Exercise 01:

Introduction

Privacy-Preservation Technologies in Information Systems

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WS 21/22

Task 1:

Data Collection

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Data Collection

a) What made Amazon the worldwide most successful online market?

Amazon uses collected user data to provide powerful item recommendations, which increase the users' potential amount of spent money.

b) How many percent of recommended items are sold in average?

In average, 30% of recommended items, which were clicked on, are bought by amazons' users.

c) Does the data collection bring any advantage for the customer?

Yes, because the data is used to personalize the experience of each user on Amazon, such that items and advertisements which are more interesting for the customer are highlighted.

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Data Collection

d) What does "Big Data" mean?

Big Data refers to huge data sets which can be used to build personal profiles of people.

e) What are the possible privacy risks of Big Data?

The created personal profiles can be used to manipulate, disadvantage and discriminate users.

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Task 2:

Cookies

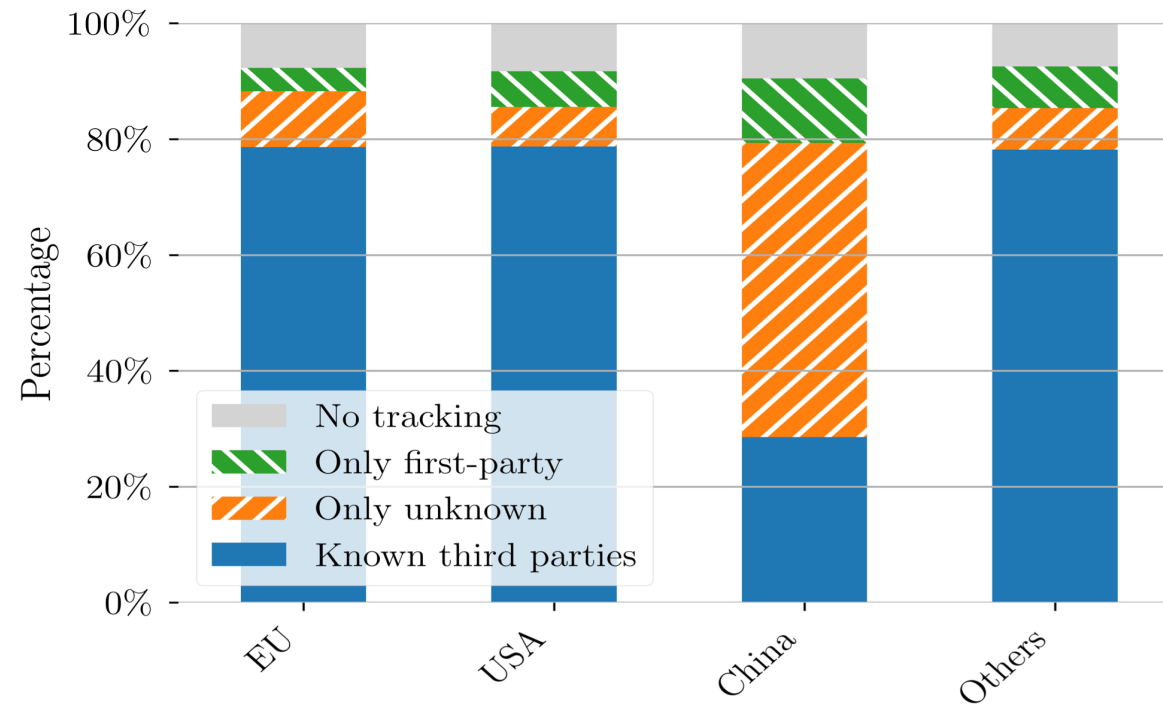Privacy-Preservation Technologies in Information Systems

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Cookies 1

What are the results of this paper?

