

DESIGN OF OUR ONLINE WORLD

CCSQ WORLD USABILITY DAY 2021

In What We Trust?!

While keep everything private may not be enough

Cupid Chan





Have you heard about... |



CCSQ WORLD USABILITY DAY



Cooking Program? Game Show?

But few weeks later...

Streaming Netflix Estimates 'Squid Game' Will Be Worth Almost \$900 Million

More than 130 million people have watched the Korean show

By [Lucas Shaw](#) +Follow
October 16, 2021, 9:36 PM EDT



Netflix Estimates 'Squid Game' to Be Worth Almost \$900 Million

Exclusive: Squid Game is Netflix's 'bi

By [Frank Pallotta](#) and [Liz Kang](#), CNN Business
Updated 4:41 AM ET, Wed October 13, 2021



'Squid Game' Dethroned In Netflix's Top 10 List By A New Show

Paul Tassi Senior Contributor @Games
News and opinion about video games, television, movies and the internet.

Listen to article 4 minutes



Squid Game NETFLIX
Trump SPAC slumps after wild week of trading

Recommended by Outbrain

STREAM EVERY LAUGH TRACK FOR JUST \$9⁹⁹/MONTH
HBO MAX SIGN UP NOW

FULL HOUSE THE NANNY FAMILY MATTERS

Kid's game
for Adult

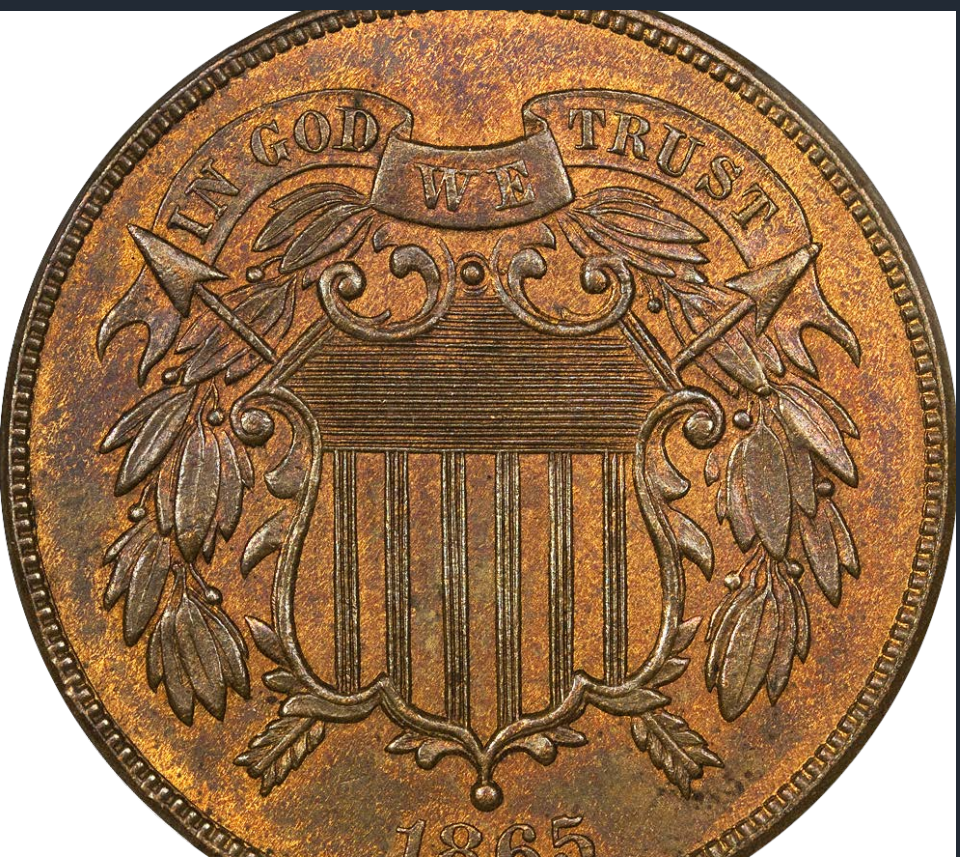
Drama
about the
struggle of
Conscience
and Desire



Winner's Prize

45.6 Billion Won = 39 Million USD

One of the answer:
“IN GOD WE TRUST”



- Official motto of the United States adopted by the U.S. Congress in 1956,
- Printed on paper currency since 1957
- First appeared on the two-cent piece in 1864

Few key questions throughout the show

Shall I **Trust** my team and share the secret so that we can win together?
What if they take my advantage and turn that against me?

Is it more **Ethical** to give money back to losers' family, or since I am the winner so I should have all the prizes?



Should I weight my **Integrity** higher than just to win a game?

And, at a different level, aren't we asking similar questions everyday?

Shall I **Trust** my coworkers and share that trick so that we can finish this project sooner? What if they take it and use that against me?

Is it more **Ethical** to give data back to the patient as it's their health history? Or, since I am the one paying the system to capture the information, I should keep it to myself?

