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harrisX
A STAGWELL COMPANY

TEACH, TRAIN, AND TRUST:

A STUDY OF DATA PRACTICES AMONG DEVELOPERS

June 2021

TL;DR: A survey of 1,200 North American developers found that they care about privacy, want to know more, and will take courses / training that improve their skills and help their career. The data also clearly demonstrates that there is a data management knowledge gap, a privacy deficit, and developers aren't being supported by their companies to prioritize privacy. Data Protocol is well positioned to address these deficiencies by teaching, training, and ultimately trusting developers to do what they know to be right.
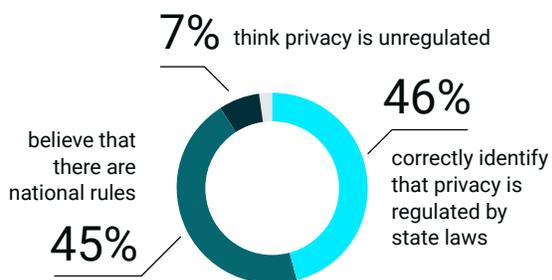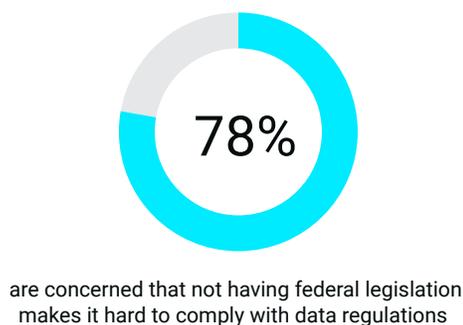
THERE IS A PRIVACY GAP AND A KNOWLEDGE DEFICIT

The state of regulations is not well understood. Having clear, well understood rules would clarify the responsibility of developers, and support them in producing better data privacy in their applications and platforms. While the developer community is unlikely to support regulation that is overly onerous, having clear regulations would likely be welcomed. Strategically, this is an opportunity for larger companies in that space to push for regulations that will protect privacy but also protect their place in the industry.

- **Only 46% of developers** correctly identify that privacy is currently regulated by a patchwork of state laws. 45% believe that there are already uniform national rules. 7% think privacy is unregulated.

- **78% of developers** are concerned that not having federal legislation makes it hard to comply with a patchwork of state and international data regulations such as CCPA and Europe's General Data Protection Regulation (GDPR).

- **This patchwork of rules is hard to follow.** Probing nine provisions from the California Consumer Privacy Act (CCPA), no more than 62% of developers had implemented any one of them.

- **Employers are hiring senior executives** to manage data privacy but this is not making its way down to the developer level, including 96% of developers that report their employer has someone in the C-suite responsible for privacy (i.e., Chief Privacy Officer, Chief Trust Officer, Chief Security Officer).

What developers think about privacy regulation

7% think privacy is unregulated

46%

believe that there are national rules

45%

correctly identify that privacy is regulated by state laws

Concern about lack of federal legislation

78%

are concerned that not having federal legislation makes it hard to comply with data regulations

Following the patchwork of rules

62%

developers who have implemented any of nine provisions from the California Consumer Privacy Act (CCPA)
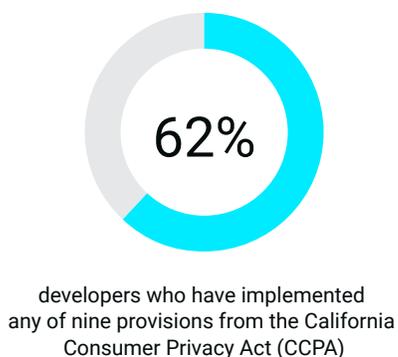
Who manages data privacy

96%

developers who report their employer has someone else in the C-suite responsible for privacy
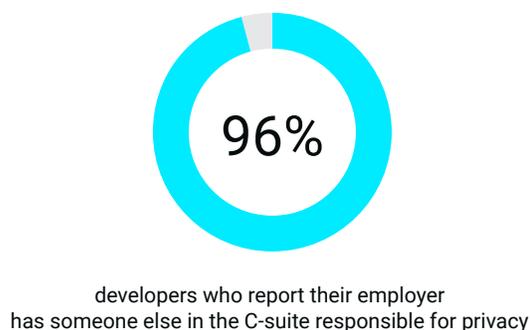
DEVELOPERS CARE ABOUT PRIVACY

A large majority of developers are conscientious of privacy, but not to the rate that would be needed to prevent another huge problem. The gaps in attitudes towards privacy are a mix of professional pressures, a lack of knowledge, and possible cynicism about end users.