(92%) Most web pages track users even if they do not give their consent.
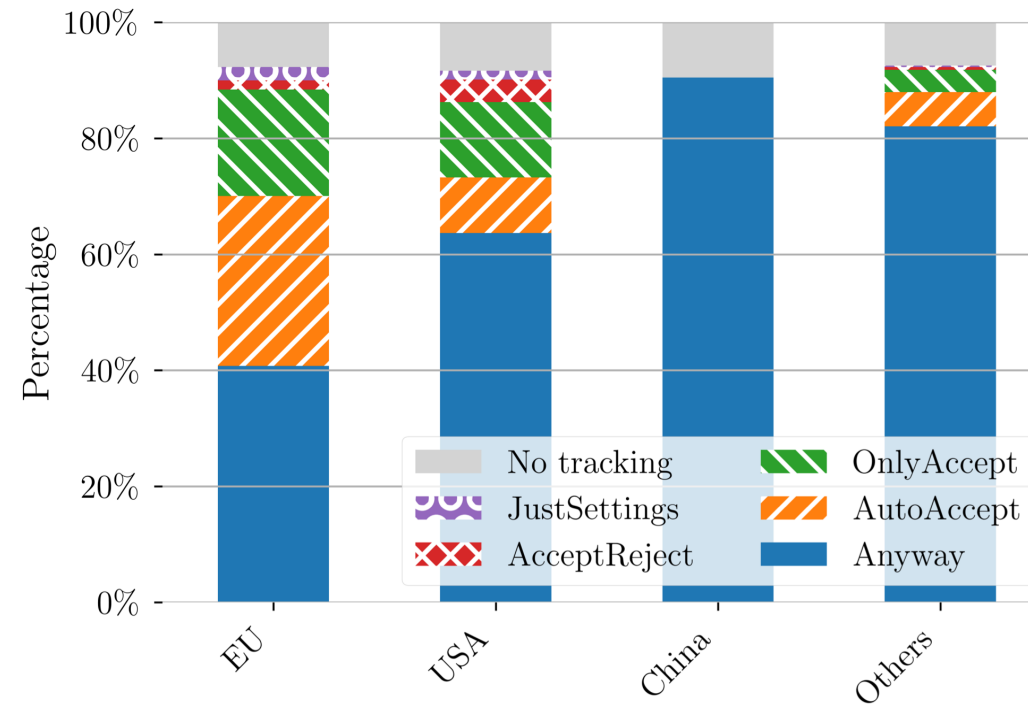
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Cookies 2

What are the results of this paper?

(4%) Few websites provide an easy way to opt out from tracking

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Cookies 3

What are the results of this paper?

