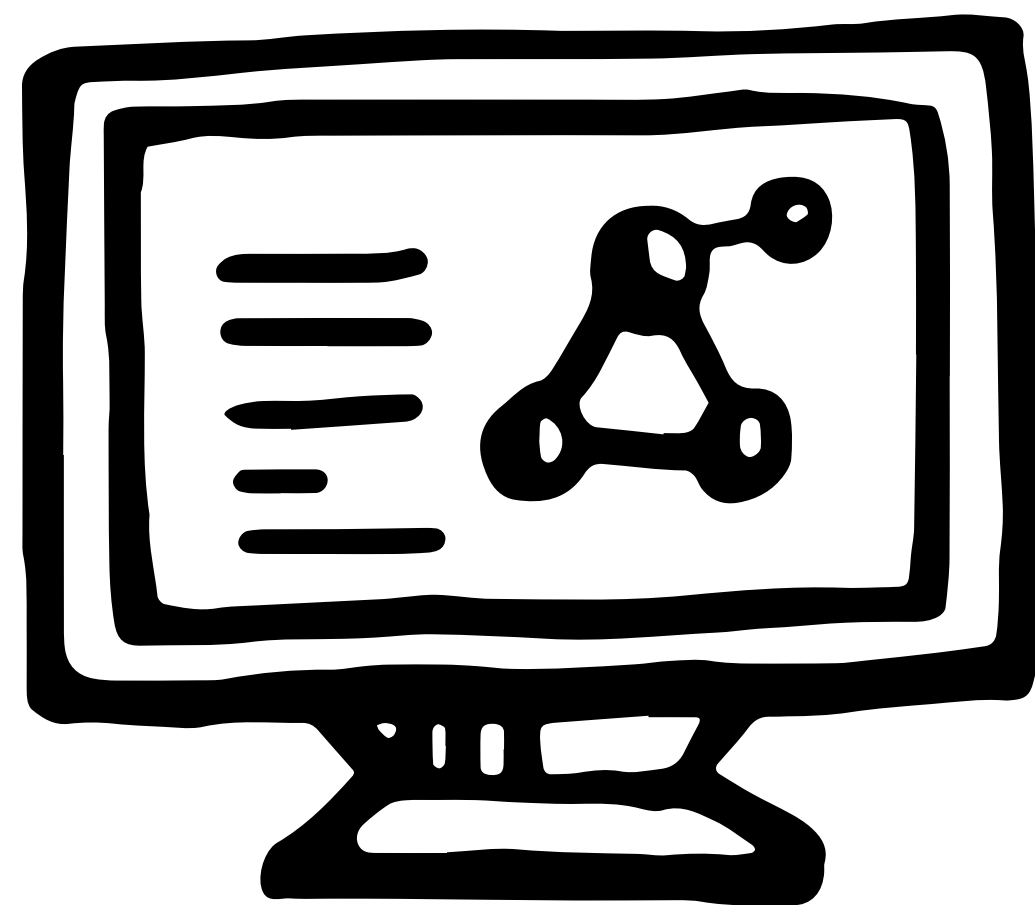
Global Reach



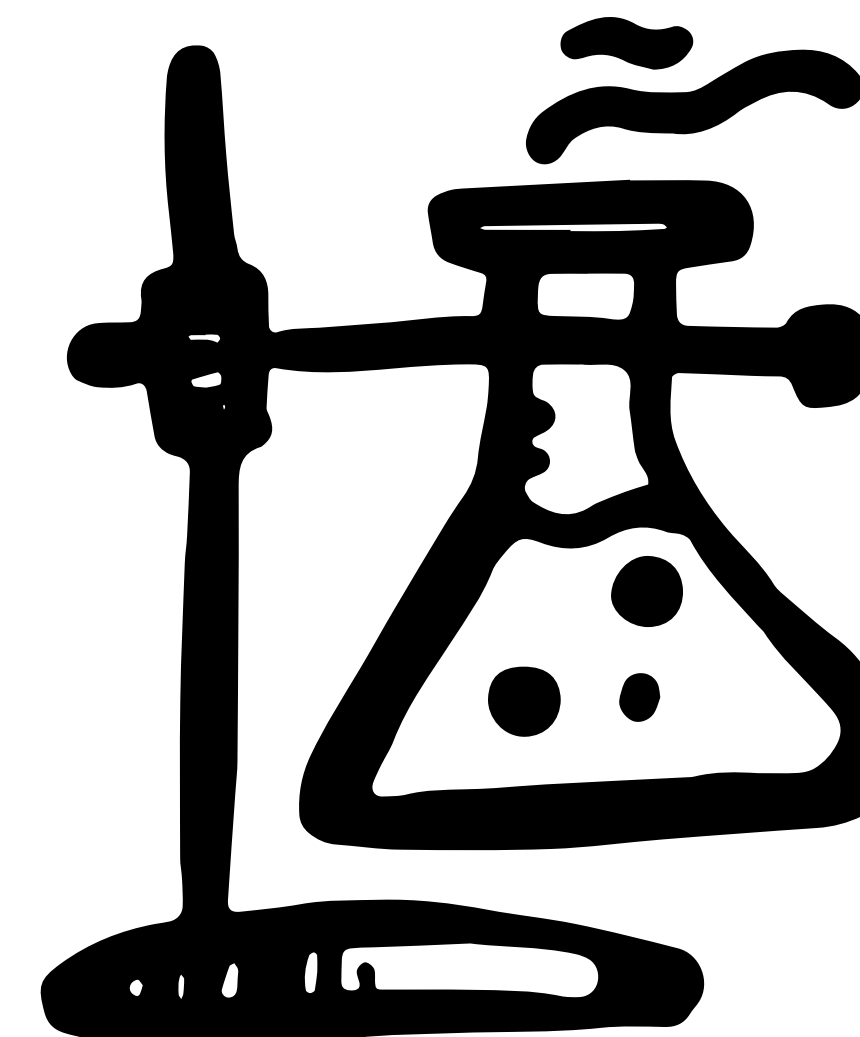
Cloud Focus



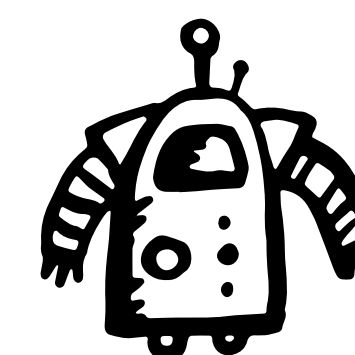
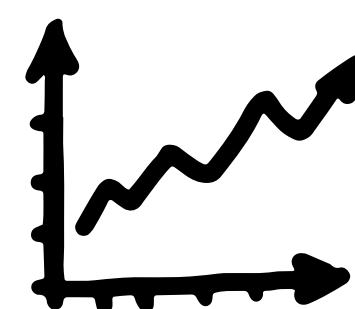
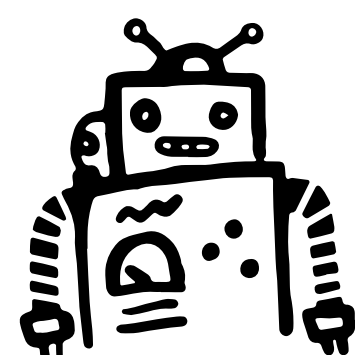
*Operational
Technologies*

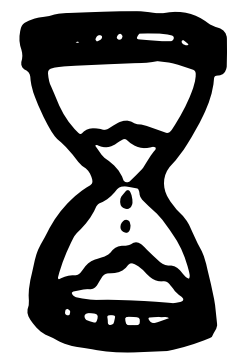


“Standard” IT

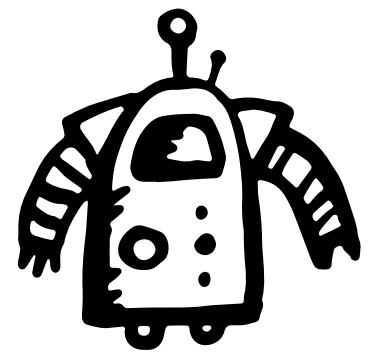


Serverless





History



New capabilities

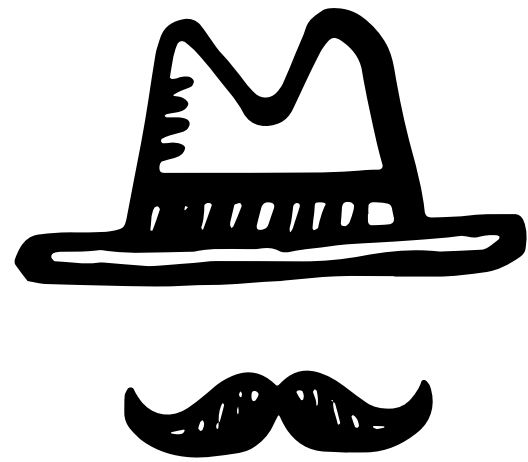


Top problem

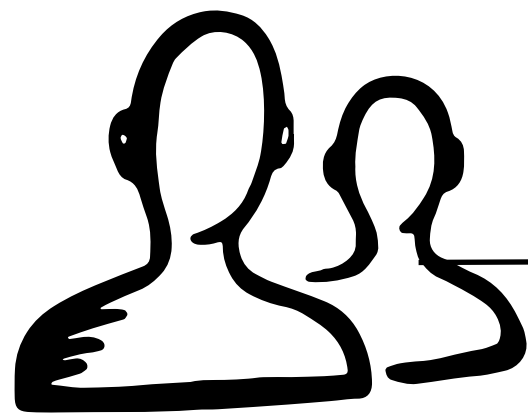


Biggest opportunity

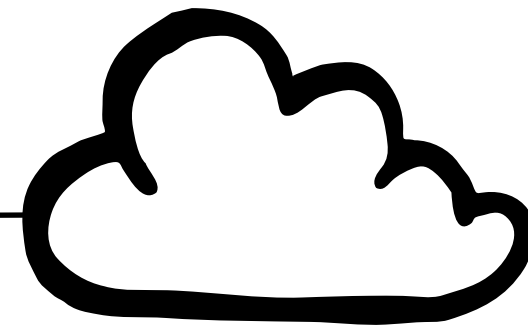
**How did we
get here?**



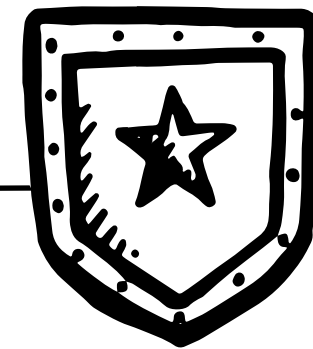
Bad People



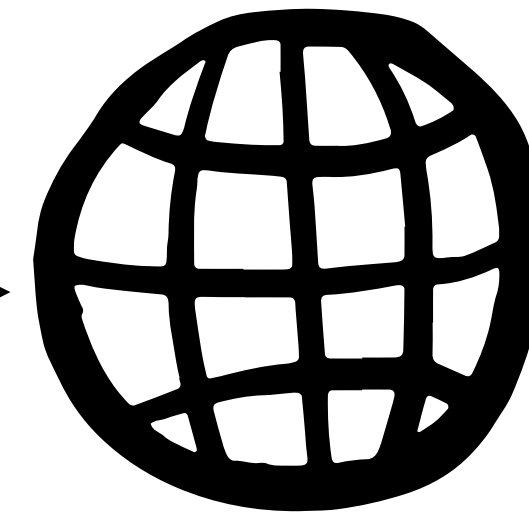
Customers



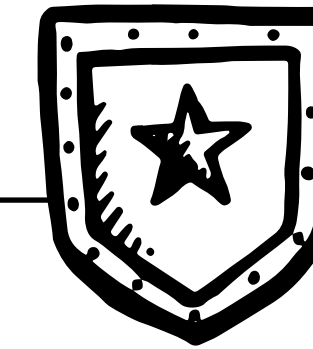
Internet



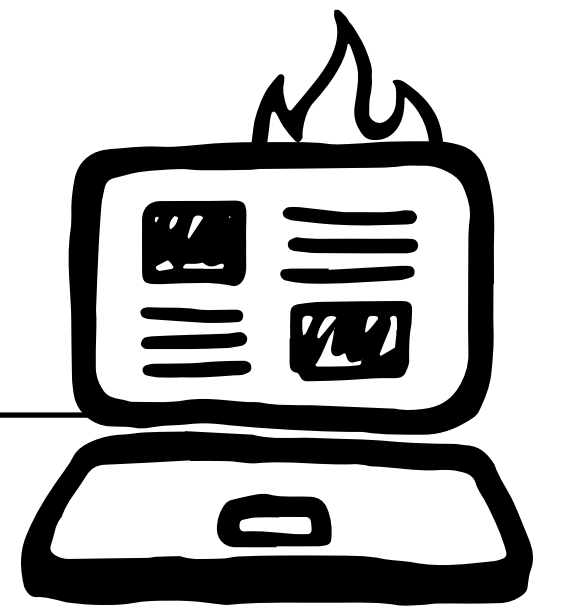
Controls



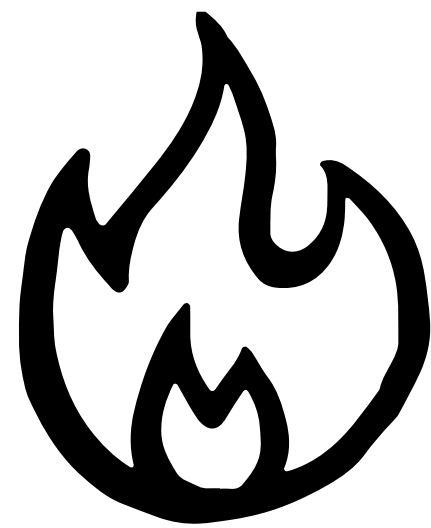
Services



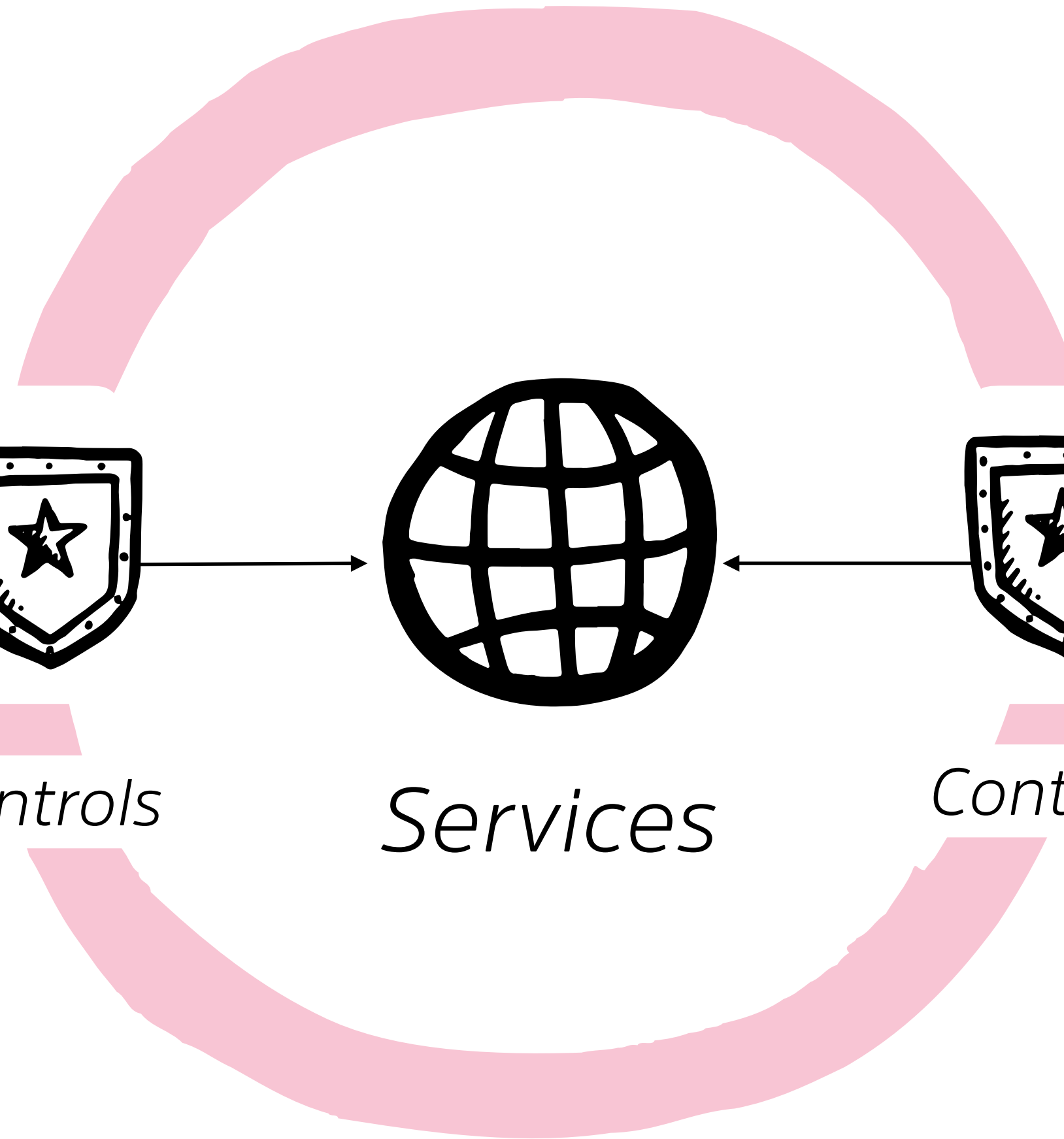
Controls



Employees



Problems



The goal of cybersecurity

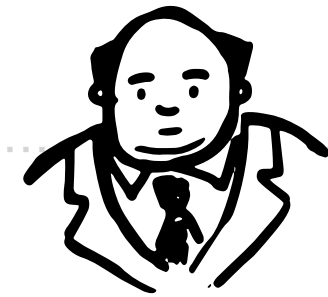
Protect the confidentiality,
integrity, and availability
of information



