

SMART CITIES

Technology is the answer, but was the question?

Rules of this class:

A Leaderboard will determine the winner of tonight's game!

The rules, to determine the number of points for each participant are:

1. Promptly answering open questions will be worth 1 point
2. If that answer is the basis of a follow on discussion - where someone joins the idea, or build on it - it is worth 2 points, instead of 1.
3. The person who builds on something someone said will also receive 1 point in that case.
4. You can access the leaderboard with the QR code - we are transparent 😊.
5. The highest scored person will receive a treat!



What are Smart Cities?



Smart Cities - Definitions and a Timeline:

A smart city is an urban area or municipality that utilizes **Information and Communication Technology (ICT)**, the **Internet of Things (IoT)**, and **data collection** to enhance operational *efficiency, information exchange, citizen welfare, and promote sustainability*.

1974 - Los Angeles implemented an urban big data project

2005 - **Cisco** invests \$25 million over five years in smart city research.

2008/09 - **IBM** initiates the "Smarter Planet" project, focusing on applying sensors, networks, and analytics to address urban challenges.

2011 - IBM names 24 cities as winners of its Smarter Cities initiative from a pool of 200 applicants.

2012 - **Barcelona** implements data-driven urban systems, including public transportation, parking, and street lighting.

2013-15 - **China** announces its third batch of 84 smart cities, total = 277.

2018 - **Toronto** and Google's subsidiary Sidewalk Labs - Quayside



Smart Cities are for whom?

1, 2, 3



Private Incs

Tech and infra providers,
consultants, financiers



Public Authorities

Enablers, regulators,
funders, compliers



People

Contributors, consumers

Smart Cities are for whom?



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People

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3, 2, 1

Some Examples



Discussing
with purpose
(of points)

