

Digital diplomacy and Artificial Intelligence

Prepared for the
Strategic Mastery Series: Elevating Delegates through Workshops in Artificial Intelligence and Diplomacy
13 December 2023
UNITAR & Permanent Mission of the Principality Monaco to the United Nations
Prof. Rafael Mesquita



About me

- **Rafael Mesquita**
- **Affiliation**
 - Assistant professor of International Relations at the **Federal University of Pernambuco**, Brazil
 - Associate of the **German Institute of Global and Area Studies (GIGA)**
 - Incoming Visiting Scholar at **SWIIPS, Columbia University**
- **Recent work**
 - Pedro Seabra, Rafael Mesquita, “Beyond Roll-Call Voting: Sponsorship Dynamics at the UN General Assembly”, **International Studies Quarterly**, Volume 66, Issue 2, June 2022, sqac008, <https://doi.org/10.1093/isq/sqac008>
- ufpe.academia.edu/RafaelMesquita

DATA DIPLOMACY

Making International Diplomacy More Accessible
and Equitable Through Data Science

www.datadiplomacyproject.com



Course outline

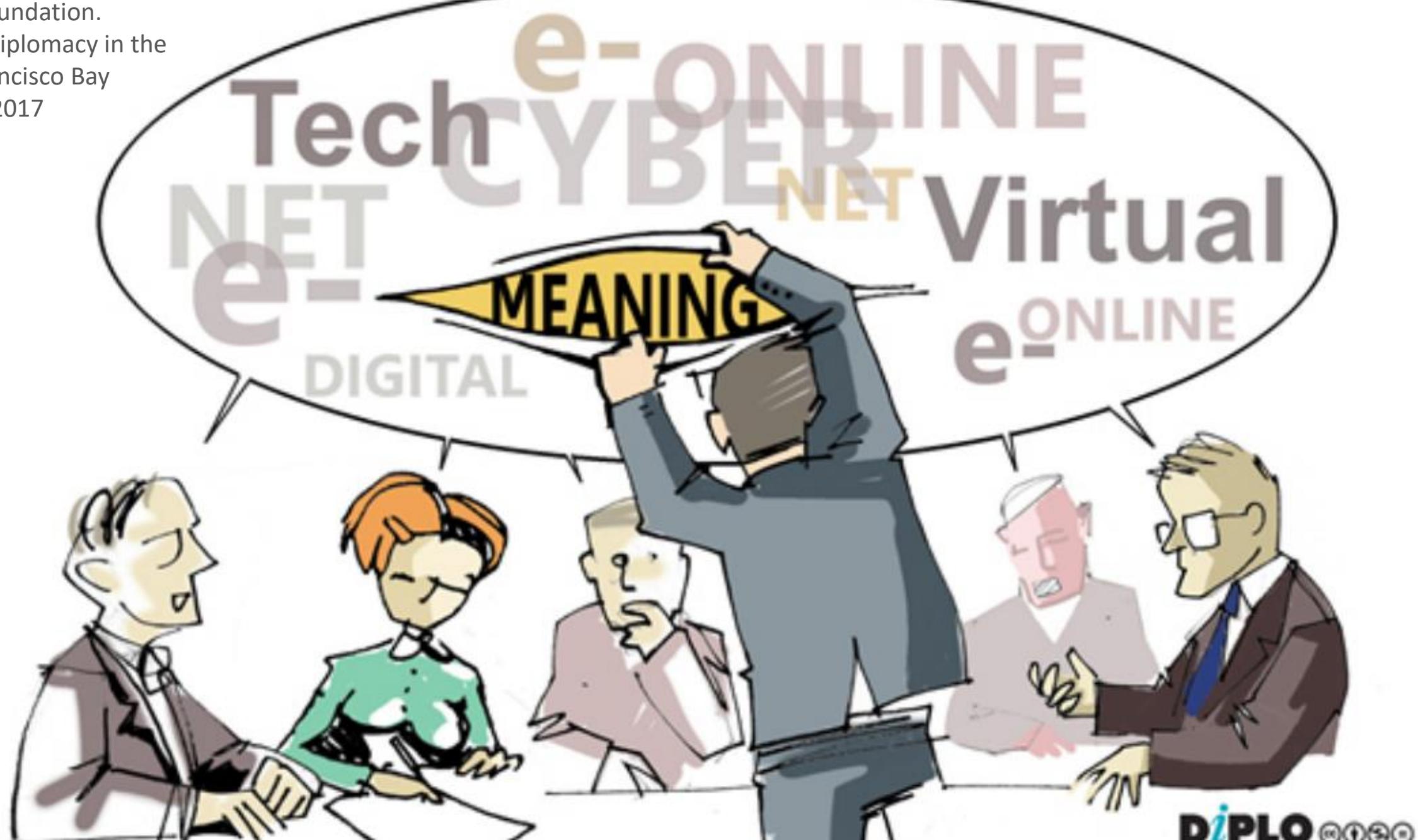
1 Digital diplomacy

- Clarifying concepts: cyber, digital, tech diplomacy
- Cyber and tech diplomacy
- Digital diplomacy
 - *Digital diplomacy as public diplomacy*
 - *Digital diplomacy as consular service*
- A framework for making sense of the digitalization of diplomacy

2 Artificial Intelligence

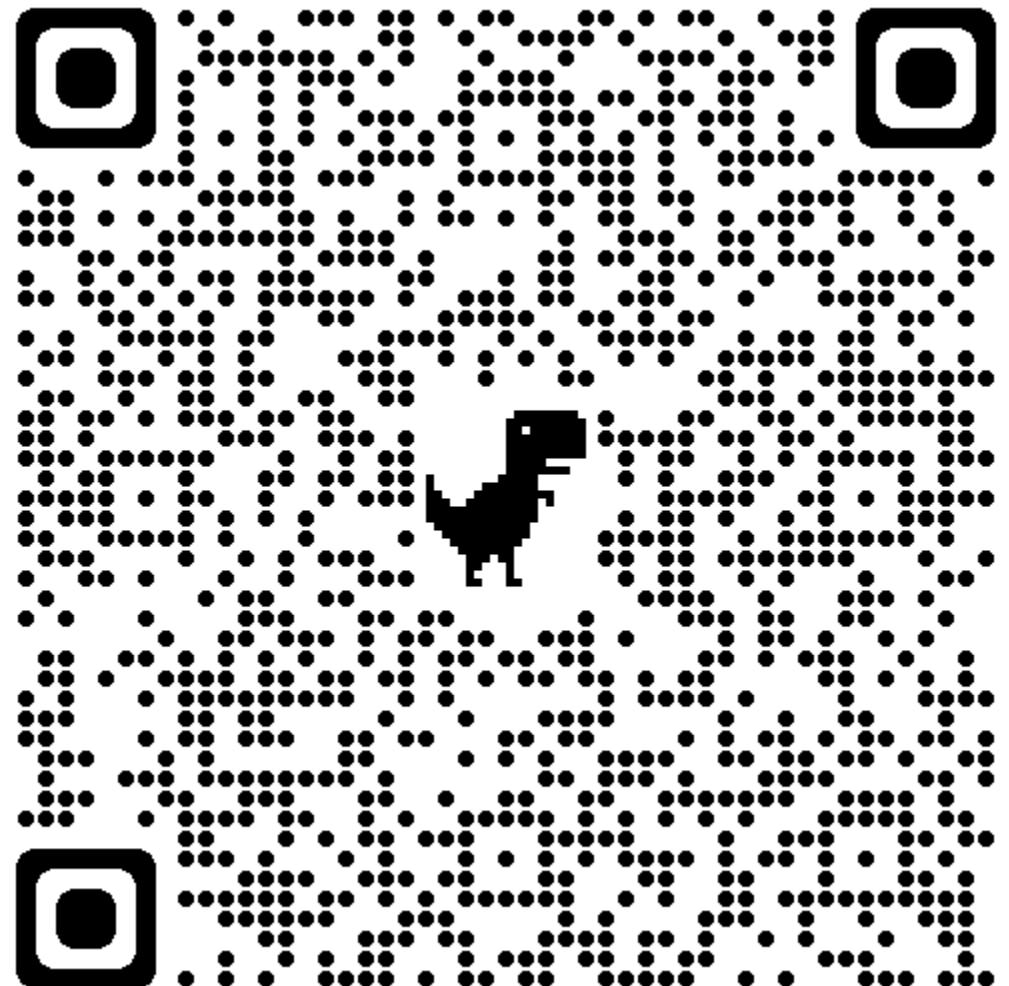
- A primer on Machine Learning and AI
- The impacts of AI on diplomacy
 - *Cyber diplomacy*
 - *Tech diplomacy*
 - *Digital diplomacy*

Source:
Diplofoundation.
"Tech diplomacy in the
San Francisco Bay
Area". 2017

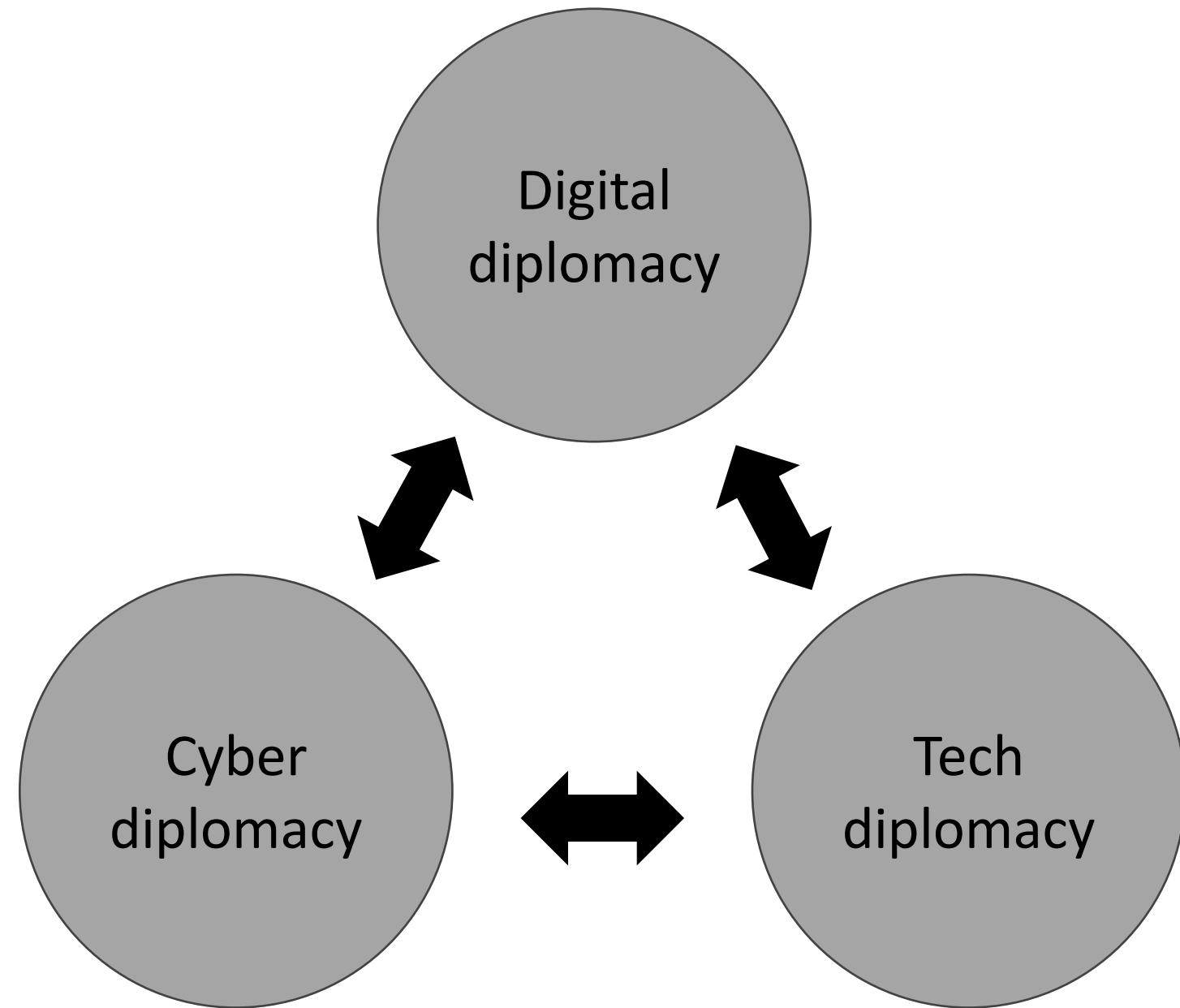


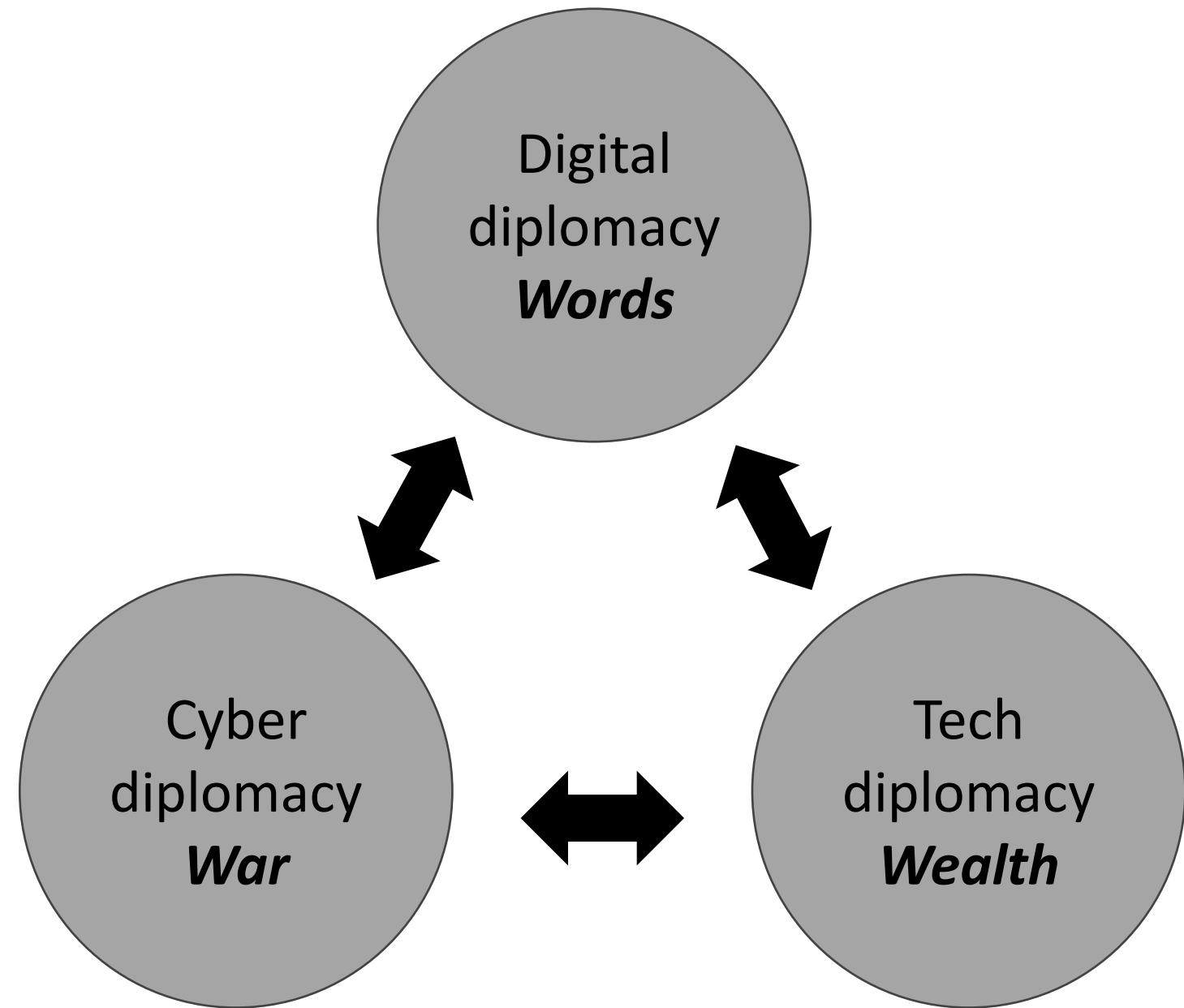
Clarifying concepts

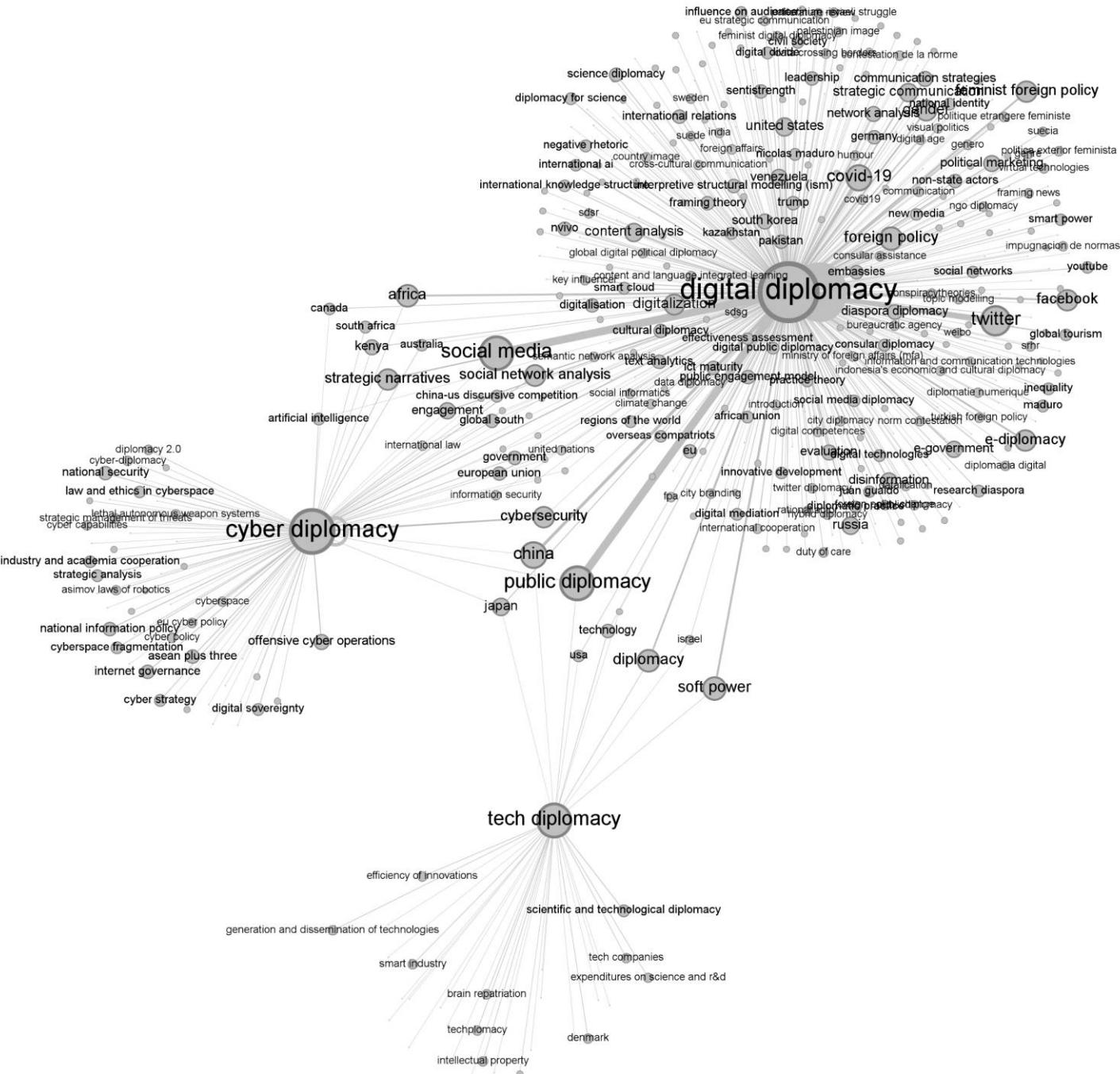
- The problem of conceptual imprecision
- What is the document about?
 - Security?
 - Industry and innovation?
 - Internet law?



https://github.com/plugrafico/digital_diplomacy_wos/tree/main





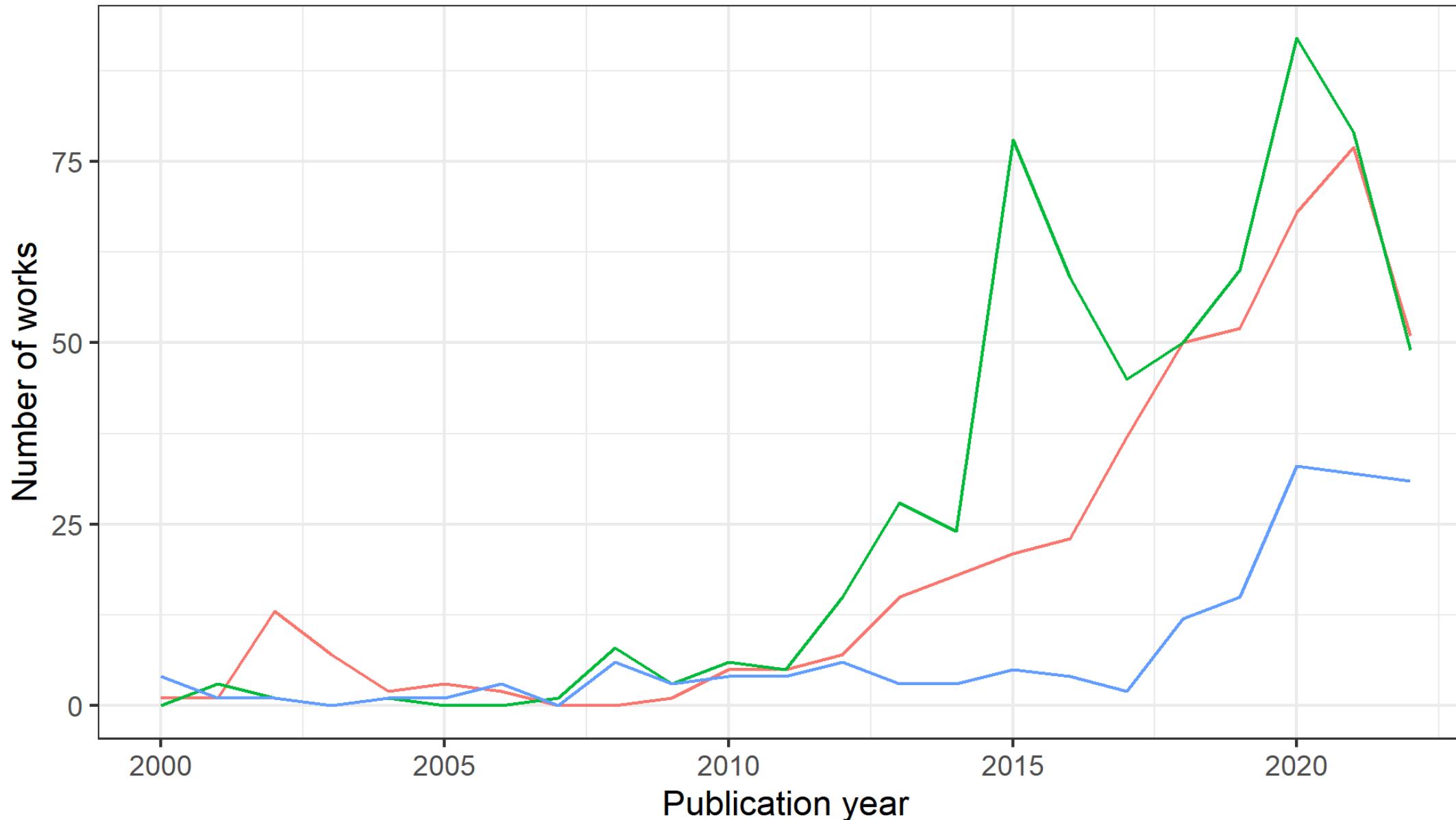


- Searches on *Web of Science* for works using the terms:
 - “Digital diplomacy”
 - “Cyber diplomacy”, “Cyberdiplomacy”, “cyber-diplomacy”
 - “Tech diplomacy”, “technological diplomacy”, “techplomacy”
 - Gather keywords from each search result

[Interactive version at:](#)

https://uestware.gitlab.io/retina/1.0.0-beta.1/#/graph/?url=https%3A%2F%2Fraw.githubusercontent.com%2Fplugrafico%2Fdigital_diplomacy_wos%2Fmain%2Fdigital_diplomacy_retina.graphml&sa=sen&nr=1.085&le=18

Term — cyber_diplomacy — digital_diplomacy — tech_diplomacy



Source:
Author's own
elaboration



Cyber diplomacy

Cyber diplomacy

- Definition:
 - “cyberdiplomacy is **the application of diplomacy to the problems generated in cyberspace** [...] key problems of internet governance [...] and cybersecurity are political and geopolitical, touching on issues of sovereignty, social and foreign policy, international law and balance of power” [1]
 - Hence, it is not about the application of digital tools to diplomacy but the reverse: applying diplomatic means to cyberspace [2]

[1] Riordan, Shaun, and Mario Torres Jarrín. 2020. “Global Policy Perspective Report: Cyberdiplomacy.” European Institute of International Studies.