CIO



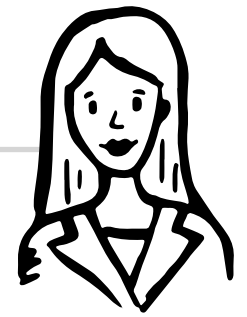
CISO



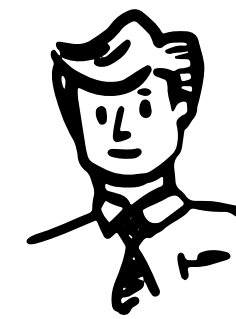
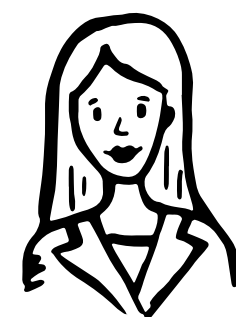
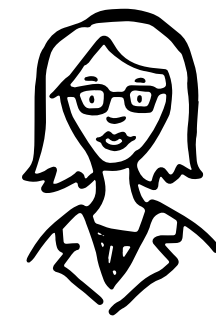
*Service
Delivery*



*System
Support*



*System
Development*

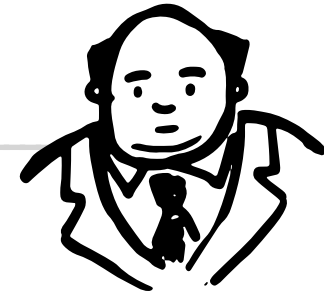




CIO



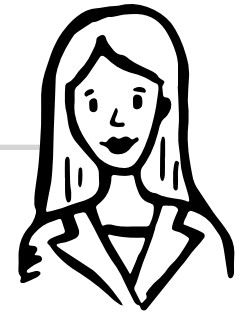
CISO



Service
Delivery



System
Support



System
Development



GRC



Service Desk



Network
Operations



Application
Development

Security
Ops

Change
Management

Application
Support

Testing

Incident
Response

Business
Liaison

System
Administration

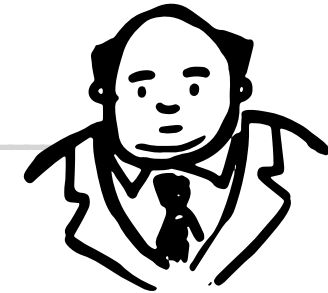
Project
Office



CIO



CISO



Service
Delivery



System
Support



System
Development

Responsible
Informed
Consulted

Responsible
Accountable
Consulted
Informed

Responsible
Accountable
Consulted
Informed

Responsible
Accountable
Consulted
Informed

RACI for customer facing solutions

**Can We Do
That?**



Joe
CISO, OurCo

170

**Number of days to detect a persistent threat on network as per Ponemon, 2018*

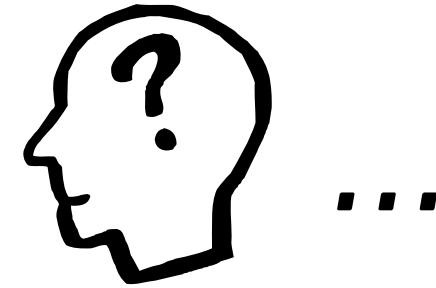


“Let’s start a threat hunting program”

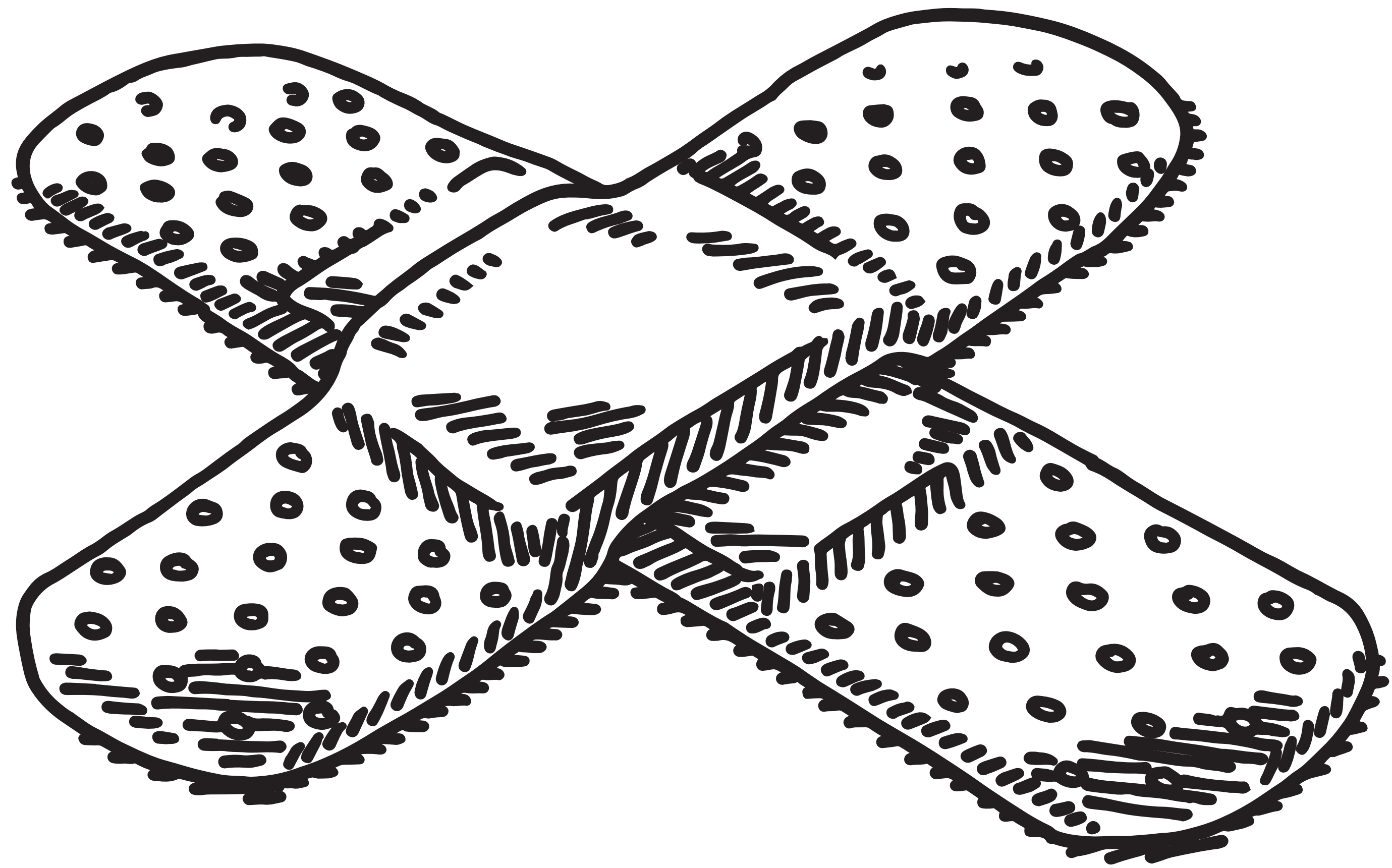
“What will we need?”



“Some new tools & 2 team members...”



- *Generate stronger analytics*
- *Expand AppSec program*
- *Fill open requisitions for SOC*
- *Deploy shelfware*
- *Create threat hunting team?!?*

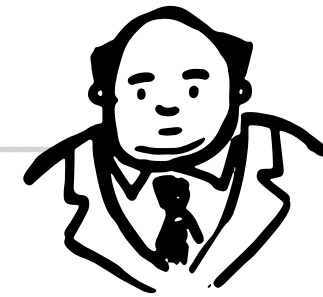




CIO



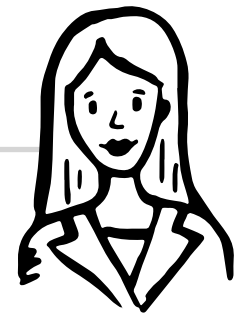
CISO



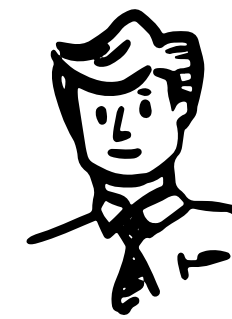
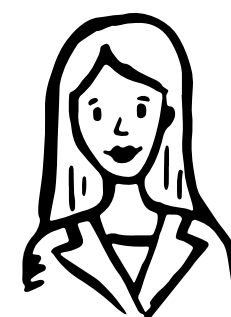
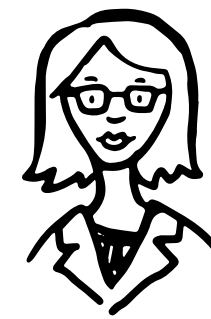
Service
Delivery