Masdar City: Pioneering Sustainable Urban Living 2006



Blueprint of Sustainability: Masdar's Master Plan – Framework



Commitment to a Greener Tomorrow – Promises



Navigating the Roadblocks to Sustainability – Challenges



Future Horizons: Unlocking Masdar's Potential - Opportunities



Quayside, Toronto - Canada



Quayside, Toronto - Promises



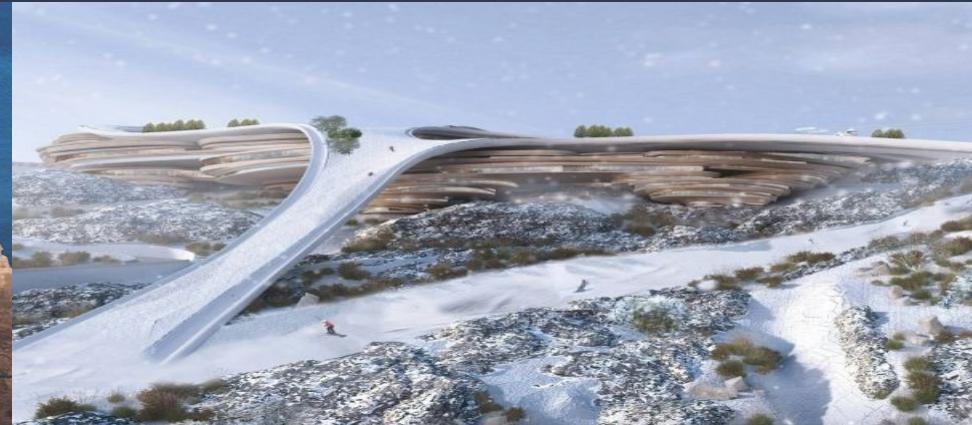
Quayside, Toronto - Challenges



Quayside, Toronto - Opportunities



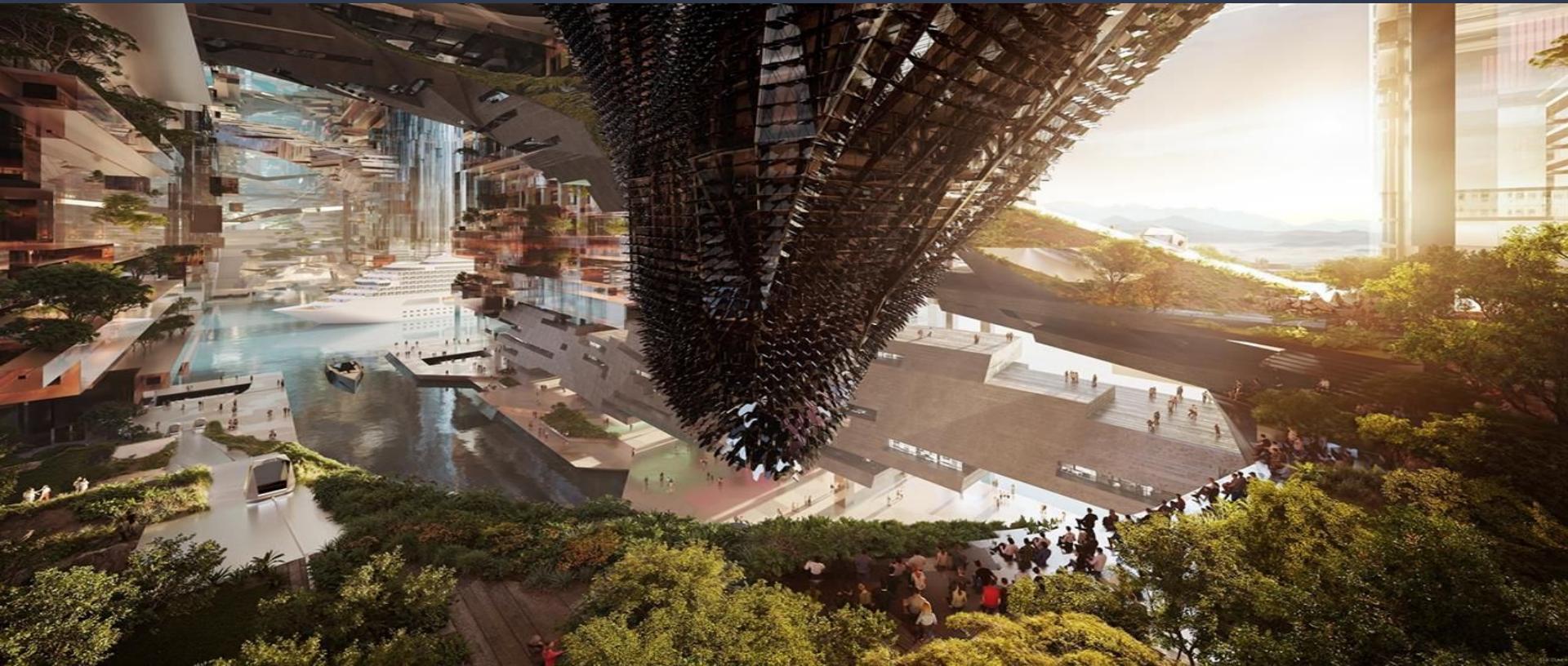
Neom - Saudi Arabia



Neom - Opportunities



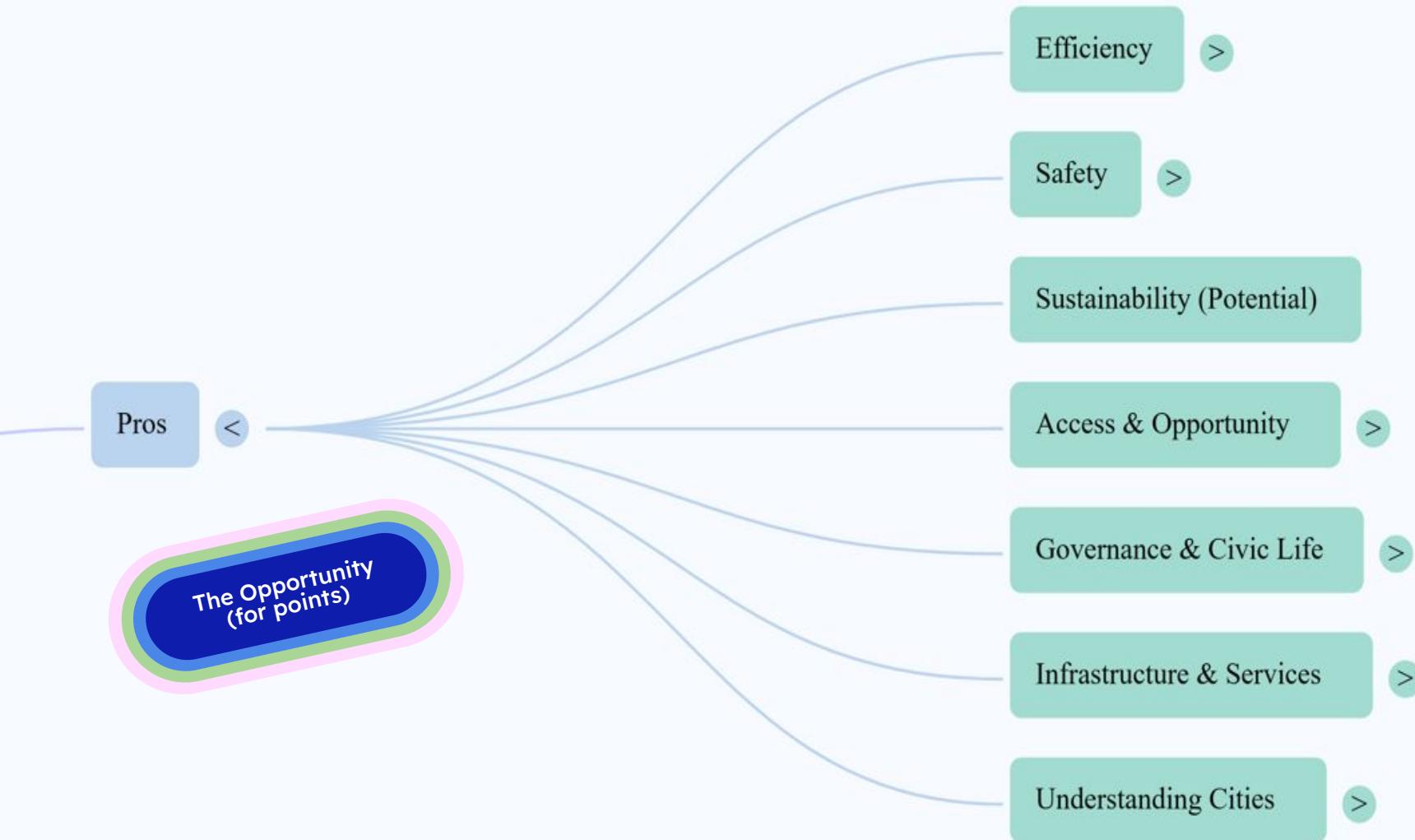
Neom - Promises



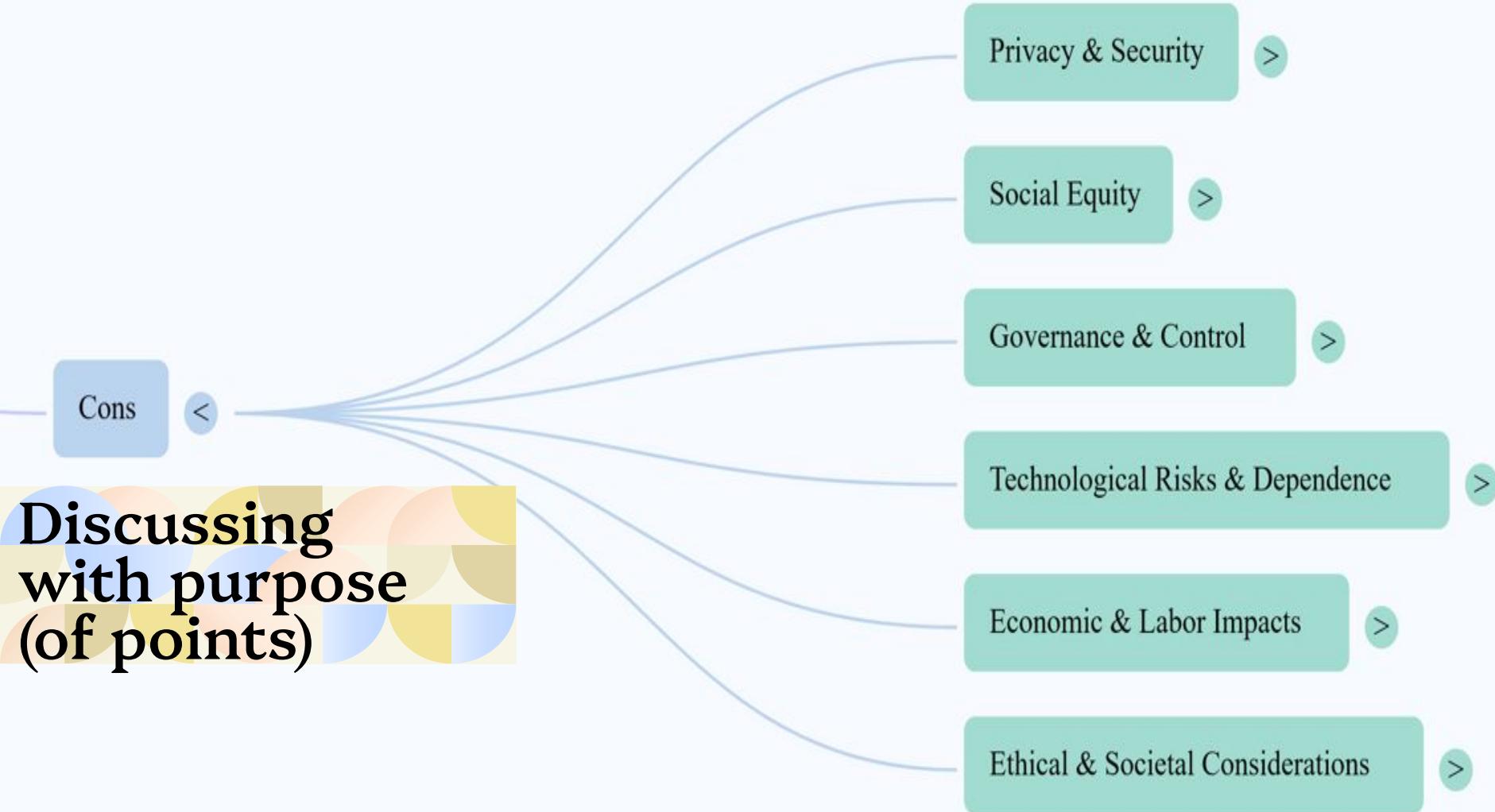
Neom - Challenges



What do you think are the pros and cons?