Should I weight my **Integrity** higher than my own family financial situation?



Degeneration of Trust



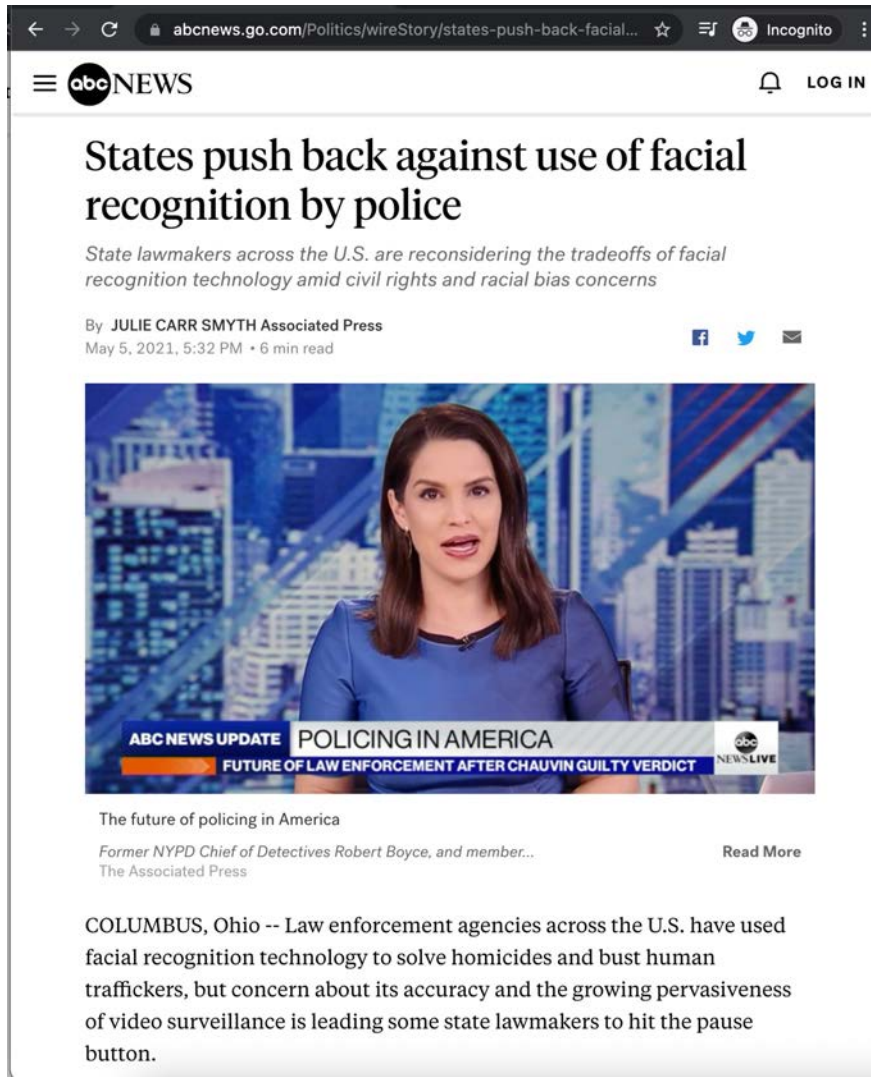
Data is fire, fueled by AI

In Nothing We Trust

- Maximize Privacy
- Keep data only to myself
- Never share
- Never leak



Facial Recognition




abcnews.go.com/Politics/wireStory/states-push-back-facial... Incognito

abc NEWS LOG IN

States push back against use of facial recognition by police

State lawmakers across the U.S. are reconsidering the tradeoffs of facial recognition technology amid civil rights and racial bias concerns