System
Support



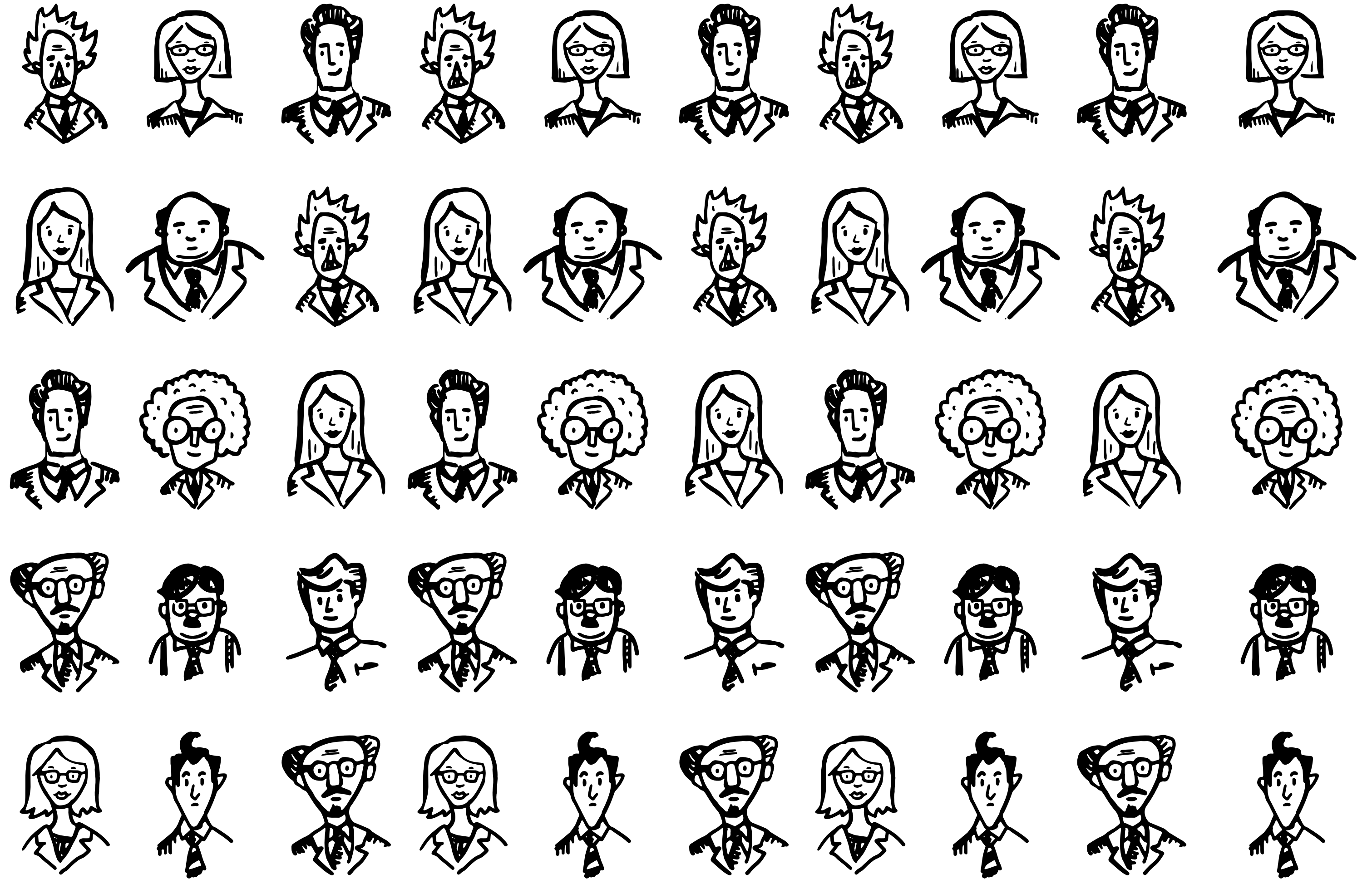
System
Development





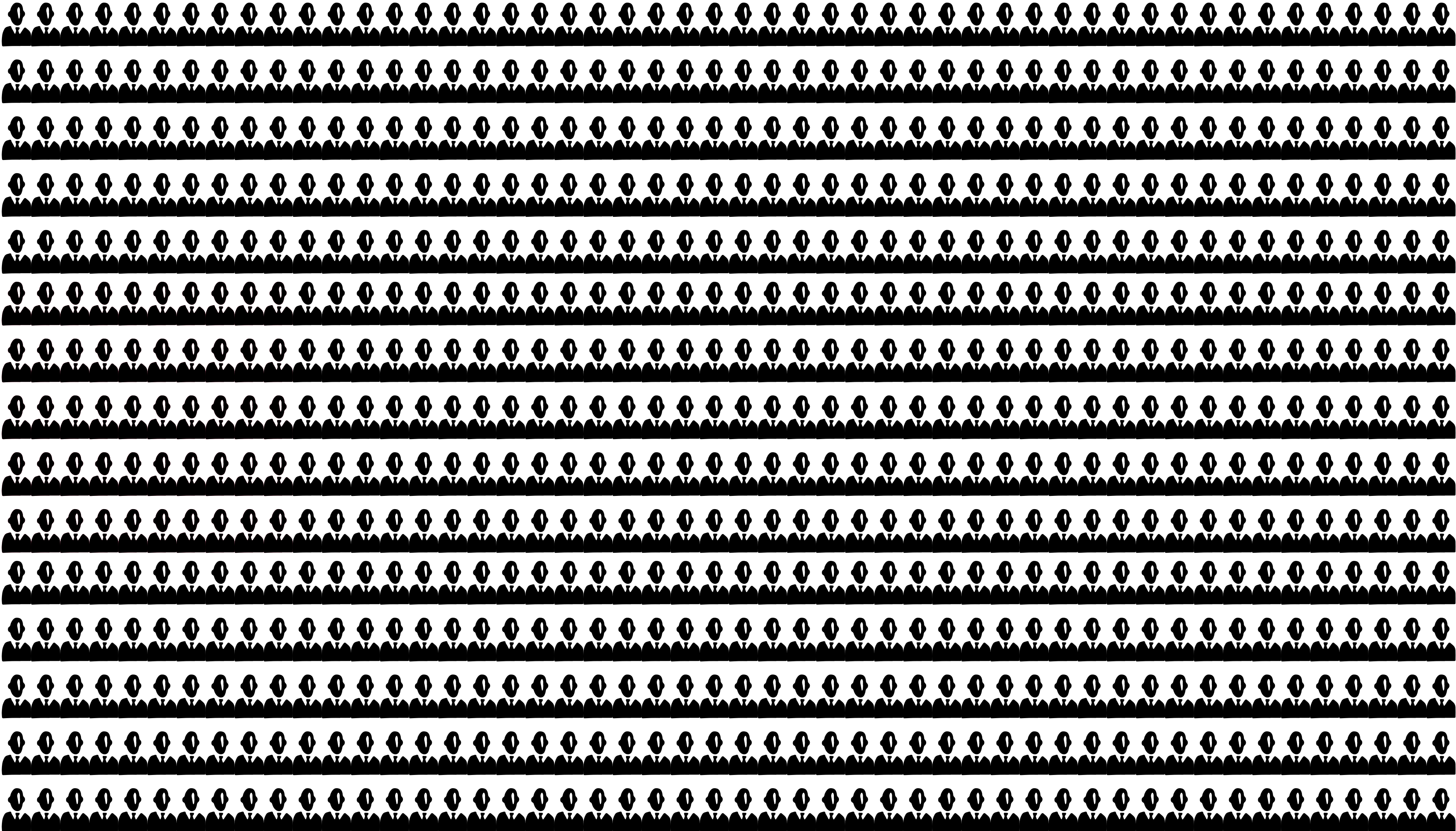
IT

Employees

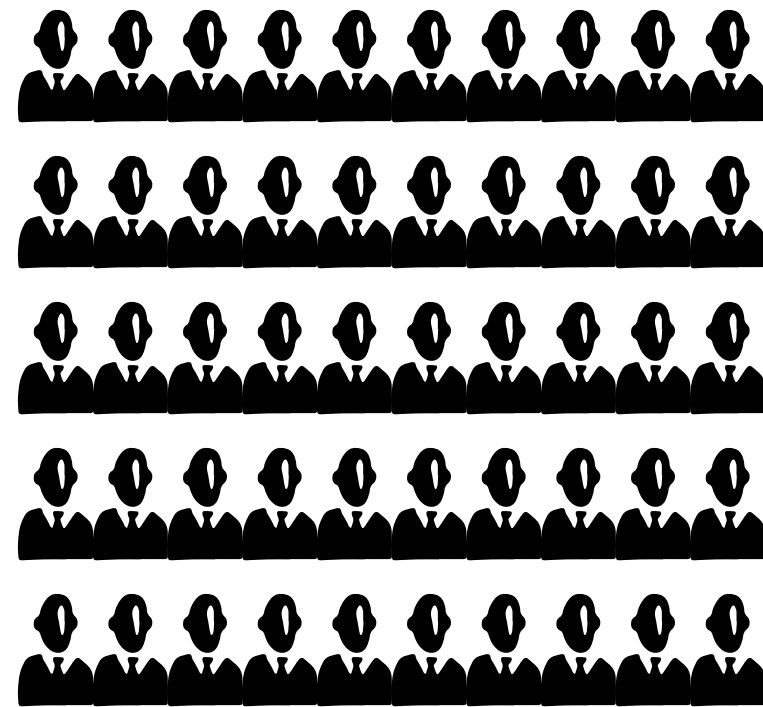


Cybersecurity

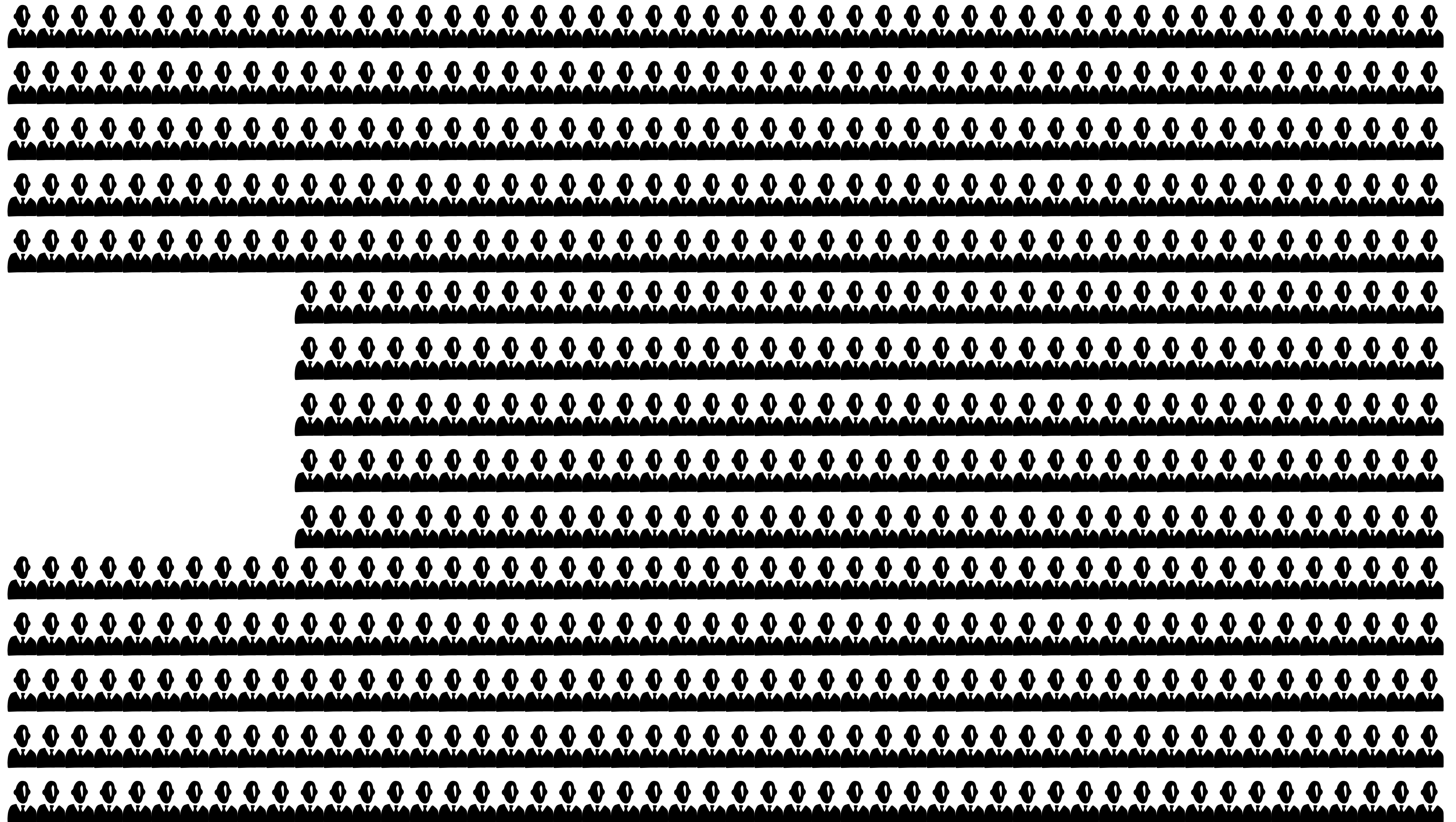
IT



Employees



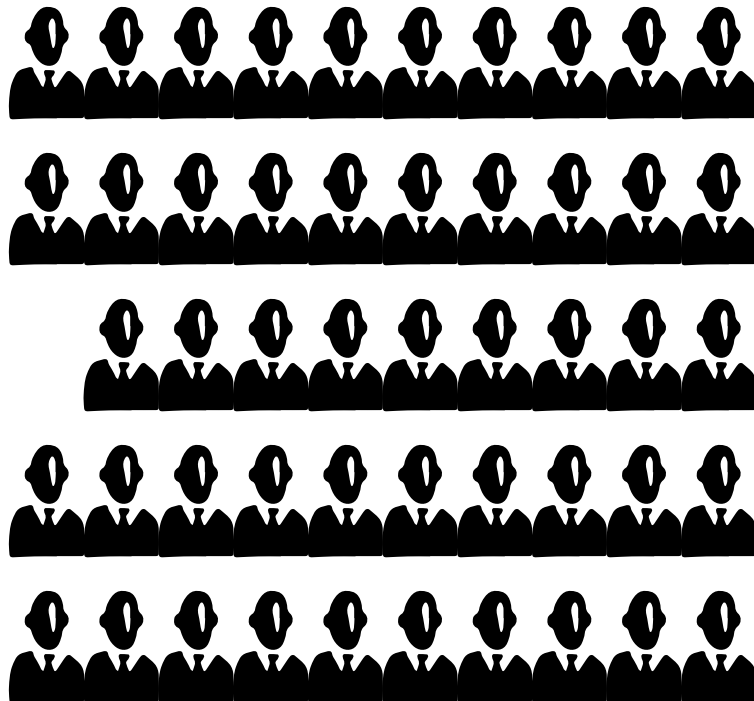
IT



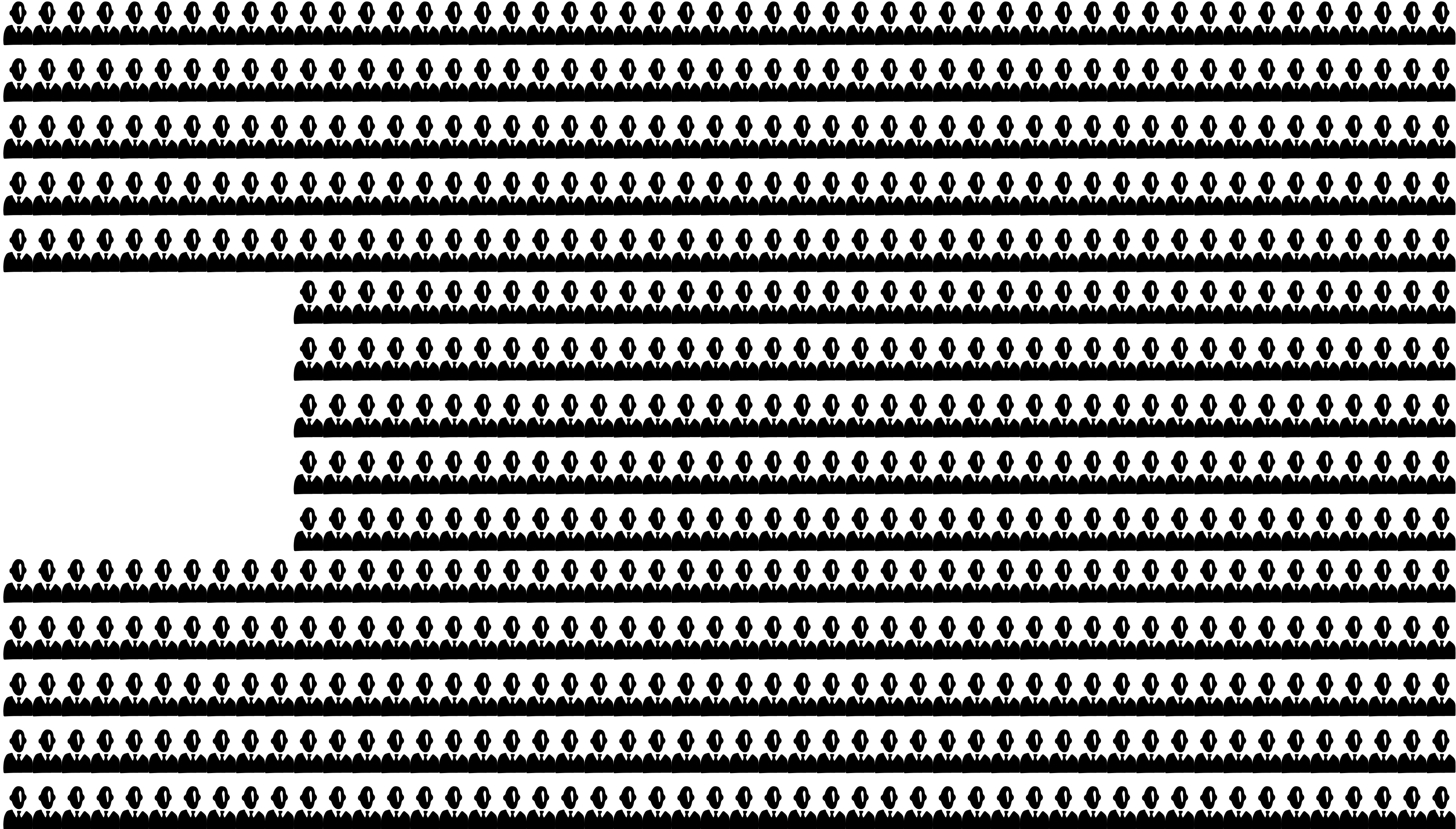
Employees




You



IT



Employees



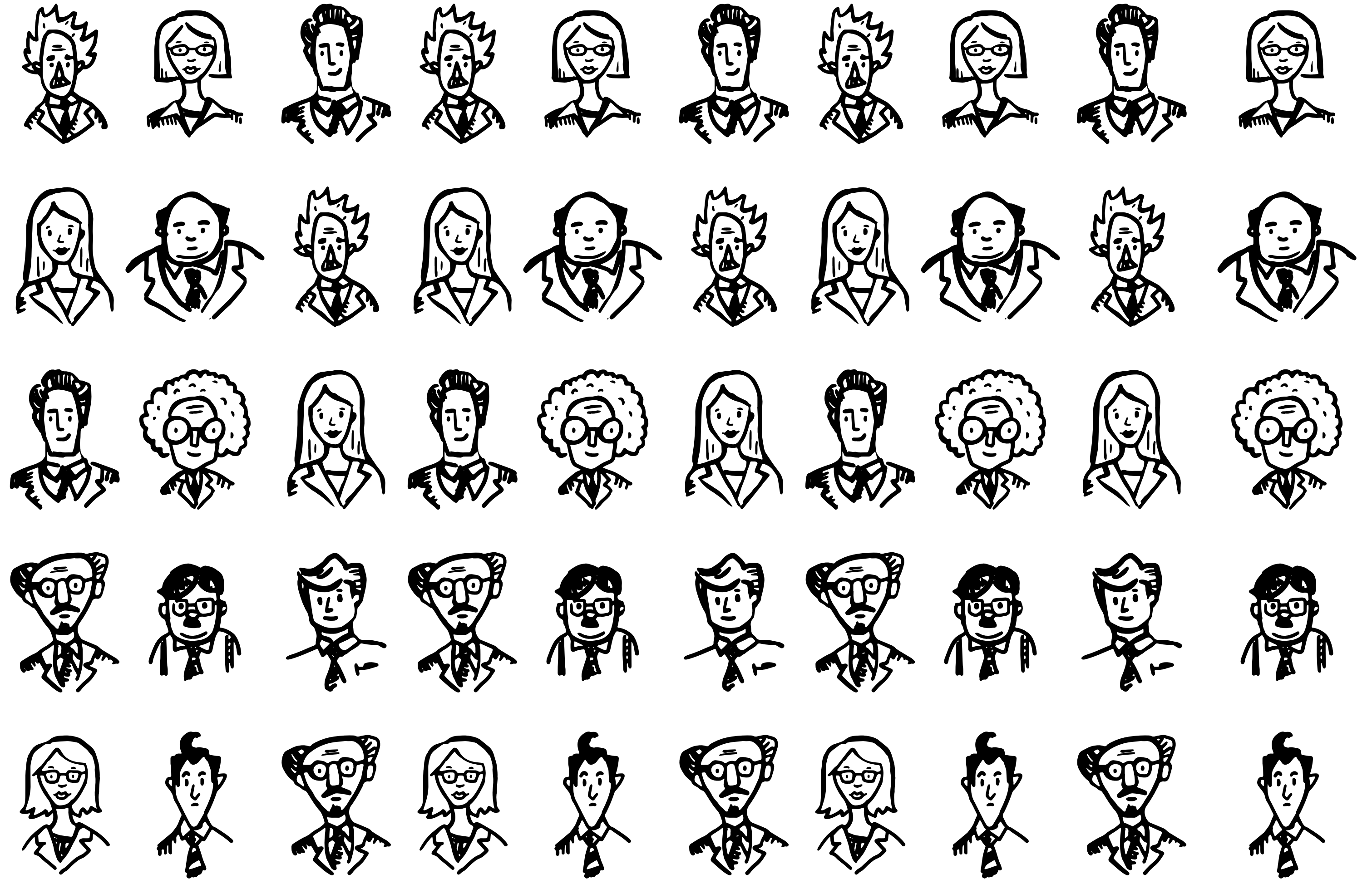
1:50:750

You

IT

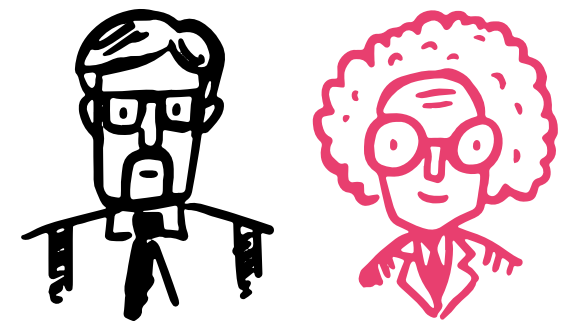
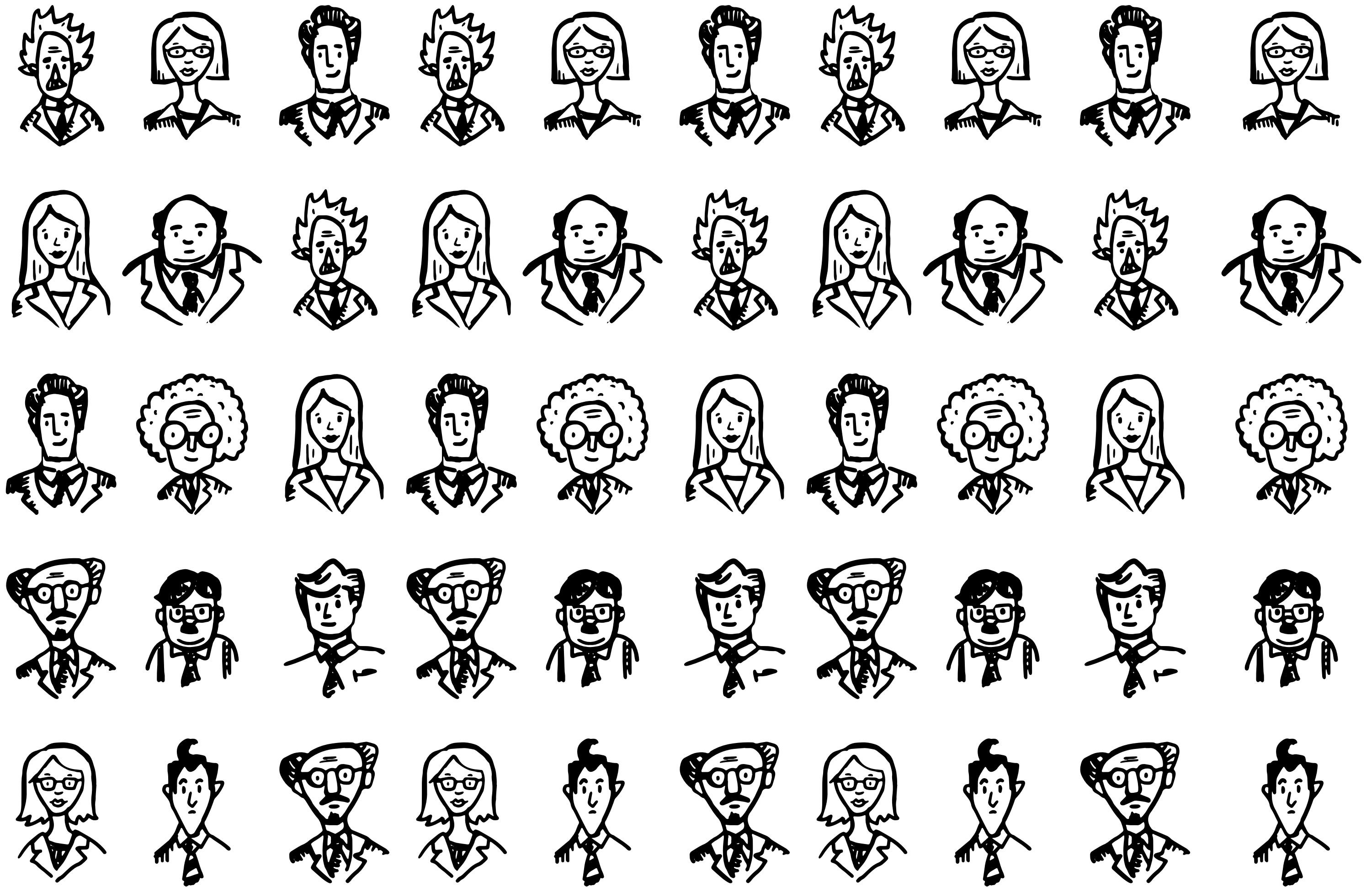
Employees

**A Lack Of
People**



Cybersecurity

IT



Cybersecurity

IT


Can you find these people?



Confront the Cybersecurity **Talent** Shortage

June 23, 2017

Contributor: Kasey Panetta



There are currently more than 348,000 open security positions, according to [CyberSeek](#). By 2022, there will be 1.8 million unfilled positions, according to the [Center for Cyber Safety and Education](#). As companies evolve toward digital business and bimodal setups, these skills are becoming more difficult to find and more expensive to hire, particularly in rural areas.

