QUARTERLY JOURNAL BY
BEYOND THE HORIZON ISSG

VOLUME 8 - ISSUE 4
2025 (OCT-DEC)

PROMOTING GLOCAL PEACE AND SECURITY

HORIZON INSIGHTS

Digital Democracy in 2026: From Platform Supply to Democratic Capacity

Policy Brief: The evolving role of trust in AI-Mediated Societies

Leverage And Political Alignment: China's Strategic Engagement In The Gulf

Book Review: Yuval Noah Harari, Nexus: A Brief History of Information Networks from the Stone Age to AI

BEYOND THE HORIZON

Beyond the Horizon International Strategic Studies Group (BtH) is an independent next-generation think & do tank in Belgium. BtH aims to promote glocal (global & local) peace and security by its strong in-house capacity and extensive network of partners throughout the world.

Disclaimer and Other Legal Information

Editorial Board

Horizon Insights 2025-4 (2025 Oct-Dec)
DOI: 10.31175/hi.2025.04
ISSN: 2593-3582 (printed)
ISSN: 2593-3590 (online)
Please cite as: Surname, Name (Writer) (2025), “Article name”, Horizon Insights – 2025/4 Brussels.

For more information visit www.behorizon.org

Table of Contents

Foreword 04

Digital Democracy in 2026: From Platform Supply to Democratic Capacity 05

By Furkan Akar

Policy Brief: The Evolving Role of Trust in AI-Mediated Societies 20

By Tiffany Morisseau, Atte Ojanen, Gabriele Quattrocchi, Gabriela Rogowska, Jessica Sutherland, María Ruiz de Assín de los Santos, Jennifer Edmond

Economic Leverage and Political Alignment: China's Strategic Engagement in the Gulf 31

By Eric Malin

Book Review: Y.N. Harari, *Nexus: A Brief History of Information Networks from the Stone Age to AI* 46

By Timucin Ibu

Foreword

Dear Reader,

We are pleased to present this new issue of our journal, running across different domains: the capacity of institutions, states, and societies to convert new sources of power — technological, economic, and informational — into legitimate outcomes.

This edition brings together original research and critical commentary on how public authorities, geopolitical actors, and societies at large are adapting to a landscape reshaped by digital platforms, shifting alliances, and accelerating information networks.

Our first article investigates the state of digital democracy platforms worldwide. Drawing on an original census of 141 verified tools and ten in-depth case studies, it argues that participation technology is no longer scarce, but that democratic capacity — institutional commitment, resources, and follow-through — remains the binding constraint.

The second contribution turns to geopolitics, examining how China converts economic leverage into political alignment across the Gulf. Comparing Saudi Arabia, the United Arab Emirates, and Iran, the article shows that economic dependence alone does not determine political alignment, and that strategic, institutional, and geopolitical mediators shape the outcomes instead.

Rounding out this issue, we feature a review of Yuval Noah Harari's Nexus: A Brief History of Information Networks from the Stone Age to AI, which situates today's debates about artificial intelligence and disinformation within a much longer history of how humans have built, and often misused, networks of information and trust.

Across platforms, alliances, and information networks alike, this issue points to a shared conclusion: capability without capacity — institutional, political, or critical — rarely delivers on its promise. We hope these contributions offer a constructive addition to ongoing debates on governance, power, and information in a rapidly changing world.

We wish you a thought-provoking and enlightening read.

Sincerely yours,

Beyond the Horizon ISSG

Digital Democracy in 2026: From Platform Supply to Democratic Capacity[1]

By Furkan Akar[2]

Abstract:

This article examines what the current supply of digital democracy platforms can, and cannot, tell public authorities about successful adoption. Drawing on an original census of 141 verified platforms, ten qualitative case studies, and the wider literature, it finds that the standard toolkit for digital participation is now widely available: polling, surveys, voting, ideation, reporting, and AI-assisted functions are no longer scarce. Yet the main constraints identified across mature deployments are not primarily technical. Weak institutionalisation limited political commitment, insufficient resources, uneven inclusion, and fragile feedback loops repeatedly shape whether participation produces democratic value. The analysis therefore shifts the question from platform selection to institutional readiness. Platform choice matters, but only after authorities have defined a mandate to act on citizen input, secured operational capacity, designed hybrid and inclusive participation processes, and made feedback visible. The article argues that the next gap in digital democracy is democratic capacity, not technological supply.

[1] The article is a shortened version of a research chapter originally published by the INNOVADE (Innovative Democracy through digitalisation) project under the Horizon Europe framework

[2] Project Officer and Research Fellow at Beyond the Horizon

| 1 From Tool Selection to Institutional Readiness

When the INNOVADE project set out to survey digital democracy technology, the practical goal was modest: map the tools in use and recommend a few the project could build on. The map came back crowded. After harmonising several catalogues and verifying each entry, the count settled at 141 distinct platforms, and somewhere in that abundance the original question quietly changed shape. If this many working tools already exist, the useful question is no longer only which one to pick, but what conditions allow any of them to work once a public authority puts it to use. That is the question this article follows, and the answer, read from the supply data on one side and from ten notable deployments and the wider literature on the other, is consistent: platform choice matters, but it sits downstream of the design and institutional decisions made around it.