By JULIE CARR SMYTH Associated Press
May 5, 2021, 5:32 PM • 6 min read



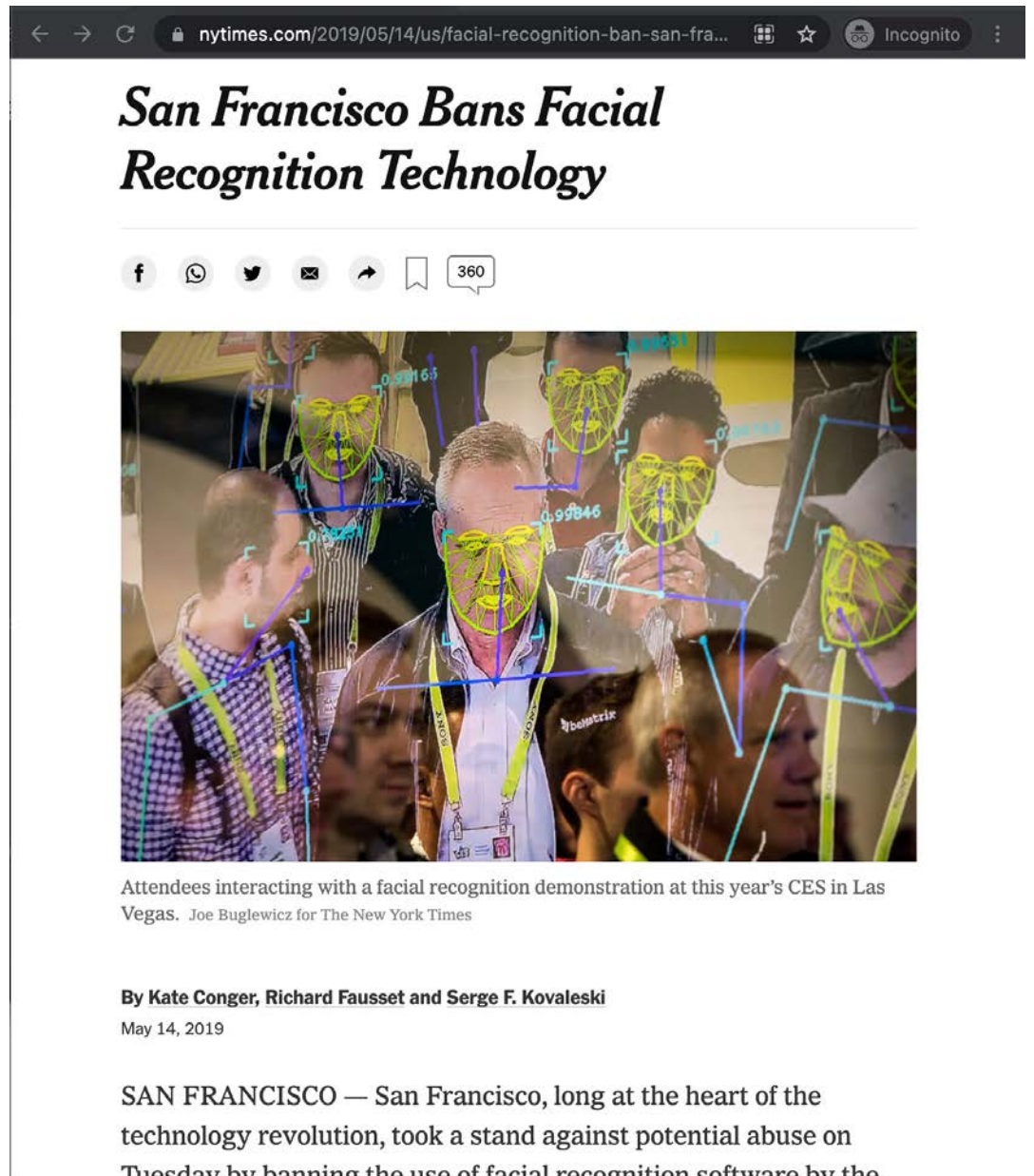
The future of policing in America

Former NYPD Chief of Detectives Robert Boyce, and member...
The Associated Press [Read More](#)

COLUMBUS, Ohio -- Law enforcement agencies across the U.S. have used facial recognition technology to solve homicides and bust human traffickers, but concern about its accuracy and the growing pervasiveness of video surveillance is leading some state lawmakers to hit the pause button.

<https://abcnews.go.com/Politics/wireStory/states-push-back-facial-recognition-police-77510175>


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nytimes.com/2019/05/14/us/facial-recognition-ban-san-fra... Incognito

San Francisco Bans Facial Recognition Technology

360



Attendees interacting with a facial recognition demonstration at this year's CES in Las Vegas. Joe Buglewicz for The New York Times

By Kate Conger, Richard Fausset and Serge F. Kovalski
May 14, 2019

SAN FRANCISCO — San Francisco, long at the heart of the technology revolution, took a stand against potential abuse on Tuesday by banning the use of facial recognition software by the

<https://www.nytimes.com/2019/05/14/us/facial-recognition-ban-san-francisco.html>



Geo-Tracking

Google Street View



Even President Obama
says so...



In case of some of you get
confused...