(2.5%) Rejecting tracking is often ineffective

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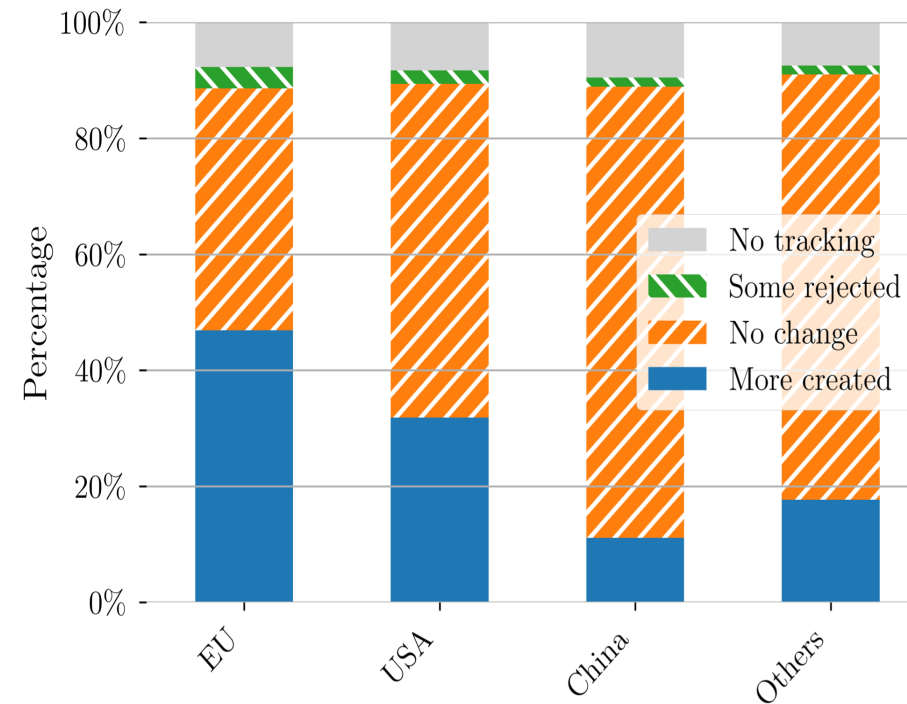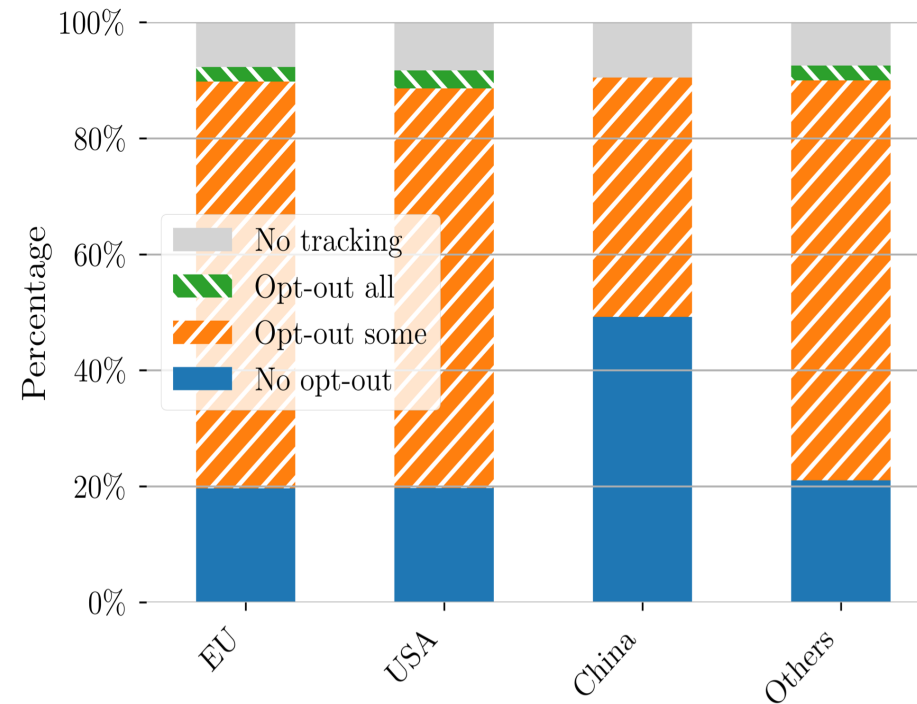
Cookies 4

What are the results of this paper?

(<3%) Opting out through external services does not prevent all tracking

Graph sources in this task: https://dl.acm.org/doi/10.1145/3321705.3329806
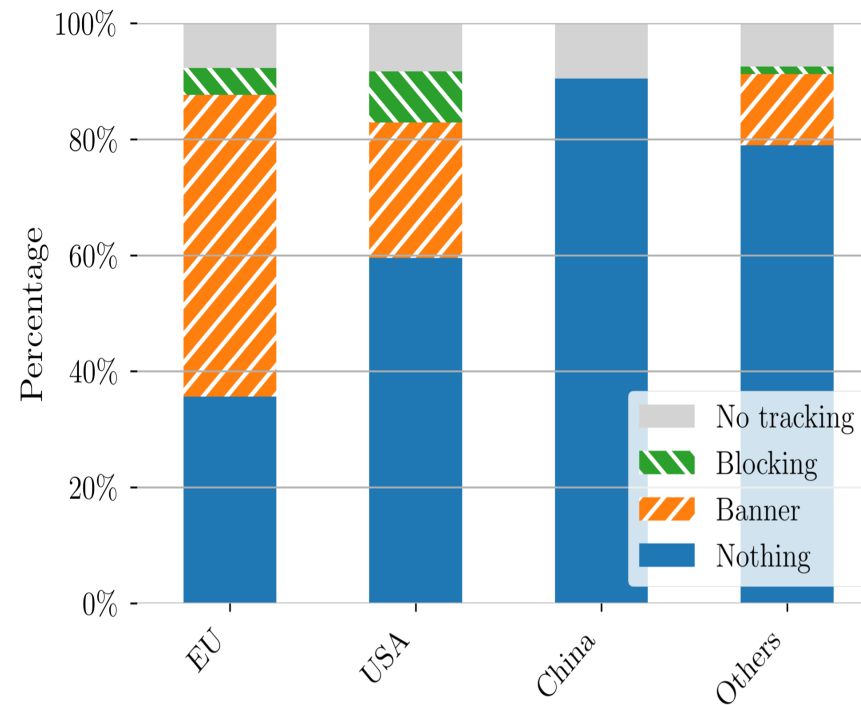
Cookies 5

What are the results of this paper?