Companies need to be able to attract this type of talent, or risk being a part of the business strategy.

Confront the Cybersecurity [Talent](#) Shortage

June 23, 2017

Contributor: Kasey Panetta



CYBERSECURITY SNIPPETS

By [Jon Oltsik](#), CSD | JAN 11, 2018 11:53 AM PT

About

Jon Oltsik is a principal analyst at Enterprise Strategy Group ESG and has been quoted in the Wall Street Journal, Business Week, and the New York Times.

ANALYSIS

Research suggests cybersecurity skills shortage is getting worse

New data from reveals growing skills gaps that represent an existential threat. What should organizations do?



770

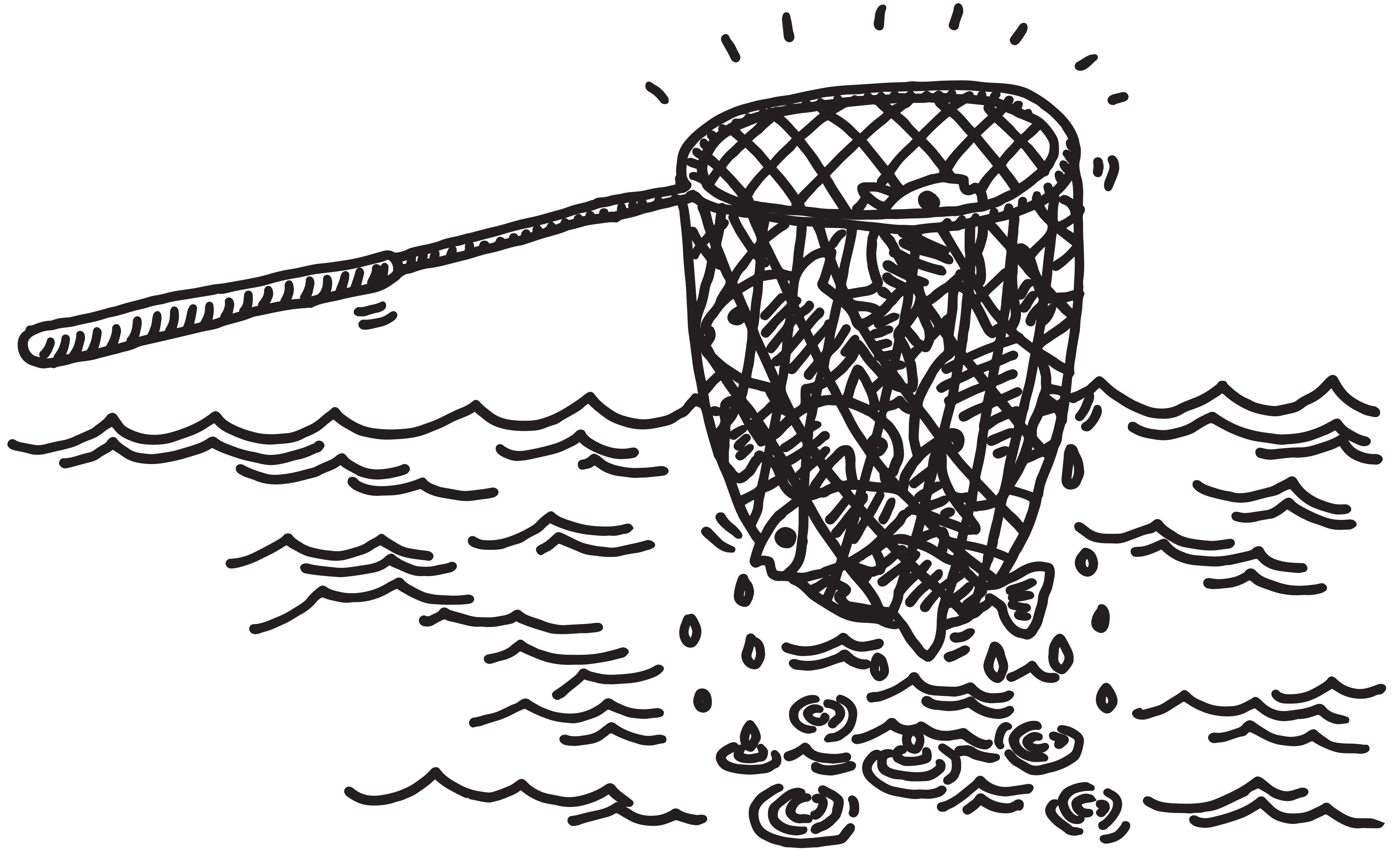
** Graduates in cybersecurity from Canadian universities per year as per Universities Canada, 2018*

Can you find these people?

*Can you **keep** these people?*

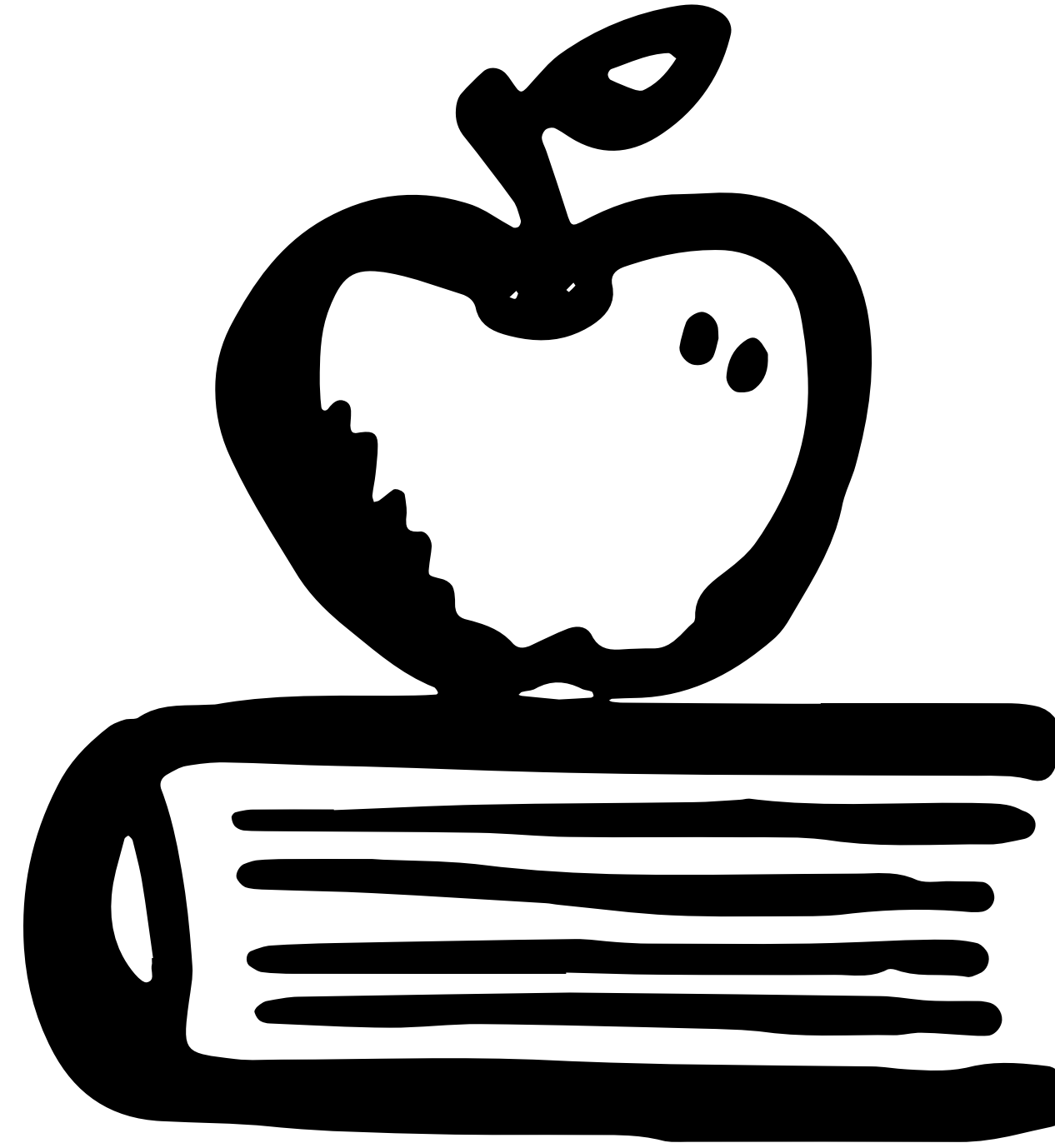
Will these people actually help?