> **“ The next gap in digital democracy is democratic capacity, not technological supply.**

This article uses two complementary layers of evidence. The first is an original supply-side census of the 141 platforms, built and verified by the project, with only the feature-level fields drawn from secondary sources. The second is a qualitative synthesis of ten widely discussed deployments, read for recurring practices, drivers, and constraints. For challenges and barriers, the case evidence is further triangulated with the wider literature. The result is not a controlled causal finding, but a convergent synthesis: the tools are abundant, and the recurring bottleneck is the democratic capacity to use them well.

Three figures set the terms. There are 141 verified platforms. The standard participation functions, polling, surveys, voting, and idea-gathering, are documented in roughly two-thirds of them, so the baseline toolkit is common rather than scarce. And across the ten cases, weak institutionalisation appears as a documented constraint in nine. The distance between broad, mature supply and thin institutional follow-through is the whole of the argument, and it is why an inventory that began as a shopping list ends as a case for looking past the shelf.

| 2 The Supply We Mapped

The census is the firmest ground in the analysis, and it is where this reading begins. Every structural field, who builds each platform, in which country, under what licence, and whether it is still active, was collected and verified by the project team; only the feature tags rely on secondary sources (Akar, 2026). The resulting picture of the market's shape can be stated with confidence, and it is more revealing than a simple headcount, because each distribution marks a decision a public authority actually has to make.

The market is built mostly by the private sector. Private providers account for 81 of the 141 platforms (57.4%), the third sector, meaning NGOs, foundations, universities, and civic-technology collectives, for 52 (36.9%), and public bodies that built a platform directly for only 8 (5.7%). That last figure is the quiet finding: government almost never builds these tools itself, which makes adoption a build-versus-buy and dependency question long before it is a technical one.

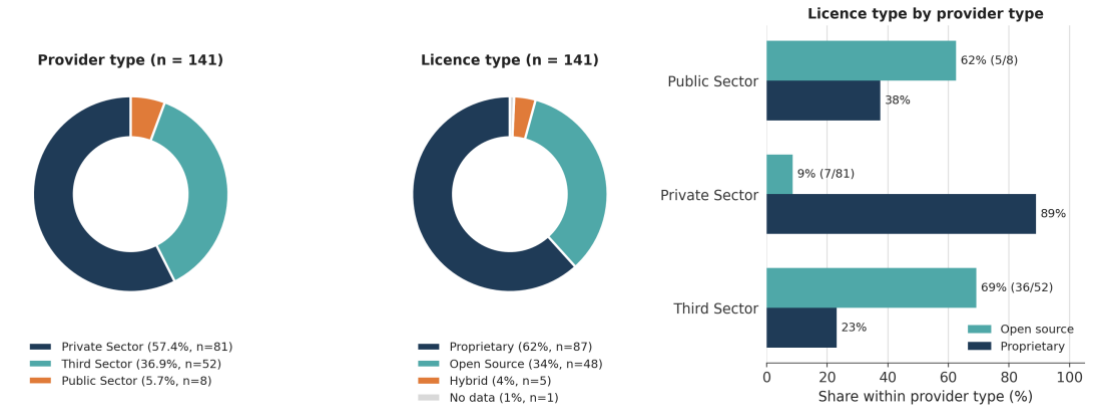


Figure 1: Provider type, licence type, and licence type by provider type distributions. Source: Akar (2026).

Licensing tells a sharper story once it is broken down. Proprietary licences cover 87 of the 141 platforms, or about 62%, open source 48, or 34%, hybrid licences 5, and one platform lacks licence data. The aggregate hides the real pattern, because licence choice tracks provider type far more tightly than any market-wide trend: third-sector platforms are open source in 69% of cases, public-sector ones in 63%, and private providers proprietary in 89%. Tools used for higher-stakes participation, especially participatory budgeting, lean more toward open source, which is what a market does when auditability becomes a condition of legitimacy rather than a nice-to-have.

Supply is also geographically narrow. The United States hosts 39 platforms (27.7%) and France 19 (13.5%), so two countries account for 41% of the field, with the Czech Republic, Canada, the United Kingdom, and Australia trailing at three to four percent each. This is not neutral, because regulatory assumptions, hosting, support continuity, and strategic dependency all travel with a provider's home jurisdiction, which turns a non-EU headquarters into a due-diligence question for European authorities rather than a disqualifier.