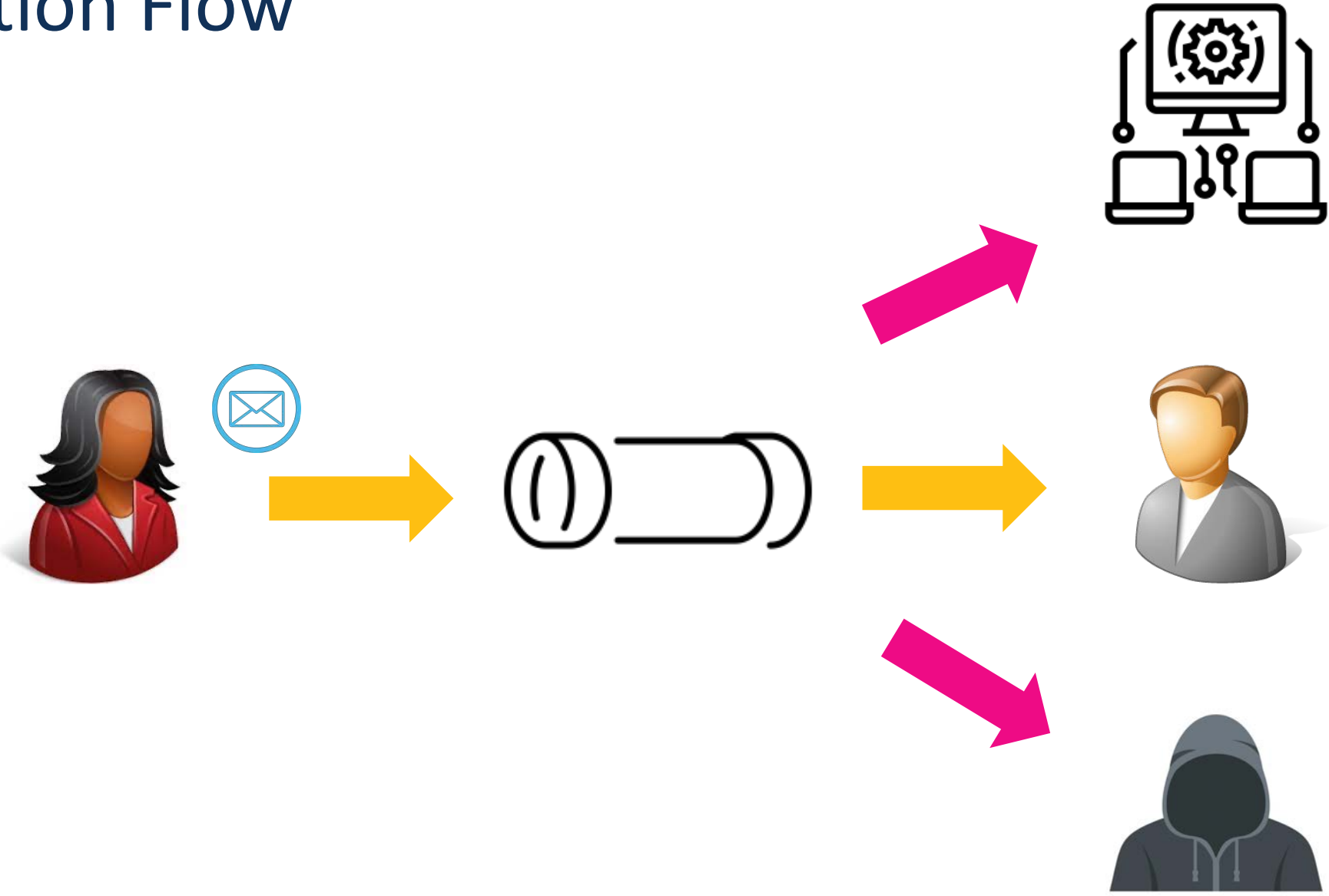
That video was generated by Deepfake



What's in common?
Privacy is not for
the nature of Data

NOT a Secret or hiding something, but
how the information flows

Information Flow





But, Privacy implies another problem

- Information needed for making an educated decision
- Data exists but can never be accessed
- Resolved by Transparency

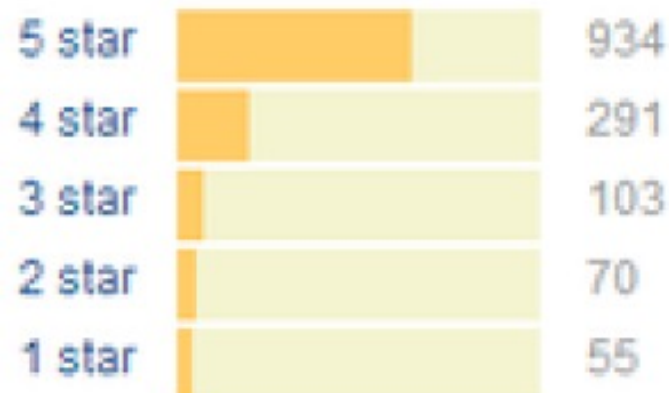


No Transparency for verification:
Money laundering

Customer Reviews

★★★★☆ (1,453)

4.4 out of 5 stars



[See all 1,453 customer reviews](#)

“ This mat does a good job of keeping the cat litter from tracking all over th

amie | 547 reviewers made a similar statement

“ Easy to clean. ”

ippi58 | 314 reviewers made a similar statement

“ Litter mat looks just as pictured - the gray is a nice neutral color. ”

Erica | 231 reviewers made a similar statement

Most Helpful Customer Reviews

184



Information needed for making an educated decision exist,
but can never be accessed

By [Bella*Punk](#)

Color Name: [Beige Twist](#) | [Amazon Verified Purchase](#)

Remove accountability for potential Fraud





Remember the big debate last year about Election Fraud?