#1 Problem



92.4%

** Malware starts via phishing as per Verizon DBIR, 2018*



Phishing awareness campaign

http://click.thehustle.co/wf/click?upn=rw4-2B1wCQbh6Z1QY0AaTRRgxNWWhkFS3tL4210JyH-2B-2BpEm4ttt5oCho7iCesyL1k1C_w2FF8AYzKpBRjzA7UjULRaTF5XlrrbdesgVaow37rDL0j99VHPRqu3DXqNtSY32Ny9C0kQ6J5iyb102DBbyU3bwwSndbVB5LBjhoA61xCaAHTcuPQWdgttqU2JGwa-2FiYxaP8S2DWu4kH64X9Klqbx-2FnPk3CS0xNvJnZ-2FMXTz2Pgwe06oqxHn36XbpZYnU61W2ZS-2FTMU4pX76KkSTWvCKR1AeJycxP093uVX-2Ffuq6GxJa4poLH4fYFmldHaomBq0h10vEJUjyGtRsSLDNhAuJDhvL5BdGbHNpybTUP9VURIMCLwcLcBGLJSP5-2FSSel6-2FSRkz2SvpFdGsHj1F5EJReK9SCrUDDeJWFJbzbv7nQJZvIE5n8-2F96TVnNnFutjkzyKR

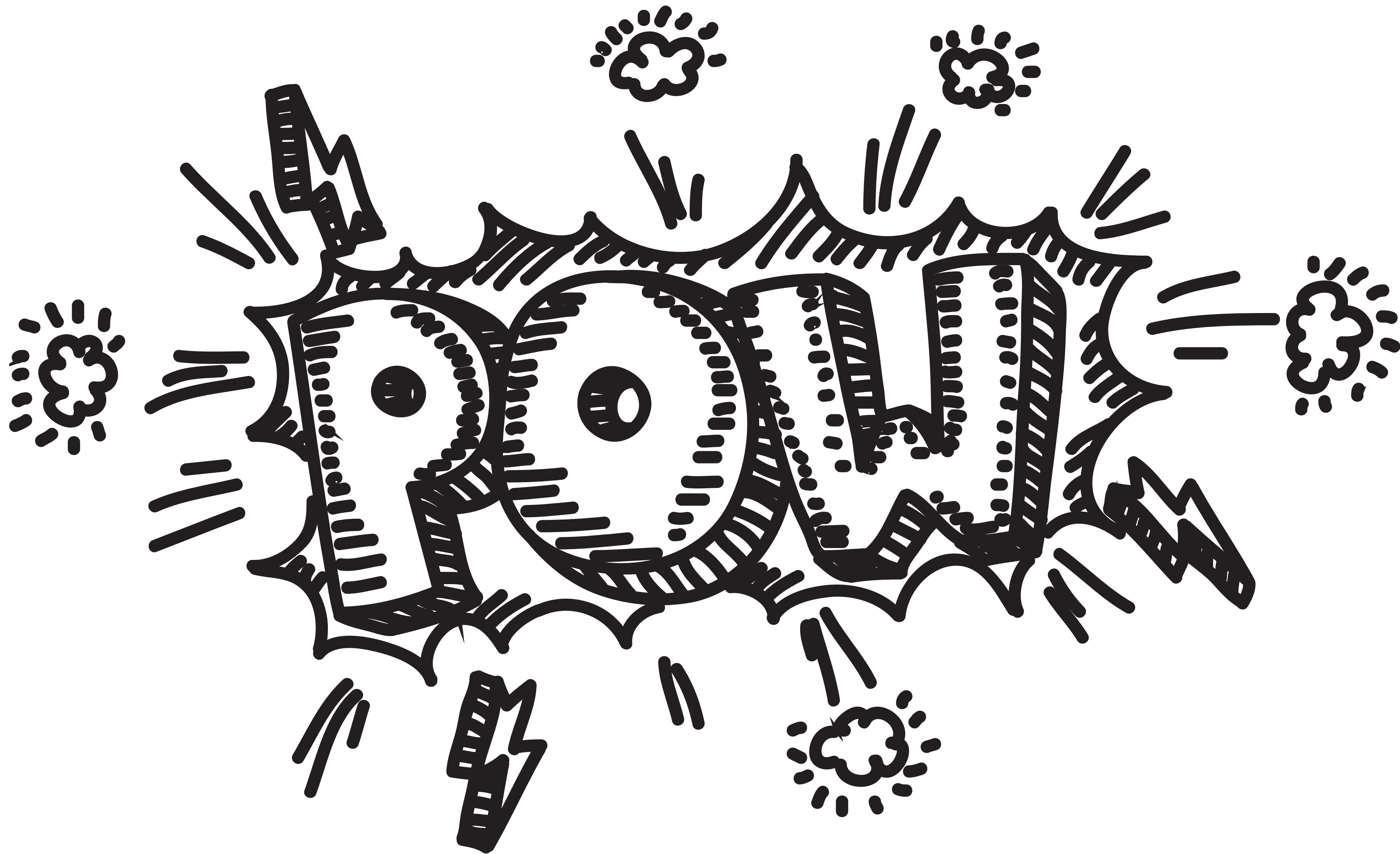
.accountant	.education	.jetzt	.school
.apartment	.energy	.kim	.soccer
.associates	.engineering	.lawyer	.surf
.bingo	.enterprise	.love	.theater
.boutique	.fish	.maison	.today
.brussels	.fitness	.memorial	.vacations
.careers	.flights	.network	.video
.clinic	.glass	.one	.webcam
.consulting	.global	.parts	.wiki
.degree	.gripe	.party	.wtf
.dog	.hockey	.porn	.yoga
.download	.how	.rentals	.zone



Runs counter to the idea of a link

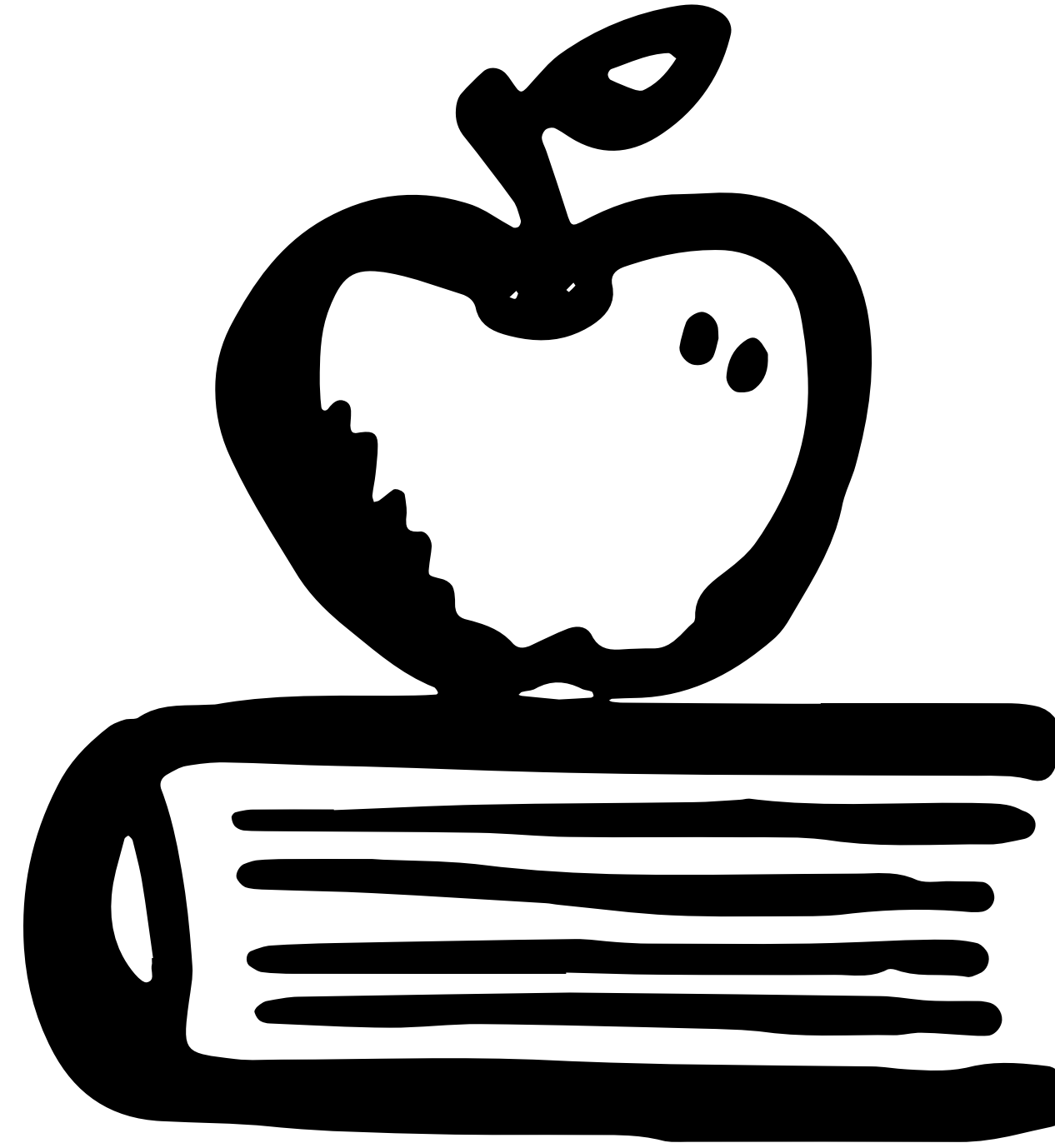
2.77%

** Effectiveness of phishing training by McCoy et al., 2017*



41%

** Web attacks use stolen credentials as per Verizon DBIR, 2018*



Password awareness campaign



Alberta Government

@YourAlberta

Sharing info on Government of Alberta



Nick Heer

@nickheer

Follow

This does not give me confidence in your password security, @YourAlberta. (cc. @troyhunt)

Old Password: *

Password: *

Confirm Password: *

! Passwords must be 8 to 20 characters long letter, one lower case letter and one number or characters are ! @ # \$ % = + _

Passwords must contain:

- 8 to 20 characters
- one upper case letter
- one lower case letter
- one number or special character
- any character with the exception of ' " \ / & + = ; : . , { } [] < > 0 * | #

2:26 AM - 18 Jul 2017

6 Retweets 11 Likes



2



6



11





Runs counter to math & psychology

86%

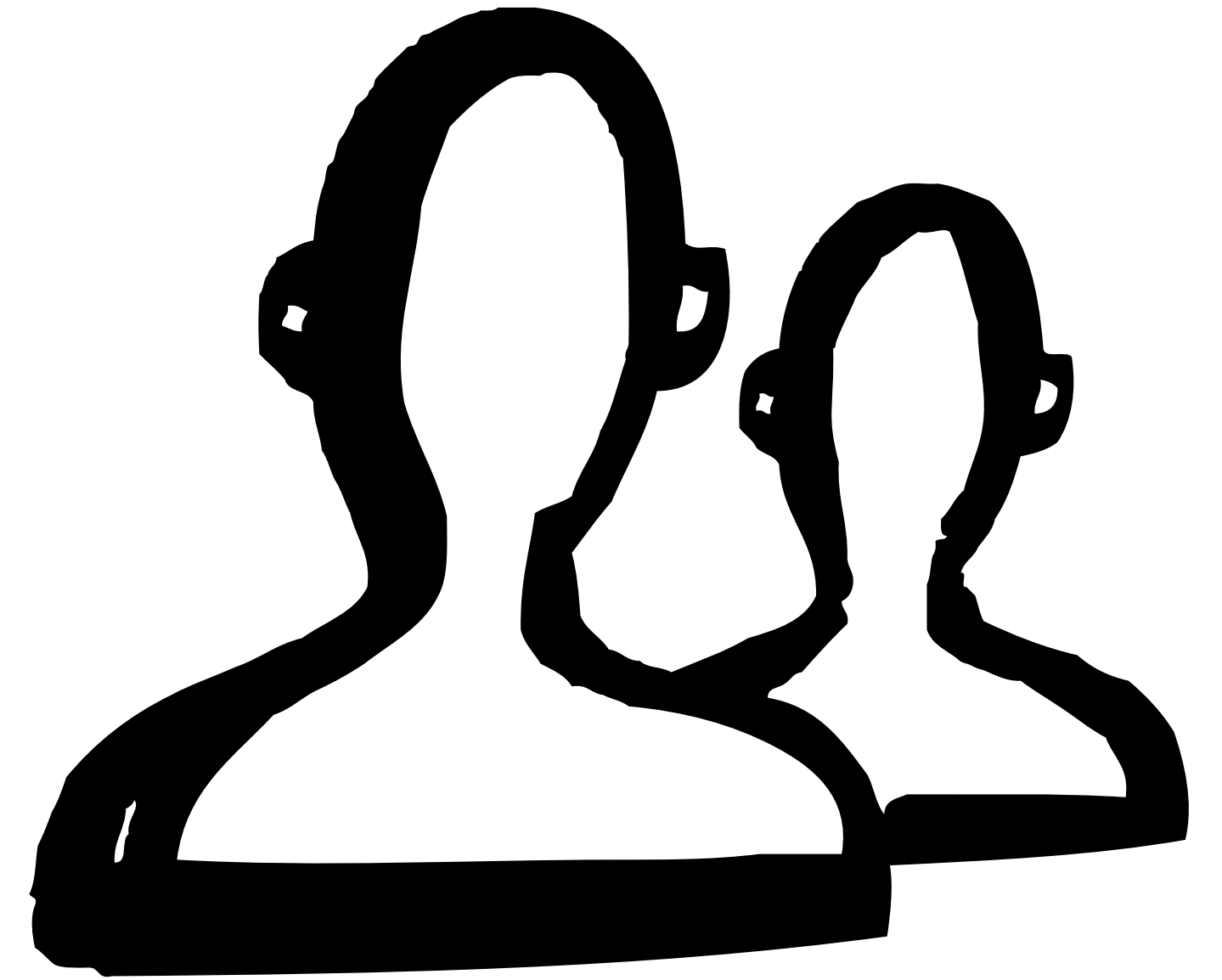
** Of passwords are reused or simple as per Troy Hunt, 2018*