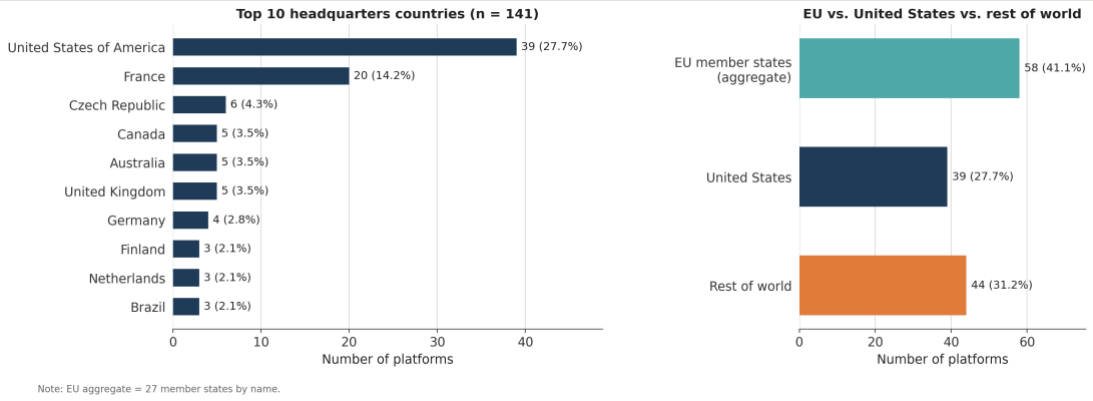


Figure 2: Headquarters geography: top 10 countries, and EU vs. United States vs. rest of the world. Source: Akar (2026).

Two further readings of the census matter for the argument that follows. The first is fragility: 11 of the 141 platforms (7.8%) were inactive at the time of verification, and the survivors tend to have either commercial revenue or long-term institutional backing behind them, which is a supply-side echo of the resource problem the cases will surface. The second is disclosure. Accessibility is documented for only about a quarter of platforms (24%), and explicit WCAG compliance for around twenty; for the remaining three-quarters the dataset records nothing. Accessibility, though, is something providers advertise when they have it, so the silence is harder to read as a mere reporting gap: for most of the field, accessible design is either absent or not considered worth claiming. A procurement officer, an auditor, or a citizen cannot take it on trust.

| 3 What the Feature Data Shows, and What It Leaves Out

One caveat has to come before any feature number. The structural fields were compiled and verified by the project directly, whereas the feature tags come mostly from the secondary catalogues the dataset consolidates, supplemented by a manual layer in which the project added or checked

features for a small number of tools (roughly 12 of the 141). The figures below therefore record largely what those sources surveyed and coded rather than a fresh audit of every platform, and their gaps track the coverage of the sources at least as much as the capabilities of the tools.

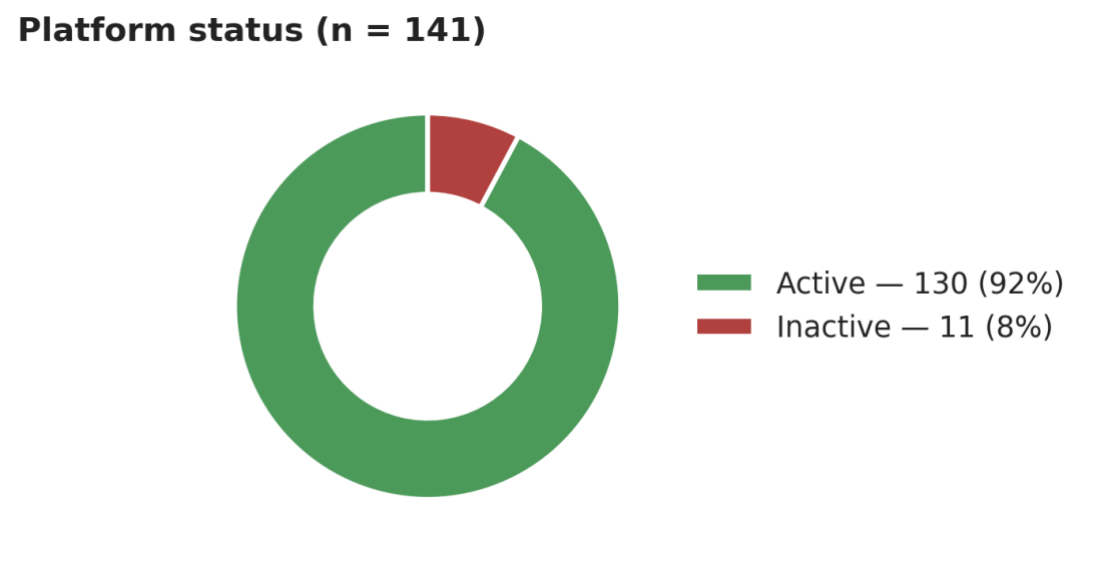


Figure 3: Platform status. Source: Akar (2026).