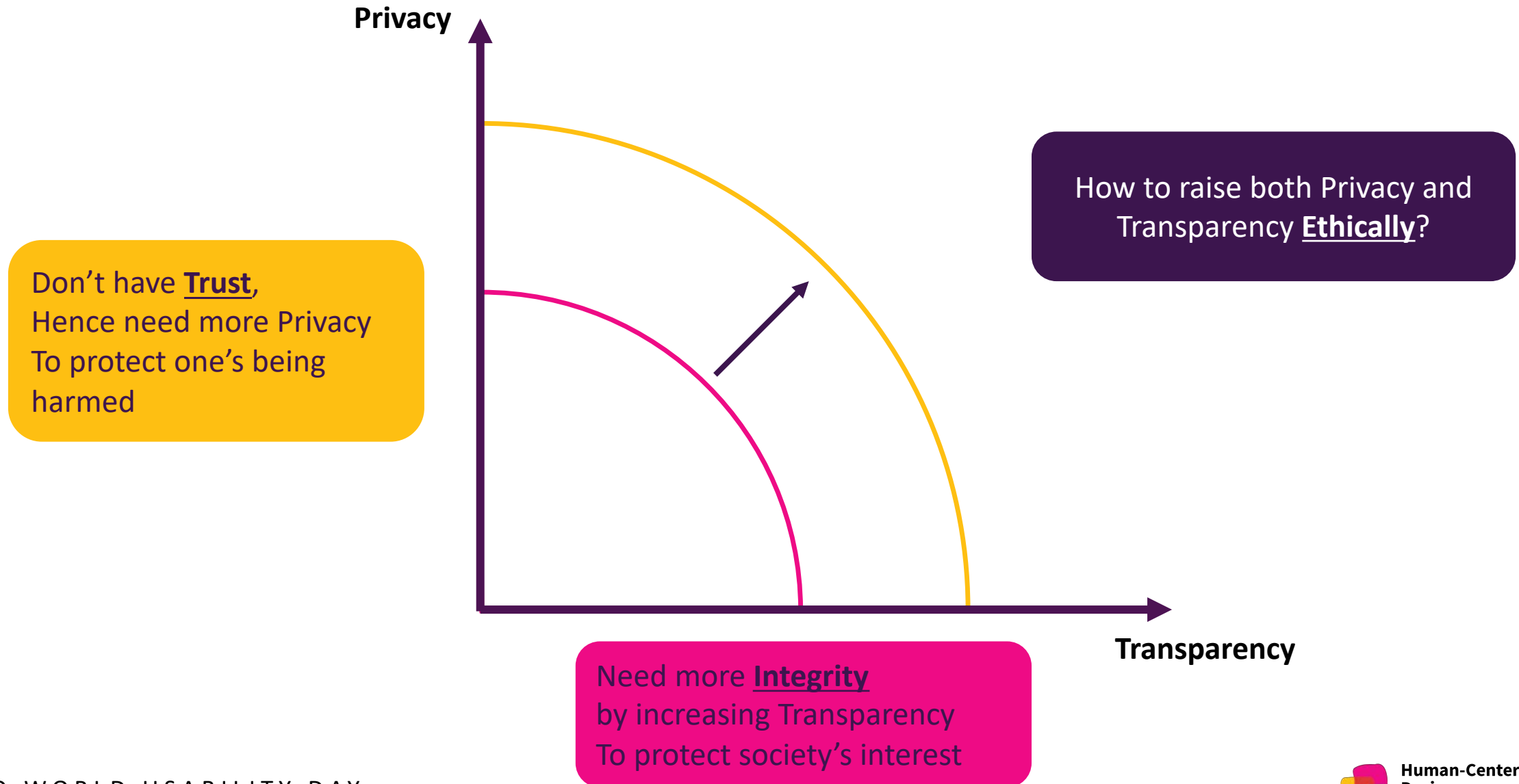
Many great researches rely on data – COVID Vaccine