- **72% of respondents** agree that "privacy is usually an afterthought when building products," which is frequently driven by external pressures prioritized elsewhere.

- **19% of developers** often feel pressured to implement decisions that compromise their view of privacy; **54% sometimes feel this pressure**. The most common reasons for doing things that compromise views are prioritizing metrics like engagement and maximizing profitability.

- **Only 35% of developers** say they collect only the data they need for the task at hand, while 65% say that they gather all available data for future contingencies.

Importance of privacy

72%
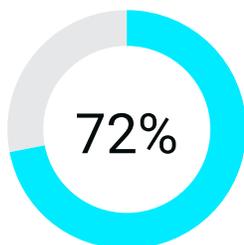
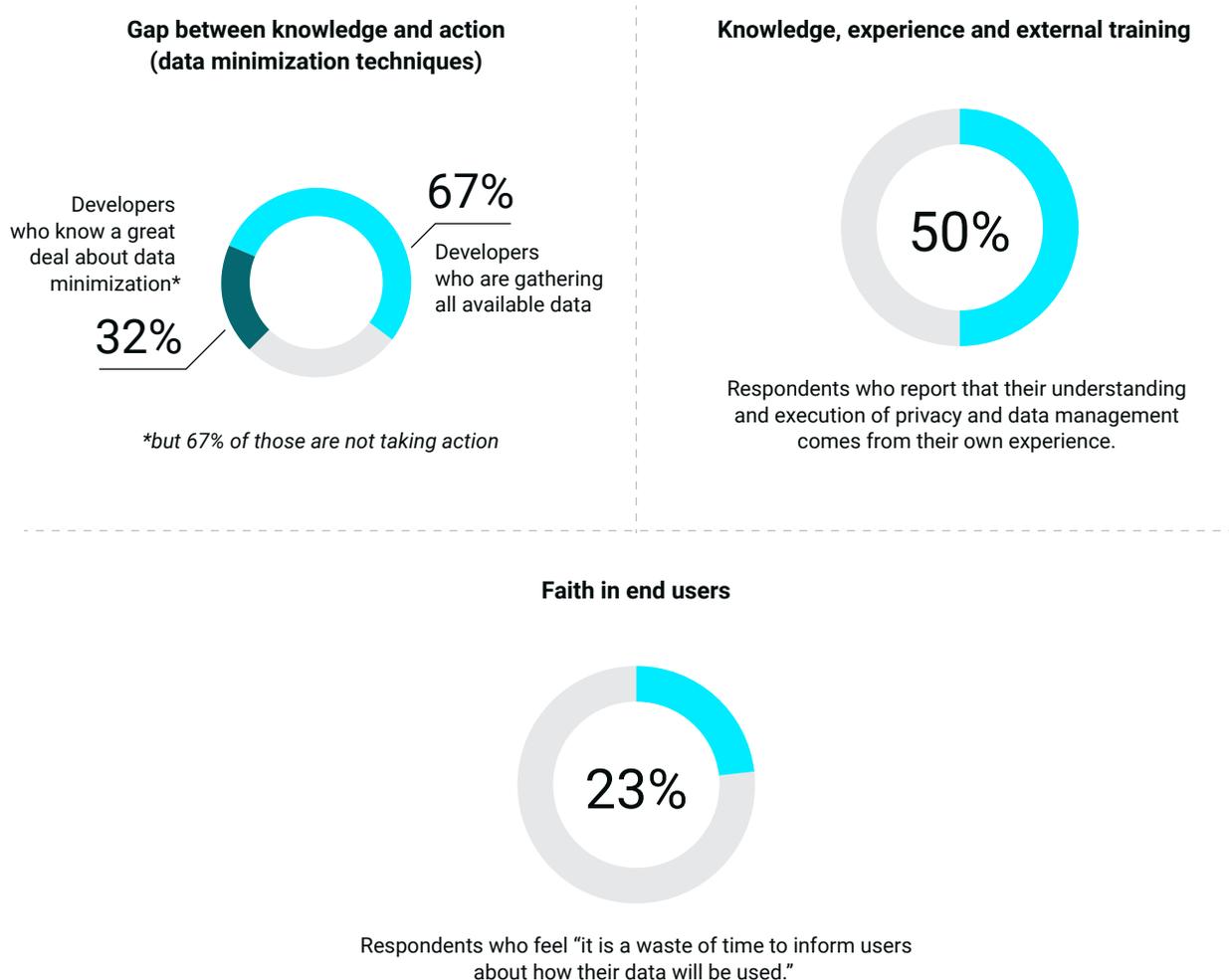Respondents who agree that "privacy is usually an afterthought when building products"

Pressure to implement decisions that compromise one's view of privacy

Developers who **often** feel pressured

19%

54%

Developers who **sometimes** feel pressured

Data collection

Developers who collect only the data they need for the task at hand

35%

65%

Developers who gather all available data for future contingencies

- **There is a gap between knowledge and action. 32% of developers** say they know a great deal about data minimization techniques, but 67% of those who know this are not taking action. 67% are gathering all available data.