China-based websites do not seem to have GDPR-induced modifications, but they are still impacted by it.
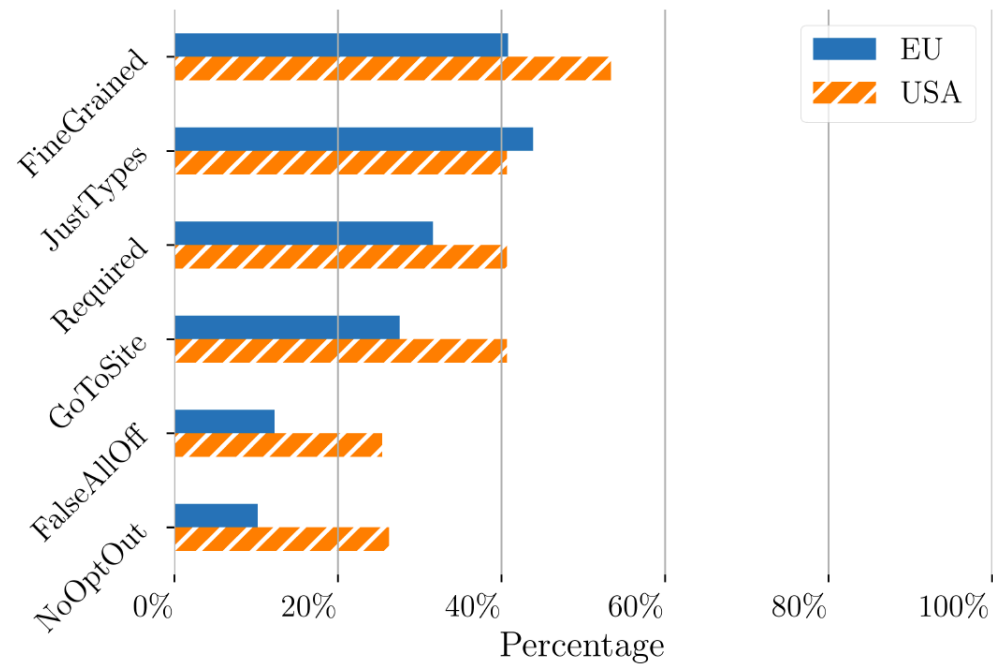

Graph sources in this task: https://dl.acm.org/doi/10.1145/3321705.3329806

Cookies 6

What are the results of this paper?

Cookie settings in the USA make opting out more difficult

on	Tracking	Long-lasting ids	3rd party opt-out link	Browser instructions	Cookie settings	Third-party notice
	92.3%	81.7%	32.0%	19.6%	17.7%	3.8%
	91.7%	80.1%	23.6%	6.6%	11.5%	4.7%
a	90.5%	82.5%	-	-	-	-
rs	92.6%	79.5%	8.5%	3.3%	3.3%	0.5%

Graph sources in this task: https://dl.acm.org/doi/10.1145/3321705.3329806

Cookies 7

What are the results of this paper?

- (16%) Few EU websites have cookie settings

- 9 websites out of 10 create long-lasting identifiers

- (3%) Third-party cookie notices are not very common

- US-based websites look almost as impacted by the GDPR as the EU websites do

- Improvement of privacy notice readability over the last decade (FRES and FKRL measures)

- (84%) Most websites do not mention GDPR where 58% of those have no privacy cookie banners, however both percentages are not mandatory but might be an indicator of how well the privacy policy is formulated

Task 3:

Privacy questionnaire

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Privacy questionnaire

Thank you for your help!

We will analyse the received data and present you the results in the future.

See you next week ☺