In Everything We Trust

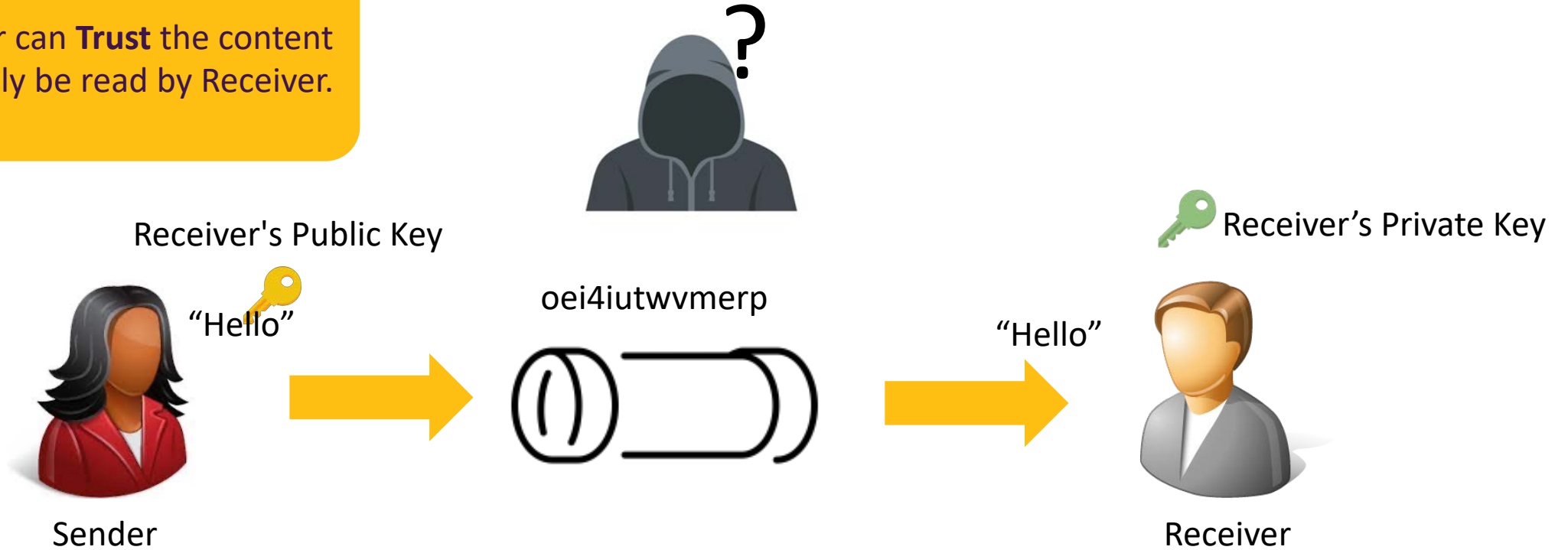
Because we need Transparency for the
benefit of our society