Ugh, Users

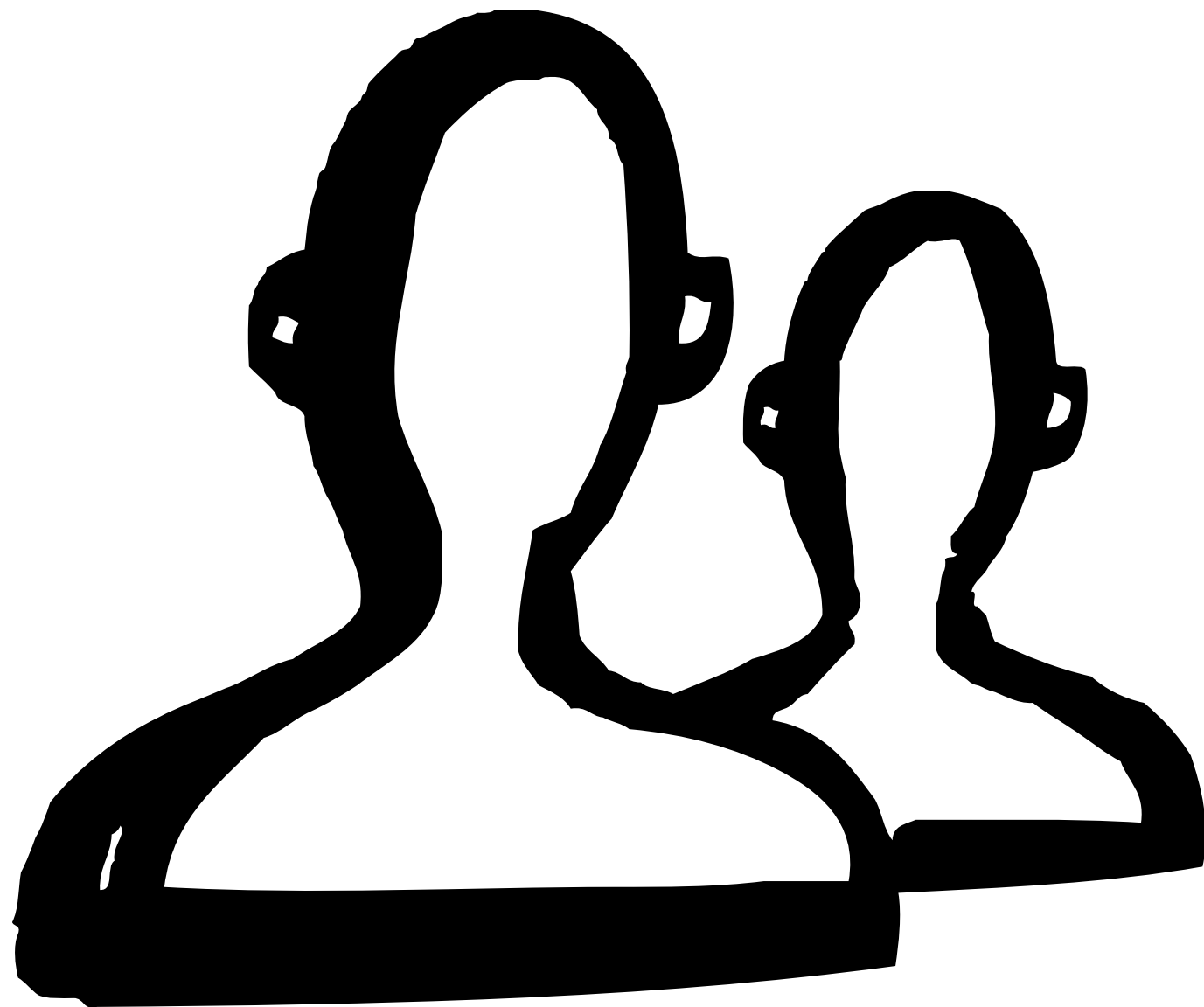


Us

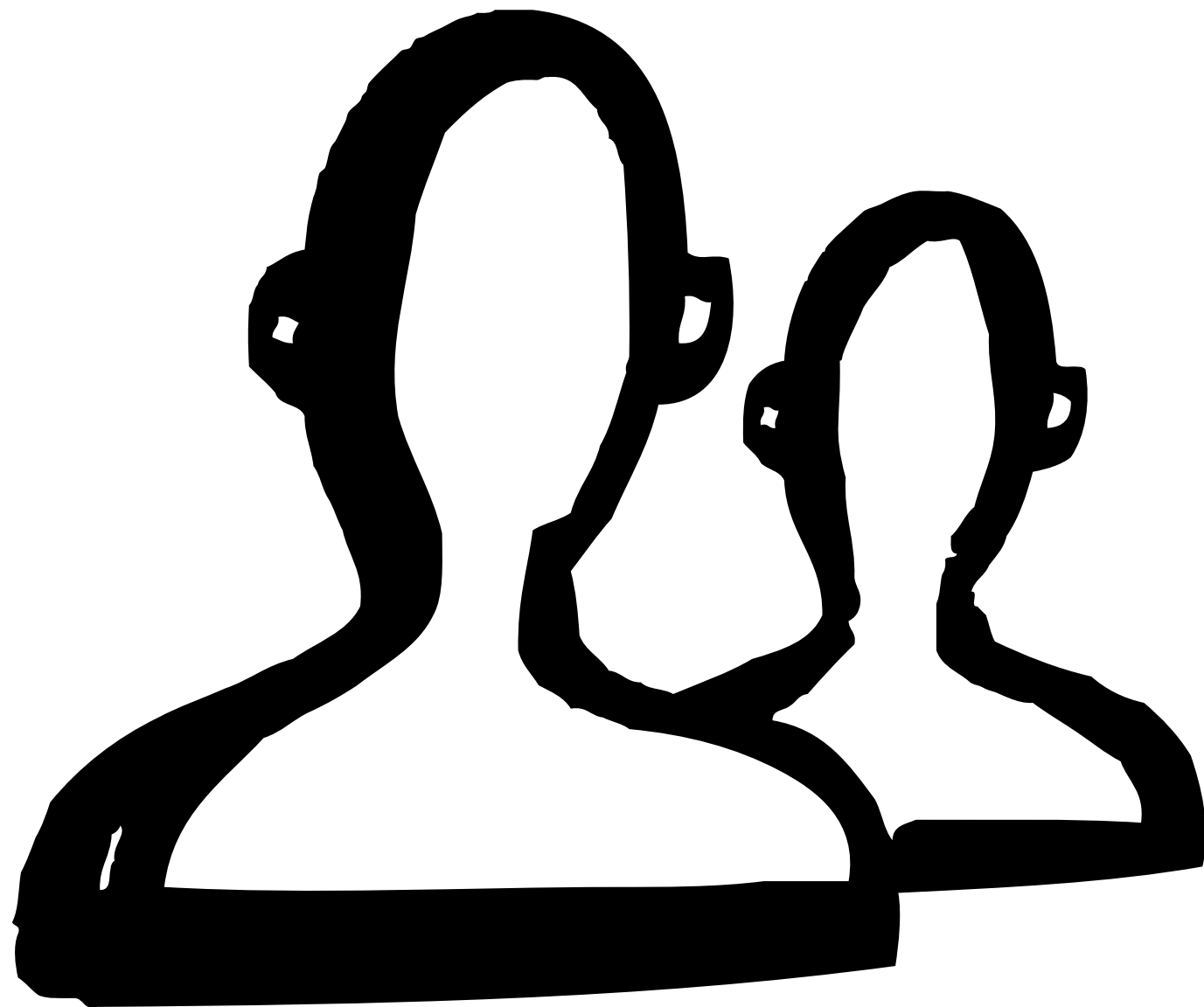
VS.



Them



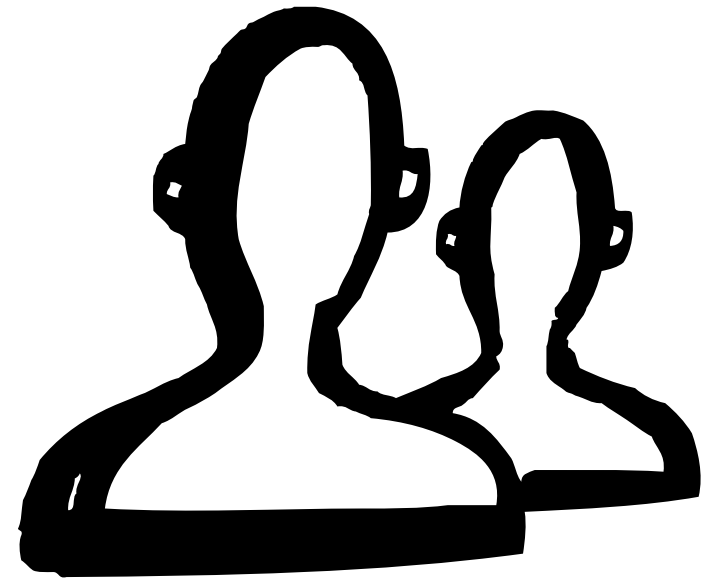
“Users” are the problem



~~*“Users” are the problem*~~

100%

** Forgotten common sense*



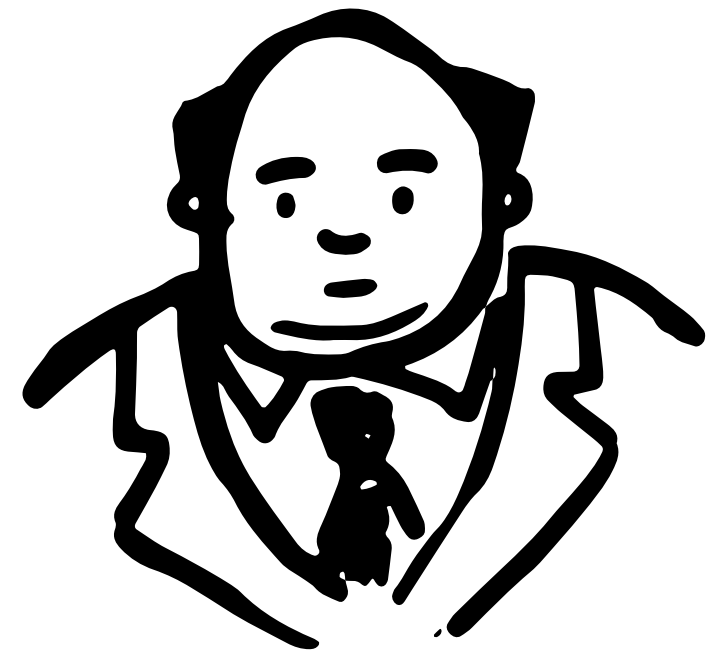
Us

VS.



Them

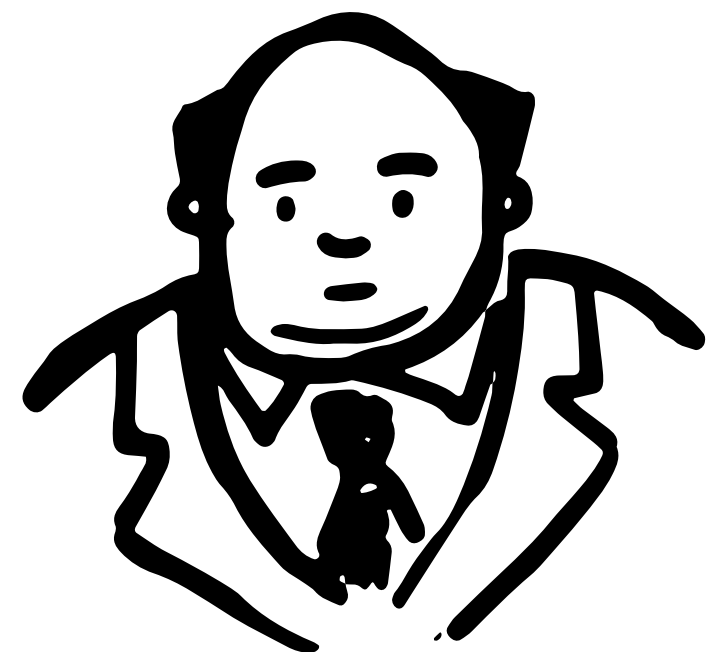
Containment



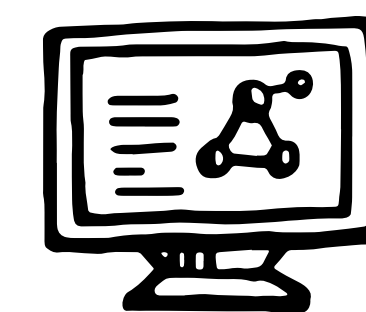
“This system needs to be deployed.”



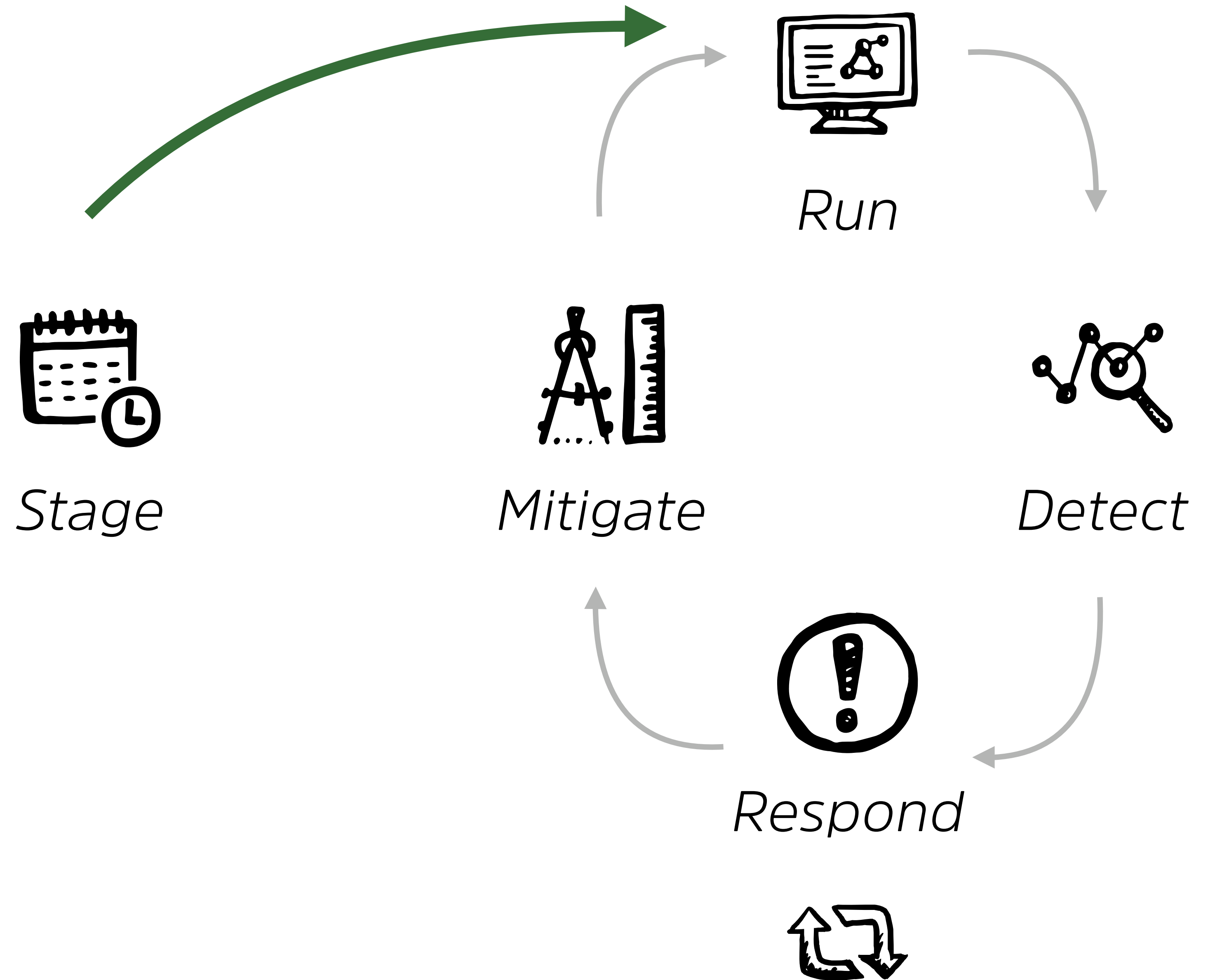
“When?”



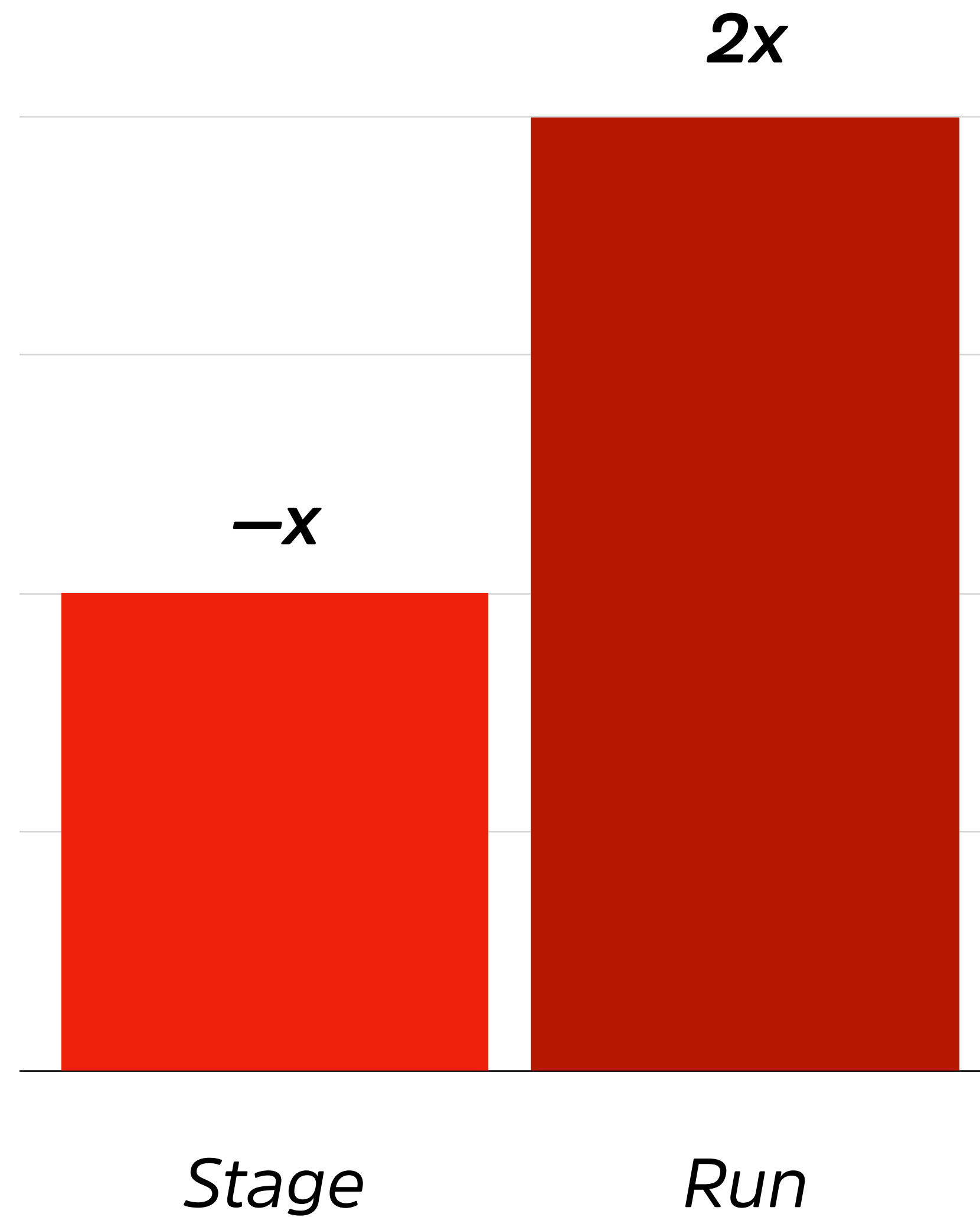
“Monday...”