[2] Riordan, Shaun. “Cyberdiplomacy”. Polity, 2019.

Cyber diplomacy



Cybersecurity
agenda

Internet
governance agenda



Cybersecurity

- The **Cybersecurity Agenda** focuses on the use of the internet to penetrate computer systems without the permission of their owner. Such illicit penetration of computer systems can aim at degeneration (causing permanent damage to information systems or through them physical infrastructure – kinetic damage), disruption (the temporary close down of computer systems – often through distributed disruption of service (DDOS) attacks), espionage (the extraction of data without the permission of the owner), or disinformation (the use of the internet to spread disinformation and fake news to undermine political stability). [1]

[1] Riordan, Shaun, and Mario Torres Jarrín. 2020. “Global Policy Perspective Report: Cyberdiplomacy.” European Institute of International Studies.

Cybersecurity

- If it is national security, is it a topic for diplomacy or for the armed forces?
- The role of Foreign Ministries
 - Compare to space exploration: geographical sites close to the Equator acquired new strategic value

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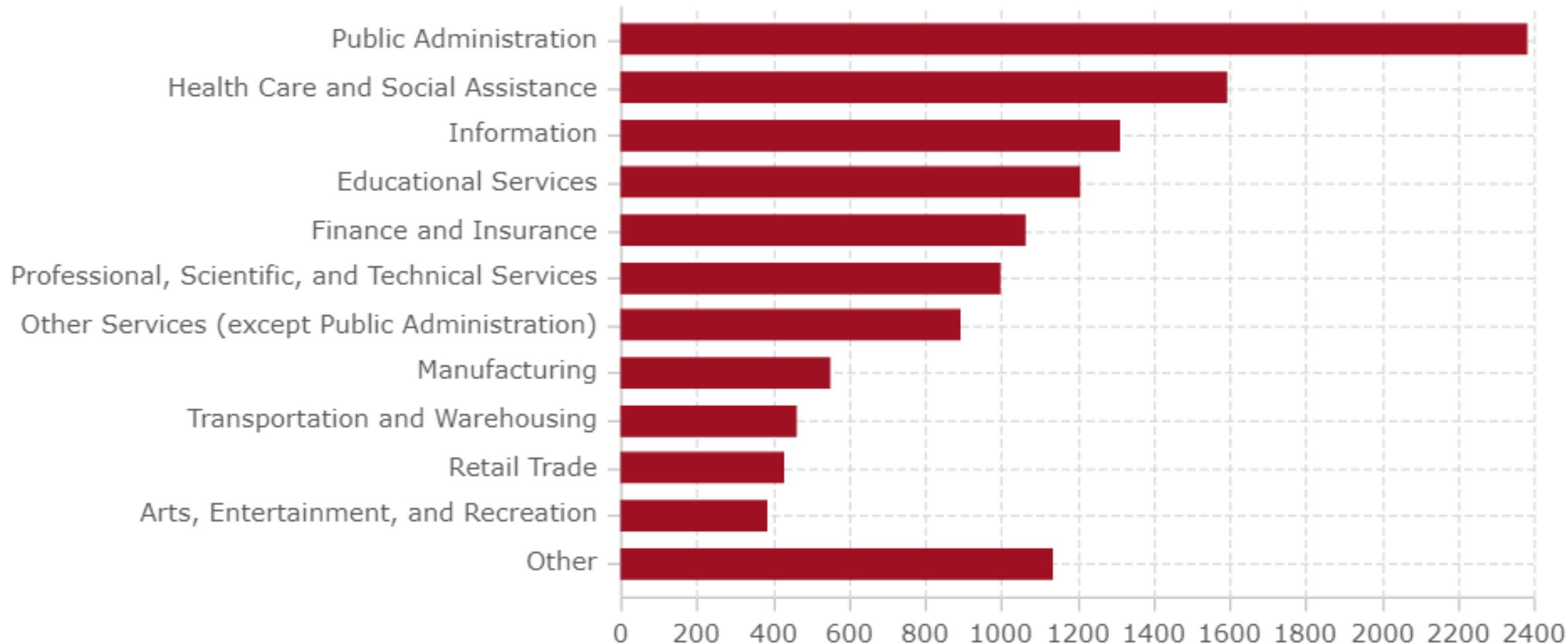


Cybersecurity

- If it is national security, is it a topic for diplomacy or for the armed forces?
- The role of Foreign Ministries
 - Compare to space exploration: geographical sites close to the Equator acquired new strategic value
- Does cyber create new circumstances that impact the role of MFAs?
 - The strategic role of **data**
- MFAs as **custodians** and **targets**

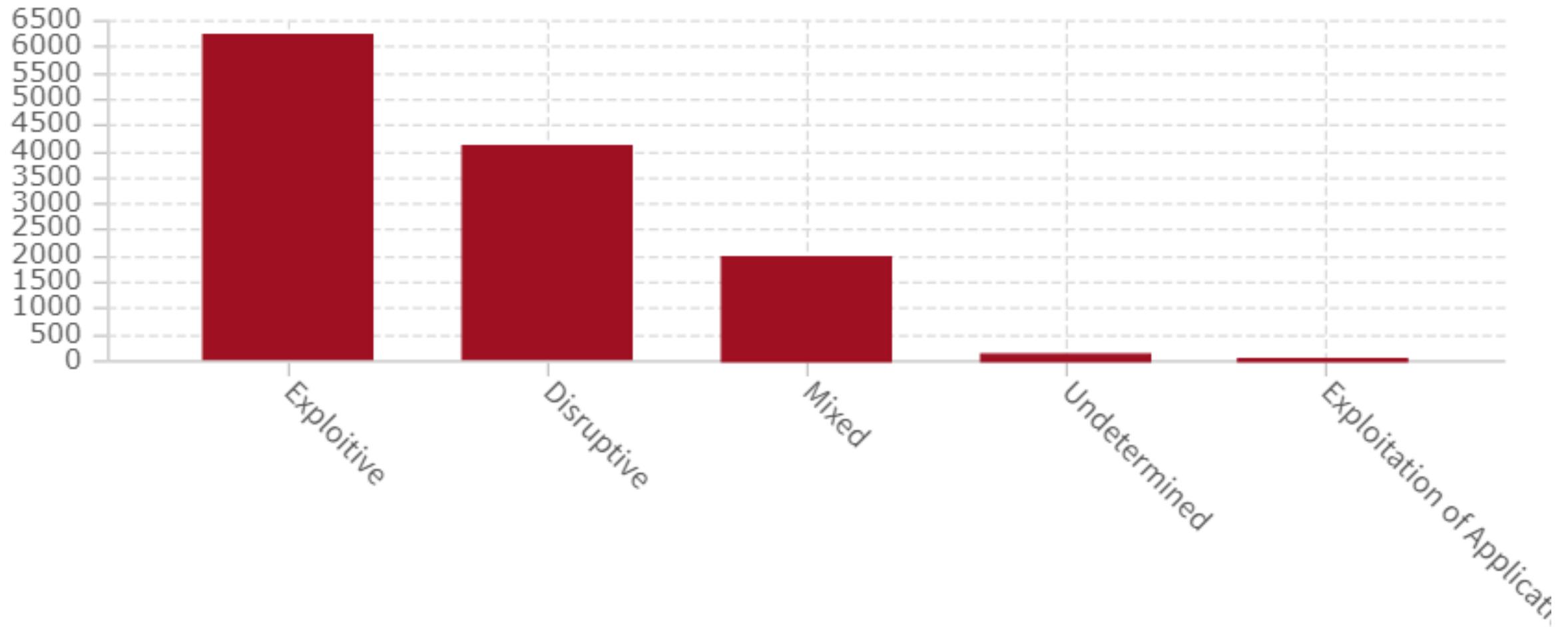


Events by Industry



Source: the Cyber Events Dataset by CISS (Univ. Maryland, USA) <https://cissm.umd.edu/cyber-events-database>
Harry, C., & Gallagher, N. (2018). Classifying Cyber Events. *Journal of Information Warfare*, 17(3), 17-31.

Events by Type



Source: the Cyber Events Dataset by CISS (Univ. Maryland, USA) <https://cissm.umd.edu/cyber-events-database>
Harry, C., & Gallagher, N. (2018). Classifying Cyber Events. Journal of Information Warfare, 17(3), 17-31.

Internet governance

- The **internet governance agenda** focuses on the way the internet is managed as a public good, and tackles issues on all levels of cyberspace. These issues include the status of the physical infrastructure and ICANN, net neutrality, encryption, data protection [...] and the issue of free, civilian internet vs. state sovereignty [1]

[1] Riordan, Shaun, and Mario Torres Jarrín. 2020. “Global Policy Perspective Report: Cyberdiplomacy.” European Institute of International Studies.

		<p>“Advancing responsible State behaviour in cyberspace in the context of international security” (C.1, A/RES/75/32)</p>	
		Did not sponsor	Sponsor
<p>“Counteracting the use of information and communications technologies for criminal purposes” (C.3, A/RES/74/247)</p>	Did not sponsor	(99)	<p>“ALB” “AUS” “AUT” “BEL” “BGR” “CAN” “CHL” “COD” “CYP” “CZE” “DEU” “DNK” “ESP” “EST” “FIN” “FRA” “GBR” “GEO” “GRC” “HRV” “HTI” “HUN” “IRL” “ISL” “ISR” “ITA” “JPN” “KOR” “LTU” “LUX” “LVA” “MDA” “MKD” “MLT” “MNE” “MWI” “NLD” “NOR” “NZL” “PAN” “POL” “PRT” “ROU” “SVK” “SVN” “SWE” “TUR” “USA” (48)</p>
	Sponsor	<p>“AGO” “ARM” “ATG” “AZE” “BDI” “BLR” “BOL” “CAF” “CHN” “CMR” “COG” “CUB” “DZA” “EGY” “ERI” “GIN” “GNQ” “IDN” “IND” “IRN” “JAM” “KAZ” “KGZ” “KHM” “LAO” “LBY” “MDG” “MMR” “NER” “NIC” “NRU” “PRK” “RUS” “SDN” “SUR” “SWZ” “SYR” “TGO” “TJK” “TKM” “UGA” “UZB” “VCT” “VEN” “ZAF” “ZWE” (46)</p>	“BEN” (1)

Source: UN General Assembly Sponsorship Dataset (Seabra and Mesquita, 2022)



Tech diplomacy



Tech diplomacy

- Policies conducted by foreign affairs personnel to approach the innovation centers where game-changing technology is being developed.
- “A Silicon Valley foreign policy”[1]
- Continuity
 - Industrial policy, economic diplomacy, science diplomacy
- Change
 - Tech giants as agents in international society

[1] Bjola, Corneliu, Jennifer Cassidy, and Ilan Manor. 2019. “Public Diplomacy in the Digital Age.” *The Hague Journal of Diplomacy* 14 (1–2): 83–101. <https://doi.org/10.1163/1871191X-14011032>.



Digital diplomacy

Digital diplomacy

- Predominantly associated to **social media and communication**.
- A recent literature review [1]
 - Digital diplomacy as “any diplomacy that use the internet” [2]
 - “the use of social media for diplomatic purposes.” [3]
 - “the use of social media platforms by a country to manage its international reputation and achieve its foreign policy goals” [4]
 - “the use of digital communication tools by diplomats to communicate with each other and the broader public” [5]

[1] Eggeling, Kristin Anabel. 2023. “Digital Diplomacy.” In Oxford Research Encyclopedia of International Studies. Oxford University Press.

[2] Hanson, F. (2012). *eDiplomacy: How the state department uses social media*. Brookings Institute.

[3] Bjola, C., & Holmes, M. (2015). *Digital diplomacy—Theory and practice*. Routledge

[4] Manor, I., & Segev, E. (2015). America’s selfie: How the US portrays itself on its social media accounts. In C. Bjola & M. Holmes (Eds.), *Digital diplomacy: Theory and practice* (pp. 89–108). Routledge.

[5] Lewis, D. (2014). *Digital diplomacy*. Gateway House: Indian Council on Foreign Relations

Public diplomacy

- “a subfield of political science and international relations that involves study of the process and practice by which nation-states and other international actors engage global publics to serve their interests” [1]
- “PD is a communication process states, nonstate actors, and organizations employ to influence the policies of a foreign government by influencing its citizens.” [2]

[1] Snow, Nancy. 2020. “Public Diplomacy.” In Oxford Research Encyclopedia of International Studies. Oxford University Press.

[2] Gilboa, Eytan. 2023. A Research Agenda for Public Diplomacy. Edward Elgar Publishing.

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Communication process

Multiple actors

[1] Snow, Nancy. 2020. “Public Diplomacy.” In Oxford Research Encyclopedia of International Studies. Oxford University Press.

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Public diplomacy



Advocacy

- Influence
- One-way
- “tell one’s story to the world”[1]

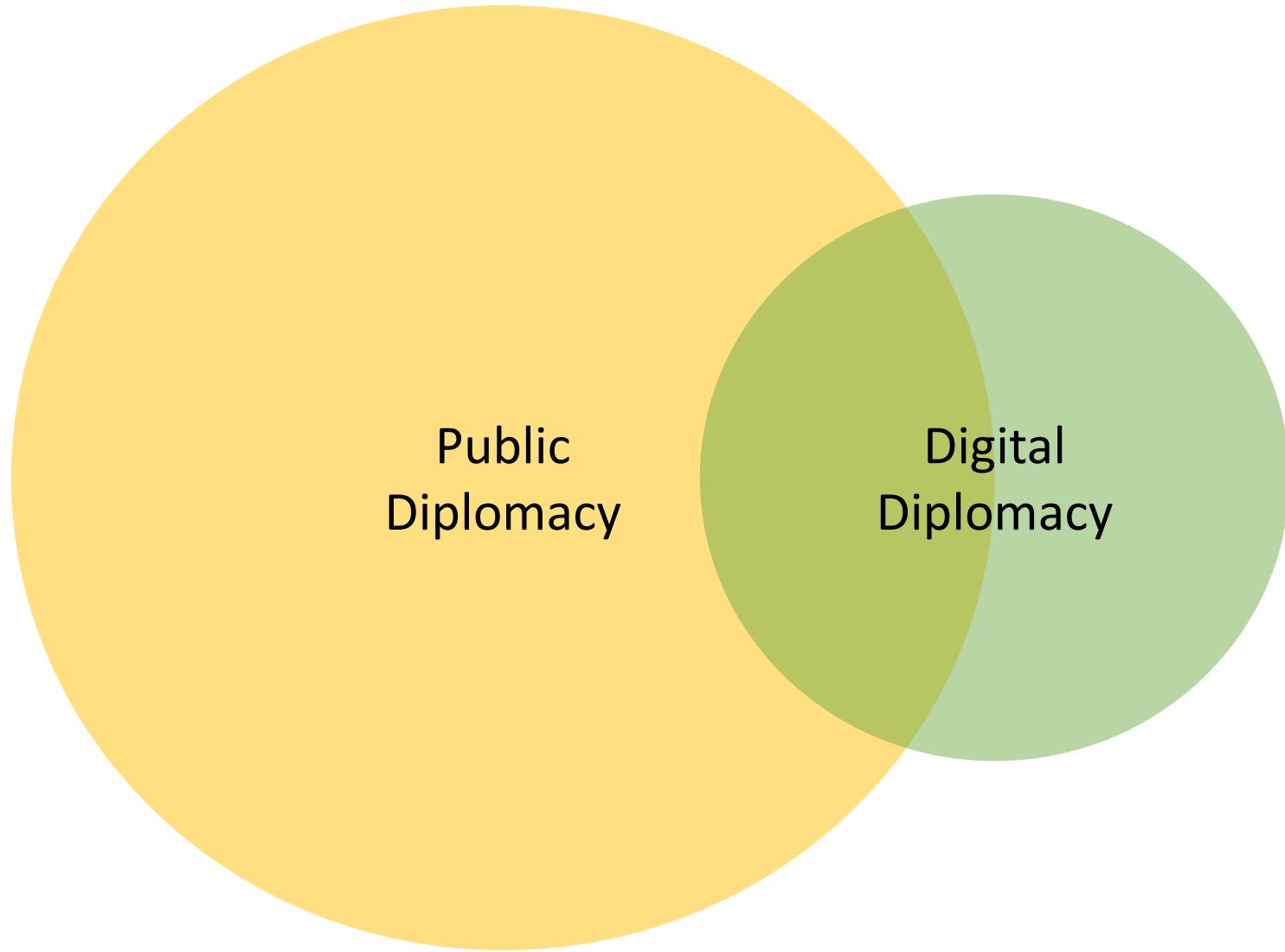


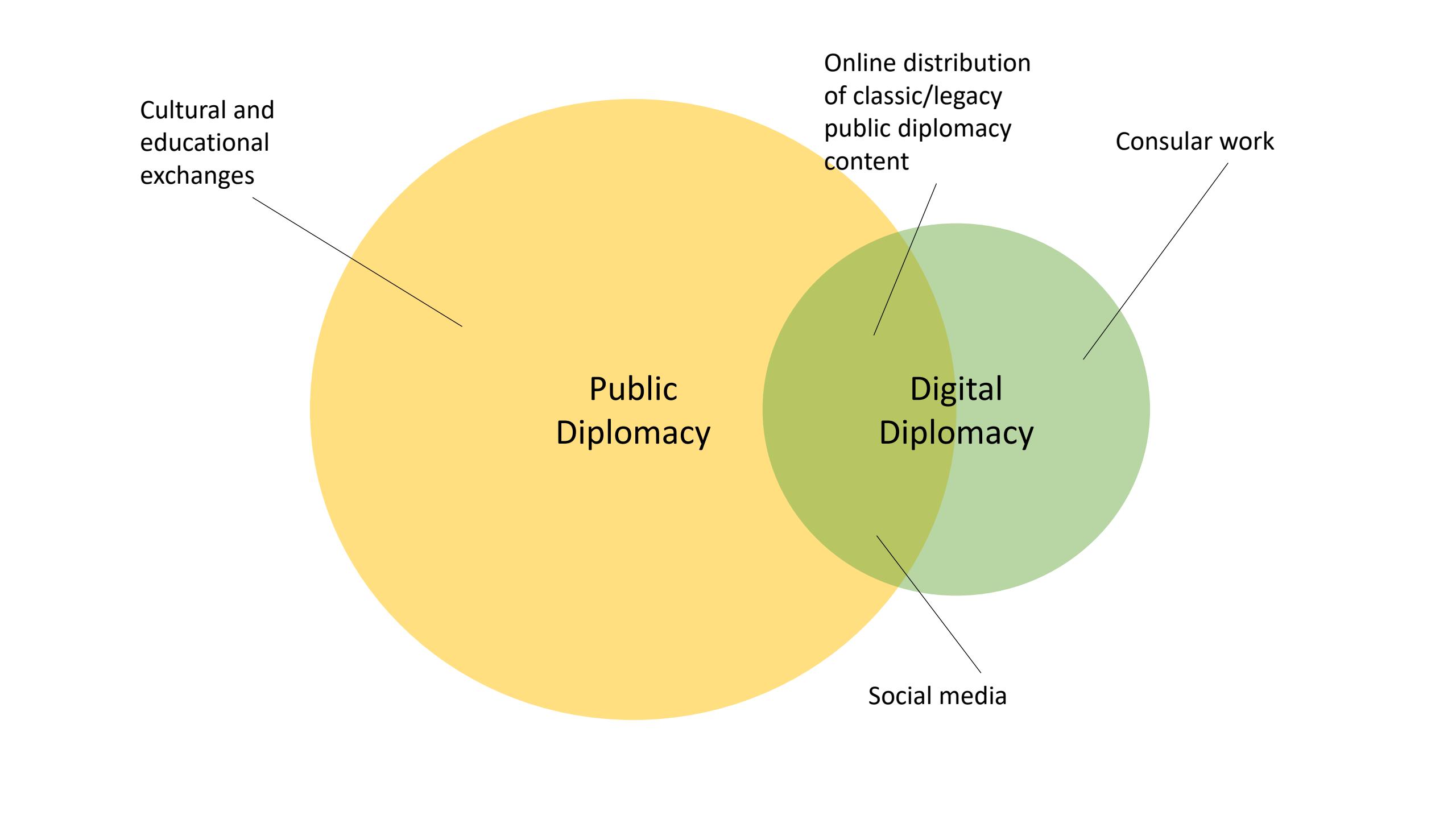
Listening

- Building relationships
- Dialogical
- Gathering information to adjust policy



[1] Snow, Nancy. 2020. “Public Diplomacy.” In Oxford Research Encyclopedia of International Studies. Oxford University Press.





A Venn diagram illustrating the relationship between two concepts. The larger, yellow circle on the left is labeled "Public Diplomacy". The smaller, green circle on the right is labeled "Digital Diplomacy". The overlapping area between the two circles is shaded in a darker green. Five lines extend from the text labels to the corresponding parts of the diagram: "Cultural and educational exchanges" points to the left side of the yellow circle; "Online distribution of classic/legacy public diplomacy content" points to the top of the overlapping area; "Consular work" points to the right side of the green circle; "Social media" points to the bottom of the overlapping area; and "Public Diplomacy" points to the center of the yellow circle.

Cultural and educational exchanges

Online distribution
of classic/legacy
public diplomacy
content

Public
Diplomacy

Digital
Diplomacy

Social media

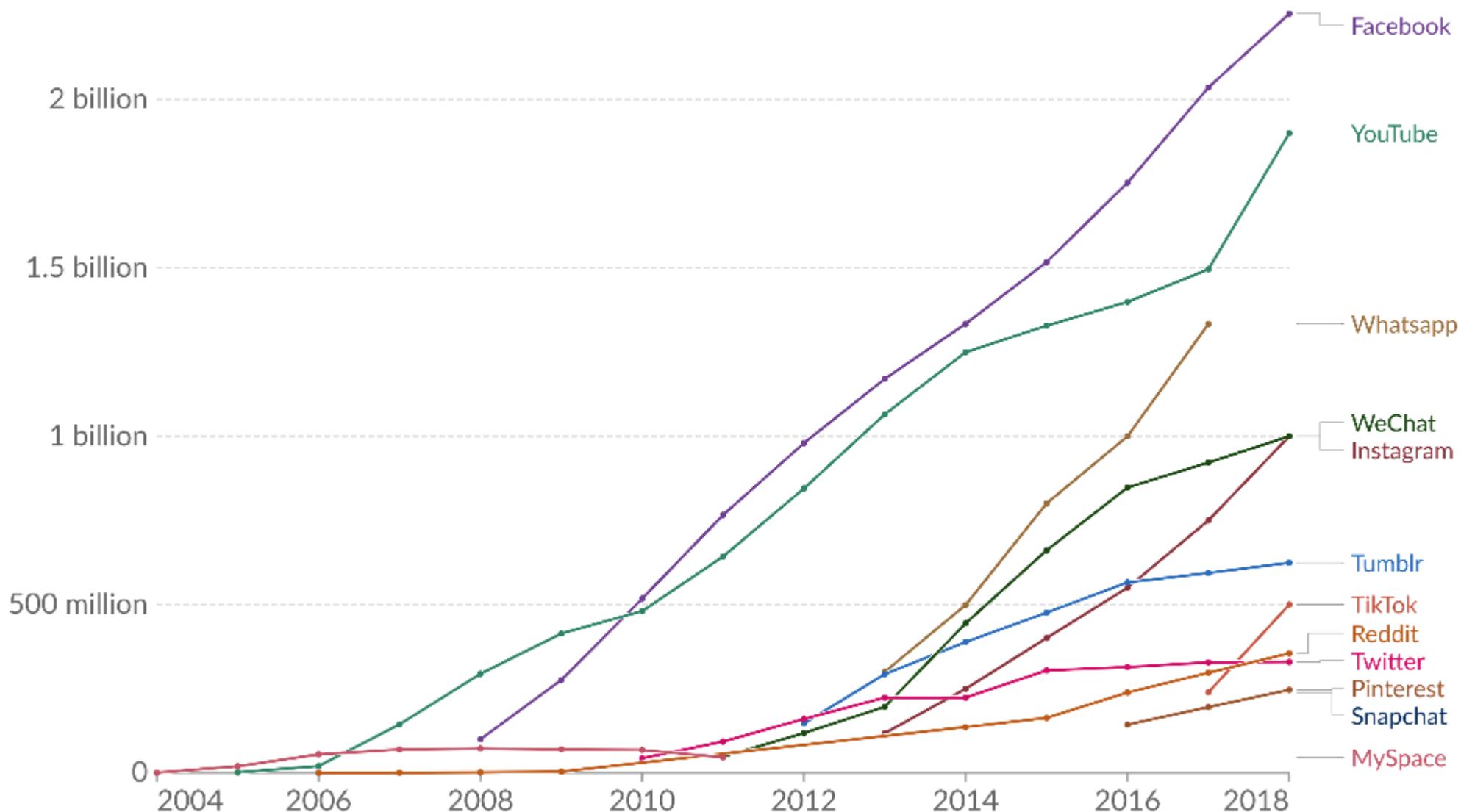
Consular work

Public diplomacy and social media

- Social media and advocacy
 - Instant and global
 - Social media as the main source of news consumption

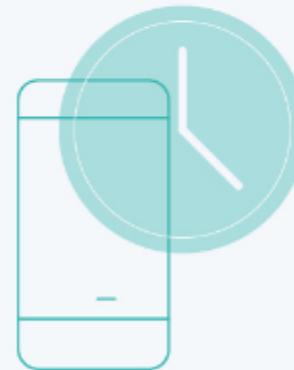
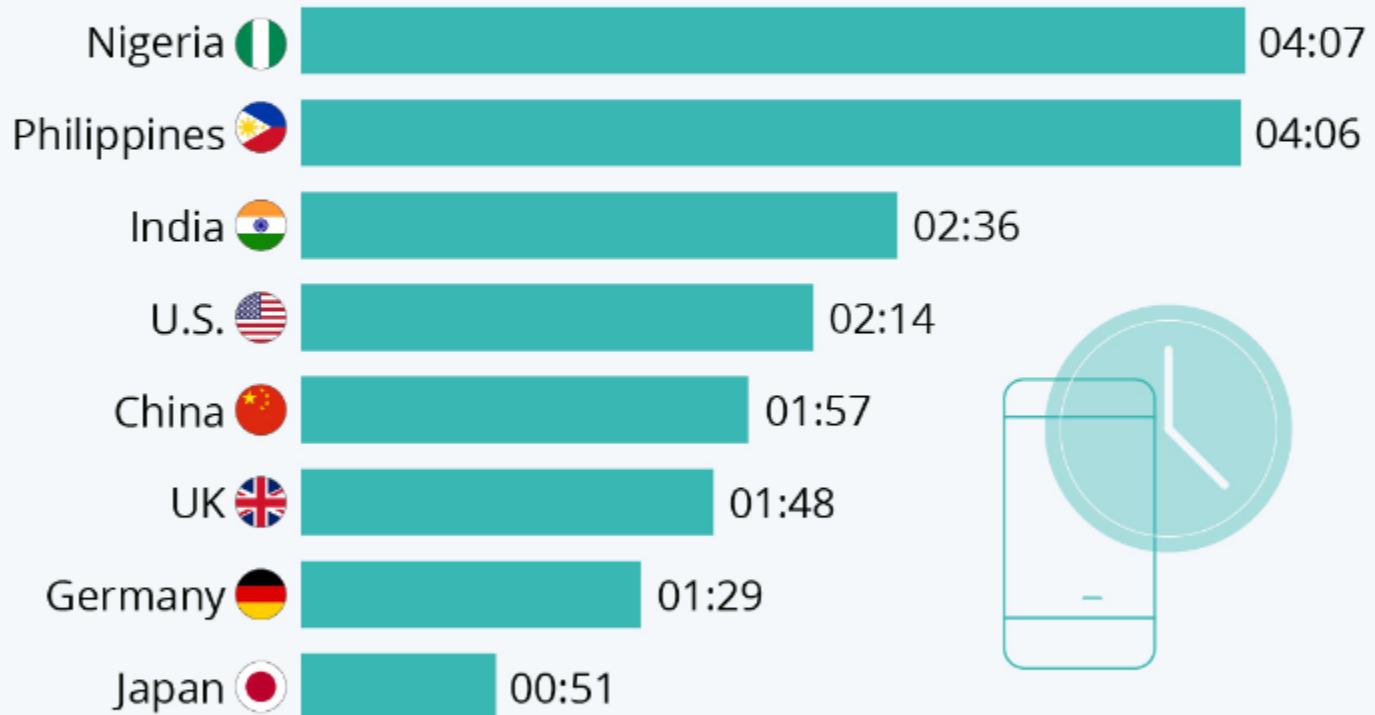
Number of people using social media platforms, 2004 to 2018

Estimates correspond to monthly active users (MAUs). Facebook, for example, measures MAUs as users that have logged in during the past 30 days. See source for more details.