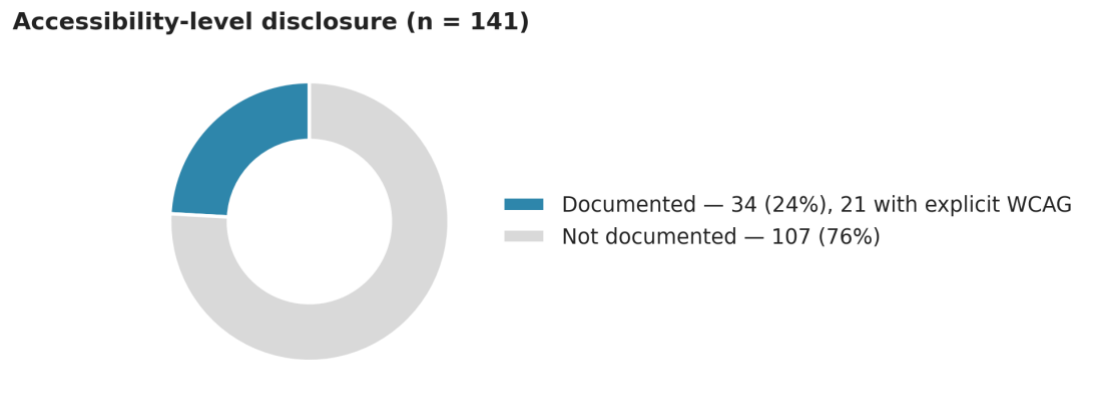


Figure 4: Accessibility-level disclosure. Source: Akar (2026).

On that basis, the baseline toolkit is well represented. Polling, surveys, voting, and prioritisation are recorded for 95 platforms (67.4%), ideation and deliberation for 89 (63.1%), citizen-facing visualisation and reporting for 78 (55.3%), and gamification for 70 (49.6%). Half the sample or more carries each of these, which is the evidence behind the opening claim that the standard functions of digital participation have become common property rather than a point of difference.

Artificial intelligence is the frontier the sources pick up most often, recorded for 52 platforms (36.9%) and covering natural-language processing, sentiment analysis, opinion clustering, and translation. The deliverable reads this as AI crossing from experiment into core infrastructure, and it may be right; the more careful statement is that the sources record AI-related capabilities for 37% of platforms, which is not the same as those platforms deploying them in any given setting or at any particular maturity. Because the catalogues capture these features unevenly and documentation lags real implementation, the figure is a conservative floor, not a ceiling.

Two clusters look thin, and the temptation is to read thinness as absence. Security, privacy, and compliance features are recorded for only 13 platforms (9.2%) and identity and access management for only 9 (6.4%). The likeliest explanation is not that the field neglects these functions but that only one of the underlying sources surveyed them systematically, so the low counts reflect which catalogues asked the question rather than what the platforms actually do. The dataset's own coding rule is the right guide here: no evidence is not evidence of absence. For a public authority trying to judge platforms on the very features that decide legitimacy, that is the practical difficulty, because the open record does not settle them either way.

| 4 The Open-Source Backbone, and Its Limits

Open source is a substantial share of this supply, not a niche within it. Forty-eight of the 141 platforms (34%) are open source, distributed mostly under the AGPL, GPL, and MIT licences, and they span all nine functional clusters, so an open-source option exists across the full range of participation tasks rather than only at the simple end.

The case for it is a procurement and continuity case, not a philosophical one. Self-hosting keeps data, security configuration, and uptime under public control, which matters most where data-sovereignty rules are strict. Source-code transparency lets the algorithms and process logic be inspected rather than trusted, and customisation to local language and context does not wait on a vendor's roadmap. If a vendor changes direction or folds, the software survives and can be maintained by others. None of these properties is automatic, and each is harder to secure in a proprietary alternative, where it has to be written into a contract rather than guaranteed by the licence.