Run

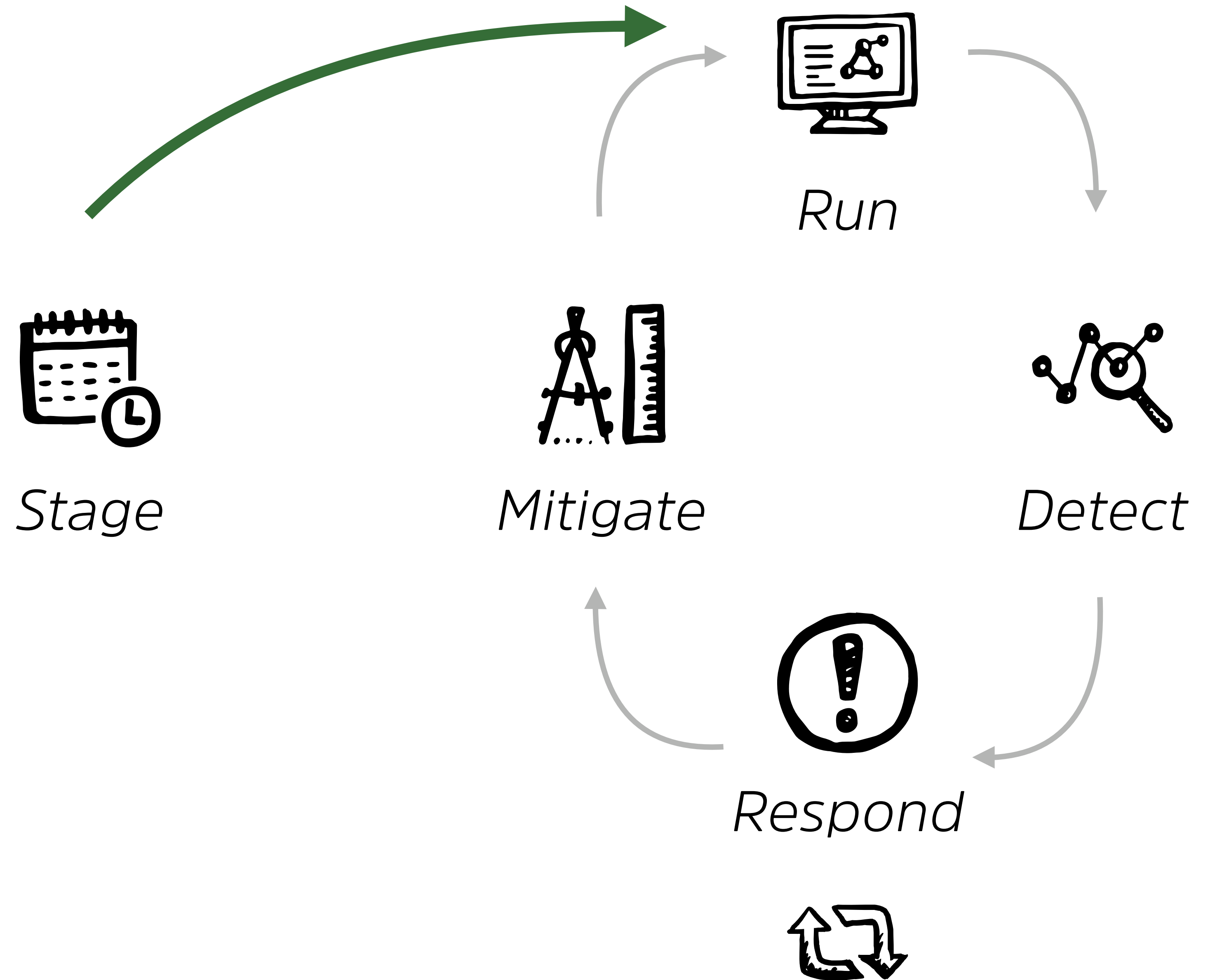


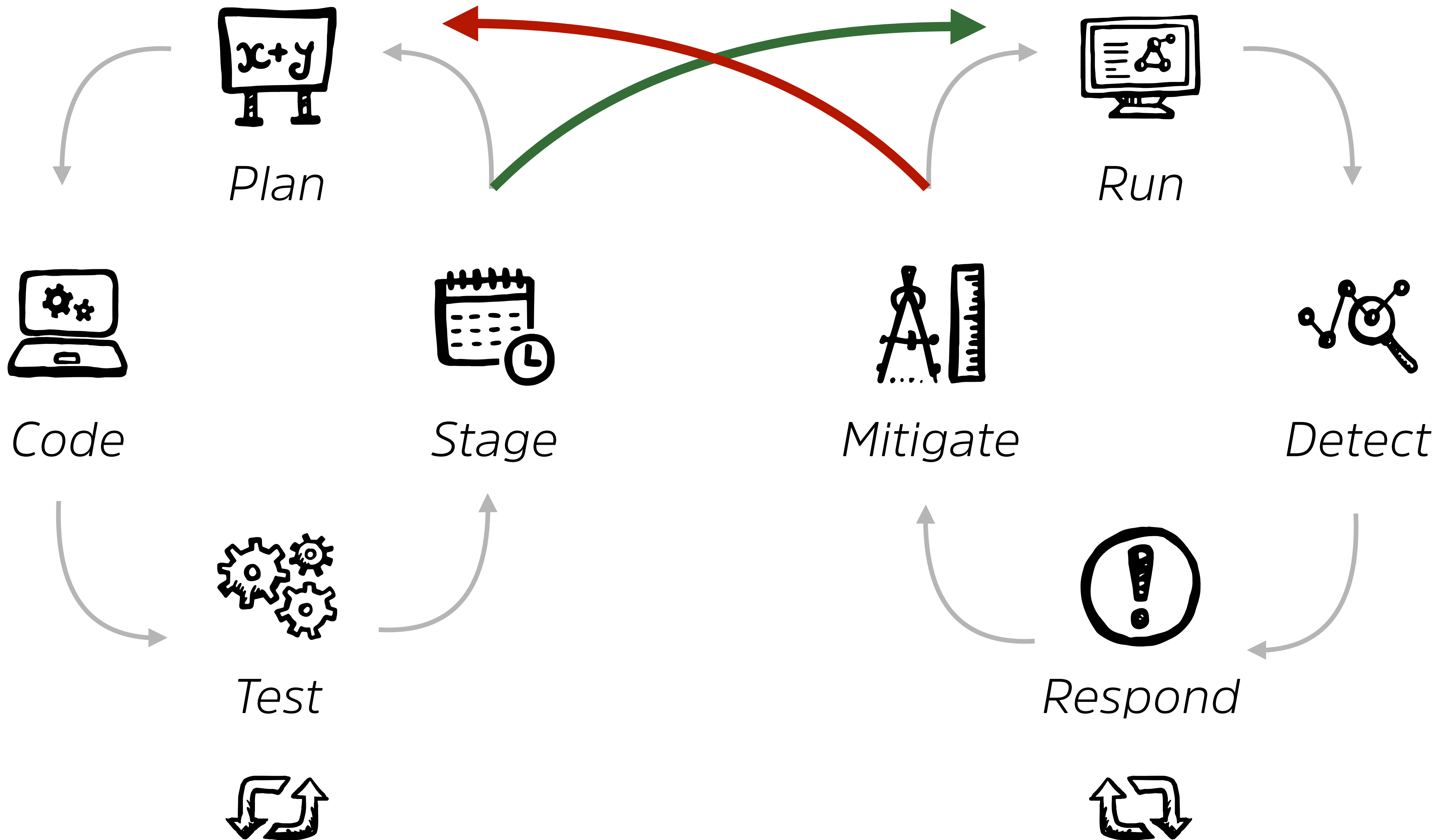
Resolution Cost—Workflow Stage



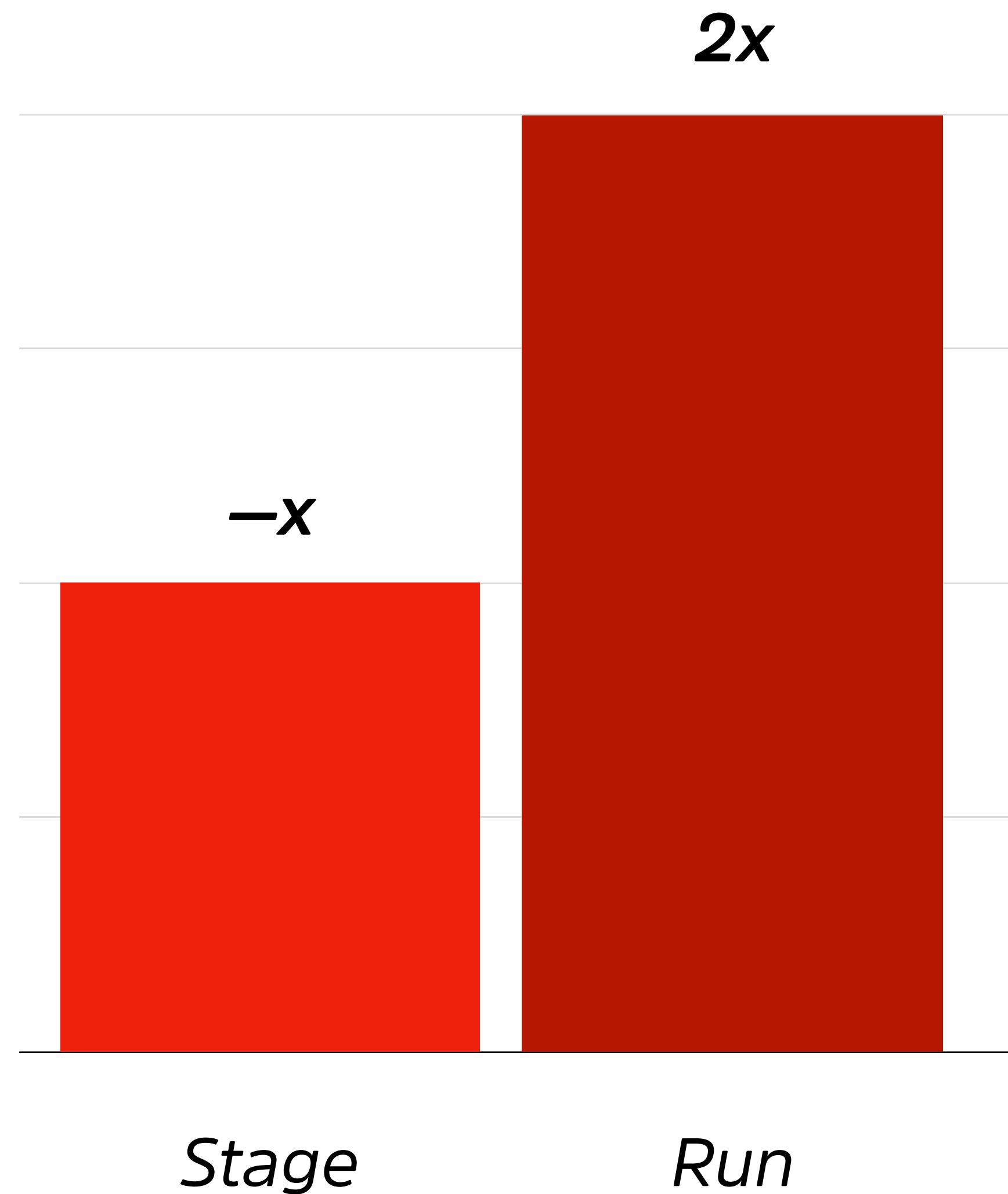
*Late stage risk assessments
limit options*