Where People Spend the Most & Least Time on Social Media

Average time spent connected to social networks per day in selected countries in 2021 (hh:mm)



904,000 internet users (16-64 y/o) surveyed across 46 markets
Source: Global Web Index via DataReportal

Public diplomacy and social media

- Social media and advocacy
 - Instant and global
 - Social media as the main source of news consumption
- Social media and listening
 - One-to-many but also two-way
 - More objective measures of impact

Public diplomacy and social media

- **Impact measurement**
- Before:
 - “We cannot gauge our success by sales. No profit and loss statement sums up our operations at the end of each year. No cash register rings when a man changes his mind” (former USIA director Edward Murrow, 1961)
- Now:
 - Big data and analytics tools



Análises



Ciência Política UFPE

Últimos 28 dias: 16 de Fev de 2022 a 15 de Mar de 2022



Visão geral

Resultados

Conteúdo

Público

Alcance

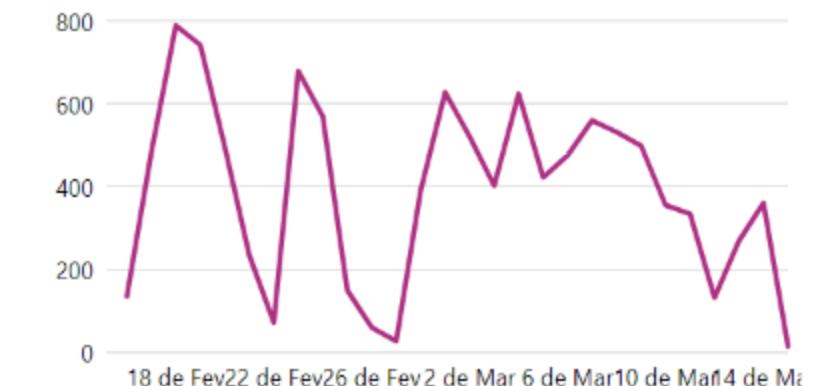
Alcance da Página do Facebook i

378 ↓ 20.3%



Alcance do Instagram i

1.775 ↑ 24.6%



Visitas à Página e ao perfil

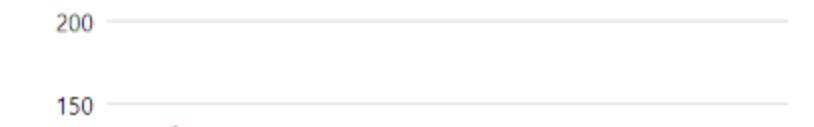
Visitas à Página do Facebook i

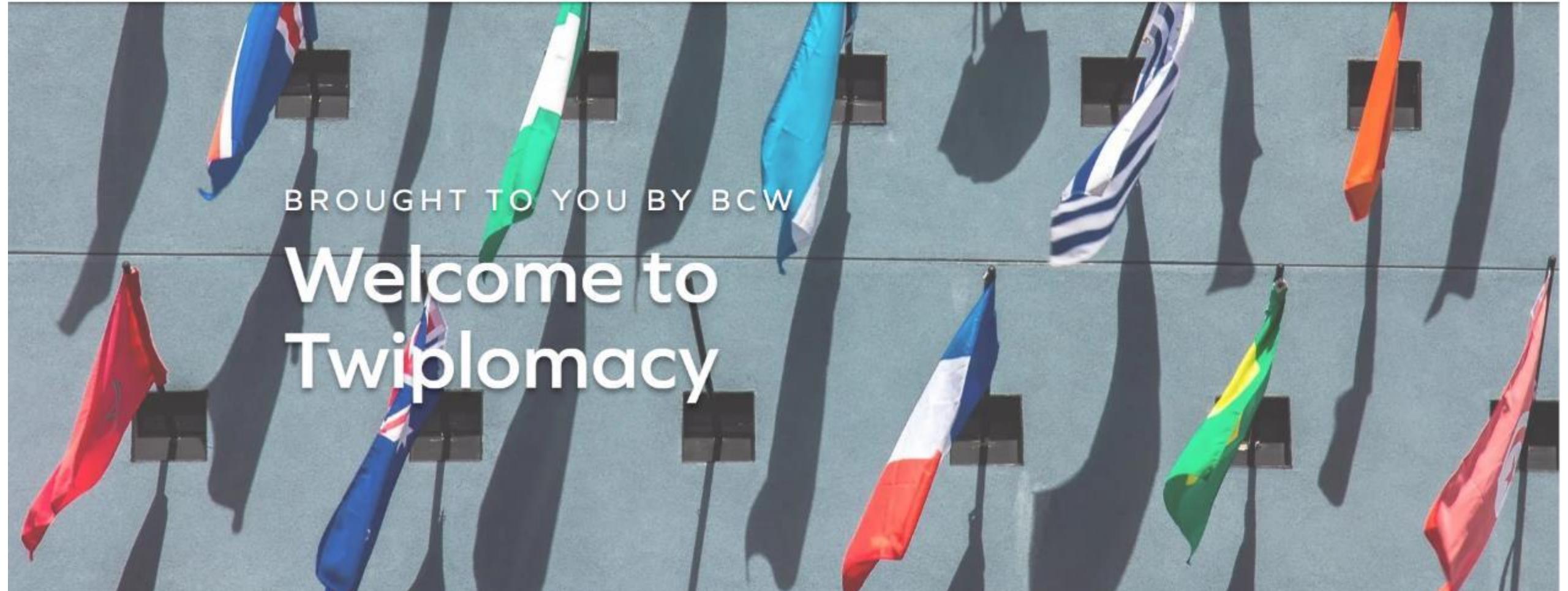
58 ↓ 6.5%



Visitas ao perfil do Instagram i

914 ↑ 52.3%





BROUGHT TO YOU BY BCW

Welcome to Twiplomacy

Project Research Team

Your Market Analysis

Save Share Refresh Date Range Export Filters More

Top Trends | Over Time

Trends

Mention Volume

125k

100k

75k

50k

25k

0

Sep 2017 Sep 2018 Sep 2019 Sep 2020

#plasticwaste #recycleables

Iris detected 2 peaks

A September 13th

Volume was 317% higher than usual driven by:

- 15.4k retweets of this Tweet
- 211 mentions using the hashtag #plasticwaste
- 987 mentions from news sites

Coversation | By Sector

Sectors | Monthly

Sector	Change
Fin Serv	↓ 7%
Gov	↑ 347%
Tech	↓ 25%
CPG	↑ 45%
Retail	↑ 457%
Pharma	↓ 212%

Share of Voice

Popularity

Top Topics | Q4

Range	Share of Voice
Eco Range	37%
Budget Range	35%
Best Of Range	28%

Top Topics

climate change

whales

stop

turtles

jobs

eco-cup

environment

years

solar

straws

charging station

technology

packaging

local

crisis

travel

industry

ocean welfare

single-use

economy

supply chain

covid-19

Eco driving

Brandwatch

INFLUENCER ANIMALS
(10)

FACEBOOK

- Lil Dub
- Princess Cheeto
- Princess Monster Tru...
- Smoothie the Cat
- Suki The Cat
- Waffles the Cat

INSTAGRAM

- Henry + Baloo 🐾
- I am Cheeto. A cat.
- Lil BUB
- Sir Winston Churchill

METRICS POSTS CHARTS ANALYSIS STORIES HISTORY MATRIX LIVE TAGGING

Filter ...



Posts

SELECT PERFORMANCE INDICATORS

- 1 Lil BUB 8/19/19 11:06 PM
- 2 Sir Winston Churchill 8/19/19 8:57 PM
- 3 Lil BUB 8/19/19 7:30 PM
- 4 Smoothie the Cat 8/19/19 6:08 PM
- 5 Suki The Cat 8/19/19 6:07 PM
- 6 Lil BUB 8/18/19 9:15 PM
- 7 Henry + Baloo 🐾 8/18/19 9:12 PM
- 8 Lil BUB 8/16/19 9:10 PM
- 9 Lil BUB 8/17/19 6:59 PM
- 10 Lil BUB 8/17/19 6:58 PM
- 11 Smoothie the Cat 8/17/19 5:05 PM
- 12 Princess Cheeto 8/17/19 4:47 PM
- 13 Lil BUB 8/16/19 7:56 PM

- 14 Lil BUB



This is the look on BUB's face every time I crack open a can of her favorite Halo food, which happens to be Seafood Medley (of course).

green jungle cat green

This is the look on BUB's face every time I crack open a can of her favorite Halo food, which happens to be Seafood Medley (of course).

Get a better look at the Smoothie & Milkshake 2020 Calendar!

There is sublime beauty in the depth of your eyes 🐾 green

What a fantastic face. #goodjobbub

The cat is the hat 🎩

What a fantastic face.

It's National Clear the Shelters Day! Been thinking of getting a pet? Adopt one today. BABY BUB asks that you please make sure you're ready to do everything you can to ensure a happy and healthy life for your li critter. These animals need

It's National Clear the Shelters Day! Been thinking of getting a pet? Adopt one today. FARY BUB asks that you please make sure you're ready to do everything you can to ensure a happy and healthy life for your li critter. These animals need

Watch the complete concert here: <https://youtu.be/NiJhJg3LTkoU>

Escape into your Wildest Dreams, inside Amazon Music's limited edition #Lovebox featuring Taylor Swift. #Sponsored by Amazon Music.

A BUBbookworm since kittenhood. #read #goodjobbub #lilbub #overachiever

A BUBbookworm since kittenhood

NUM
0
LIKES

324

4.8k

540

1.6k

57k

184k

9.4k

10k

85k

5.9k

56

95k

10k

272

39

47

421

866

526

465

392

229

710

E1A

0.28%

0.43%

3.2%

2.4%

12%

0.57%

0.63%

3.6%

4.6%

E1A

0.57%

0.28%

0.43%

3.2%

2.4%

12%

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E1A

0.57%

12%

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12%

12%

12%



fanpage karma

THE HEART OF SOCIAL MEDIA

Streams

[New Board](#)

[Quick Search](#)

YOUR BOARDS

- Hayward All** x
- Hayward University TW x
- Hayward University FB x
- HW School of Finance All x

Hayward All

[Add Streams](#) [Add Social Network](#) [Refresh All](#)

My Tweets Hay ...

Hayward School of Finance 21hours ago [View on Twitter](#)

Bank of Canada wary of business investment surge



My Tweets Hay ...

Hayward University 21hours ago [View on Twitter](#)

Join us for our Doggy De-Stress to relax with some friendly and cuddly dogs! 🐶

Monday 9 December
1pm - 2:30pm
Jubilee, G31

Hayward University 21hours ago [View on Twitter](#)

Refugees travel 2 billion km every year to seek safety from violence. Step up with them, join the UNHCR, the UN Refugee Agency challenge!

These are the current figures on our ranking

Geneva - 701KM
Barcelona - 1,427KM
Madrid - 576KM

Haven't signed up? Sign up with your fitness app, and whether you are a walker, a hiker, a jogger or a dancer, join the challenge to step with refugees and gain an opportunity to attend the Nansen Refugee Award.



Hayward University 21hours ago [View on Twitter](#)

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Hayward University 21hours ago [View on Twitter](#)

Your feedback last year told us there was nowhere for you to make hot food and drinks. We introduced a new Student Kitchen with a hot water tap and microwave, making these winter months a little more bearable. ☕

Hayward School of Finance 21hours ago [View on Twitter](#)

Business and Management Studies student Pippa Donalee is running a series of podcasts called "You Belong" which are about how to get more women into top business positions in the future.



Hootsuite™

Geneva - 701KM
Barcelona - 1,427KM
Madrid - 576KM

Refugee seek sa them, j Agency

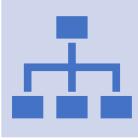
These :
Genevi Barcelo Madrid

Haven' app, ar jogger with re attend

Your fe nowhe drinks Kitcher microv little m

Public diplomacy and social media

Common services

	Management	Composition, scheduling, etc.
	Measurement	Impact metrics from your account activity
	Listening	Querying data from users and organizations at large

Consular work

- Digital diplomacy goes beyond social media and public communication
- “**Digitalization of diplomacy**” [1]
 - Not a new department, but a process affecting all aspects of diplomacy
 - There is no online vs. offline diplomat
- Regular activities that were redefined by digital tools:
 - Consular service
 - Diaspora diplomacy
 - Emergency response

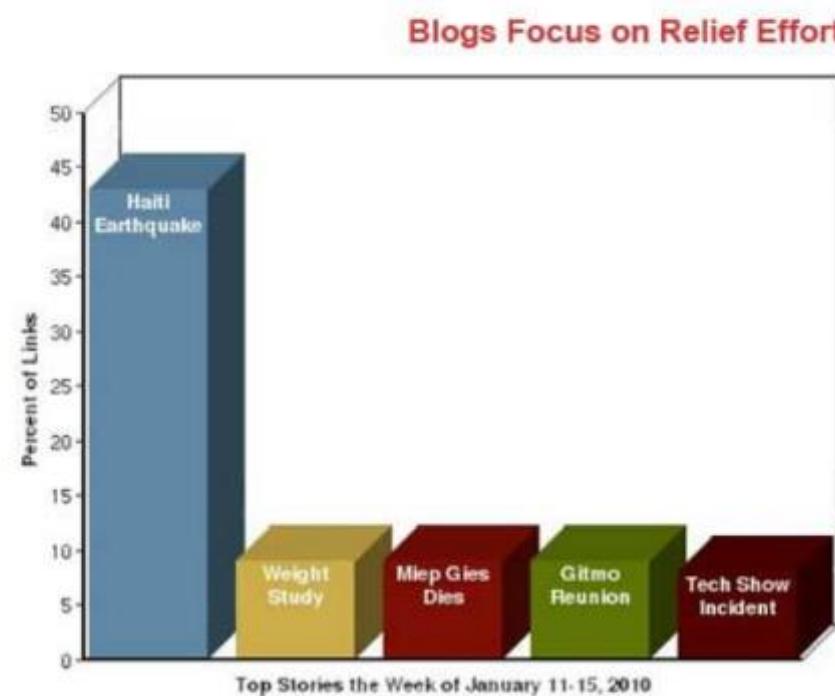
[1] Manor, Ilan. 2018. “The Digitalization of Diplomacy: Toward Clarification of a Fractured Terminology.” *DigDiploROx Working Paper 2*: 1–20.

Social Media Aid the Haiti Relief Effort

PEJ New Media Index January 11-15, 2010



The tragic January 13 earthquake that devastated the country of Haiti and killed an estimated 200,000 people inspired a wealth of online activity. The online communication site Twitter played an especially large role as it quickly filled with Haiti-related information and ways to offer aid, according to this week's analysis of social media by the Pew Research Center's Project for Excellence in Journalism. Social media became central to the fundraising effort that raised millions of dollars.



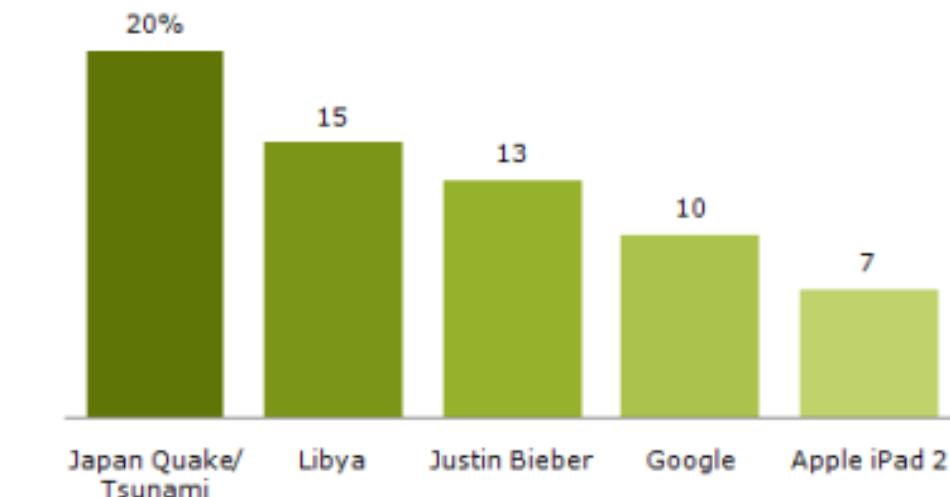
Source: Pew Research Center

Twitter Responds to the Japanese Disaster

PEJ New Media Index March 7-11, 2011

Two International Stories Lead on Twitter

Percent of Links



PEW RESEARCH CENTER'S PROJECT FOR EXCELLENCE IN JOURNALISM

The costs of digital diplomacy

Affordances

- Instant communication
- Multiple actors and two-way communication
- Platforms with global reach

The costs of digital diplomacy

Affordances

- Instant communication
- Multiple actors and two-way communication
- Platforms with global reach

Costs

- Information overload (“always on”)
- Hard to control the narrative
- Social media companies as interested parties

The costs of digital diplomacy

- **Information overload**
- Cf. “CNN Effect”: an extraneous influence dictating a ‘real-time policy’ pace to diplomacy
- “Always on”
- Impact on professional practice:
 - With more exposure comes a heightened concern with not “losing face”
 - Demographics of foreign ministries: digital “natives” vs. “migrants”

The costs of digital diplomacy



Follow

Our prayers are with the missing Nigerian girls and their families. It's time to [#BringBackOurGirls](#). -mo



The costs of digital diplomacy

- **Hard to control the narrative**
- Apart from external audiences, intra-organizational coordination is also challenging
- “In 2012, it was estimated that the US state department managed some 288 Facebook profiles, 200 Twitter accounts and 125 YouTube channels. [...] According to the 2014 annual report by the US Advisory Commission on Public Diplomacy, the state department’s social media empire has grown by 50% and now includes 1,000 accounts.” [1]

[1] Manor, I. (2016). Are We There Yet: Have mfas Realized the Potential of Digital Diplomacy?: Results from a Cross-National Comparison. *Brill Research Perspectives in Diplomacy and Foreign Policy*, 1(2), 1-110

The costs of digital diplomacy

- **Social media companies**
- Do we need to be there?
 - Social media companies' business model relies on **increasing numbers and early adoption**
 - Inducement to create “waves of the future”
 - Being a “first mover” can be advantageous *at times* to the client. It is *always* advantageous to the provider

June 25, 2014

On Virtual Embassies in the Age of Digital Diplomacy

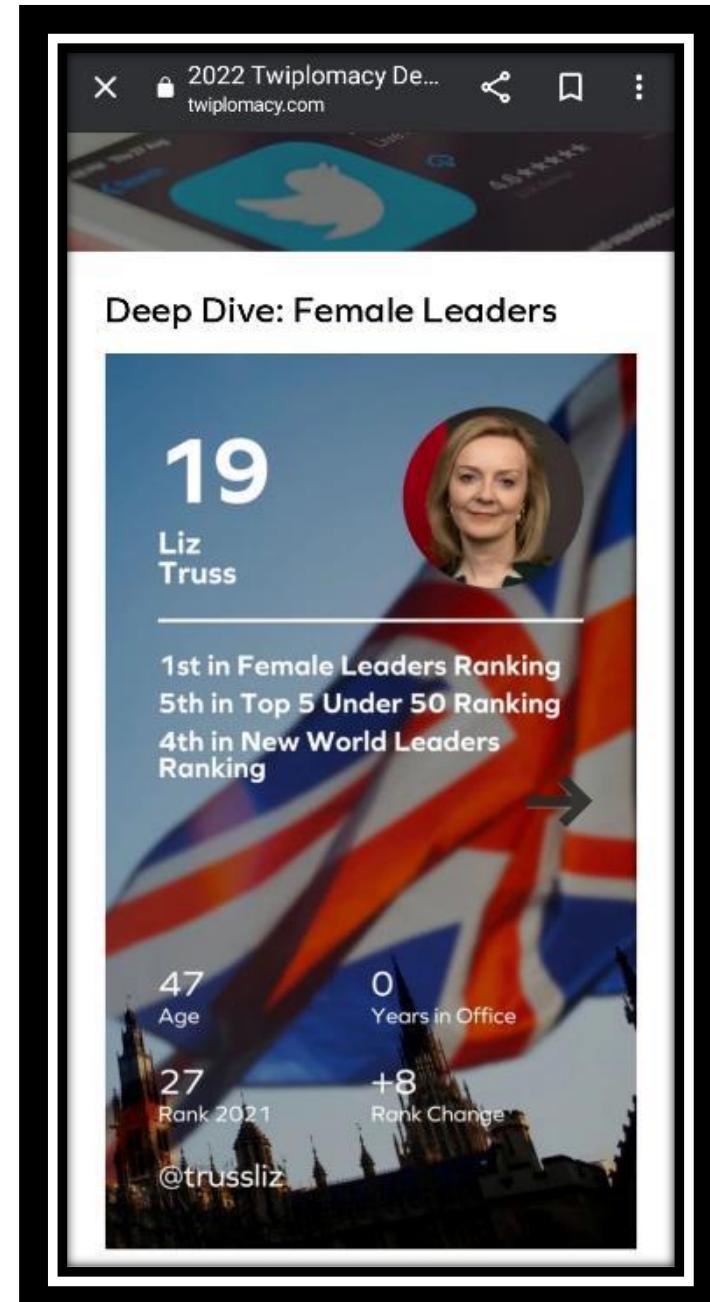
For some years now, foreign ministries throughout the world have been experimenting with virtual embassies. In 2007, Sweden established a virtual embassy in the popular virtual world Second Life. Meant to serve as a cultural embassy, visitors could learn about Swedish culture, view Swedish art and even participate in seminars hosted by the virtual embassy. In 2011, the US State Department launched Virtual Embassy Teheran, a web page dedicating to promoting dialogue between the US and the Iranian people.