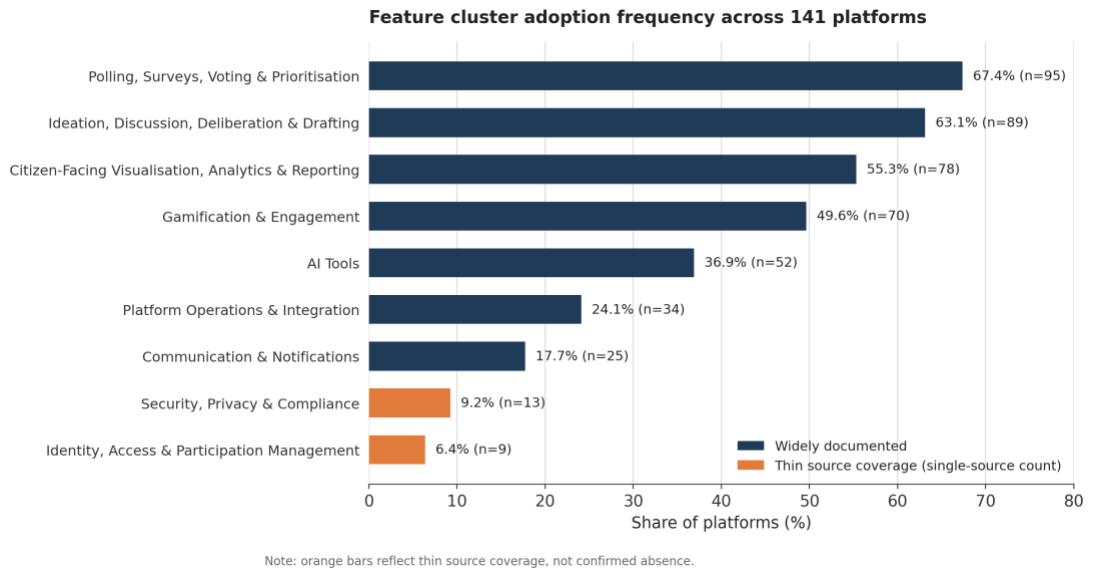


Figure 5: Feature Cluster Adoption Frequency Across the 141 Platforms. Source: Akar (2026).

One distinction does real work in procurement and is easy to miss: an application is the software, while an instance is a particular deployment of it. Decidim is an application first built for Barcelona, and Helsinki, Mexico City, the French National Assembly, and the European Commission each run their own instances; FixMyStreet began in the United Kingdom and now runs in Brussels and dozens of other cities. The application is the technical foundation, the instance is what a citizen actually uses, and a procurement decision is always a decision about an instance even when it is written up as a choice of platform.

The limits deserve the same emphasis as the promise, because the case evidence keeps finding them. Open source is auditable but not automatically trusted, since the audit depends on intermediaries the public finds credible. It is adaptable but not automatically sustained, since community maintenance can lapse and donations can dry up; the Rahvaalgatus.ee operation behind Citizen OS runs on roughly 1.5 full-time equivalents and donation-funded e-signing costs. It is transparent but not automatically inclusive, since several open-source deployments struggle with the same divides as their proprietary peers. It is a sound base layer, and it settles none of the institutional questions the rest of this article turns on.

| 5 What the Notable Deployments Teach

The census says what exists; it cannot say what works. For that the project examined ten deployments in depth, chosen purposively to span geography, governance level, provider type, function, maturity, and

available documentation. They are used here to identify recurring practices and enabling conditions in mature, well-documented deployments, rather than to provide a controlled comparison between successful and failed initiatives. Read through a five-lens framework covering governance, inclusion, process design, technology, and resources, the ten yield thirteen consolidated drivers of success. The full set of drivers (DS1–DS13) and the underlying case detail are documented in D4.2, Section 2.1.2 and Annex I. Three recur with enough force, and bear on real decisions directly enough, to carry the section.

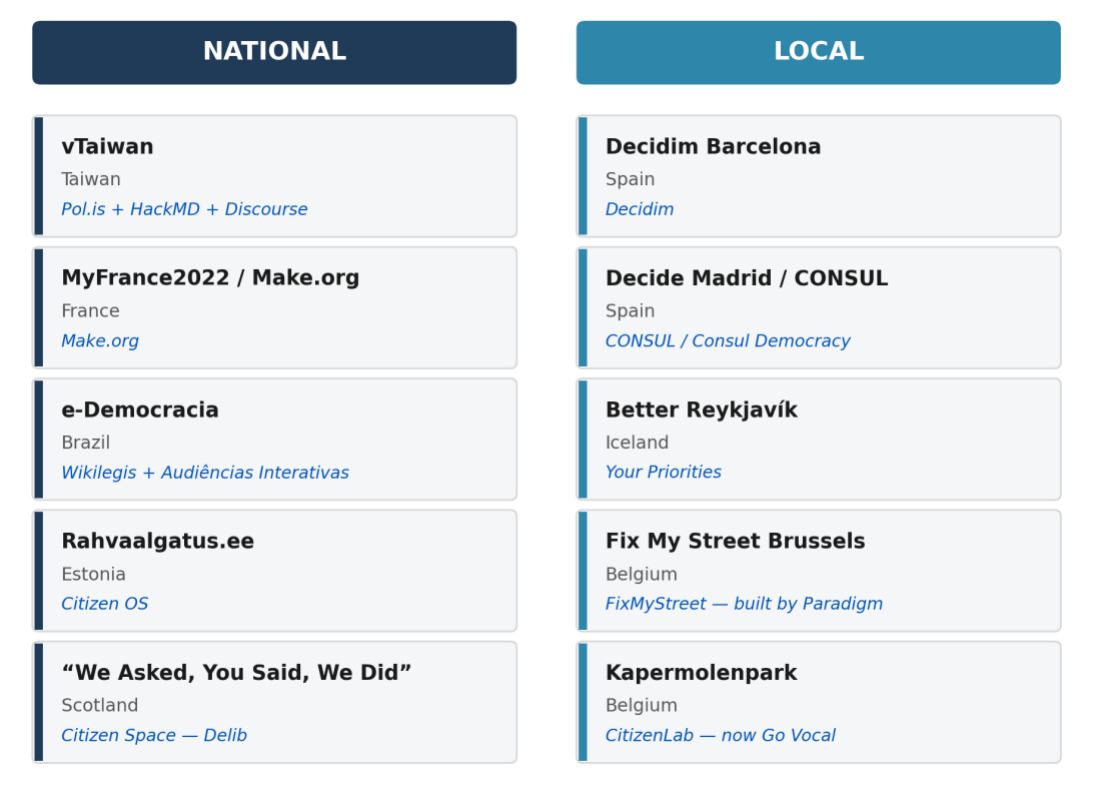


Figure 6: Case study set: ten deployments by governance level (national / local). Source: D4.2, Table 2.5 (Case Studies map view).