Bolt-on

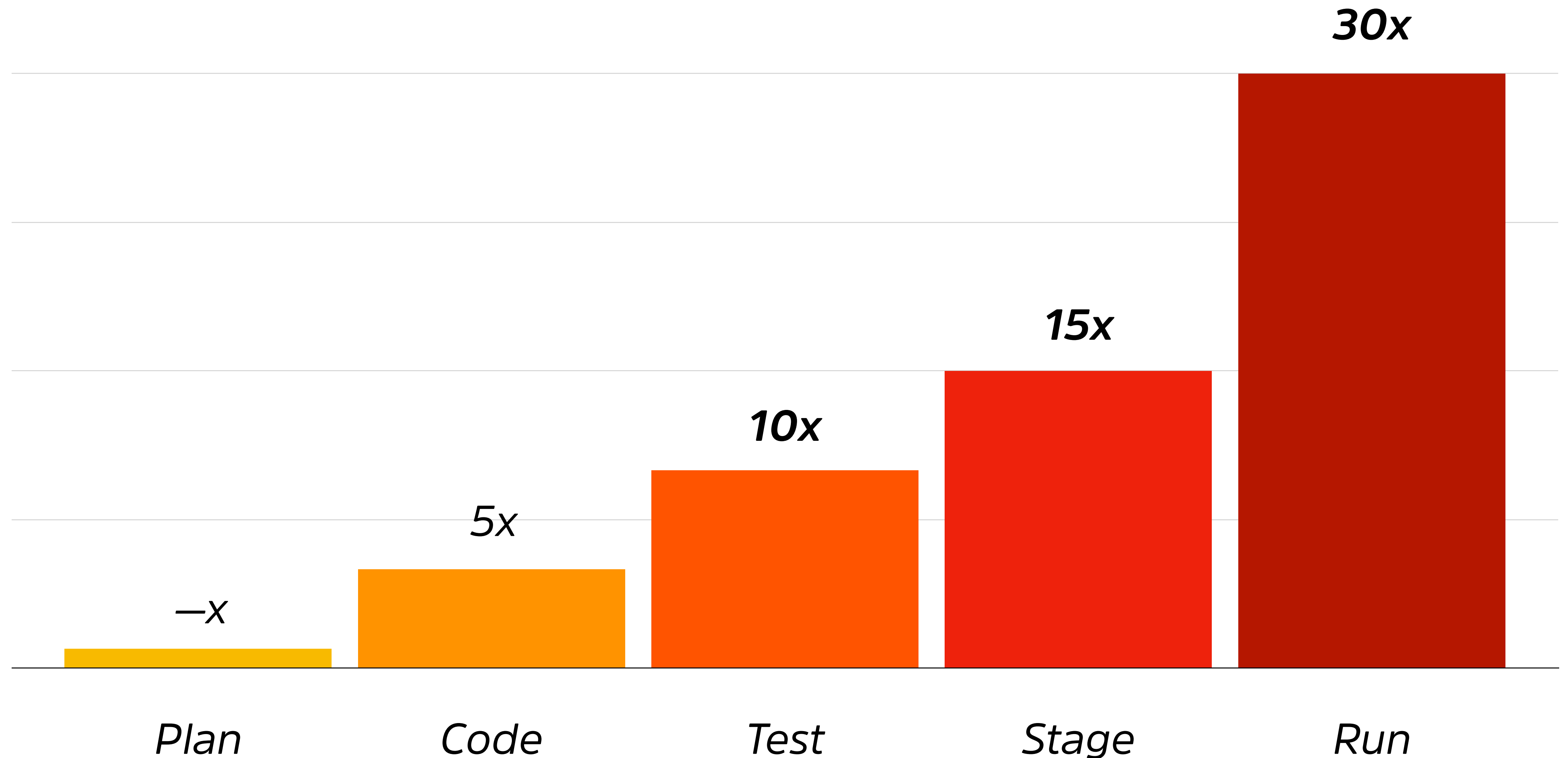




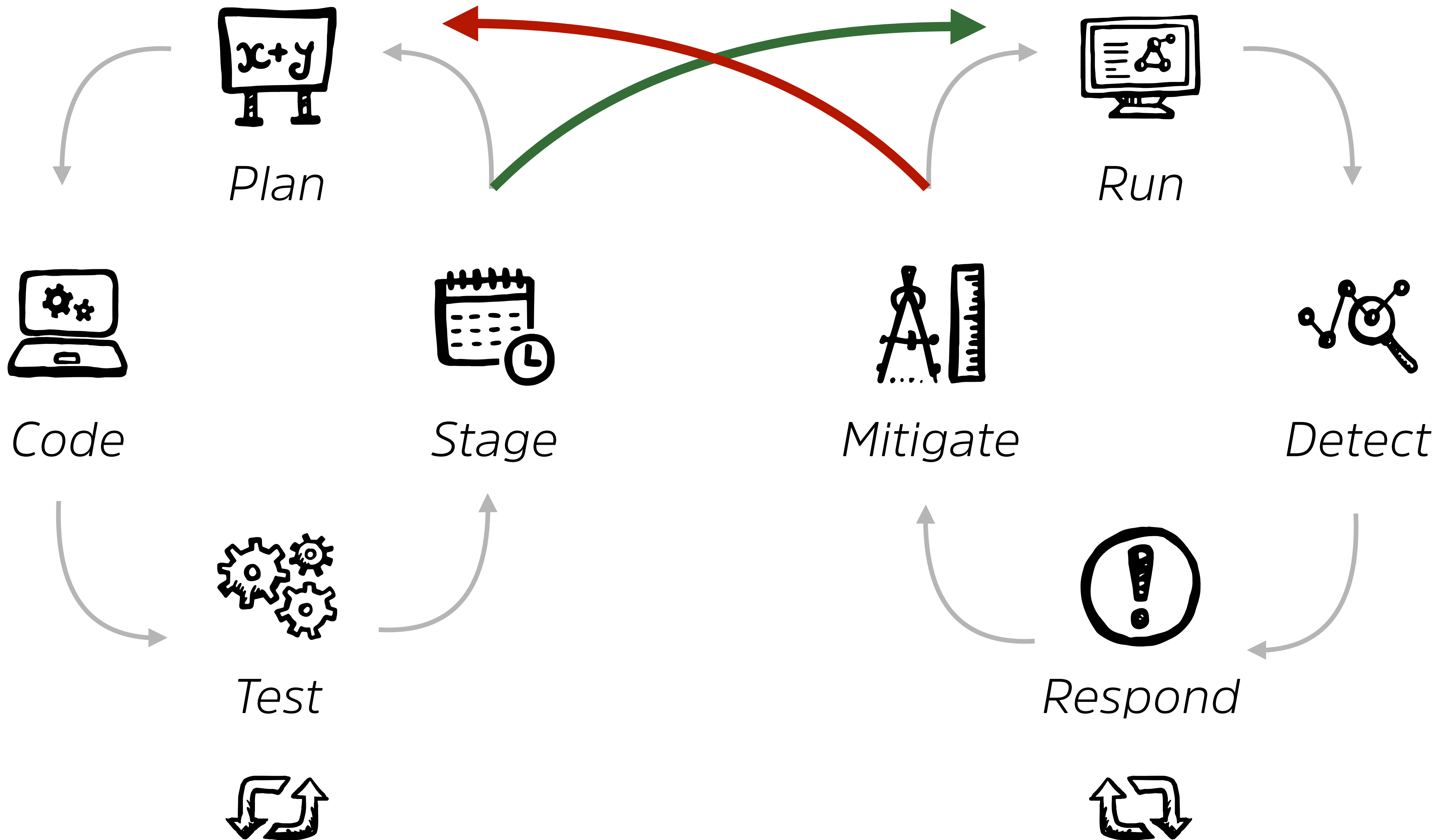
Resolution Cost—Workflow Stage

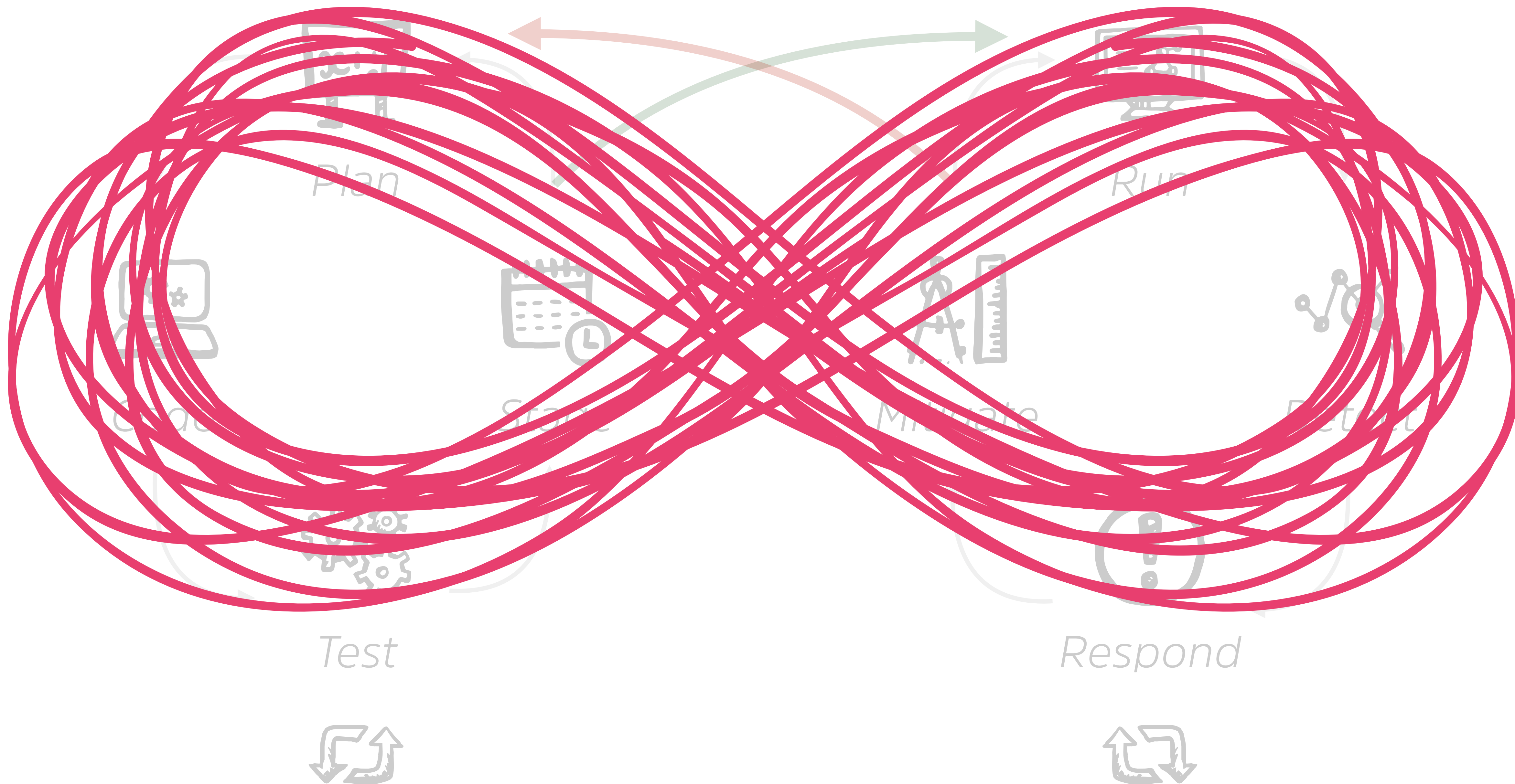


Resolution Cost—Workflow Stage









	Elite ^a	High	Medium	Low
<i>Deployment Frequency</i>	On-demand (multiple deploys per day)	Between once per hour and once per day	Between once per week and once per month	Between once per week and once per month
<i>Lead time for changes</i>	Less than one hour	Between one day and one week	Between one week and one month ^b	Between one month and six months ^b
<i>Time to restore service</i>	Less than one hour	Less than one day	Less than one day	Between one week and one month
<i>Change failure rate</i>	0-15%	0-15%	0-15%	46-60%

**2018 State of Devops report from DORA*

*Early security intervention
opens up new options*

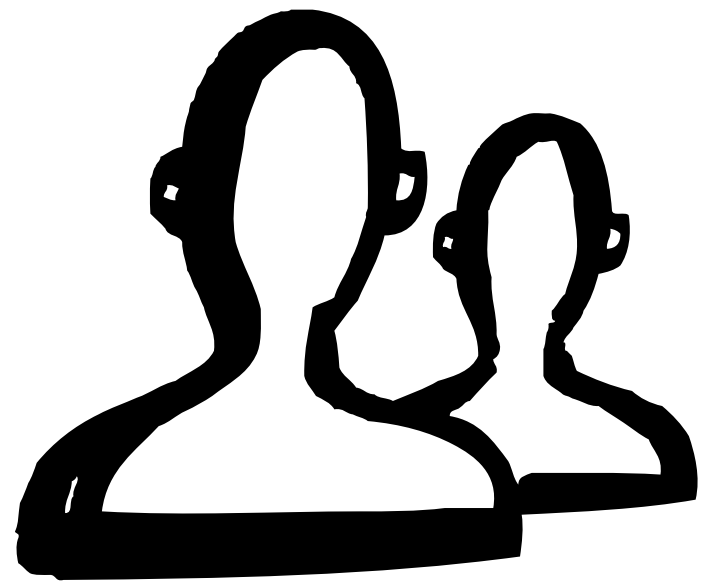
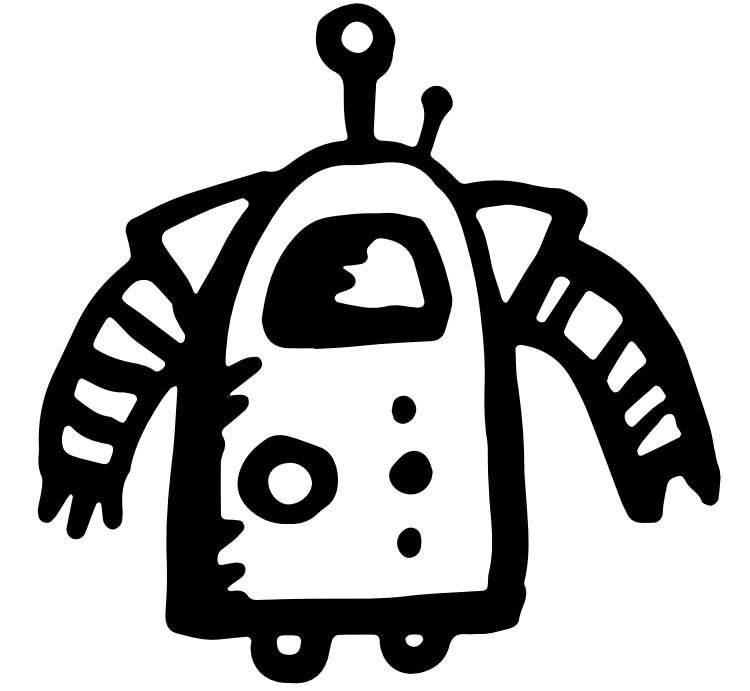
*Can you **keep** up with
development cycles?*

Can you speak developer?

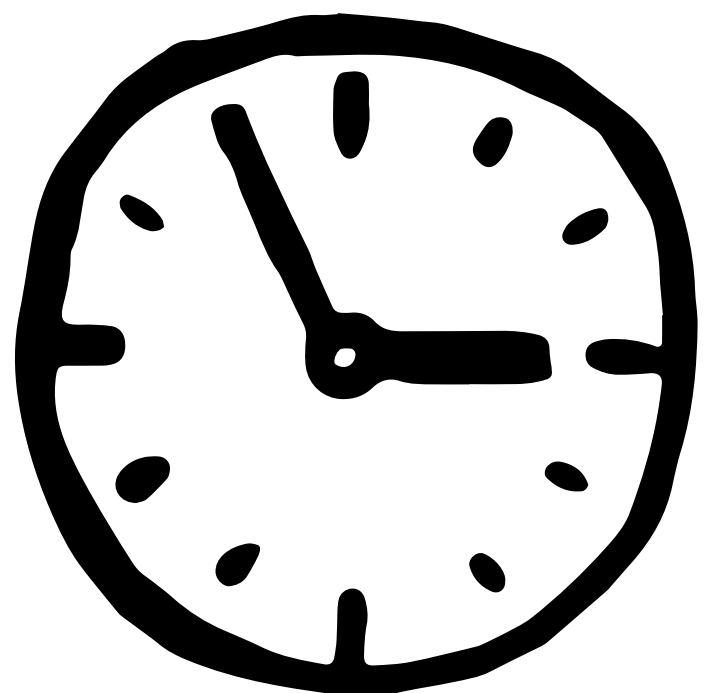
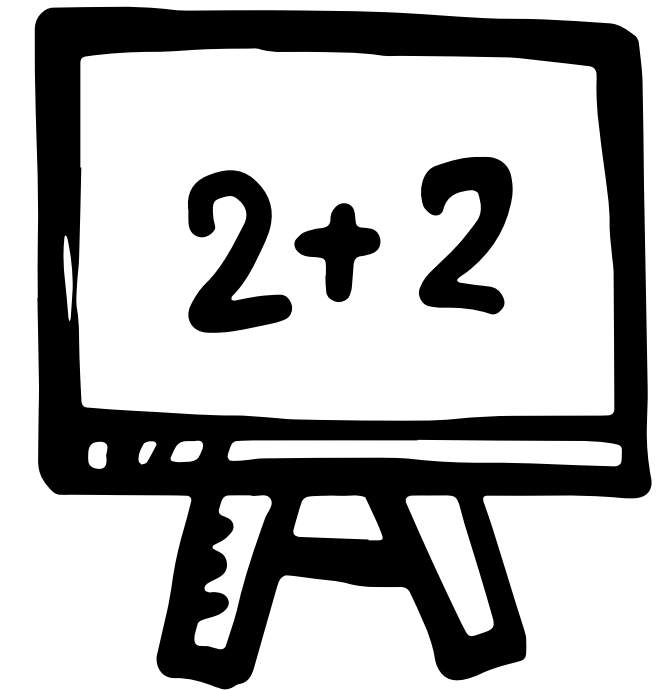
What now?



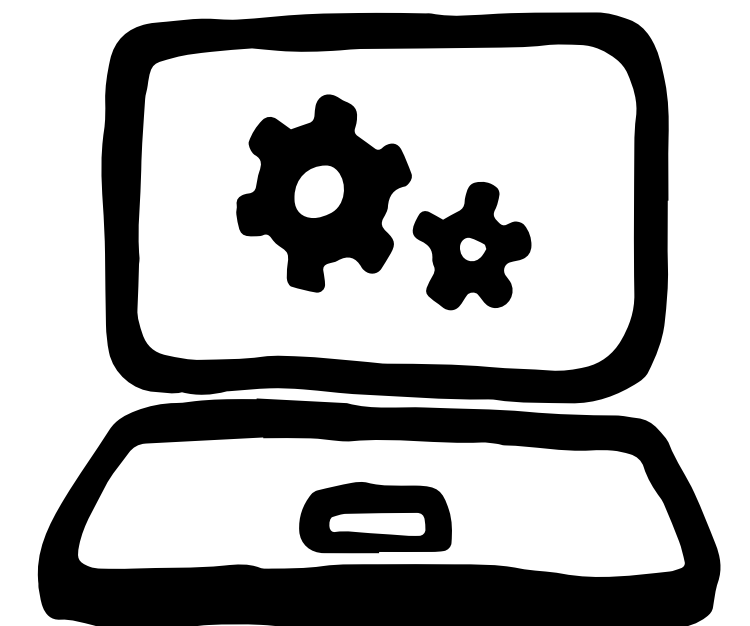
*You can't scale...**automate***



*User's \neq problem...**educate***



*Not collaborating...**participate***



The goal of cybersecurity

Make sure that systems
work as intended
...and only as intended

Thank you

Read more at

<https://markn.ca>

Reach me online

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