Source:

<https://www.businessinsider.com/eu-hosts-400000-metaverse-party-barely-anyone-shows-up-2022-12>

<https://digdipblog.com/2014/06/25/on-virtual-embassies-in-the-age-of-digital-diplomacy/>

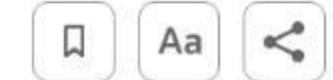


Europe

YouTube blocks Russian parliament channel, drawing ire from officials

Reuters

April 11, 2022 6:53 PM GMT-3 · Updated 2 years ago



Does the global village have gatekeepers?





BRILL

DIPLOMACY AND FOREIGN POLICY 1.2 (2016) 1–110

BRP
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brill.com/brp

Further reading
on the compared
effectiveness of
digital diplomacies
by MFAs

Are We There Yet: Have MFAs Realized the Potential of Digital Diplomacy?

Results from a Cross-National Comparison

Ilan Manor

Department of International Development, University of Oxford

Abstract

Despite growing interest in digital diplomacy, few studies to date have evaluated the extent to which foreign ministries have been able to realize its potential. Studies have also neglected to understand the manner in which diplomats define digital diplomacy and envision its practice. This article explores the digital diplomacy model employed by four foreign ministries through interviews and questionnaires with practitioners.

A framework for making sense of digitalization and diplomacy

Levels (“where?”)	Local, National, Bilateral, Regional, Global
Scope (“about what?”)	Policy areas
Actors (“who?”)	Ministries of Foreign Affairs, Ministries of Trade, International Organizations, Multinational Corporations
Modes (“how?”)	Conventional, Track Two, Summity

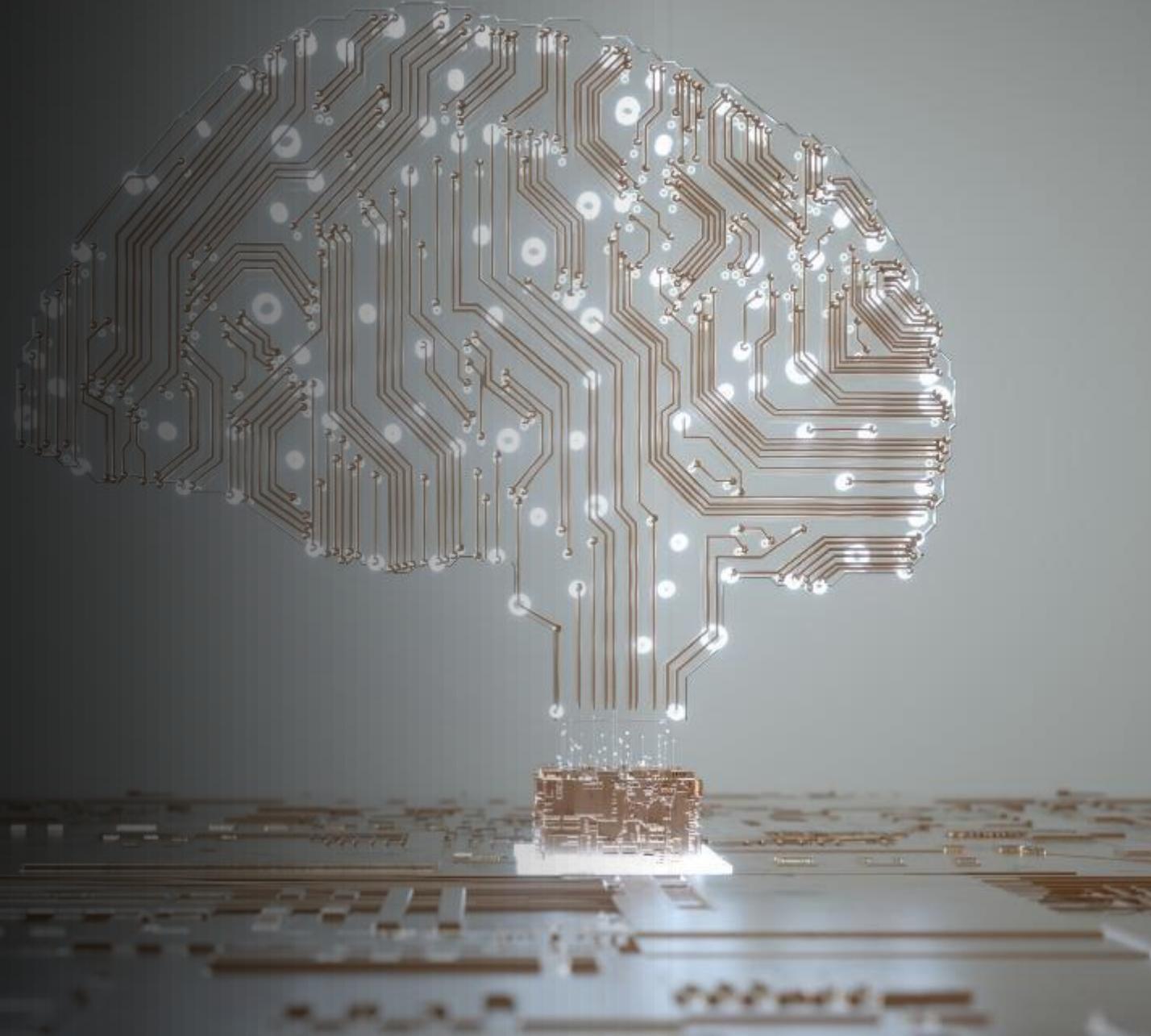
Source:

Adapted from Cooper, Andrew Fenton, Jorge Heine, and Ramesh Chandra Thakur. 2013. “Introduction: The Challenges of 21st Century Diplomacy.” In *The Oxford Handbook of Modern Diplomacy*, edited by Andrew Fenton Cooper, Jorge Heine, and Ramesh Chandra Thakur, 1–31. Oxford Handbooks. Oxford, U.K: Oxford University Press.

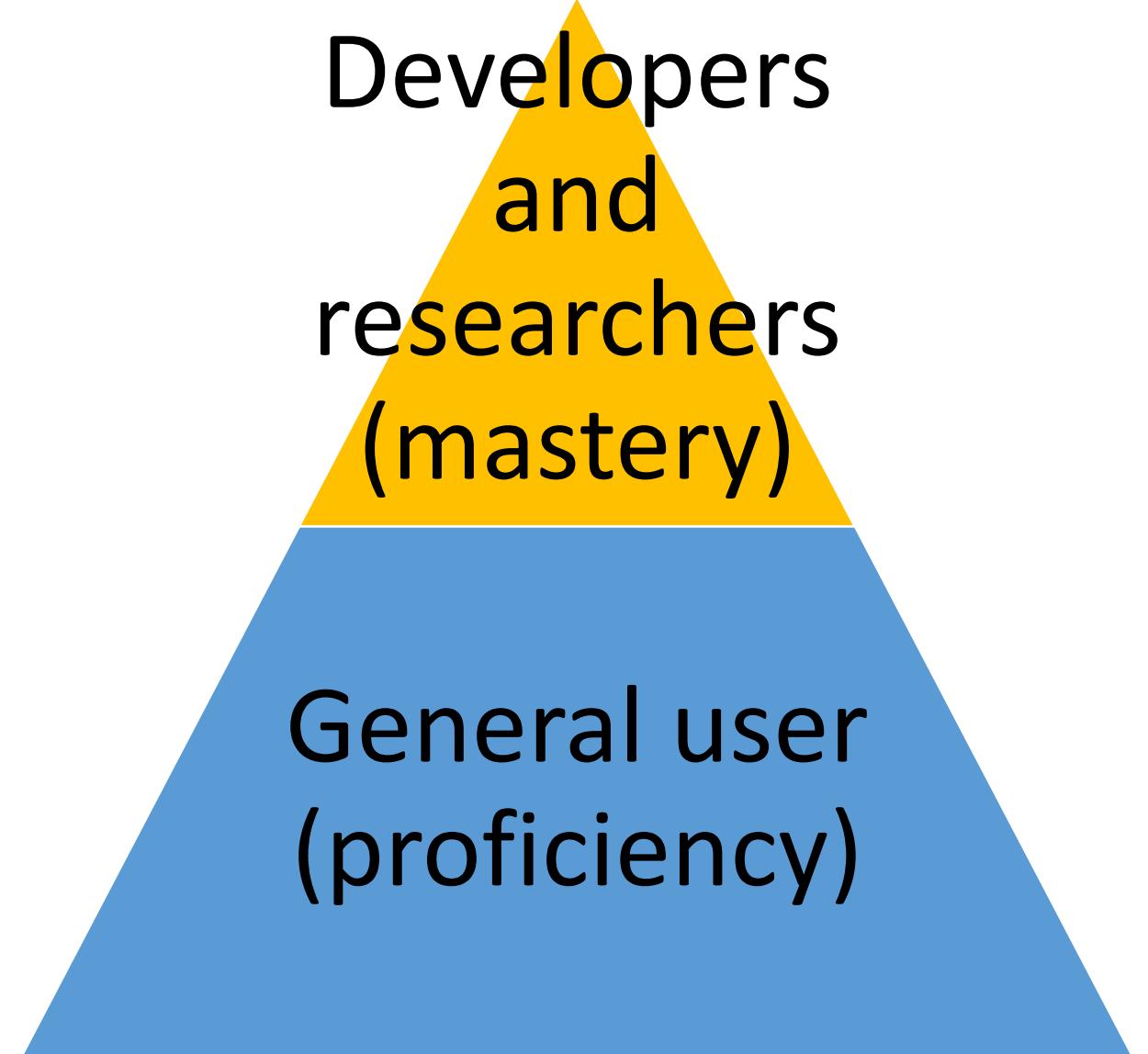
A framework for making sense of digitalization and diplomacy

Cyberdiplomacy	Tech diplomacy	Digital diplomacy
<ul style="list-style-type: none">- Cyber security agenda- Internet governance agenda		<ul style="list-style-type: none">- Public diplomacy- Other consular work
Levels ("where?")	<ul style="list-style-type: none">- Domestic- Multilateral organizations	<ul style="list-style-type: none">- Bilateral and infra-state level
Scope ("about what?")	<ul style="list-style-type: none">- <u>Governmental data</u>- <u>Sovereignty in cyberspace</u>	<ul style="list-style-type: none">- Technology and innovation
Actors ("who?")	<ul style="list-style-type: none">- MFAs as custodians/targets- States / other stakeholders (companies, civil society, academia, etc.)	<ul style="list-style-type: none">- <u>MFAs, science and technology agencies / innovation hubs and big tech</u>
Modes ("how?")	<ul style="list-style-type: none">- ...- Conventional multilateral diplomacy and negotiation	<ul style="list-style-type: none">- Conventional consultar networks- <u>Social media</u>

Artificial Intelligence

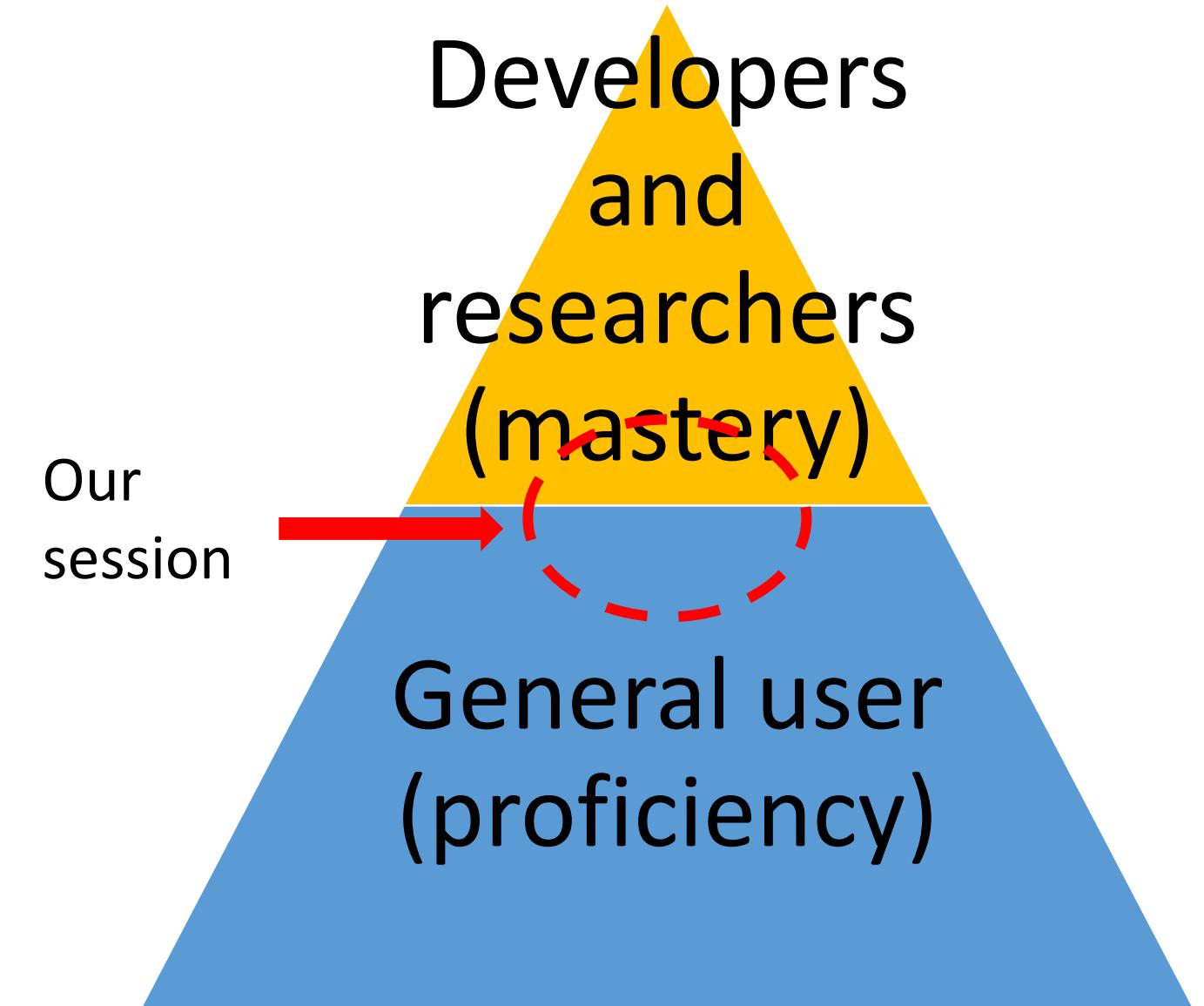


AI and organizations



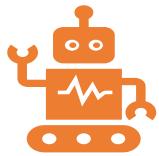
Source:
Radar AI (Datacamp, 2023)

AI and organizations



Source:
Radar AI (Datacamp, 2023)

A brief glossary



Artificial Intelligence (AI) :

An AI system is a machine-based system that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can influence physical or virtual environments. Different AI systems vary in their levels of autonomy and adaptiveness after deployment. **“Generative AI”** refers to AI that is capable of producing original text, video or audio based on human inputs, normally delivered using natural language (“prompts”).



Machine Learning (ML) :

The use of algorithms and statistical models to enable computer systems to learn from data without being explicitly programmed.



Neural Networks

Neural networks are a subset of ML that are modeled after the structure of the human brain. They consist of layers of interconnected nodes that process information and learn to recognize patterns in data. **“Deep Learning”** refers to the exponentiation of this process with the addition of a high number of layers and parameters.

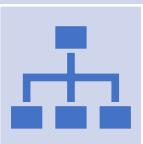
A primer on ML and AI

What are ML models?



With regards to the **type of data**

Tabular, Text, Networks



With regards to **supervision**

“Human-in-the-loop”



With regards to **the problem or objective**

The unobserved part for which the model is trained

Tabular data

Variables/Features (K)

Observations (N)

Tabular data

Variables/Features (K)

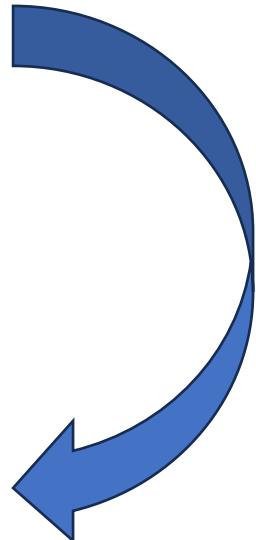
Outcome/response (Y)

Independent variables/covariates (X)

Observations (N)

Text data

```
> sample_text[1,]  
undocsymbol  
101 A/55/L.57  
  
text_ed  
101 The General Assembly, Recalling its resolution 46/182 of 19 December 1991 and reaffirming that  
humanitarian assistance should be provided in accordance with the guiding principles contained in  
the annex to that resolution, Recalling also its resolution 54/96 F of 15 December 1999 on humanita-  
rian assistance to the Federal Republic of Yugoslavia, Deeply appreciative of the humanitarian assi-  
stance and the rehabilitation support rendered by a number of States, in particular major contributo-  
rs, international agencies and organizations and non-governmental organizations to alleviate the hi
```



```
> text.dfm  
Document-feature matrix of: 29 documents, 2,682 features (88.01% sparse) and 0 docvars.  
  features  
docs the general assembly , recalling its resolution 46 / 182  
text1 92 1 1 47 2 4 4 1 4 1  
text2 211 10 9 93 1 15 10 0 11 0  
text3 87 2 2 53 2 4 2 0 3 0  
text4 94 2 2 50 2 6 4 1 6 0  
text5 91 2 2 40 1 4 3 1 6 0  
text6 41 1 1 19 1 3 0 1 7 0  
[ reached max_ndoc ... 23 more documents, reached max_nfeat ... 2,672 more features ]
```



Brazil Mission to the UN @Brazil_UN_NY • 19 de mar de 2021

#Brazil 🇧🇷 participated today in 65th session of the Commission on the Status of Women general debate. Watch the full speech delivered virtually by Damares Alves, Minister of Women, Family and Human Rights ➡ bit.ly/3vHnVYZ
#BrazilattheUN #CSW65 #GenerationEquality



Ministério dos Direitos Humanos e da Cidadania e mais 5

29

58

333



Digital artifacts combine multiple types of data



Brazil Mission to the UN @Brazil_UN_NY 19 de mar de 2021

#Brazil 🇧🇷 participated today in 65th session of the Commission on the Status of Women general debate. Watch the full speech delivered virtually by Damares Alves, Minister of Women, Family and Human Rights ➡

bit.ly/3vHnVYZ

#BrazilattheUN #CSW65 #GenerationEquality



Ministério dos Direitos Humanos e da Cidadania e mais 5

29

58

333

Tabular data

Textual content

Network/relational data

Types of ML

Supervised

Semi-supervised

Unsupervised

Reinforcement

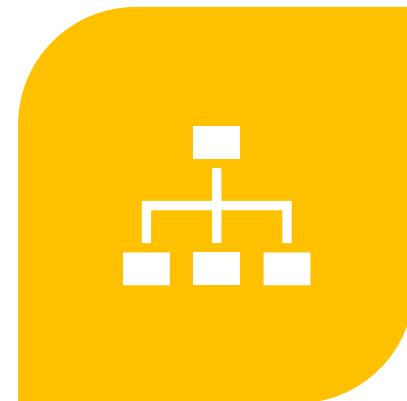
Objective



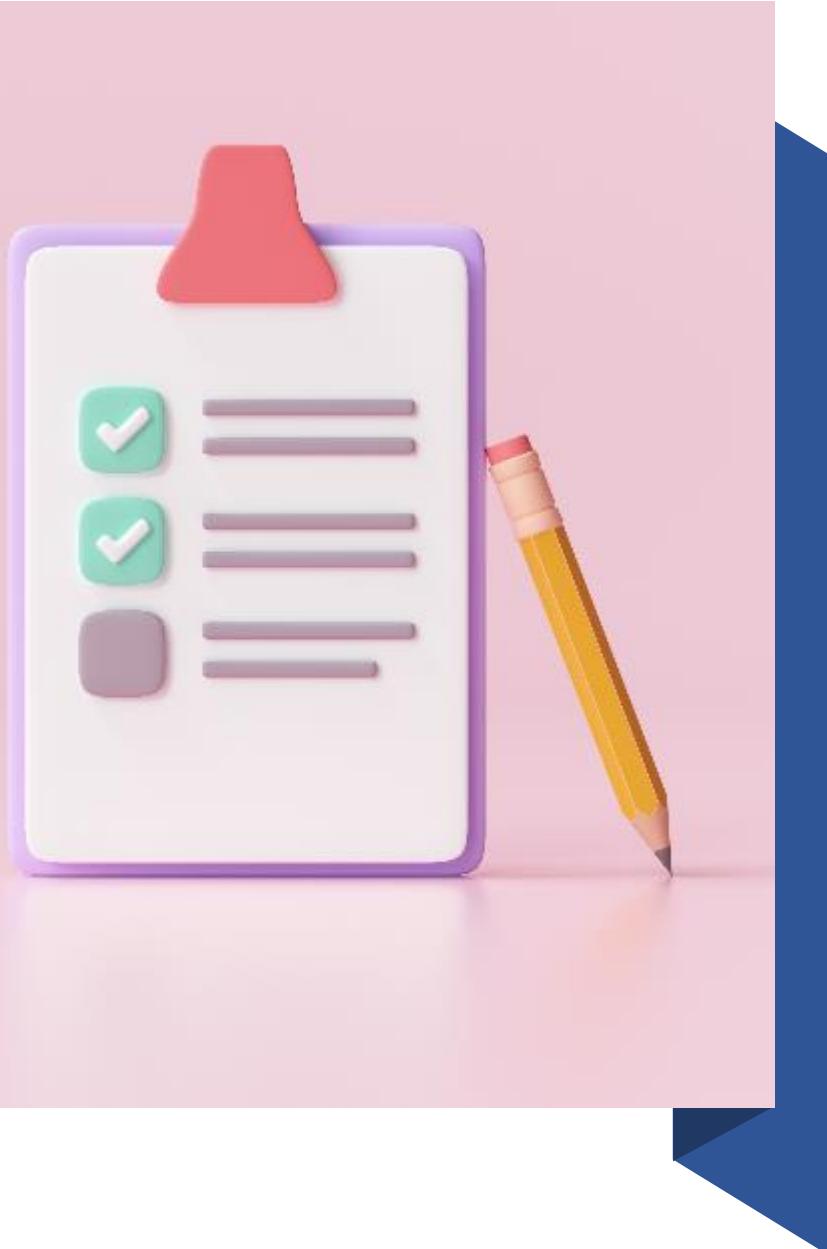
PREDICTION



INFERENCE AND
EXPLANATION



CLASSIFICATION AND
DESCRIPTION

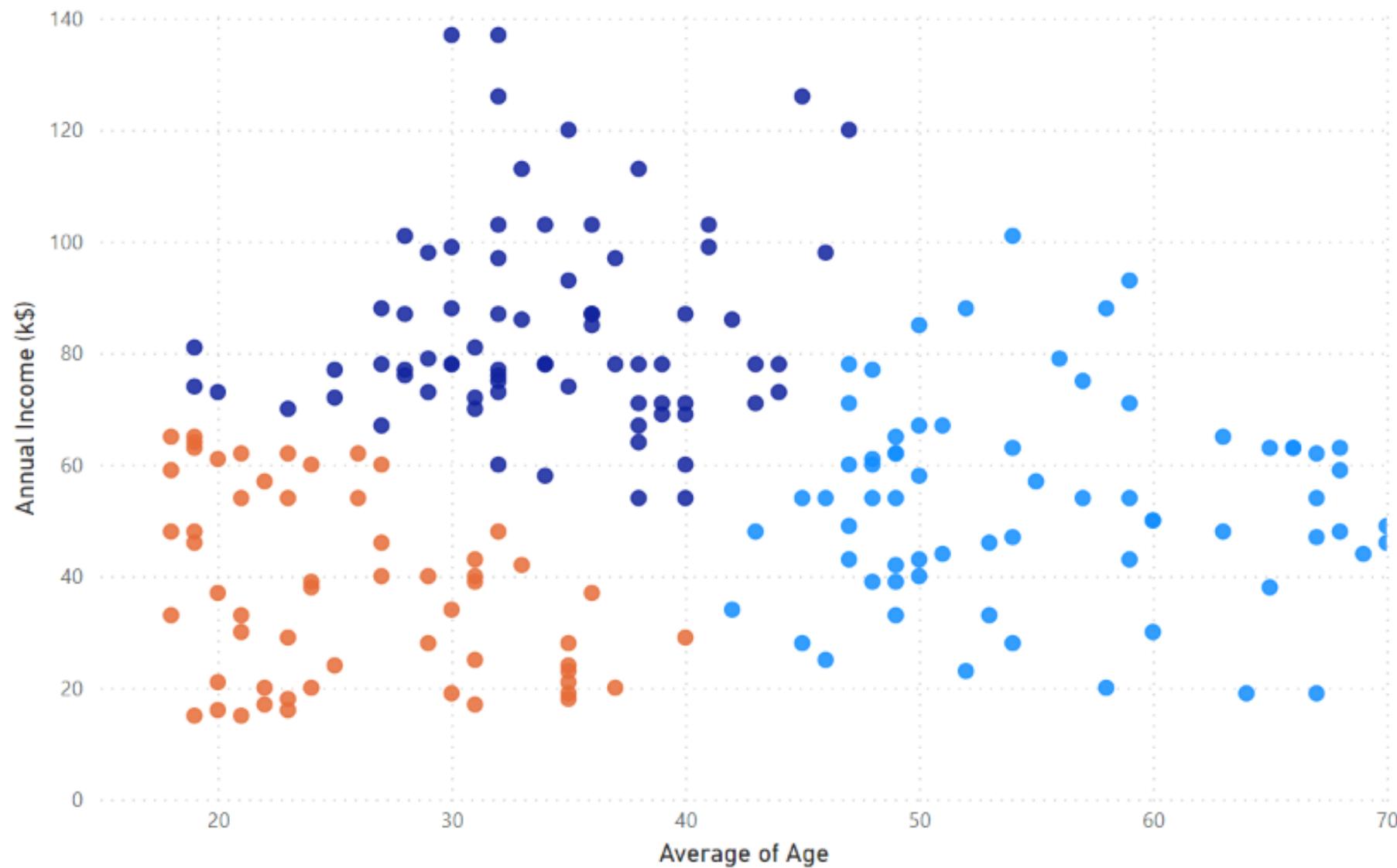


Cluster analysis

- **Given a set of N observations with $x_1, x_2 \dots x_k$ features, is it possible to cluster all observations into groups based on feature similarity?**
- One could assign groups based on attributes decided *ex ante*
 - All Visa Applicants that are female
- But given that observations can be similar or dissimilar in multiple dimensions, the desired outcome is to use all available information
 - Instead of defining *ex ante* how to segment results, let the data speak for itself