- **Developers need external training in privacy. 50% of respondents** report that their understanding and execution of privacy and data management comes from their own experience. They are learning, in the workplace, to prioritize these metrics over privacy which they can be expected to carry with them to future projects and jobs.

- **Developers lack faith in end users. 23% of respondents** feel "it is a waste of time to inform users about how their data will be used."

**Gap between knowledge and action
(data minimization techniques)**

Developers who know a great deal about data minimization*

32%

67%

Developers who are gathering all available data

but 67% of those are not taking action

Knowledge, experience and external training

50%

Respondents who report that their understanding and execution of privacy and data management comes from their own experience.

Faith in end users

23%

Respondents who feel "it is a waste of time to inform users about how their data will be used."

DEVELOPERS WANT TO LEARN

Software development is a fast moving industry with a lot of pressure to keep up with technology and developers are, overall, acculturated to continue to learn both to keep up and to help find future job opportunities.

- **Developers take classes. Up to 37% report having taken a class** with some of the larger online providers like LinkedIn Learning and Data Camp. **Only 3% report having never done any further training** on relevant professional skills
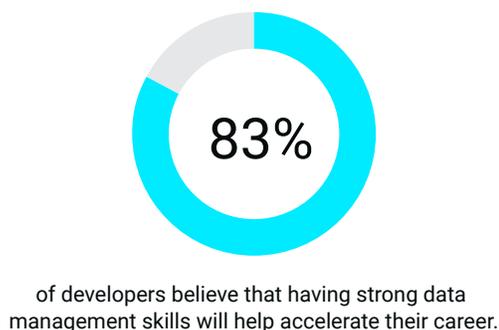
Data management and privacy is an area where developers see both a gap in their skills and opportunity to accelerate their career.

- **83% of developers** believe that having strong data management skills will help accelerate their career.

- **69%** say that they care about data privacy but do not feel adequately prepared to make decisions.

- **71%** say they do not know how to be proactive in protecting data privacy.

Professional training

37%

Developers who report taking a class with an online provider

3%

Developers who report no further training
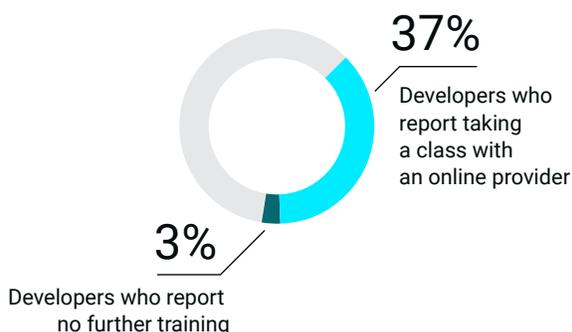
Belief in strong data management skills

83%

of developers believe that having strong data management skills will help accelerate their career.

Data privacy and decision making

69%

developers who say that they care about data privacy but do not feel adequately prepared to make decisions.

Proactivity in data privacy protection

71%

developers who say they do not know how to be proactive in protecting data privacy.
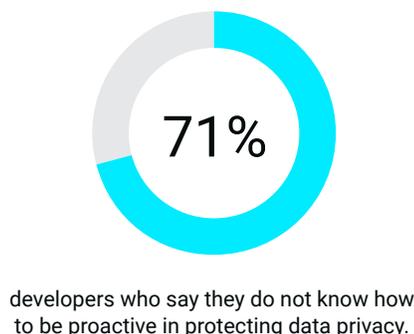
There is a clear market for instruction on data privacy, which is not currently being addressed. This presents a big opportunity for Data Protocol, especially in partnership with employers.

- **55% of developers** wish they had more training on data privacy.

  △ Of those who wished they had more training, **75%** would be willing to pay for additional training.

- **87% of developers** who are employed full time by mature companies that are not in the start-up phase say that their employer has a program to pay for additional training.