Discussing with purpose (of points)



Put People Before Gadgets



Build Public Tech, Not Corporate Control

Sidewalk Labs' 'smart' city was destined to fail

The Google company has abandoned its plan to remake Toronto's waterfront

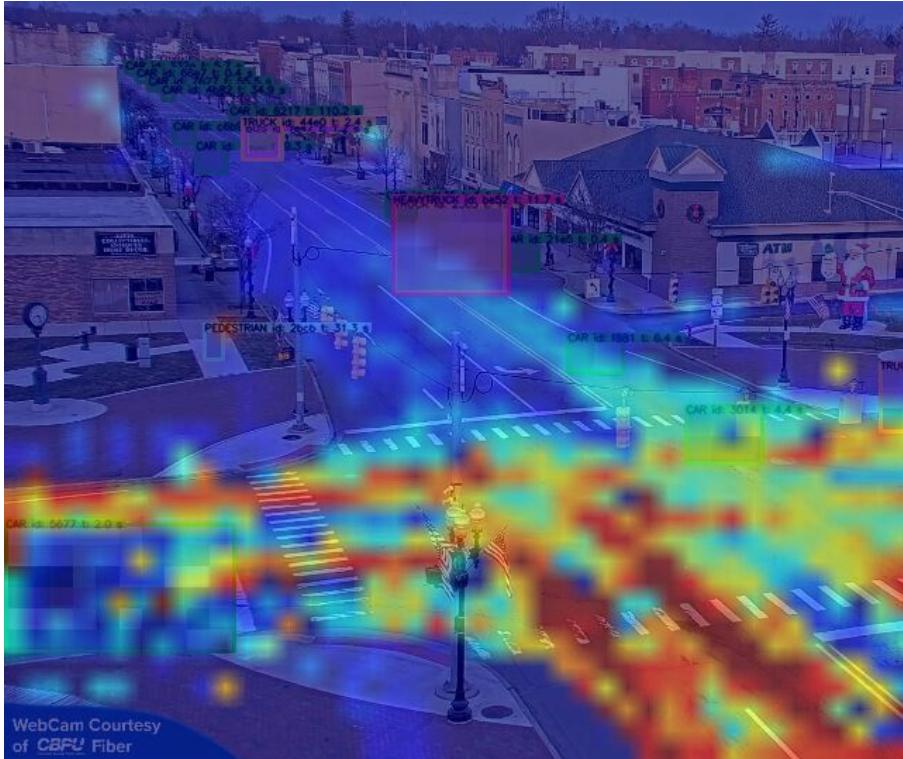
By [Alissa Walker](#) | [@awalkerinLA](#) | May 7, 2020, 6:40pm EDT