Average of Age and Annual Income (k\$) by CustomerID and CustomerID (clusters) 2

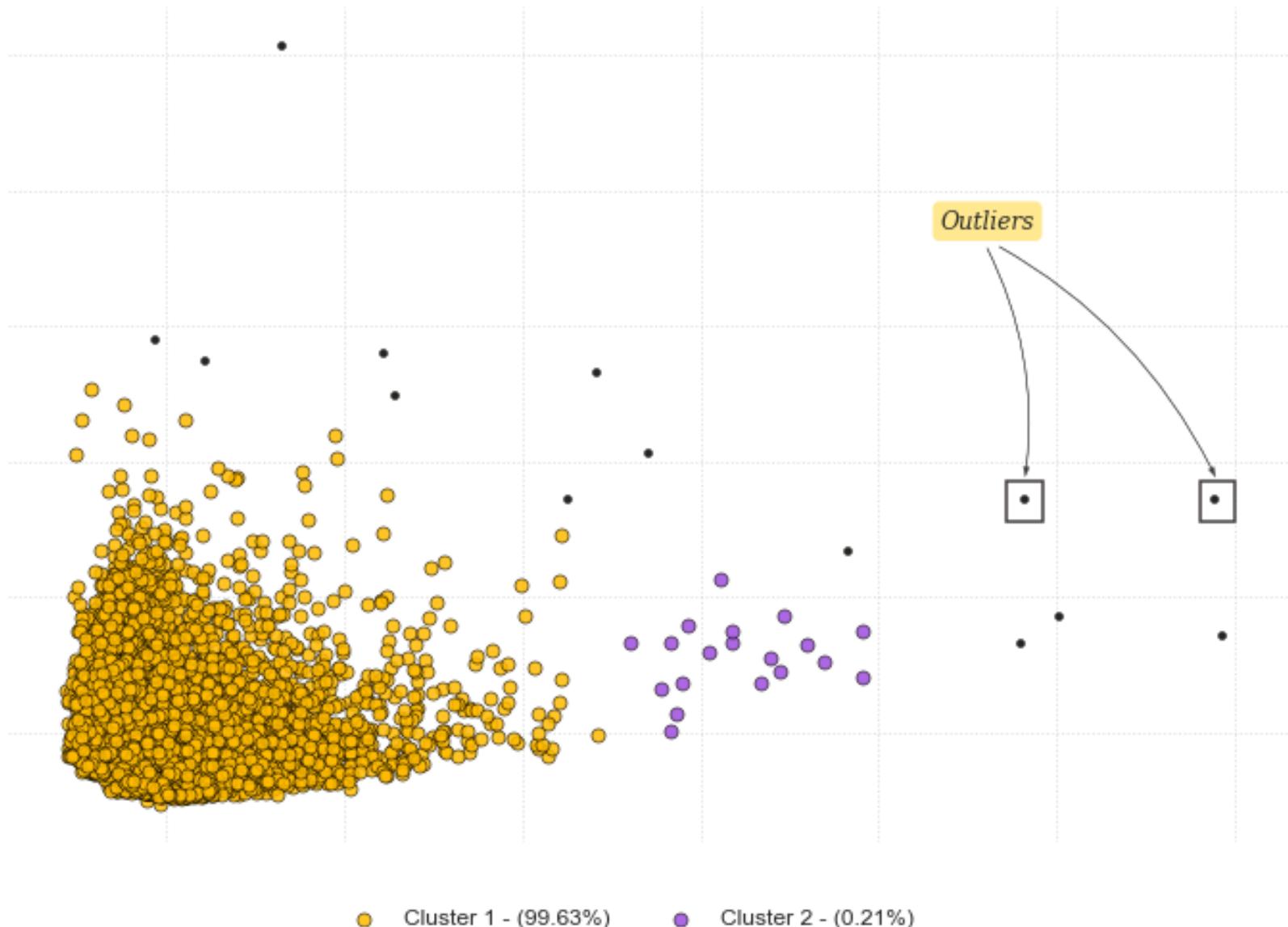
CustomerID (clusters) 2 ● Cluster1 ● Cluster2 ● Cluster3



Source:
<https://medium.com/mlearning-ai/clustering-in-power-bi-e1c7fd5700e>

Credit Card Customer Clustering using DBSCAN

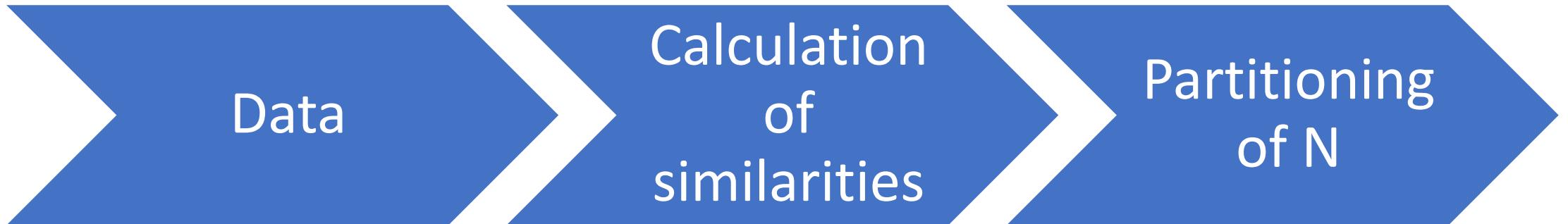
Two clusters of credit card customers were formed. There are also some outliers detected.



Source:
<https://medium.com/@isabeljohnnson06/understanding-credit-card-usage-patterns-insights-from-cluster-analysis-66761a3da9a2>

Cluster analysis

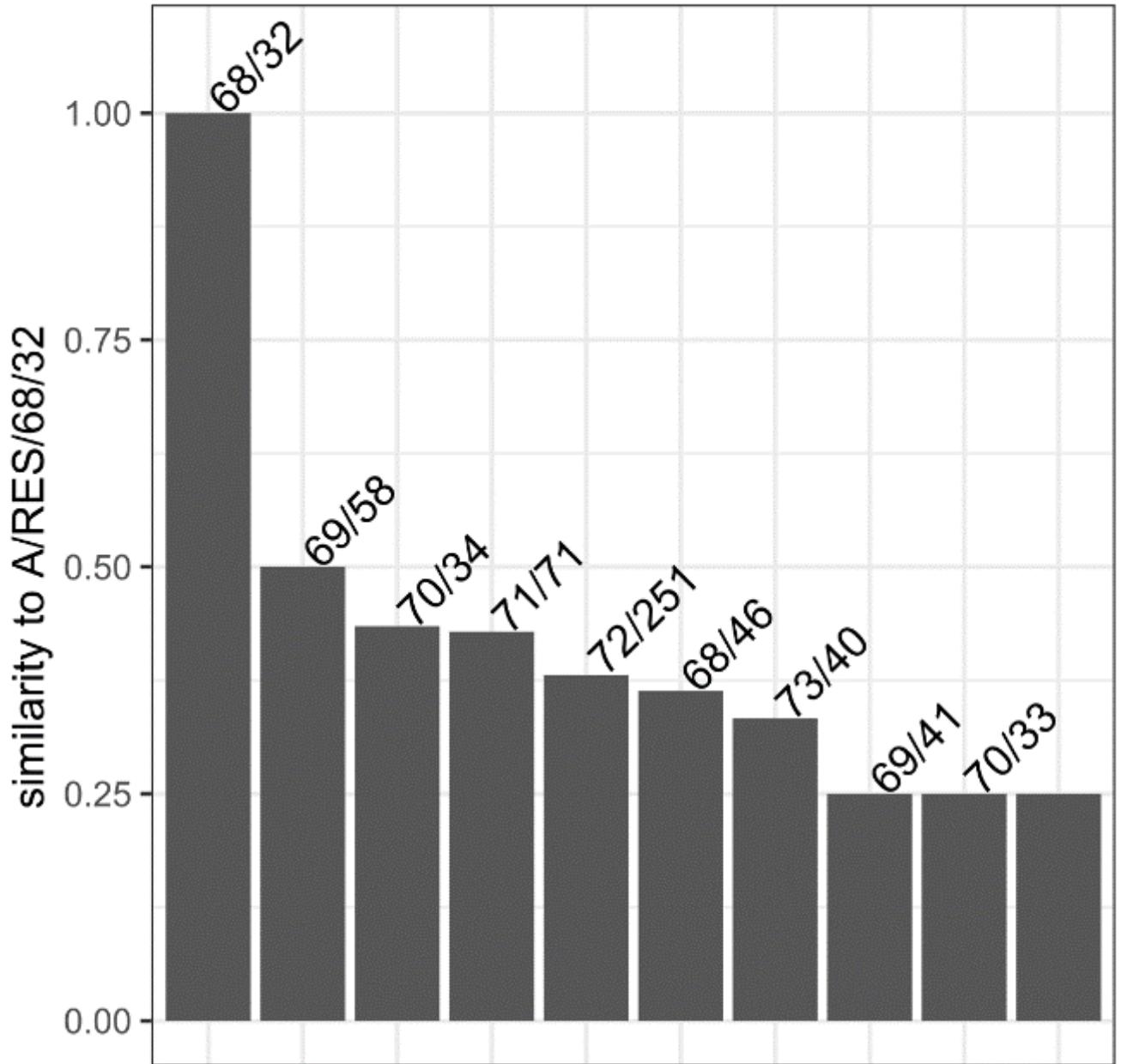
- Cluster analysis is classed as an **unsupervised classification** tool because:
 - Algorithms are either inductive (k-means) or deterministic (hierarchical clustering) and dispense an initial human definition of the groups
 - The focus is on N



Similarity

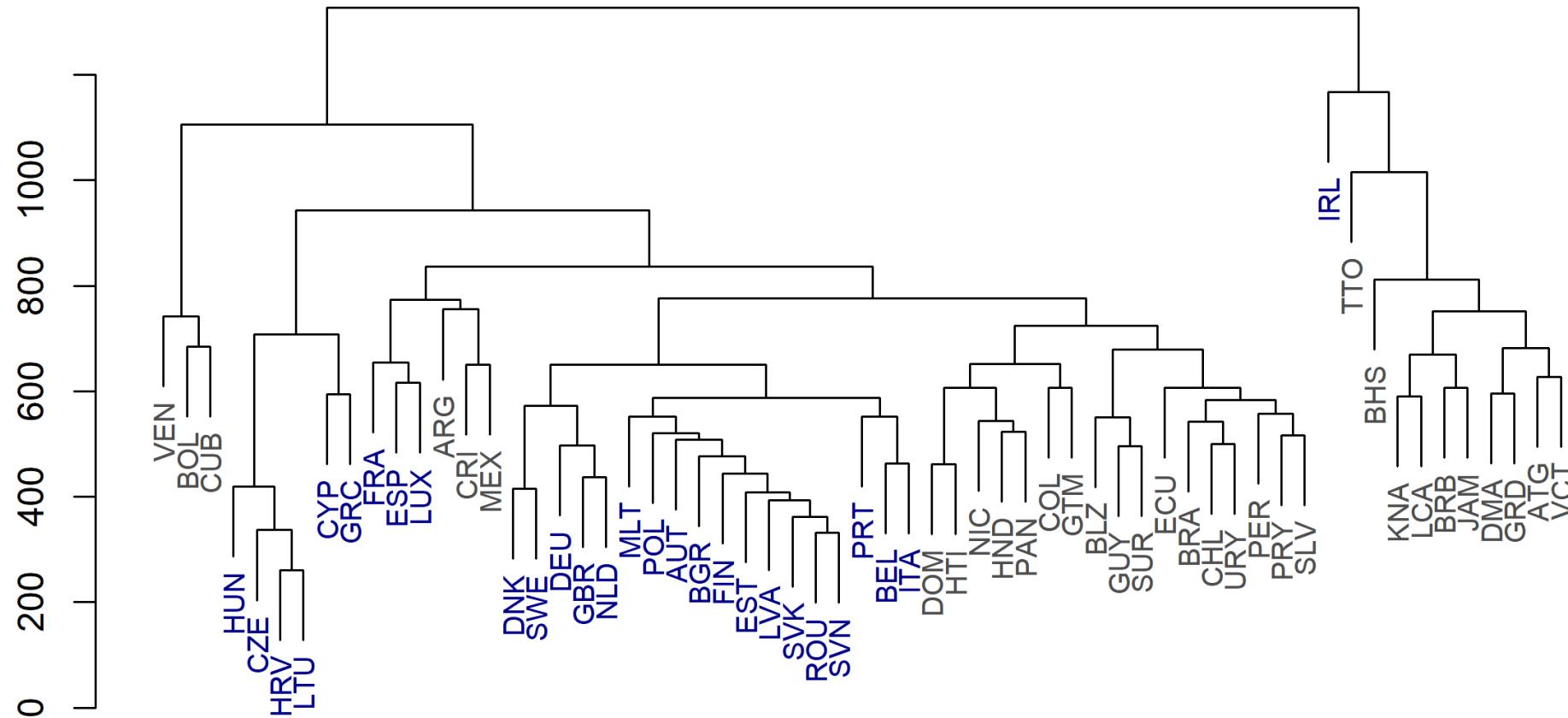
- The intermediate step of cluster analysis (similarity between observations) can be an outcome of interest in its own right
- **Given a series of observations N with features $x_1, x_2 \dots x_k$, is it possible to measure how similar are two observations?**

Are there
resolutions very
similar to one
another?



Source:
Elaborated by the
author.

Similarity of speeches at the UN General Debate, 2000-2020



Source:

Elaborated by the
author.

Dimensionality reduction

- **Given a series of N observations with features $x_1, x_2 \dots x_k$, can all the K variables be summarized into a smaller number of factors?**
- The expectation is that the observation's score in one variable tends to be correlated with its score in other variables
 - Ex.: Height and weight
- So all of the separate variables might in fact point to a smaller number of unobserved ("latent") dimensions

Sumarizing a fuzzy, multi-dimensional concept: “soft power”

Jiadong Tong^{a, b}, Ziliang Yu^c, Jiayun Xu^b, Meng Tong^d

The Belt and Road Initiative and China’s Export: A Soft Power Perspective

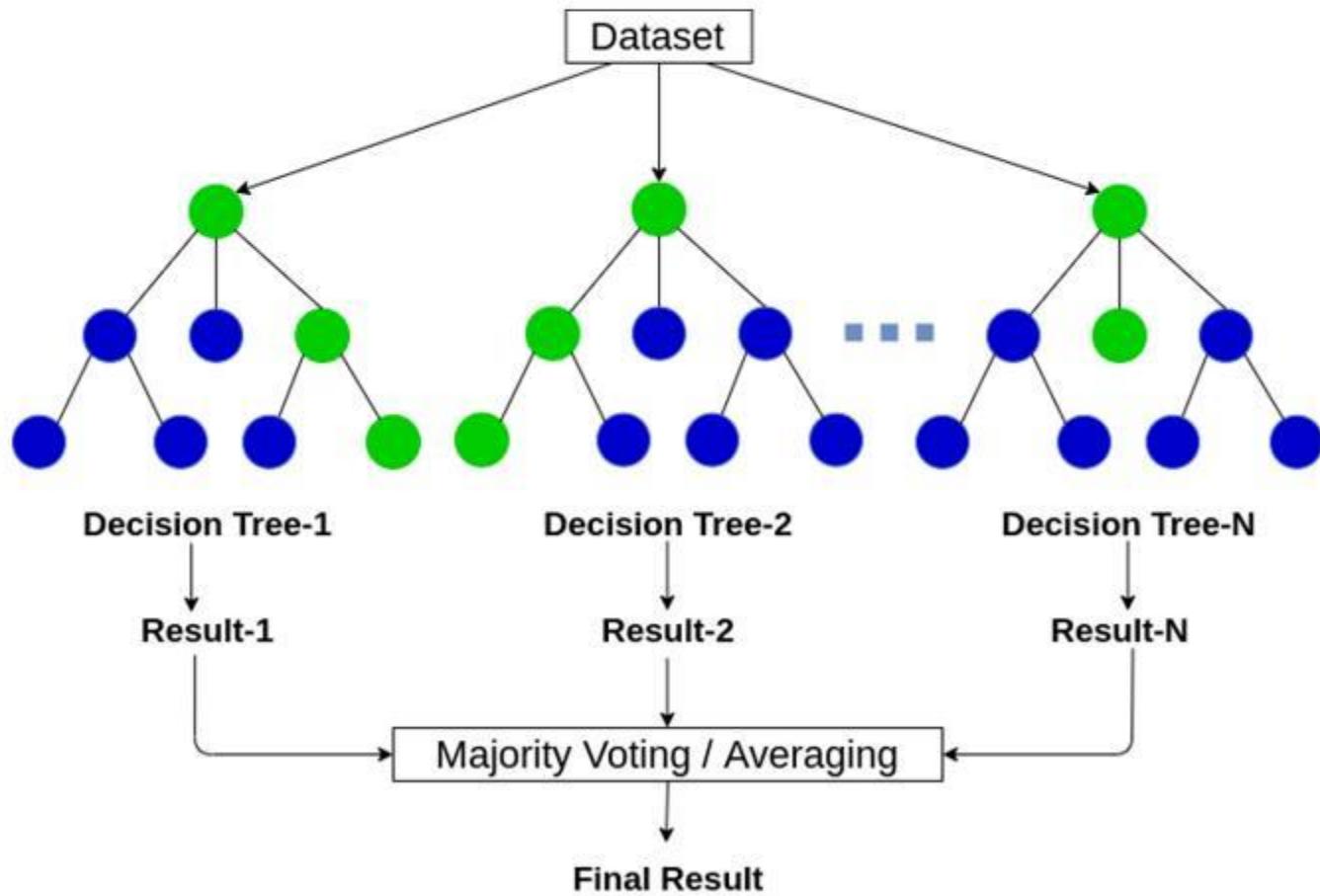
Abstract Using a newly built soft power index, we examine whether and how soft power affects Chinese firm-level export to the Belt and Road (B&R) countries from 2000 to 2016. We find that soft power has significantly positive effects on both export value and export product types for the B&R countries. These effects are more pronounced than those for non-B&R countries and differ not only between the “Belt” and the “Road” countries but also regional groups, firm ownerships, modes of trade, and sectors. Further analysis shows that soft power increases the intensive margin of exports by approximately three times that of the extensive margin. Thus, our findings provide a new perspective for understanding both the Belt and Road Initiative (BRI) and the contemporary economic evolution occurring in China.



A supervised inference task

	id_draft	ldoc_final	n_sponsors_final	title	rel_orgs
1	3943	A/71/L.10/Add.1	42	Education for democracy :	
2	3946	A/71/L.13/Add.1	65	The situation in Afghanistan :	
3	3948	A/71/L.15/Add.1	54	Cooperation between the United Nations and the Council of Europe :	
4	3950	A/71/L.17/Add.1	56	Cooperation between the United Nations and the International Criminal Police Organization :	
5	3956	A/71/L.24/Add.1	33	Sustainable fisheries, including through the 1995 Agreement for the Implementation of the Provisions of the United Nations Convention on t	
6	3957	A/71/L.25/Add.1	79	Investigation into the conditions and circumstances resulting in the tragic death of Dag Hammarskjöld and of the members of the party acco	
7	3958	A/71/L.26/Add.1	43	Oceans and the law of the sea :	
8	3959	A/71/L.27/Add.1	97	World Tuna Day :	
9	3960	A/71/L.28/Add.1	61	Persistent legacy of the Chernobyl disaster :	
10	3964	A/71/L.31/Add.1	50	Assistance to the Palestinian people :	
11	3965	A/71/L.32/Add.1	82	Strengthening of the coordination of emergency humanitarian assistance of the United Nations :	
12	3968	A/71/L.34/Add.1	69	Safety and security of humanitarian personnel and protection of United Nations personnel :	
13	3969	A/71/L.35/Add.1	68	Report of the International Atomic Energy Agency :	
14	3972	A/71/L.38/Add.1	66	Sport as a means to promote education, health, development and peace :	
15	3973	A/71/L.39/Add.1	55	The situation in the Syrian Arab Republic :	
16	3975	A/71/L.41/Add.1	42	Global health and foreign policy : health employment and economic growth :	
17	3980	A/71/L.46/Add.1	48	Cooperation between the United Nations and the Organization for the Prohibition of Chemical Weapons :	

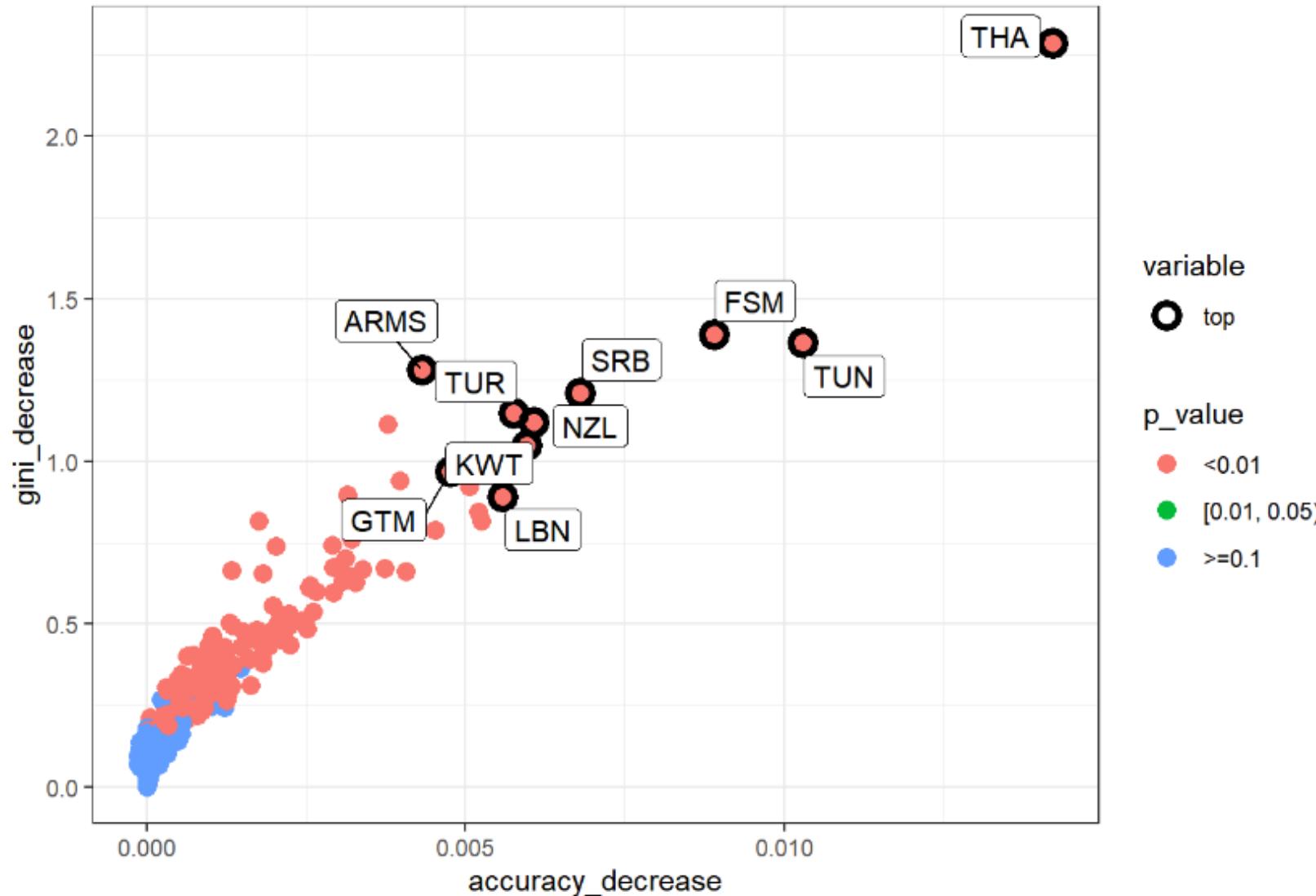
Random Forest



<https://anasbrial98.github.io/blog/2021/Random-Forest/>

The second multi-way importance plot shows importance measures that derive from the role a variable plays in prediction: accuracy_decrease and gini_decrease with the additional information on the *p*-value based on a binomial distribution of the number of nodes split on the variable assuming that variables are randomly drawn to form splits (i.e. if a variable is significant it means that the variable is used for splitting more often than would be the case if the selection was random).