Pareto Trade off between Privacy and Transparency

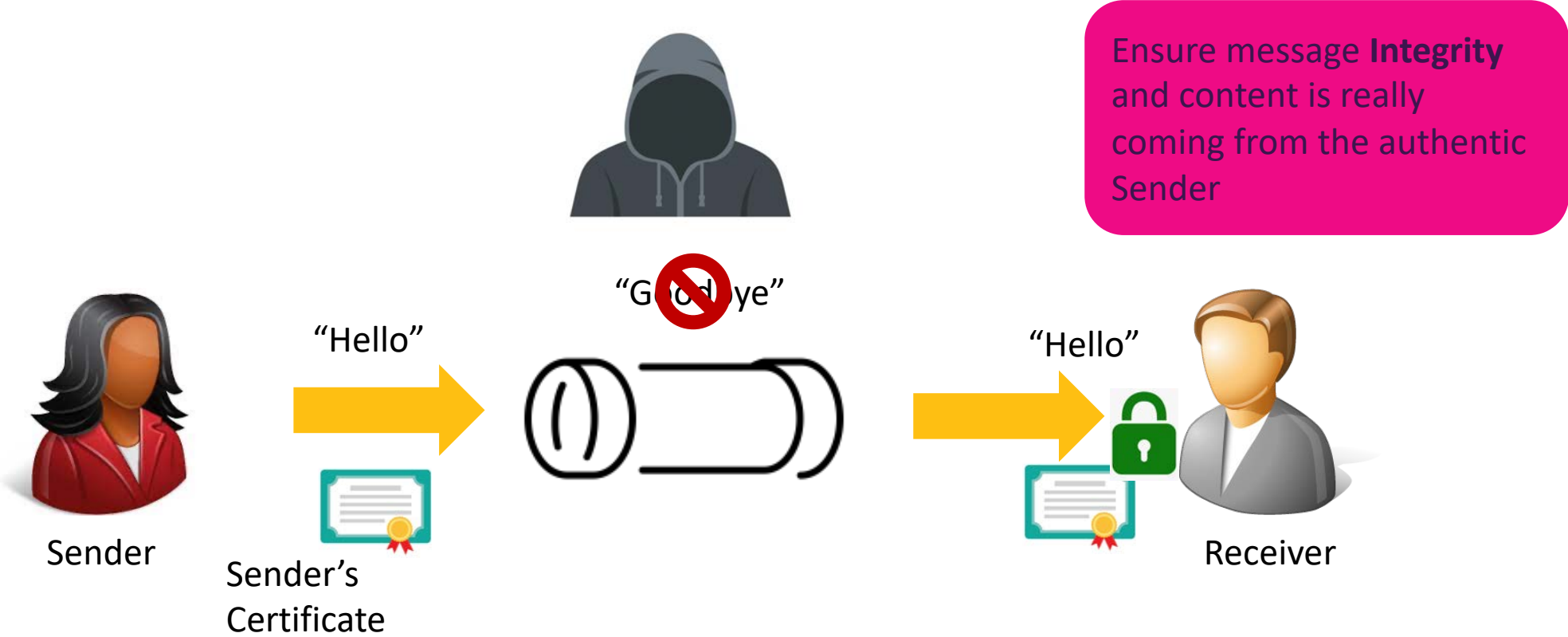


Public/Private Key Cryptography

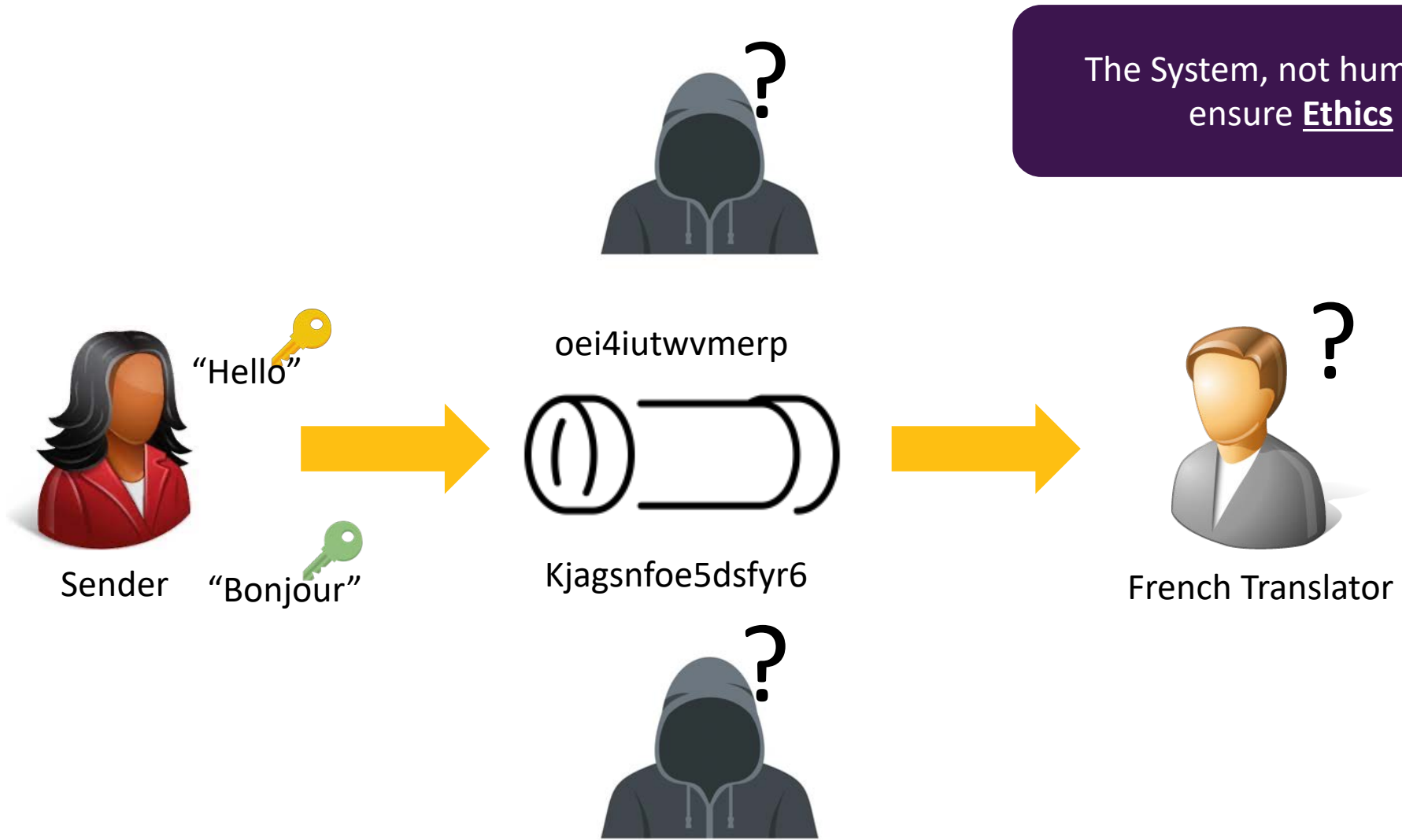
Sender can **Trust** the content
can only be read by Receiver.