The first and most consistent pattern is that institutional commitment matters more consistently than the specific tool chosen. The deployments that produced durable outcomes did so where an institution had committed, visibly, to acting on what citizens submitted. Better Reykjavík has lasted more than a decade because the city attached budget and process to citizen proposals rather than treating them as advisory; Decidim Barcelona works because participation was built into the municipal governance architecture as a routine input rather than a one-off consultation. vTaiwan shows the same variable from both sides, since its reach came from ministerial sponsorship inside the executive and its decline followed once that sponsorship grew uneven and the gatekeeping

unclear. It is the closest the evidence comes to holding the tool constant while the decisions around it change, and the outcome moved with the decisions. In each case the tool was an enabler, and the mandate to act on its output was the ingredient that actually bound.

The second pattern is that hybrid participation proves more robust than digital-only participation. Fix My Street Brussels pairs an online reporting interface with neighbourhood-level municipal follow-up, and Kapermolenpark combined an online platform with physical events that reached residents who would not have engaged on a screen; in both, the digital channel alone recruited a narrower demographic than the blended format did. The cases and the wider literature agree that bridging digital and physical participation is associated with broader reach and better retention, with the qualification that the offline half carries the cost of dedicated facilitation.

The third pattern is that visible feedback loops counter the "black hole" problem, the sense that citizen input disappears once submitted. Scotland's "We Asked, You Said, We Did" publishes a structured public record of what each consultation produced, and Better Reykjavík tracks every proposal through municipal review. Neither commits the administration to accept everything, and both make refusal visible and traceable. Across the cases it is this transparency, rather than the acceptance rate itself, that sustains people's willingness to take part again. What unites all three drivers is that each is a property of how an institution runs a process, not of which platform it bought.

| 6 What Stills Blocks Even the Good Ones

The harder half of the analysis is establishing what fails, and how reliably. The project worked from two streams: 44 distinct challenges extracted from the ten cases, and 40 more synthesised from four authoritative sources: the OECD's analysis of civic participation and emerging technologies (OECD, 2025), Mariani et al.'s work on design thinking and e-participation (Mariani et al., 2025), Oliveira and Garcia's systematic review of electronic participation challenges (Oliveira & Garcia, 2019), and Nesta's report on digital democracy tools (Simon et al., 2017). Triangulated through the same five lenses, the two streams reduce to 19 challenge categories, and their empirical weight is very unevenly spread. These are the factors that recur across notable deployments and the literature, not a controlled attribution of cause, and that is the right way to read them.

Lens	Challenge category	Empirical validation
Governance & Accountability	Weak institutionalisation and limited political commitment	●●●●●●●●● (9 cases)
	Opaque participatory processes with weak feedback and accountability	●● (2 cases)
	Perceived lack of legitimacy of participatory tools for policymakers	Literature only
	Vulnerability to undue influence or manipulation	Literature only
Inclusion & Engagement	Lack of representation, inclusion, and diversity	●●●●●● (6 cases)
	Digital divide and lack of digital skills	●●● (3 cases)
	Lack of institutional trust and weak neutrality	● (1 case)
	Low awareness and insufficient outreach	● (1 case)
	Low citizen motivation, apathy, disengagement, and lurking behaviour	● (1 case)
Design & Process Quality	Poor process design and weak facilitation	●●● (3 cases)
	Inadequate methods and data for participation	●●● (3 cases)
	Weak societal relevance and disconnection from citizens' priorities	● (1 case)
	Inappropriate policy-cycle fit	● (1 case)
	Unclear and overly technical language	Literature only
Technology, Data & Security	Privacy concerns and low trust in technology	●●● (3 cases)
	Platform usability, accessibility, and moderation problems	● (1 case)
	AI opacity, algorithmic bias, and risks from automated content	● (1 case)
Resources & Capabilities	Insufficient resources and heavy administrative burdens	●●●●●●●●● (9 cases)
	Lack of digital expertise and specialised capacity	● (1 case)

Table 3: Challenge categories by five-lens grouping, with empirical validation (case count).