Multi-way importance plot

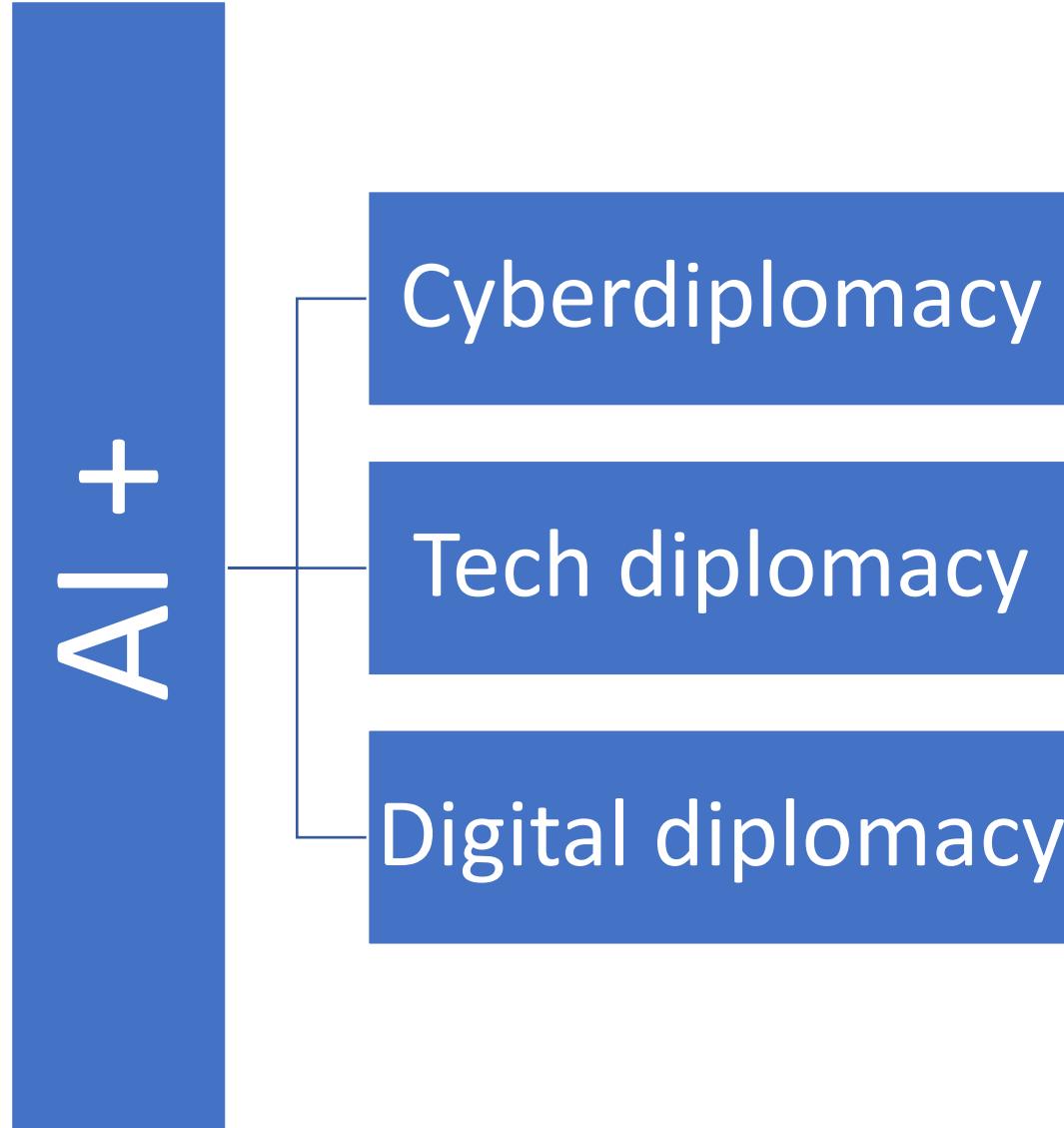


Source:
Elaborated by the
author.

AI and diplomacy



AI and diplomacy

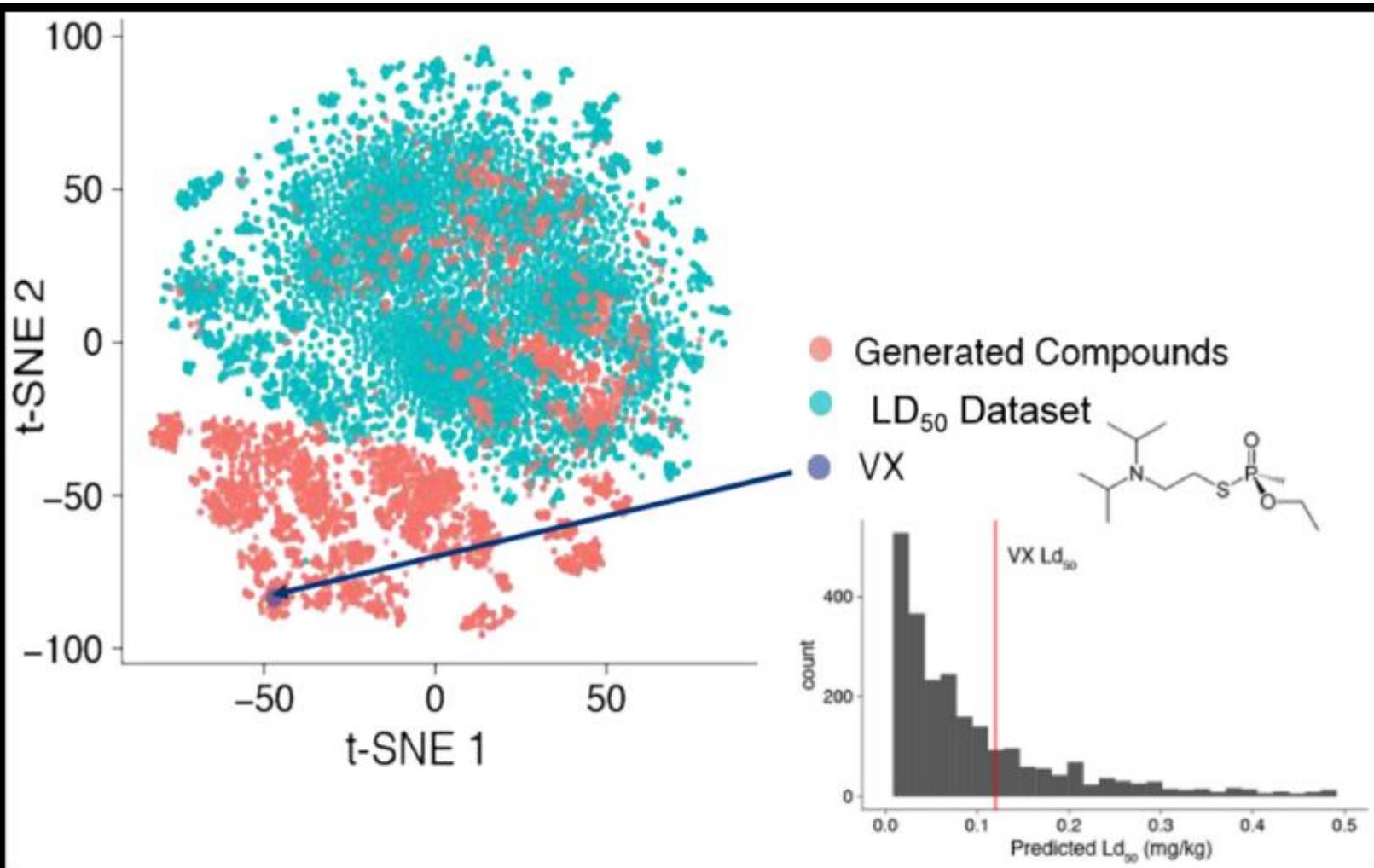




AI and cyber

AI and cyber

- **Cyber security agenda**
- Dual use of ML capabilities + exponential scale
- ML models affect the balance between offence/defense by being able to multiple the capacity to create new, undocumented harmful agents (malware, chemical compounds)



We had previously designed a **commercial de novo molecule generator** which we called MegaSyn2 which is guided by machine learning model predictions of bioactivity for the purpose of **finding new therapeutic inhibitors** of targets for human diseases. This generative model normally **penalizes predicted toxicity** and rewards predicted target activity. We simply proposed to **invert this logic** using the same approach to design molecules de novo, but now guiding the model to reward both toxicity and bioactivity instead. We trained the AI with molecules from a **public database** using a collection of primarily drug-like molecules (that are synthesizable and likely to be absorbed) and their bioactivities. We opted to score the designed molecules with an organism-specific lethal dose (LD₅₀) model [...]

In less than 6 hours after starting on our in-house server, our model generated **forty thousand molecules** that scored within our desired threshold. In the process, the AI designed not only VX, but many other known chemical warfare agents that we identified through visual confirmation with structures in public chemistry databases. Many **new molecules** were also designed that looked equally plausible. These new molecules were predicted to be more toxic based on the predicted LD₅₀ in comparison to publicly known chemical warfare agents

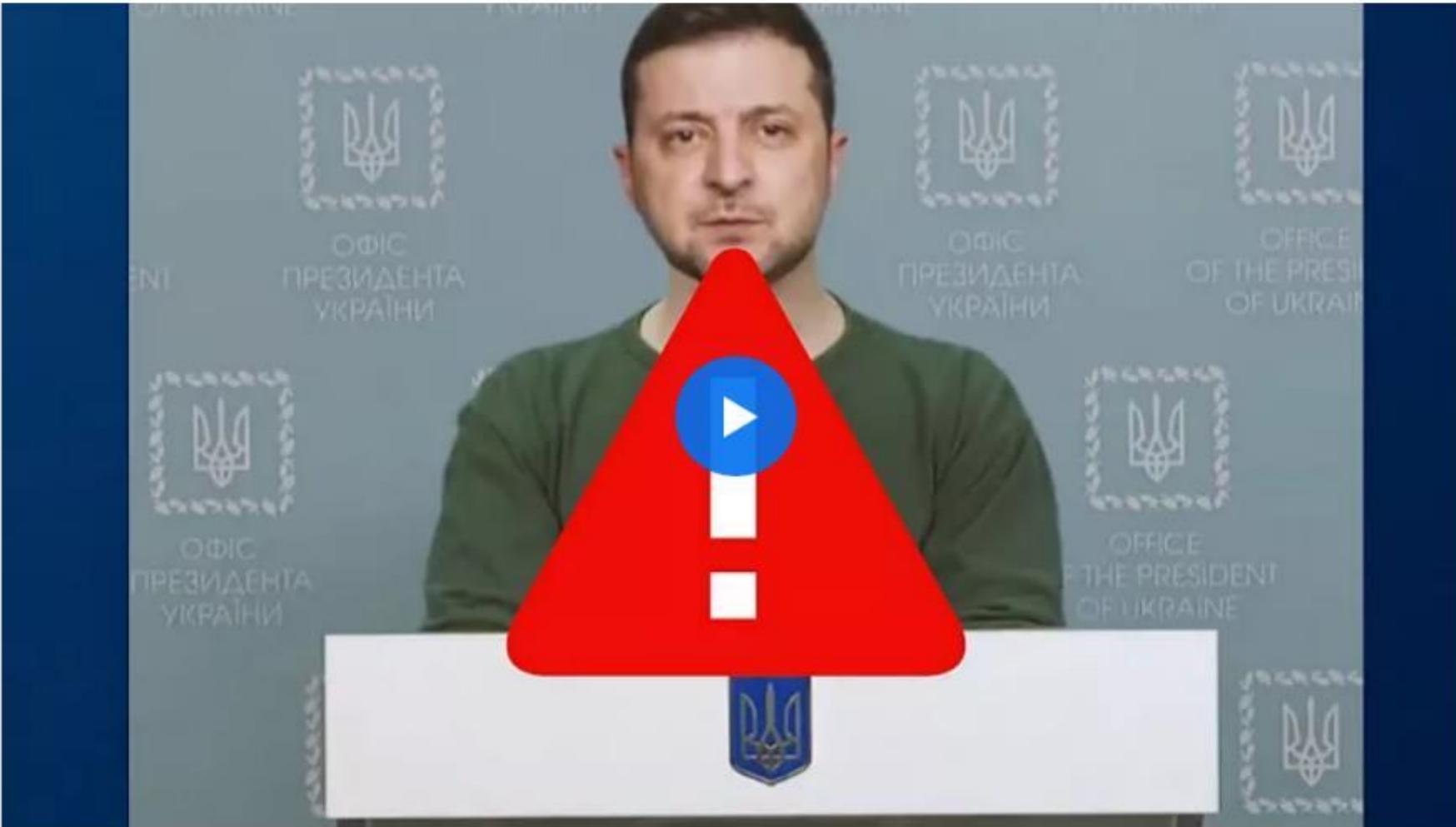
[See this image and copyright information in PMC](#)

Figure 1. A t-SNE plot visualization of the LD₅₀ dataset (cyan) and top 2000 MegaSyn AI-generated and predicted toxic molecules (salmon) illustrating VX (purple and 2D structure). Many of the molecules generated are predicted as more toxic *in vivo* in the animal model than VX (histogram showing cutoff for VX LD₅₀).

Source:

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9544280/>

Deepfake Zelenskyy surrender video is the 'first intentionally used' in Ukraine war



Deepfakes for \$24 a month – how AI is disrupting Bangladesh's election

Ahead of South Asian nation going to the polls in January, AI-generated disinformation has become a growing problem



Screenshot of an anti-opposition disinformation video posted on Facebook featuring a deepfake of exiled BNP leader Tarique Rahman

Other examples include anti-opposition deepfake videos posted on Meta's Facebook, including one that falsely purports to be of exiled BNP leader Tarique Rahman suggesting the party "keep quiet" about Gaza to not displease the US. The Tech Global Institute, a think-tank, and media non-profit Witness both concluded the fake video was likely AI-generated.

A screenshot of the HeyGen AI-powered video creation platform. The interface shows a preview window with a woman in a yellow top, a 'Demo' button, and sections for 'Text', 'Element', 'Asset', and 'Tags'. The preview shows a woman in a yellow top and another in a pink top. The platform is described as 'Explore HeyGen Realtime Avatar' and 'Click to Join the Webinar Now!'. It features logos for KPMG, NVIDIA, and pattern. A 'Get started' button is visible.

AI-powered video creations at scale

Effortlessly produce studio quality videos with AI-generated avatars and voices.

Get started for free →

No credit card needed

Source:
<https://www.ft.com/content/bd1bc5b4-f540-48f8-9cda-75c19e5ac69c>

How it works

Whether you're a professional or beginner, you can create stunning videos in minutes instead of hours.



Israel

'The Gospel': how Israel uses AI to select bombing targets in Gaza

Concerns over data-driven 'factory' that significantly increases the number of targets for strikes in the Palestinian territory

Israel-Hamas war - live updates

Harry Davies, Bethan McKernan and Dan Sabbagh in Jerusalem

Fri 1 Dec 2023 10.03 GMT

Israel's military has made no secret of the intensity of its bombardment of the Gaza Strip. In the early days of the offensive, the head of its air force spoke of relentless, "around the clock" airstrikes. His forces, he said, were only striking military targets, but he added: "We are not being surgical."

There has, however, been relatively little attention paid to the methods used by the Israel Defense Forces (IDF) to select targets in [Gaza](#), and to the role artificial intelligence has played in their bombing campaign.

" "once this machine was activated" in Israel's 11-day war with Hamas in May 2021 it generated 100 targets a day. "To put that into perspective, in the past we would produce 50 targets in Gaza per year. Now, this machine produces 100 targets a single day, with 50% of them being attacked."

Source: The Guardian

AI and cyber

- ML has been productively applied to support the core tasks of diplomacy and interstate cooperation
- Early warning system and forecasting
 - Open source events datasets (GDELT)
- Scenario simulation
 - “Computational diplomacy” (UNIGE)



Contents lists available at [ScienceDirect](#)

Journal of Computational Science

journal homepage: www.elsevier.com/locate/jocs



Datafying diplomacy: How to enable the computational analysis and support of international negotiations

Florian Cafiero

médialab, Sciences Po, Paris, France

ARTICLE INFO

Keywords:

Computational diplomacy
Open data
Digital humanities

ABSTRACT

Computational diplomacy, the application of digital and computational methods to the study and practice of international negotiations, presents unique challenges compared to most other fields in the computational humanities and social sciences. Among them are the necessity of responsiveness when handling crises, the need to anticipate and respond to adversarial behavior, or the need for secrecy in dealing with sensitive information. In this paper, we propose an agenda to address these challenges, and evaluate the feasibility of the various tasks that could be assigned to computational diplomacy. While most analysis tools seem almost ready to use, the availability and reliability of diplomacy-related data remains a major concern.

Article

Machine learning and phone data can improve targeting of humanitarian aid

<https://doi.org/10.1038/s41586-022-04484-9>

Emily Aiken^{1,5}, Suzanne Bellue², Dean Karlan³, Chris Udry⁴ & Joshua E. Blumenstock^{1,5} 

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Published online: 16 March 2022

Open access

 Check for updates

The COVID-19 pandemic has devastated many low- and middle-income countries, causing widespread food insecurity and a sharp decline in living standards¹. In response to this crisis, governments and humanitarian organizations worldwide have distributed social assistance to more than 1.5 billion people². Targeting is a central challenge in administering these programmes: it remains a difficult task to rapidly identify those with the greatest need given available data^{3,4}. Here we show that data from mobile phone networks can improve the targeting of humanitarian assistance. Our approach uses traditional survey data to train machine-learning algorithms to recognize patterns of poverty in mobile phone data; the trained algorithms can then prioritize aid to the poorest mobile subscribers. We evaluate this approach by studying a flagship emergency cash transfer program in Togo, which used these algorithms to disburse millions of US dollars worth of COVID-19 relief aid. Our analysis compares outcomes—including exclusion errors, total social welfare and measures of fairness—under different targeting regimes. Relative to the geographic targeting options considered by the Government of Togo, the machine-learning approach reduces errors of exclusion by 4–21%. Relative to methods requiring a comprehensive social registry (a hypothetical exercise; no such registry exists in Togo), the machine-learning approach increases exclusion errors by 9–35%. These results highlight the potential for new data sources to complement traditional methods for targeting humanitarian assistance, particularly in crisis settings in which traditional data are missing or out of date.

Instead of relying on survey and census data to target the poorest households, the authors turned to **big data from mobile phone user subscriptions**. ML methods allowed to transform the high-dimensional dataset of user information into a **proxy for household wealth and reduce targeting error of aid**.

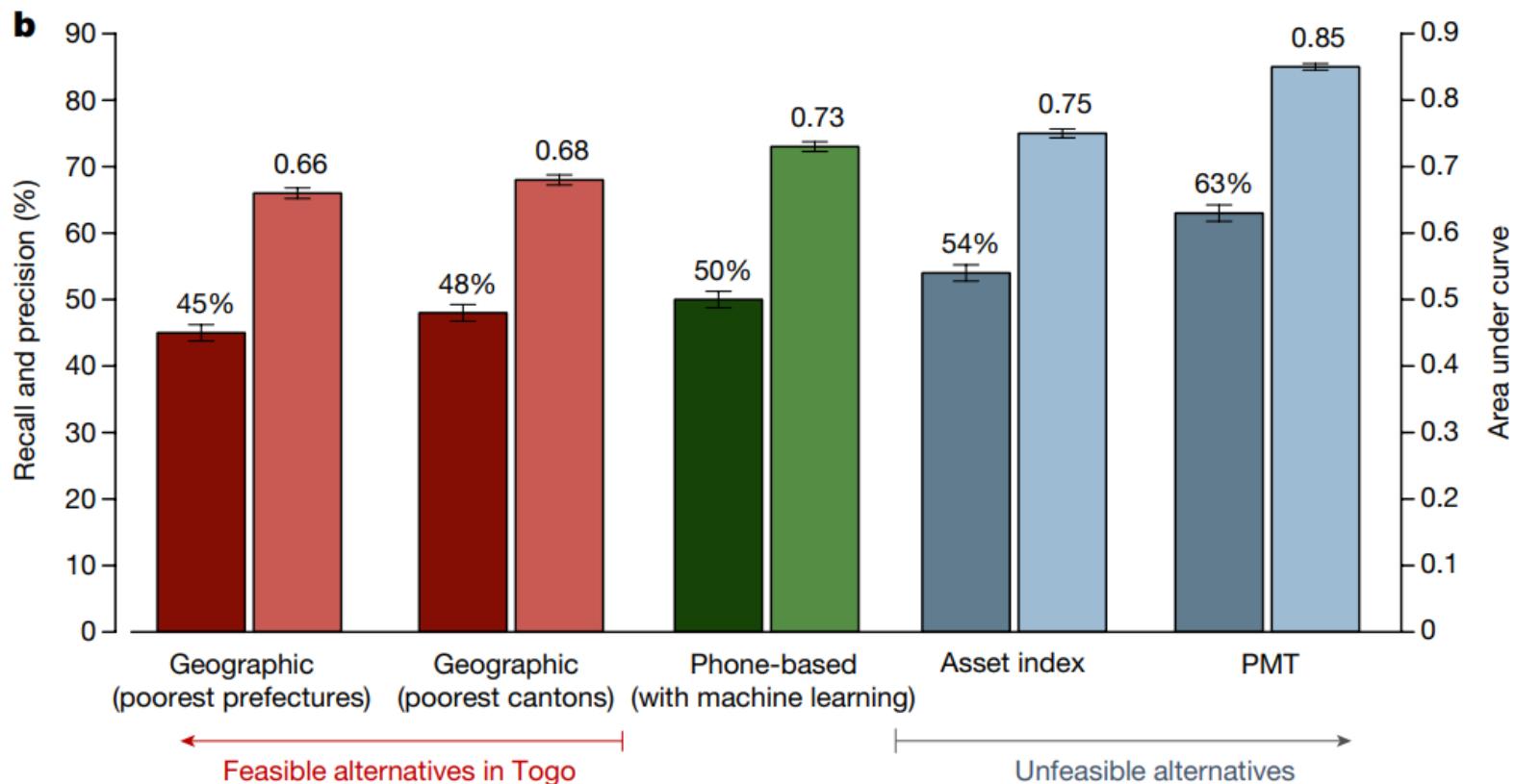


Fig. 1 | Comparing Novissi targeting to alternatives. a, b, The performance of phone-based targeting (green) compared with alternative approaches that were feasible (red) and unfeasible (blue) in Togo in 2020. Targeting is evaluated for the actual rural Novissi programme (a), which focused on Togo's 100 poorest cantons (using a 2020 survey representative of mobile subscribers in the 100 cantons, where PMT is a ground truth for poverty since consumption data was not collected in the phone survey); and a hypothetical nationwide

anti-poverty programme (using a national field survey conducted in 2018–2019, where consumption is a ground truth for poverty) (b). The darker bar in each pair indicates recall and precision (left axis), which is equivalent to $1 - \text{exclusion error}$; the lighter bar in each pair indicates area under the curve (right axis). The bar height represents the point estimate from the full simulation; whiskers show s.d. produced from $n = 1,000$ bootstrap simulations. The figure highlights a subset of the results contained in Table 1.

Source:
Aiken et al. 2022. Machine learning and phone data can improve targeting of humanitarian aid. *Nature*, 603.