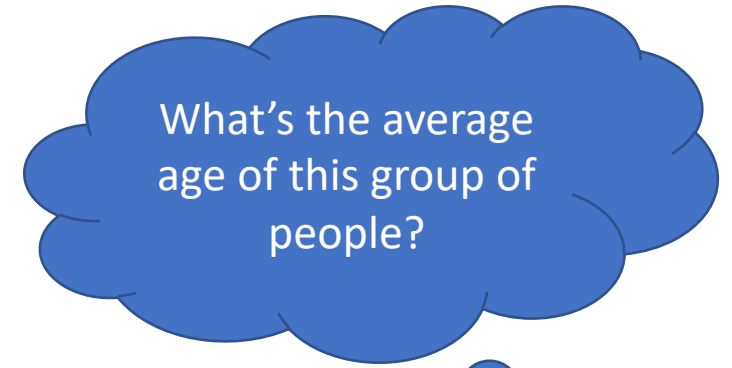
Cryptographic signature



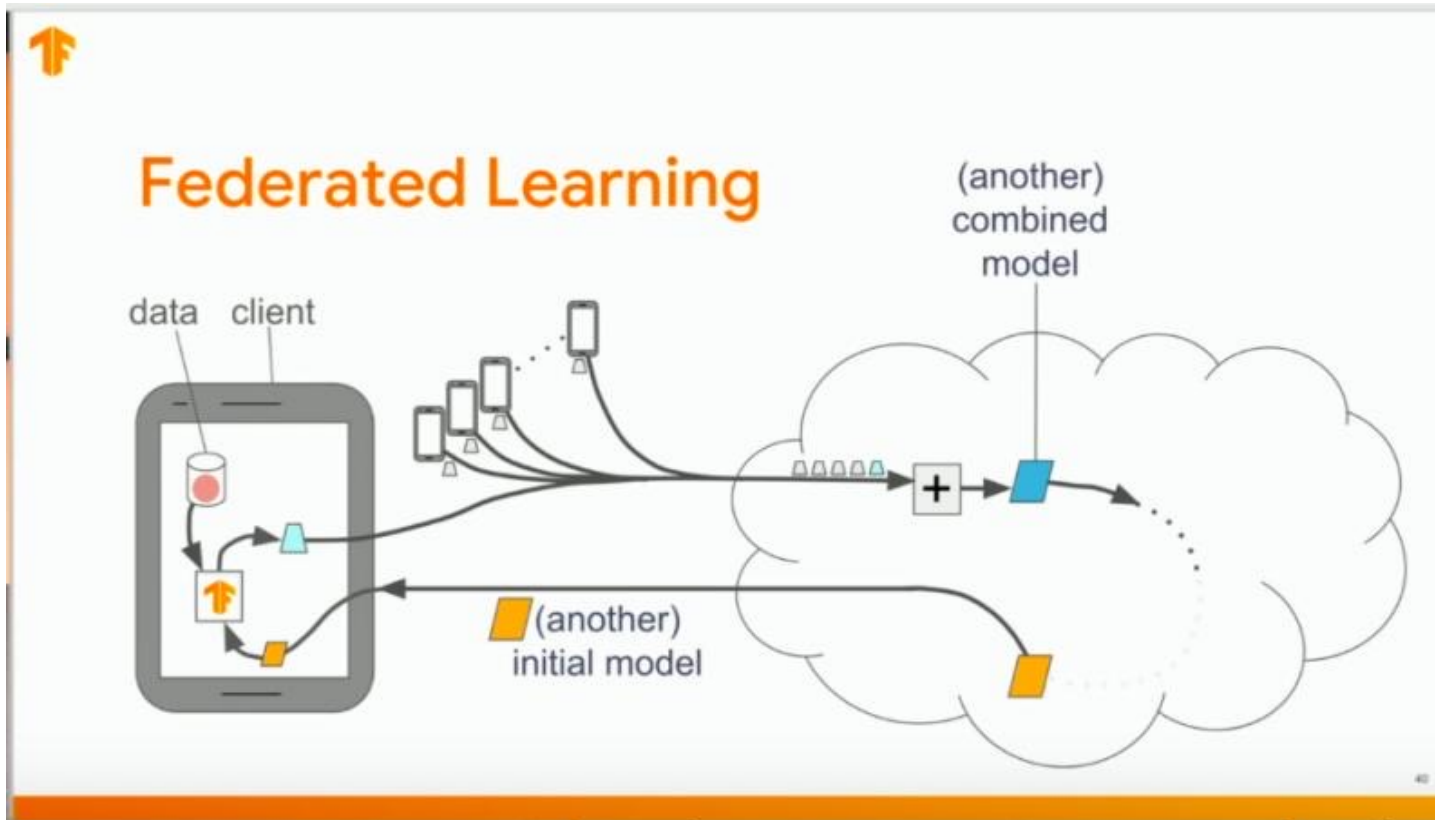
Homomorphic Encryption



Differential Privacy



Add a random number
between -100 to 100
before sending back the
response



Federated Learning

- Combine all those technologies we talked above, PLUS one more
- Machine Learning and AI

<https://www.kdnuggets.com/2020/04/federated-learning-introduction.html>

Conclusion: In What We Trust?!

- In Something We Trust!
- That Something is based on the context on the information flow, not what the data is
- In order to increase **Trust, Ethics and Integrity**, we need to increase Both Privacy and Transparency.
- Technology can help
- Pistevo – Greek word meaning to Trust and Believe in
- You shouldn't trust even you see it.



CEO & Cofounder, Pistevo Decision



Chair, BI & AI Committee Linux Foundation



Senior Fellow & Adjunct Professor,
University of Maryland College Park



<https://www.linkedin.com/in/cupidchan>



@cupidckchan



<https://www.youtube.com/channel/UCk-AIleYRy0vuTs4aPck0FA>