Desire of training in data privacy

55%
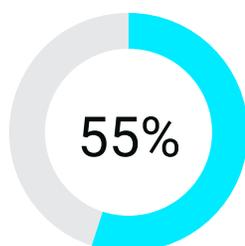
developers who wish they had more training on data privacy.

(Of those , 75% would be willing to pay for additional training)

**Programs for additional training in mature companies**

87%
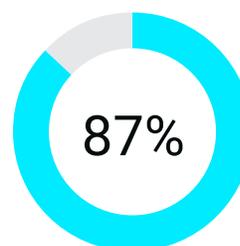
developers who are employed full time by mature companies saying that their employer has a program to pay for additional training.

SAMPLE COMPOSITION

These data come from a survey of **1210 software developers** and managers based in the United States who work for employers or clients in the United States. **70%** consider themselves to be active developers. **17%** lead teams of coders. **5%** were previously developers but no longer write code and **5%** work with code but do not consider themselves to be developers. **75%** of the sample are employed full time and **24%** work as freelancers or independent contractors.

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IMPLICATIONS

1-in-5 is a big number when we're talking about security. One out of five people feeling less-than-good about their company's data practices speaks to **doubts across the industry** about whether current standards are sufficient.
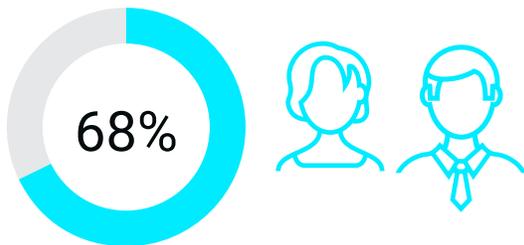
When asked how important the **leadership** in their companies think **protecting consumer data** is, **68% of developers and their peers respond very or criticallly important**.

When asked how important **developers and their peers think protecting consumer data is, 69% of respondents say very or criticallly important**. Protecting consumer data - in the abstract - is of high importance to both leadership and developers.
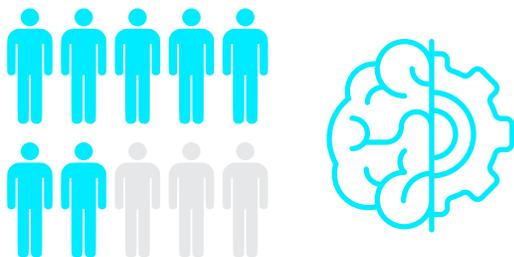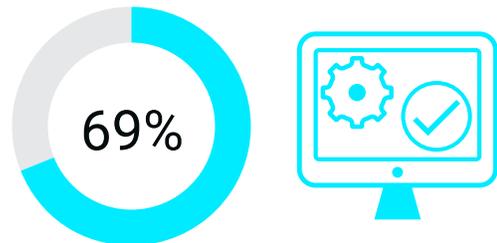
Once we put this responsibility in the context of building products, **the responses flip. Over 7-in-10 developers and their peers agree privacy is an afterthought when building products**. There is a disconnect between reported values and the nuts & bolts of building products.

The privacy gap: 1-in-5 developers and their peers grade their company's data practices as less than good.
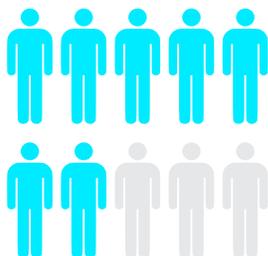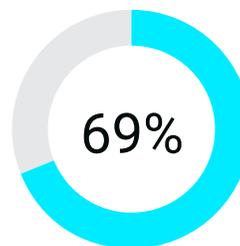
68%
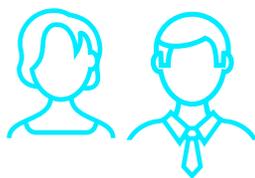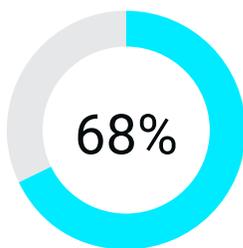
A majority of those in leadership roles place importance on protecting consumer data. Startups and Consumer apps lead the industry, whereas Data-driven and Ad-driven businesses lag behind.

A majority of developers and their peers place importance on protecting consumer data. Startups lead the industry, whereas Ad-driven business models lag behind.

69%

Over 7-in-10 developers and their peers agree privacy is an afterthought when building products. This attitude is even more pervasive (83%) for those working in Startups.

Those working in **Startups** are more likely to see **privacy as an afterthought** than those working in mature companies or as freelancers.