Two categories are validated across almost the whole sample, and they behave as the binding constraints. Weak institutionalisation and limited political commitment appears in nine of the ten cases, as uneven ministerial buy-in in vTaiwan, dependence on parliamentary discretion in e-Democracia, and the pilot-to-platform problem in Kapermolenpark, where a successful one-off failed to institutionalise because the

governance, procurement, and data-protection arrangements had to be rebuilt from scratch the next time. Even Decidim Barcelona, the most embedded case in the set, still records the difficulty of balancing community co-governance against an institutional roadmap. The second binding constraint, insufficient resources and heavy administrative burdens, also appears in nine cases: Rahvaalgatus.ee runs on roughly 1.5 full-time equivalents, e-Democracia's moderation strains its staff, Decide Madrid and Decidim Barcelona struggle with the throughput of screening citizen input, and vTaiwan's reliance on volunteers is a sustainability risk at scale. Of the nineteen categories it is the single most consistent finding.

The striking thing is that these are the field's success stories, and the recurring pain in them is institutional and resource-based, not technical. Two further challenges are common without being universal. Lack of representation, inclusion, and diversity appears in six of ten cases, from self-selection among the better-off in vTaiwan to the skewed participation, concentrated among middle-aged, repeat, and digitally confident contributors, documented in Decidim Barcelona, Decide Madrid, Better Reykjavík, and Fix My Street. The digital divide proper appears in three and compounds it, which is why Scotland, Kapermolenpark, and Rahvaalgatus.ee all conclude that offline complements are operationally necessary rather than aspirational, the last because reliance on Estonia's national digital identity excludes anyone without the credential.

A third tier sits mostly in the literature. AI opacity and algorithmic bias is prominent in the OECD's analysis but surfaces as a primary challenge in only one case, Make.org, where the transparency of ranking, deduplication, and consensus-mapping is contested; as AI moves from documented frontier toward operational core, this is the category most likely to grow in future evidence. A small number of categories are represented primarily in the literature rather than in the ten cases, including concerns about policymakers' perceptions of legitimacy, vulnerabilities to undue influence, and the use of overly technical language. These are best read as potential blind spots in current case documentation rather than as established absences.

One observation qualifies every entry in the framework. Many factors that appear as drivers reappear as challenges depending on how fully they are implemented: vTaiwan is the example both of successful civic-state collaboration and, over its full trajectory, of the damage uneven collaboration does. The same property reads as a strength or a weakness according to the depth of institutional commitment behind it, which states the article's point as plainly as the evidence allows: outcomes turn on how these tools are used, not on whether they exist.

| 7 What This Means for the Field

This returns the article to the question the project began with, and answers it honestly. The dataset is well suited to first-stage market intelligence and gap analysis and unsuited, on its own, to final platform selection. A platform can document AI clustering, an accessibility standard, and a long deployment list and still fail serious diligence on hosting, interoperability, maintenance, multilingual capacity, moderation, data governance, and institutional readiness. The dataset narrows the field; it does not identify the platform to adopt.

> **“The striking thing is that these are the field’s success stories, and the recurring pain in them is institutional and resource-based, not technical.**

Three implications follow. Open source belongs in the base layer of any procurement framing, on the sustainability and dependency-management grounds set out above rather than ideological ones, since the open-source third of the ecosystem holds the platforms with the widest diffusion and the longest deployment histories; which specific platform to choose is a separate question, downstream of this analysis. Design requirements should follow the drivers the cases identified rather than the feature lists in vendor documentation, which means prioritising visible feedback loops, hybrid participation, low-friction onboarding, and trusted identity with proportional verification, precisely the capabilities vendors under-market because they are as much matters of process as of software. And the institutional preconditions have to be named honestly and early. Institutional readiness is concrete: before a platform is procured, an authority should be able to point to a political mandate to act on the outputs, the operational capacity to run the process, a design for visible feedback, a governance arrangement for any AI in the loop, and a funding plan that outlasts the pilot. Where these are missing, the case evidence is unambiguous that the best-chosen platform fails on the same constraints as every other.

For public authorities and the field more broadly, the supply-side problem is not scarcity but coordination, disclosure, and procurement clarity. The Knowledge Base and its interactive companion at https://innovade-digital-atlas.lovable.app give the field a basis for scoping the market and finding

its gaps, and because both will be updated, later readings will show whether the AI frontier consolidates into documented core capability and whether disclosure on security, identity, and accessibility climbs off its current floor.

| 8 Conclusion

The project went looking for the right tool and found that platform choice is only one part of the problem. The supply of digital democracy platforms in 2026 is already broad enough that the field's binding constraint has moved from the tools to the capacity to use them, a harder thing to build and a slower thing to fund. That constraint will only tighten as supply keeps growing. Generative AI and AI-assisted development are lowering the cost of building participation tools, so the number of available platforms will rise faster than before, and the count will say even less than it does today about whether participation actually works. What that wave does not produce is the political will to act on citizens' input, the administrative capacity to run a process well, or the institutional culture that treats participation as binding rather than decorative. Those remain human, institutional, and comparatively scarce. The capacity to judge what the available supply can do in context, to sustain platforms beyond grant cycles and electoral turnover, and to govern the processes they host with visible feedback and a real mandate, is what no platform, however many arrive, supplies on its own. The next gap is democratic, not technological.