AI and cyber

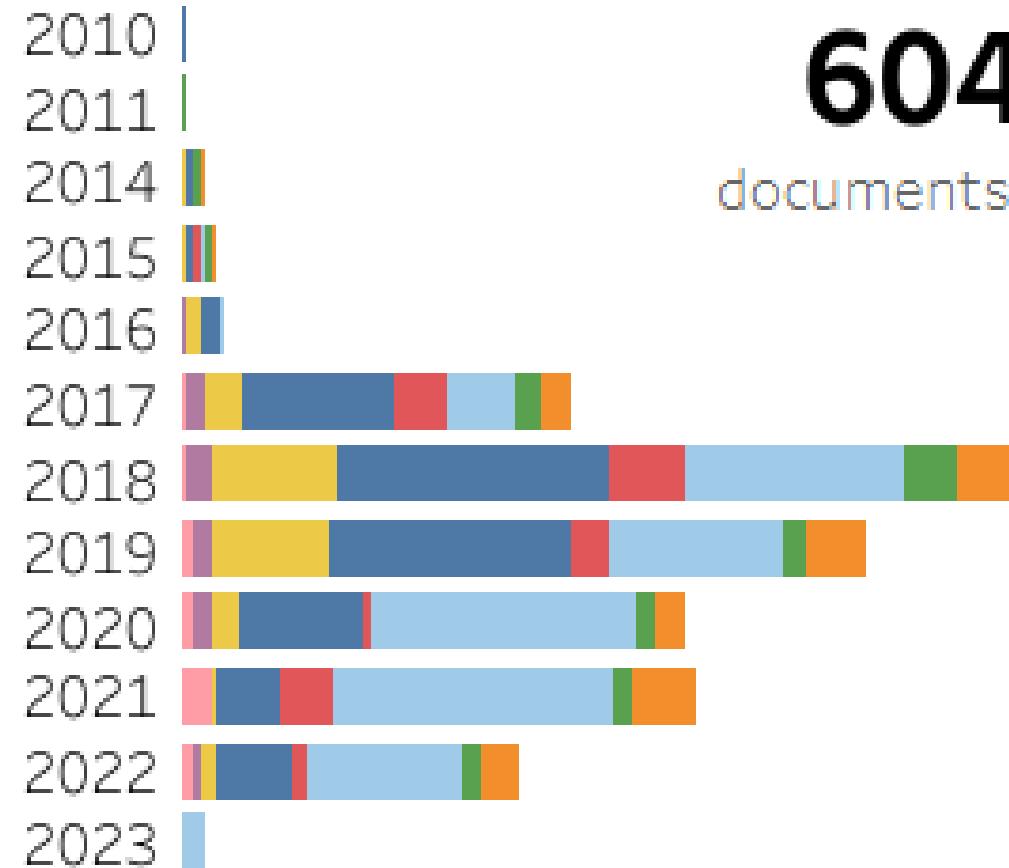
- “More broadly, AI presents a governance challenge due to its effects on economic competitiveness, military security, and personal integrity, with consequences for states and societies. In this respect, AI may not be radically different from earlier general-purpose technologies, such as the steam engine, electricity, nuclear power, and the internet [...]. From this perspective, **it is not the novelty of AI technology that makes it a pressing issue to regulate but rather the anticipation that AI will lead to large-scale changes and become a source of power for state and societal actors.**” [1]

[1] Tallberg, Jonas, Eva Erman, Markus Furendal, Johannes Geith, Mark Klamberg, and Magnus Lundgren. 2023. “The Global Governance of Artificial Intelligence: Next Steps for Empirical and Normative Research.” International Studies Review 25 (3): viad040.

AI and cyber

- **Internet governance agenda**
- Two broad periods until now
- Inception: mid-2010s, early initiatives by multi-state entities, highest count of initiatives by private and national actors
- Maturity: peak activity in 2017-2018, international organizations overtake national entities in number of frameworks

604
documents



Think Tank

Professional associ...

Private Sector

National Authorities

Multistakeholder

International Organ...

Civil Society

Academia

AI and cyber

- OECD, G7, G20
 - OECD: Committee on Digital Economic Policy (2016)
 - G7: ICT Ministerial (2016)
 - OECD: established an AI expert group (2018)
 - G7 Summit 2018: Canada and France announce the Global Partnership for AI. Initially “International Panel on Artificial Intelligence”. Officially launched in 2020, secretariat currently hosted by the OECD.
 - OECD: published the “OECD Principles on AI” (2018), later endorsed by non-members (Argentina, Brazil, Colombia, Costa Rica, Peru and Romania)
 - G20: ministerial meeting endorsed AI principles following OECD priors (2019)

AI and cyber

OECD Principles

1. Inclusive growth, sustainable development and well-being

AI should benefit people and the planet by driving inclusive growth, sustainable development and well-being.

2. Human-centred values and fairness

AI systems should be designed in a way that respects the rule of law, human rights, democratic values and diversity, and they should include appropriate safeguards – for example, enabling human intervention where necessary – to ensure a fair and just society.

3. Transparency and explainability

There should be transparency and responsible disclosure around AI systems to ensure that people understand when they are engaging with them and can challenge outcomes.

4. Robustness, security and safety

AI systems must function in a robust, secure and safe way throughout their lifetimes, and potential risks should be continually assessed and managed.

5. Accountability

Organisations and individuals developing, deploying or operating AI systems should be held accountable for their proper functioning in line with the above principles.

Source:

<https://www.oecd.org/>

AI and cyber

- **UN system**
 - Group of Governmental Experts on Lethal Autonomous Weapons Systems (GGE) meets since 2017 within the framework of the United Nations Convention on Certain Conventional Weapons (CCW). With representatives from on average 90 states
 - UNESCO: Recommendation on the Ethics of AI adopted by member states in 2021.
 - SG: the Global Digital Compact as part of Our Common Agenda (Summit of the Future 2024)

AI and cyber

UNESCO

Values

1. Respect, protection & promotion of Human Rights and Fundamental Freedoms and Human Dignity
2. Living in peaceful, just and interconnected societies
3. Ensuring diversity and inclusiveness
4. Environment and Ecosystem flourishing

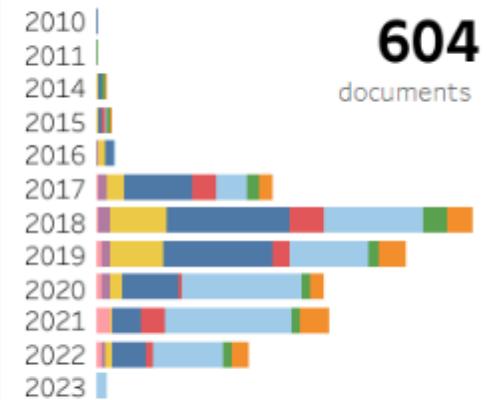
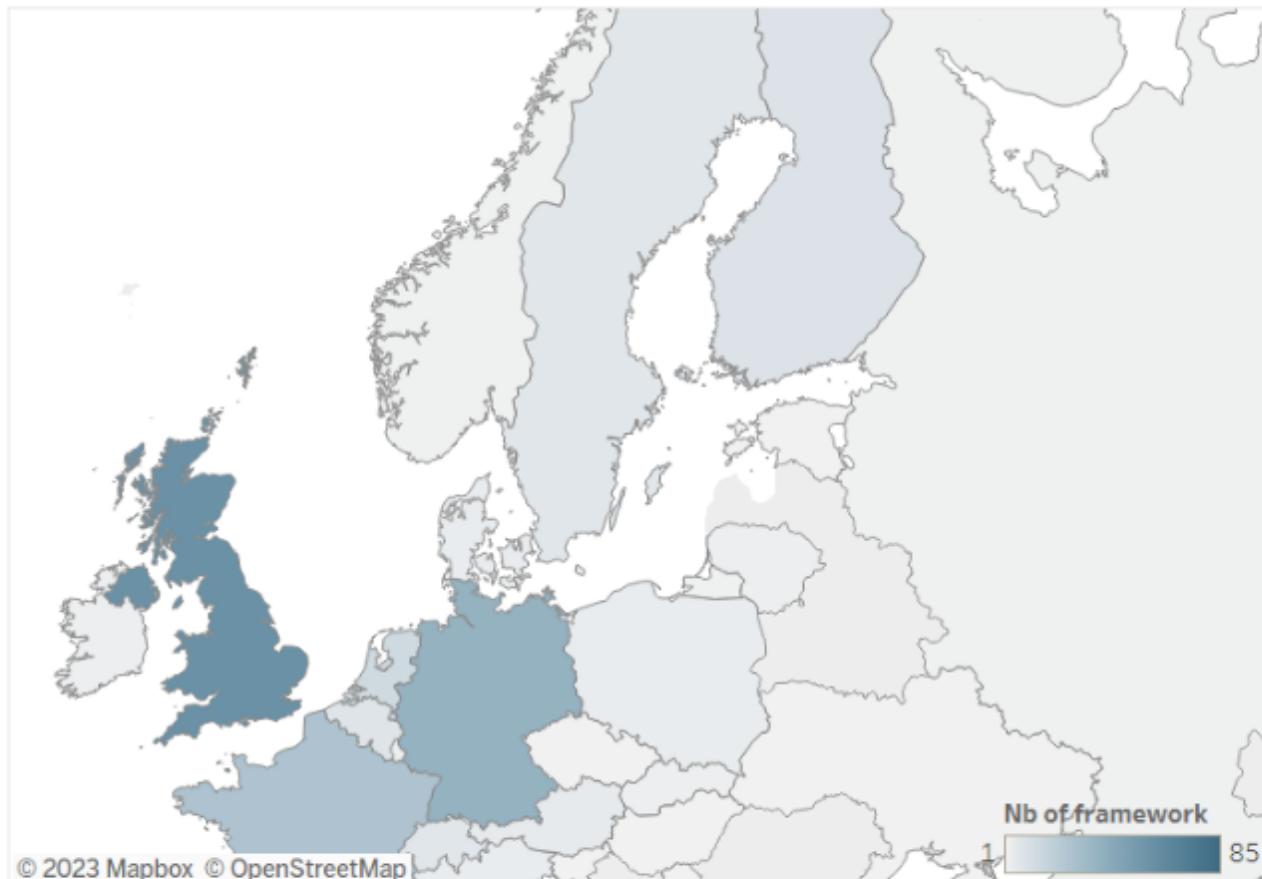
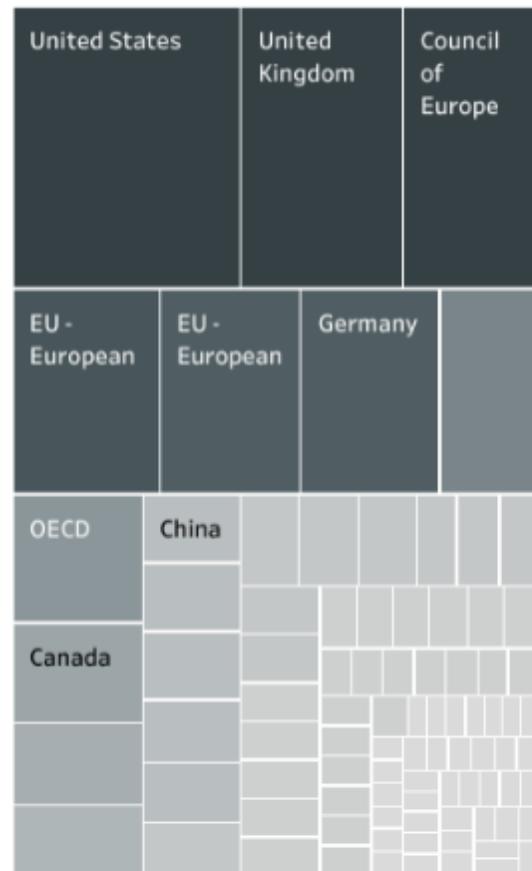
Principles

1. Proportionality and Do No Harm
2. Safety and Security
3. Right to Privacy and Data Protection
4. Multi-stakeholder and Adaptive Governance & Collaboration
5. Responsibility and Accountability
6. Transparency and Explainability
7. Human Oversight and Determination
8. Sustainability
9. Awareness & Literacy
10. Fairness and Non-Discrimination

AI initiatives

Source:
<https://www.coe.int/en/web/artificial-intelligence/national-initiatives>.

DATAVISUALISATION OF AI INITIATIVES



Think Tank

Professional associ...

Private Sector

National Authorities

Multistakeholder

International Organ...

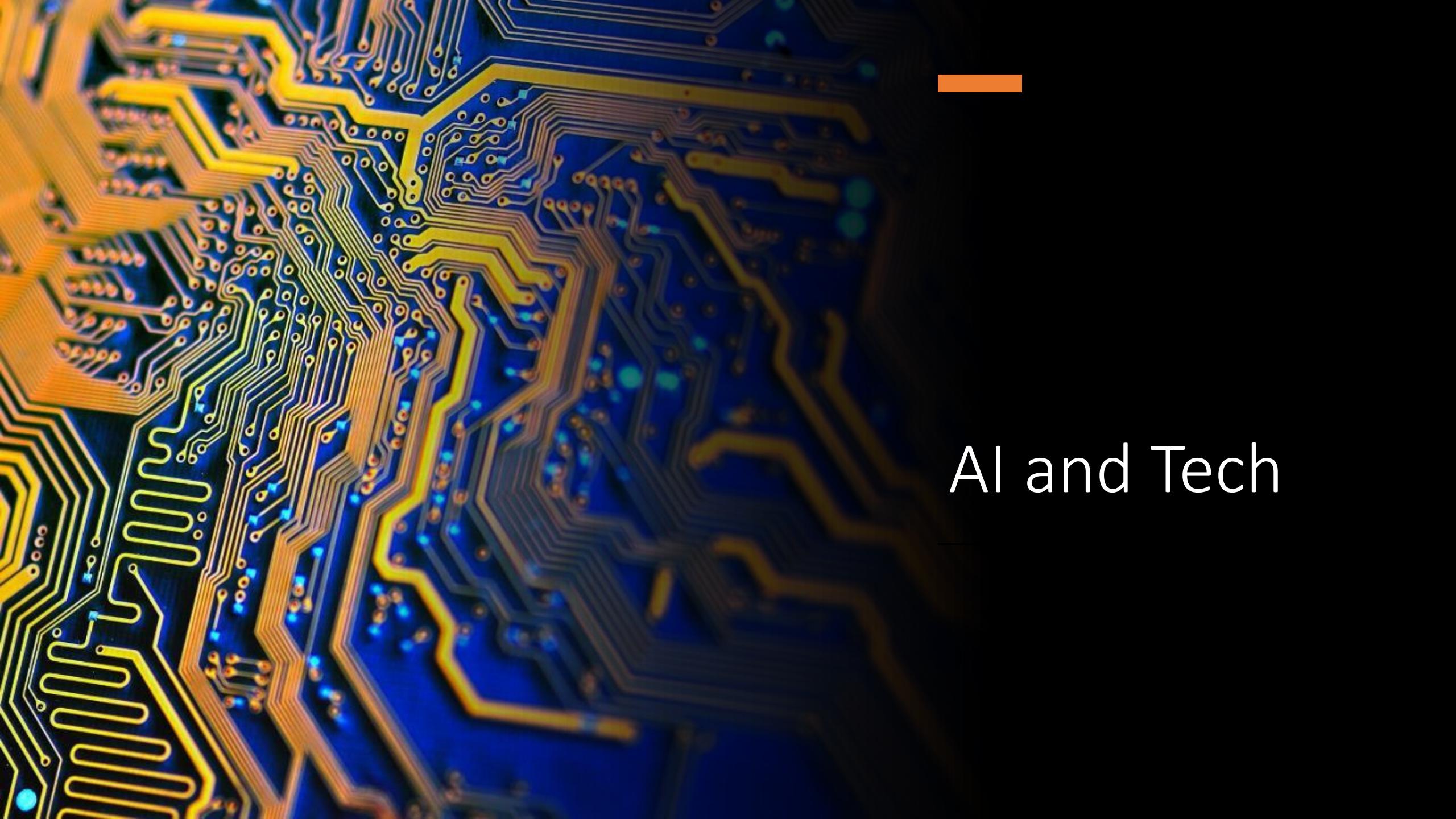
Civil Society

Academia

Select source(s)

(All)

Editor (Type in your research and press Enter)

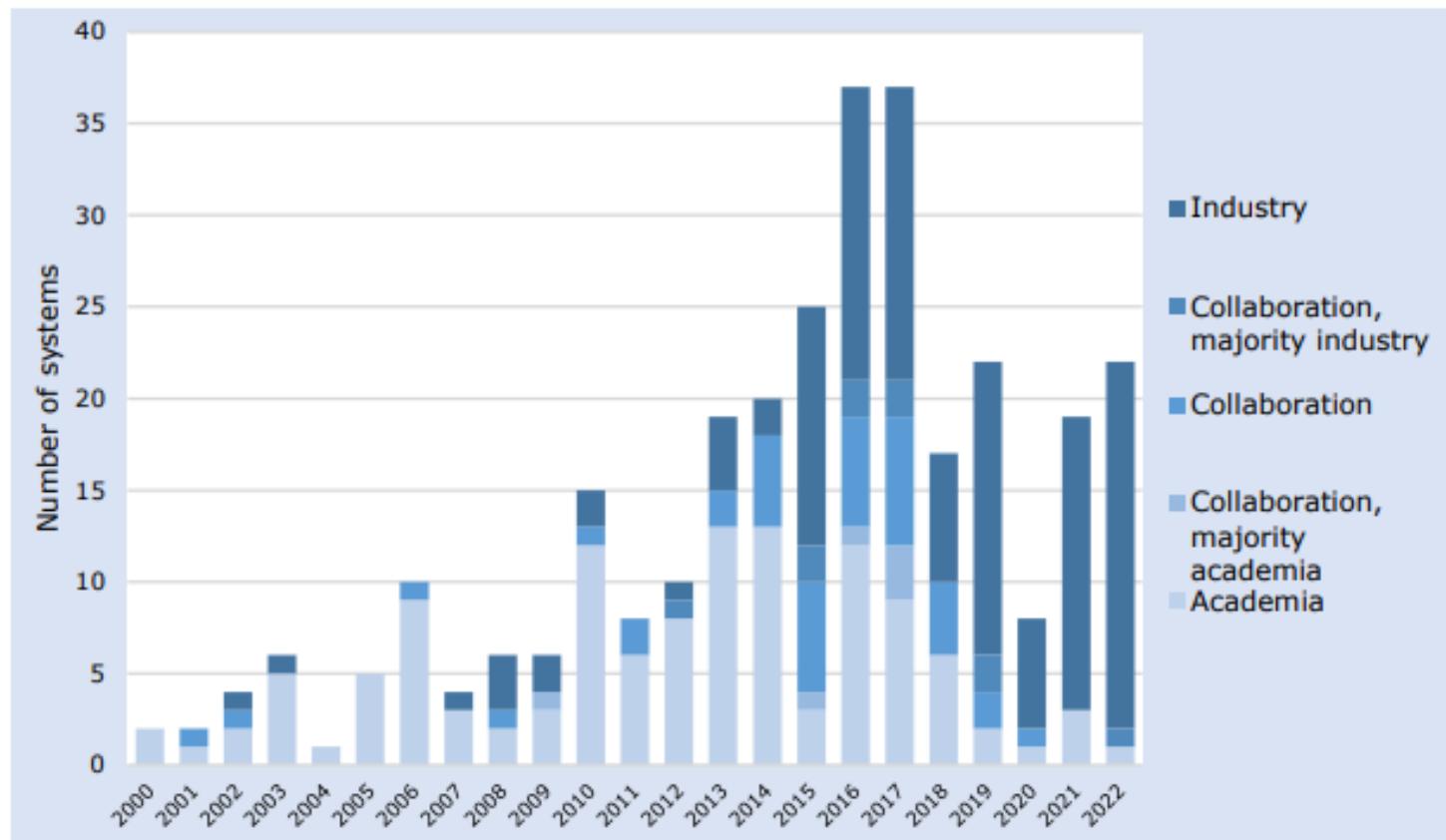


AI and Tech

AI and tech diplomacy

- AI systems emerged from composite research ecosystems, involving universities, government, and private sector
- Albeit all of these stakeholders played a part at first, the recent trend sets private companies ahead

Figure 1. Affiliation of researchers involved in the largest machine learning systems (2000-2022)



Sources: J. Sevilla et al., "Compute Trends Across Three Eras of Machine Learning", 2022, available at <https://arxiv.org/abs/2202.05924>; data available at <https://docs.google.com>. Adapted from Institut Montaigne, "Investir l'IA sûre et digne de confiance : un impératif européen, une opportunité française", Action Note, April 2023.

Source:
Pannier, Alice. Balancing Security and Openness for Critical Technologies Challenges for French and European Research. Études de l'IFRI. Oct. 2023

Where is ML at?

Source:
Parameter, Compute and
Data Trends in Machine
Learning by Jaime
Sevilla, Pablo
Villalobos, Juan Felipe
Cerón, Matthew Burtell,
Lennart Heim, Amogh B.
Nanajjar, Anson Ho,
Tamay Besiroglu and
Marius
Hobbhahn; 2021

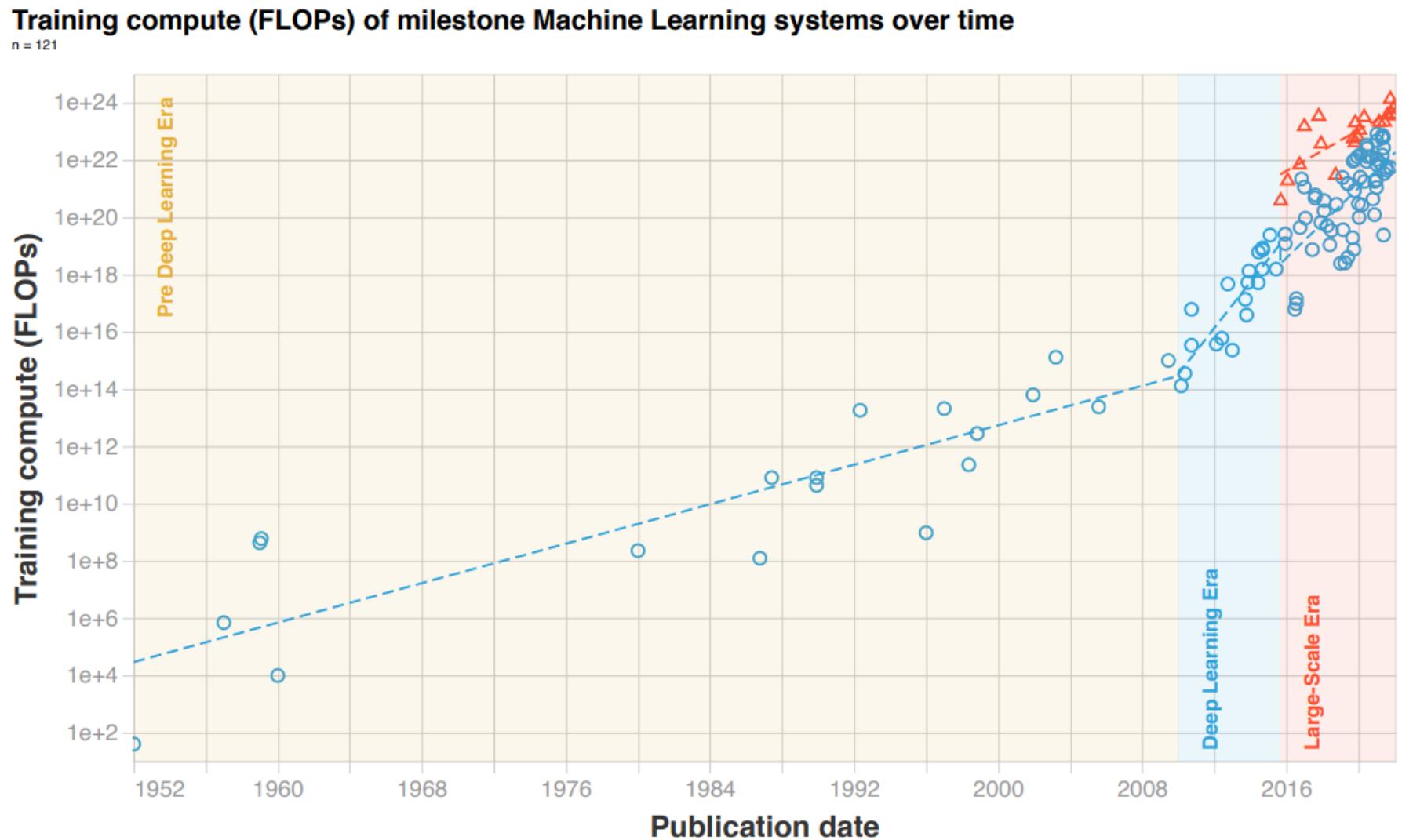


Figure 1: Trends in $n = 121$ milestone ML models between 1952 and 2022. We distinguish three eras. Notice the change of slope circa 2010, matching the advent of Deep Learning; and the emergence of a new large-scale trend in late 2015.