Plan for Failure (Gracefully)



Think Long-Term in Real-Time



MISP Live Dashboard - MISP Standard ZMQ

Network activity: 146.255.36.1 | Rotation speed: 30 sec | Zoom level: 15 |

Netherlands null, null

Attribute.category overtime (hours)

Logs

Time	Event.id	Attribute.tag	Attribute.category	Attribute.type	Attribute.value Attribute.comment
12:49:42	9232		Payload delivery	sha1	413eba3973a1c1a6429bf1703b8798c21c mimikatz-like x64 - Xchecked via VT: 301b905eb98d8d6bb5
12:49:42	9232		Payload delivery	md5	347ac3b6b791054de3e5720a7144a677 mimikatz-like x64 - Xchecked via VT: 301b905eb98d8d6bb5
12:49:42	9232		External analysis	link	https://www.virustotal.com/file/301b905eb98d8d6bb5/04d mimikatz-like x64 - Xchecked via VT: 301b905eb98d8d6bb5
12:49:42	9232		Payload delivery	sha1	16605a4a29a10120845/c47ebde788487be788d mimikatz-like x64 - Xchecked via VT: 2bc8549fabe47596a3b
12:49:42	9232		Payload delivery	md5	37945c3b4a897a42a66adcbab6956e0 mimikatz-like x64 - Xchecked via VT: 2bc8549fabe47596a3b
12:49:42	9232		External analysis	link	https://www.virustotal.com/file/2bc8549fabe47596a3b/003 mimikatz-like x64 - Xchecked via VT: 2bc8549fabe47596a3b
12:49:42	9232		Payload delivery	sha1	afee8b4acf87b7c409af0f0364a81e5060a2dd mimikatz-like x64 - Xchecked via VT: 8ebc97e05c8e1073bda
12:49:42	9232		Payload delivery	md5	b14dfaf7f0cbcafad51cefe5f39645f mimikatz-client - Xchecked via VT: 8ebc97e05c8e1073bda
12:49:42	9232		External analysis	link	https://www.virustotal.com/file/bc97e05c8e1073bda/2ebfbf mimikatz-client - Xchecked via VT: 8ebc97e05c8e1073bda

World map showing global distribution of network activity or threat levels, with a color scale from 0 to 10.

Train Hybrid Thinkers



Not-so smart poles - Vishakhapatnam, India



What happened: Smart light poles, equipped with CCTV cameras, environmental sensors to measure **temperature, noise, humidity, air quality and wind speed**, free wifi, emergency call systems, public speakers, remote LED lighting. Designed for 225 km/h winds. Installed in 50 locations for **\$1.7 million**. Stopped working over time, maintenance required - **\$9.22 million**.

What went wrong:

Motives: They hired experts - consultants with a proven track record, but also profit motives. They said what the public leader wanted to hear - and their motivation was to install impressive infrastructure.

Accountability: The federal funds were fully used, and these poles remained federal jurisdiction, and so no maintenance was carried out.

Public Participation: Oversight would have ensured the poles were of greater quality, or simply never installed and instead allocate resources for other things.

Who is accountable for

1. Big Tech Overreach
2. Top-Down Governance
3. Neglect of Civic Participation
4. Short-Term Thinking

What role do we play?