Training compute (FLOPs) of milestone Machine Learning systems over time

$n = 102$

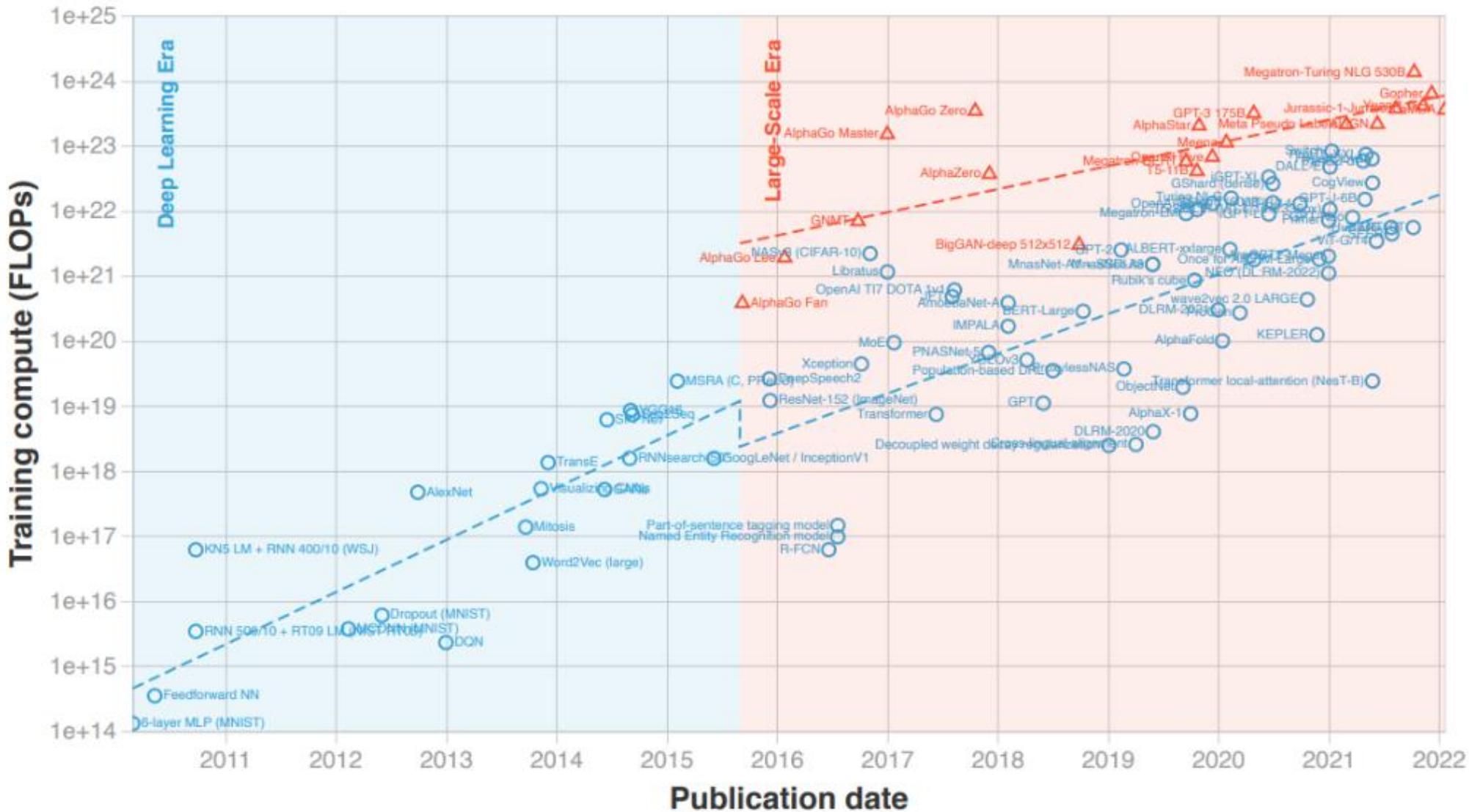
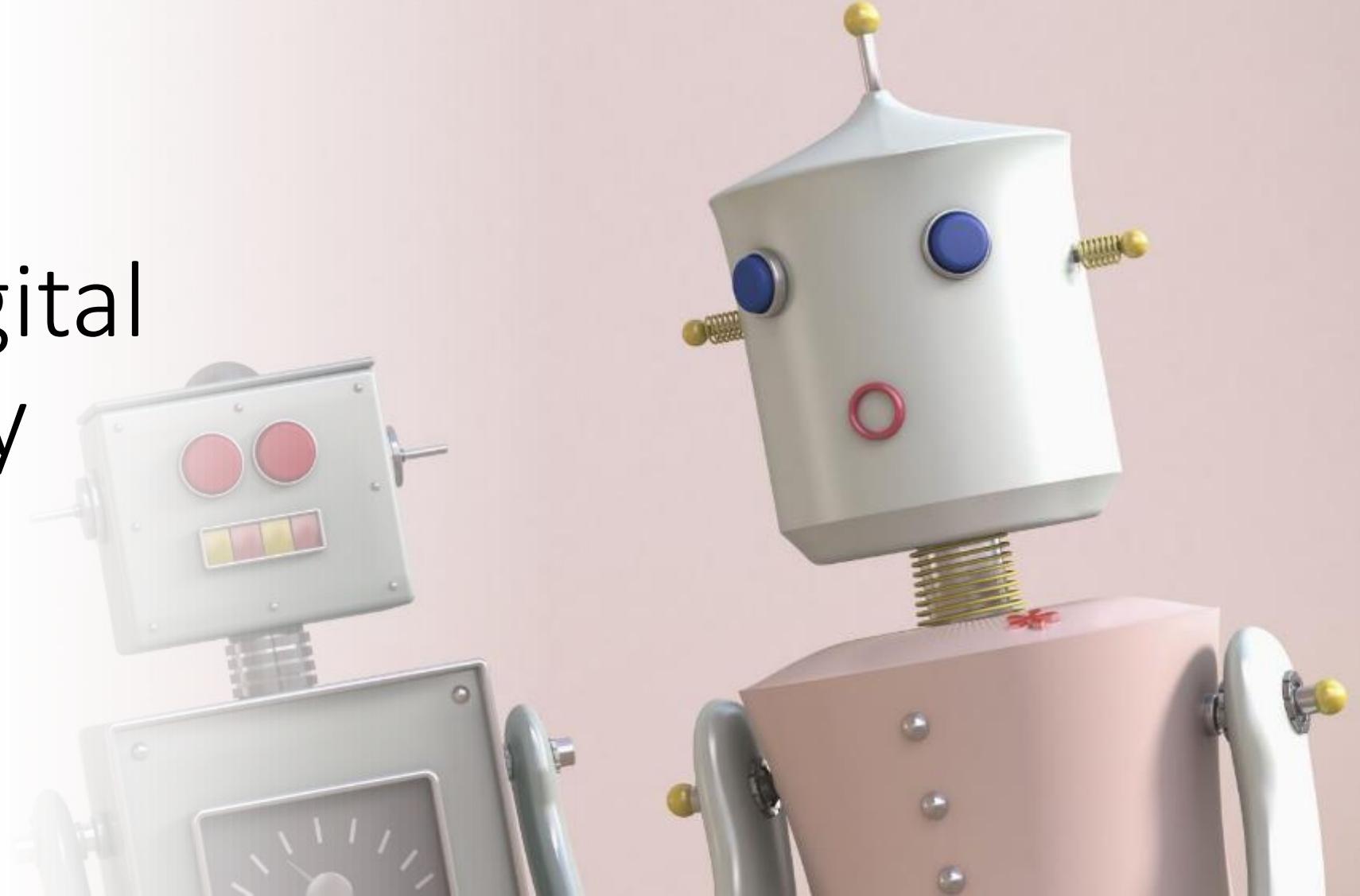


Figure 3: Trends in training compute of $n102$ milestone ML systems between 2010 and 2022. Notice the emergence of a possible new trend of large-scale models around 2016. The trend in the remaining models stays the same before and after 2016.

AI and Digital Diplomacy



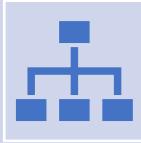
AI and digital diplomacy

- As one of the core materials of diplomatic work is **text-based**, one of the most promising areas of application of AI is **Natural Language Processing**
- Because NLP is a growing field, many solutions are open source
 - <https://voyant-tools.org/>

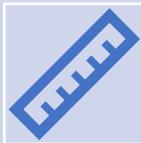


AI and digital diplomacy

- **Social media**
- Most social media platforms have already incorporated AI-enhancements in all processes
- An “environmental” update



Management



Measurement



Listening

AI and digital diplomacy

- **Advocacy and measurement**
- ML allows us to find hidden patterns in the data that can assist in:
 - Self-awareness: summarizing and making sense of the image conveyed
 - Accuracy: analyze multiple features that correlate with message engagement (or failure)

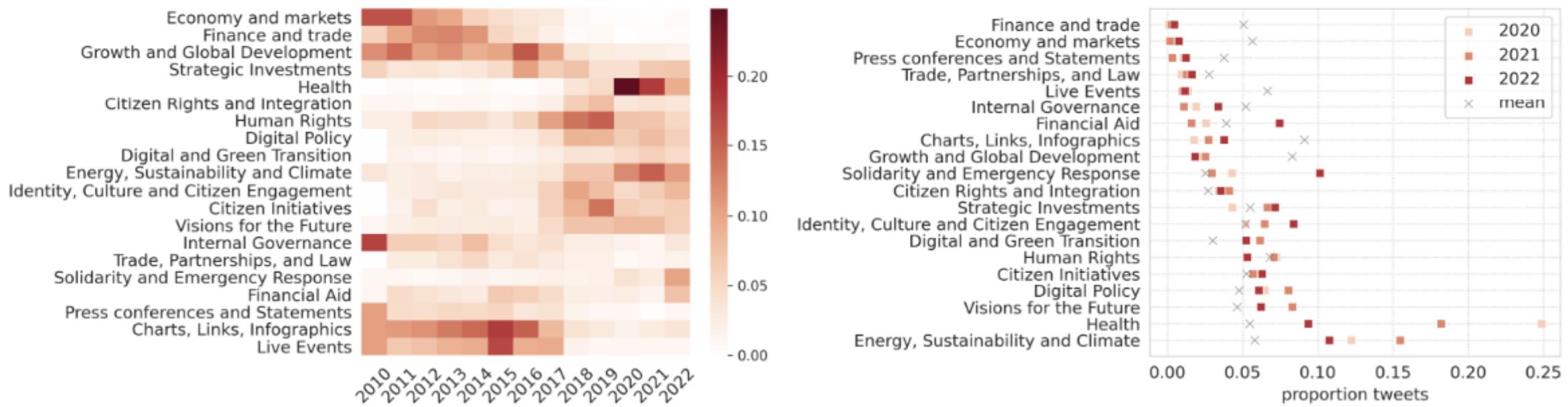
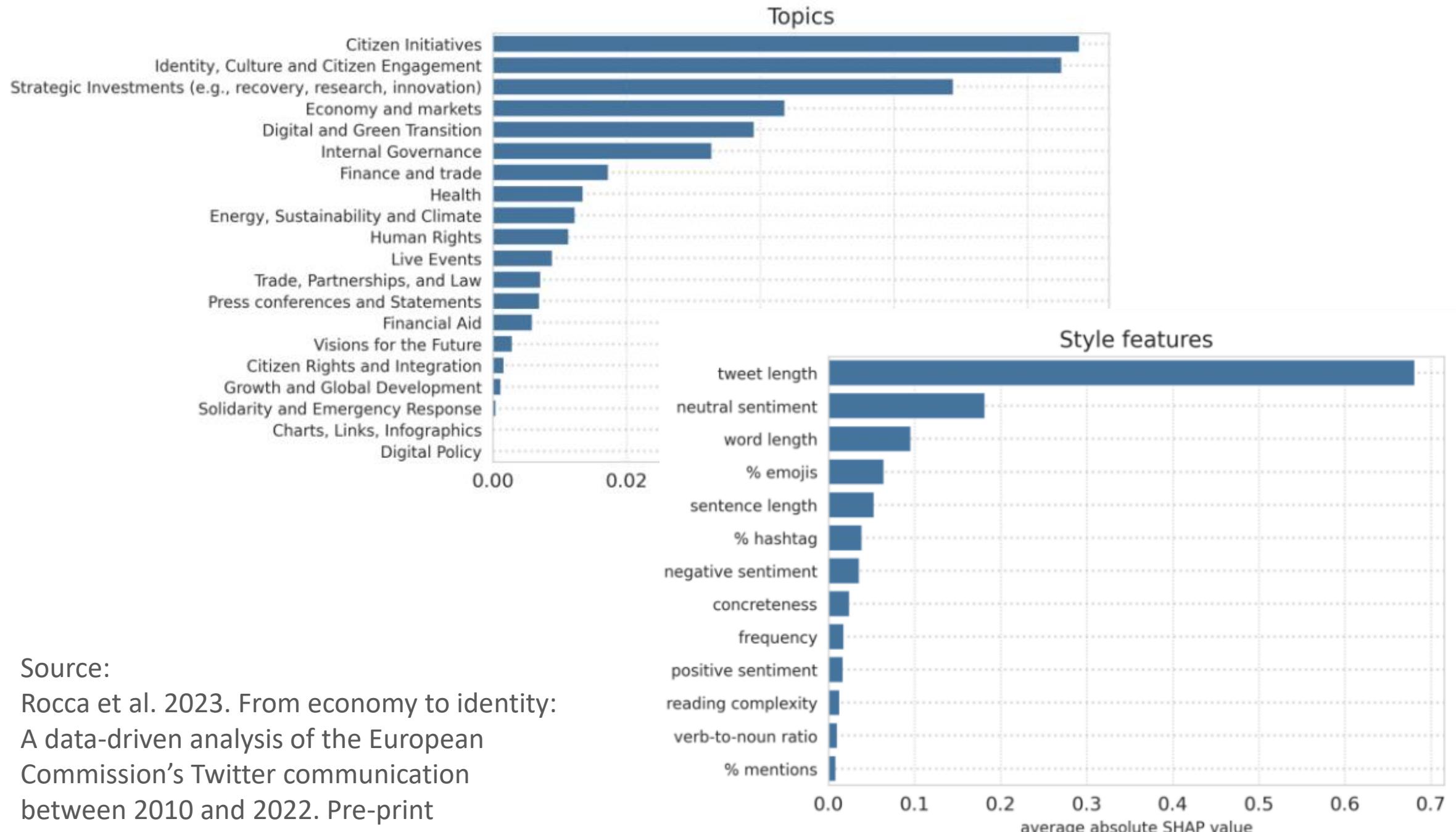


Figure 2 **Left:** Topic volume for each of the 20 topics identified by our topic model, over the entire lifetime of the EC's Twitter account. Colors represent the proportion of tweets, within a given year, that score highest on the target topic. **Right:** proportion of tweets per topic between 2020 and 2022. Average across all years is also displayed for reference.

Source: Rocca et al. 2023. From economy to identity: A data-driven analysis of the European Commission's Twitter communication between 2010 and 2022. Pre-print



Source:

Rocca et al. 2023. From economy to identity:
A data-driven analysis of the European
Commission's Twitter communication
between 2010 and 2022. Pre-print

The costs of digital diplomacy

Affordances

- Instant communication
- Multiple actors and two-way communication
- Platforms with global reach

Costs

- Information overload (“always on”)
- Hard to control the narrative
- Social media companies as interested parties

Overview of DIPROMATS 2023: automatic detection and characterization of propaganda techniques in messages from diplomats and authorities of world powers

Overview de DIPROMATS 2023: detección y caracterización automáticas de técnicas de propaganda en mensajes de diplomáticos y autoridades de potencias mundiales

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Jorge Carrillo-de-Albornoz,¹ Iván Gonzalo-Verdugo³

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Abstract: This paper presents the results of the DIPROMATS 2023 challenge, a shared task included at the Iberian Languages Evaluation Forum (IberLEF). DIPROMATS 2023 provides a dataset with 12012 annotated tweets in English and 9501 tweets in Spanish, posted by authorities of China, Russia, United States and the European Union. Three tasks are proposed for each language. The first one

AI and digital diplomacy

- **Consular work**
- Generative AI and the creation of standardized content at larger volumes in lesser time (“ghost writing”)

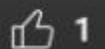


The 2023 Ameri Prize Recognizes Innovative Use of Artificial Intelligence at U.S. Embassy in Guinea



USC Annenberg
15,9 mil inscritos

Inscrever-se



1



Compartilhar

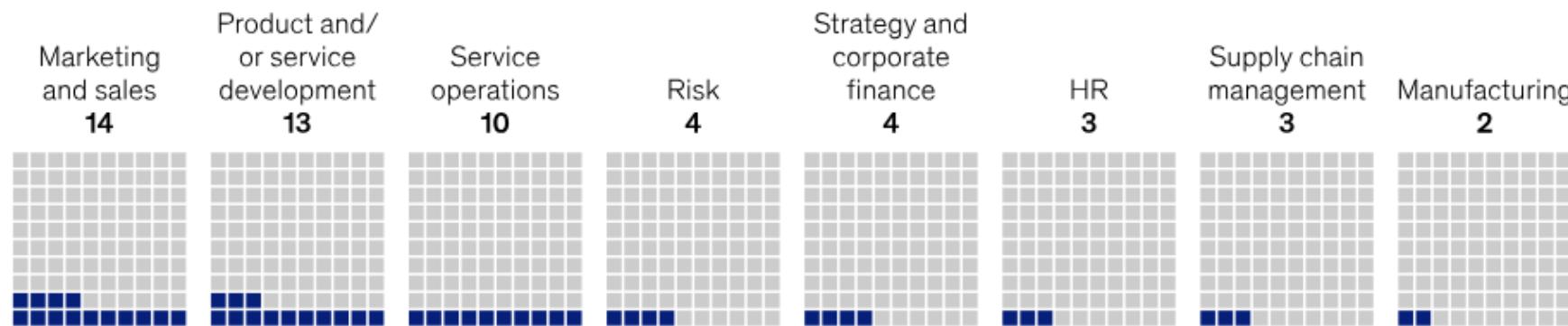
Salvar

...

Source:
<https://youtu.be/FrC7JJR7qwc?si=ilcBvMepSDBD9glr>

The most commonly reported uses of generative AI tools are in marketing and sales, product and service development, and service operations.

Share of respondents reporting that their organization is regularly using generative AI in given function, %¹



Most regularly reported generative AI use cases within function, % of respondents

Marketing and sales	Product and/or service development	Service operations
Crafting first drafts of text documents	Identifying trends in customer needs	Use of chatbots (eg, for customer service)
9	7	6
Personalized marketing	Drafting technical documents	Forecasting service trends or anomalies
8	5	5
Summarizing text documents	Creating new product designs	Creating first drafts of documents
8	4	5

¹Questions were asked of respondents who said their organizations have adopted AI in at least 1 business function. The data shown were rebased to represent all respondents.

Source: McKinsey Global Survey on AI, 1,684 participants at all levels of the organization, April 11–21, 2023

Source:
<https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-state-of-ai-in-2023-generative-ais-breakout-year#/>

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Apple Restricts Employee Use of ChatGPT, Joining Other Companies Wary of Leaks

The iPhone maker is concerned workers could release confidential data as it develops its own similar technology

By [Aaron Tilley](#)

and [Miles Kruppa](#)

Updated May 18, 2023 7:35 pm ET

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Source:
https://support.google.com/bard/answer/13594961?visit_id=638380316829767313-2908931925&p=privacy_help&rd=1#your_data

CGI to Integrate AI into Visa Processing at US Embassies, Consulates

By Staff Writer – October 26, 2023

SHARE



Stephanie Mango, CGI Federal

CGI Federal Inc. announced the State Department's Bureau of Consular Affairs has extended its delivery of consular support services across five countries in the Asia Pacific region with a new 10-year task order.

The contract also includes a 2-year base period and four 2-year option periods, with a total value of \$69.9 million.

"We are proud to continue our collaboration with our Department of State client in the Asia Pacific region through the ROI-led delivery of technology, grown from a close partnership with the Department of State spanning over 30 years," said CGI Federal President Stephanie Mango. "As applicant and agency needs evolve, CGI is committed to delivering enhanced solutions to satisfy the mission critical needs of U.S. embassies and consulates."

Source:

<https://washingtonexec.com/2023/10/cgi-to-integrate-ai-into-visa-processing-at-us-embassies-consulates/>

A landmark inquiry in Australia has found an illegal welfare hunt by the previous government made victims feel like criminals and caused suicides.

Known locally as "Robodebt", it was an automated government scheme which incorrectly demanded welfare recipients pay back benefits.

People received letters saying they owed thousands of dollars in debt, based off an incorrect algorithm.

More than half a million Australians were affected by the policy.

The scheme ran from 2016 until it was ruled illegal by a court in 2019. It had forced some of the country's poorest people to pay off false debts.

Digital diplomacy and AI

Visualization: <https://uestware.gitlab.io/retina/1.0.0-beta.1/#/graph/?>

https://raw.githubusercontent.com/plugrafico/digital_diplomacy_wos/main/digital_diplomacy_retina.graphml?sa=e-n&nr=1.085&le=18

Readings

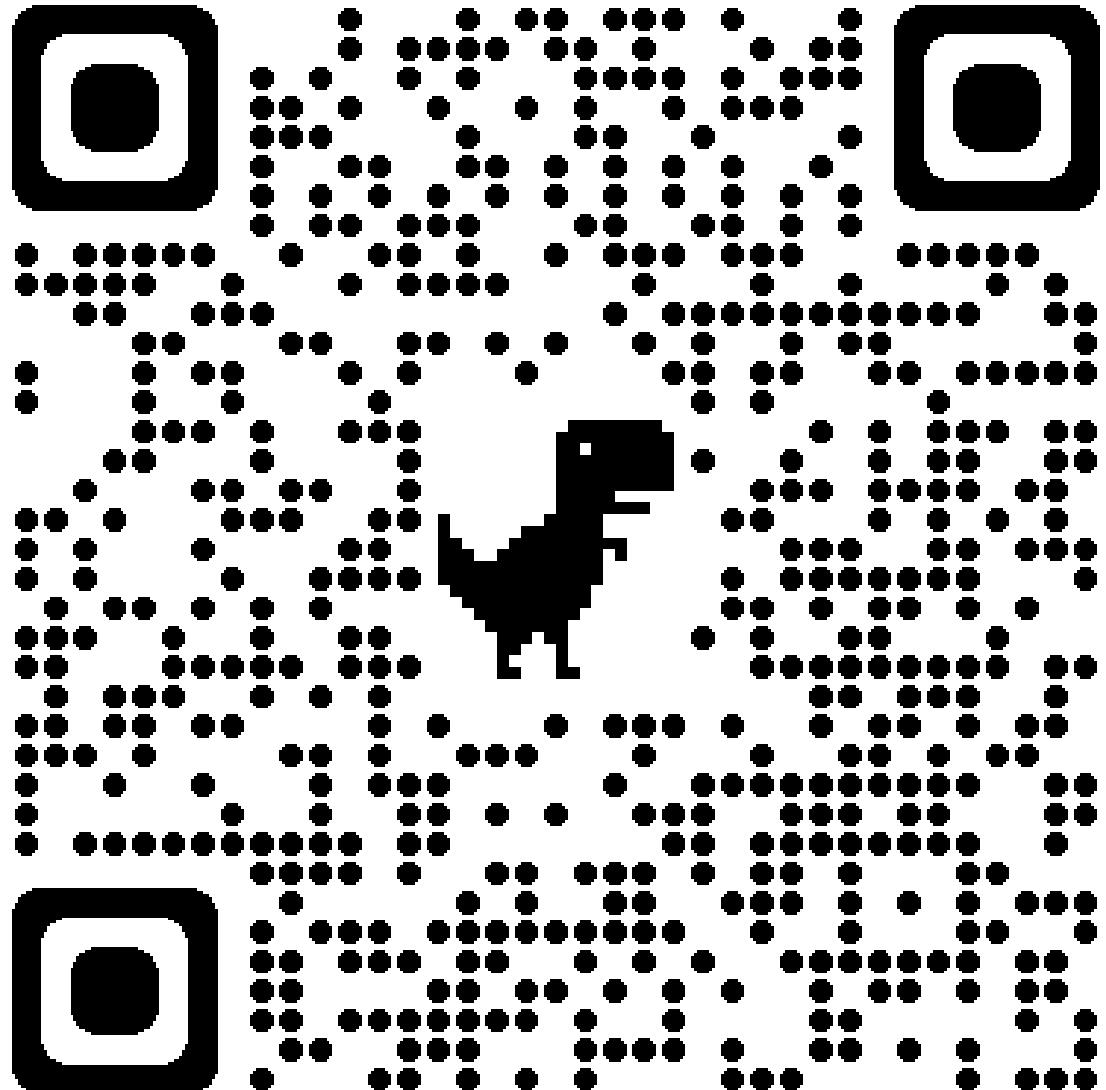
- Eggeling, Kristin Anabel. 2023. "Digital Diplomacy." In Oxford Research Encyclopedia of International Studies. Oxford University Press. <https://doi.org/10.1093/acrefore/9780190846626.013.790>
- Manor, I. (2016). Are We There Yet: Have mfas Realized the Potential of Digital Diplomacy?: Results from a Cross-National Comparison. Brill Research Perspectives in Diplomacy and Foreign Policy, 1(2), 1-110. <https://doi.org/10.1163/24056006-12340002>
- Tallberg, Jonas, Eva Erman, Markus Furendal, Johannes Geith, Mark Klamberg, and Magnus Lundgren. 2023. "The Global Governance of Artificial Intelligence: Next Steps for Empirical and Normative Research." International Studies Review 25 (3): viad040. <https://doi.org/10.1093/isr/viad040>
- Schmitt, L. Mapping global AI governance: a nascent regime in a fragmented landscape. AI Ethics 2, 303–314 (2022). <https://doi.org/10.1007/s43681-021-00083-y>

Other resources:

- OECD.AI: Multiple resources on AI policy and societal impacts, including the OECD Principles on AI <https://oecd.ai/en/>
- An interactive dashboard by the Council of Europe of AI Policy Initiatives since 2010 <https://www.coe.int/en/web/artificial-intelligence/national-initiatives>
- Guide by the UN Department of Economic and Social Affairs Sustainable Development, including summaries of AI strategies by a sample of governments, international organizations and civil society <https://sdgs.un.org/documents/resource-guide-artificial-intelligence-ai-strategies-25128>
- Interactive visualizations of key trends in computing power of ML models <https://epochai.org/trends>
- An open source tool for data-intensive analysis of texts <https://voyant-tools.org/>

Thank you

rafael.mslima@ufpe.br



Course materials available at
https://github.com/plugrafico/digital_diplomacy_wos