Bibliography

Akar, F. (2026). *Digital Democracy Apps Dataset* [Data set]. Zenodo. https://doi.org/10.5281/zenodo.19608945.

Klinge, X., et al. (2026). *Report on the State of the Art in Digital Democracy Technology* (INNOVADE Deliverable D4.2). Zenodo. https://doi.org/10.5281/zenodo.20341205.

OECD. (2025). *Tackling civic participation challenges with emerging technologies: Beyond the hype*. OECD Public Governance Policy Papers, No. 72. OECD Publishing. https://doi.org/10.1787/ec2ca9a2-en.

Mariani, I., Mortati, M., Rizzo, F., & Deserti, A. (2025). *Design thinking as a strategic approach to e-participation: From current barriers to opportunities*. Springer. https://doi.org/10.1007/978-3-031-72160-1.

Oliveira, C., & Garcia, A. C. B. (2019). Citizens' electronic participation: A systematic review of their challenges and how to overcome them. *International Journal of Web Based Communities, 15*(1), 1–19. https://doi.org/10.1504/IJWBC.2019.10020619.

Simon, J., Bass, T., Boelman, V., & Mulgan, G. (2017). *Digital democracy: The tools transforming political engagement*. Nesta. https://www.nesta.org.uk/report/digital-democracy-the-tools-transforming-political-engagement/.

Policy Brief: The Evolving Role of Trust in AI-Mediated Societies[3]

By Tiffany Morisseau,[4] Atte Ojanen,[5] Gabriele Quattrocchi,[6] Gabriela Rogowska,[7] Jessica Sutherland,[8] María Ruiz de Assín de los Santos,[9] Jennifer Edmond[10]

Abstract:

Trust in democratic institutions is being fundamentally redefined as Artificial Intelligence increasingly mediates information exchange and influences decision-making processes. The KT4D project examines how artificial intelligence affects trust at multiple levels: between citizens and institutions, across different cultural contexts, and within organisations where Artificial Intelligence is deployed without clear standards.

The policy brief presents eight recommendations grouped across institutional, organisational, educational, and governance dimensions. At the institutional level, public bodies should ensure traceability and authenticity of information through authenticated digital signatures and origin labels. Organisations deploying AI systems must establish and communicate shared rules for AI use to keep interpersonal and institutional trust.

Educational recommendations emphasise contextualised critical digital literacy programmes that reflect local languages, social norms, and cultural values. Governance recommendations call for AI frameworks responsive to intercultural differences, mandatory human oversight for critical decision-making systems, epistemic responsibility in online knowledge dissemination, infrastructural

---

[3] The policy brief was originally published by the KT4D (Knowledge Technologies for Democracy) project under the Horizon Europe framework

[4] R&D Manager / Lead in Cognition and Society, Strane Innovation

[5] Research Manager, Demos Helsinki

[6] Project Manager, Trust-IT Services

[7] Communication, Dissemination, & Outreach Specialist, Trust-IT Services

[8] Research Fellow, University of Warwick

[9] Project Manager, Fundación Cibervoluntarios

[10] Associate Professor of Digital Humanities, Trinity College Dublin

approaches to democratic AI governance, and sufficient enforcement capacities for current regulation.

The central policy challenge is that while the European Union has addressed the effects of artificial intelligence through regulations, the focus has recently shifted toward innovation and deregulation. This creates tension between upholding democratic processes and promoting the rapid deployment of artificial intelligence, as this advanced knowledge technology can indirectly disrupt democracy in ways that static risk categories fail to capture challenges and help them manage their own democratic and civic participation and tackling their part as informed and active citizens in the European Union.

| 1 AI as a New Actor in the Trust Equation

Trust is essential in democratic societies, forming a precondition for citizens to rely on institutions and engage in decision-making. Yet, trust is being redefined as Artificial Intelligence (AI) increasingly mediates information exchange, and affects decision-making processes and public discourses. The influence of algorithms and the rapid dissemination of news and information across cultural contexts make it increasingly difficult to identify trustworthy sources of knowledge. As of today, trust depends not only on institutional integrity but also on digital literacy and technical transparency. Understanding how trust is built, maintained, and sometimes eroded in technologically mediated environments is central to safeguarding critical thinking and democratic participation.

> **“ As of today, trust depends not only on institutional integrity but also on digital literacy and technical transparency.**

1.1 Societal Challenges

What does it mean to receive, understand, or produce information in AI-mediated environments? The growing likelihood that any given piece of information, image or video has been generated or transformed by AI obfuscates how citizens assess and relate to information. It is becoming increasingly complex to identify in what context information was produced and the intentions underpinning it. The uncertainty caused by this opacity can (sometimes intentionally) undermine citizens’ trust in institutions, which are less able to serve as reliable reference points. Therefore, maintaining trust depends on strong collective mechanisms ensuring that information shared by institutions can be reliably traced,

verified, and contextualised, especially on issues that truly matter to citizens.

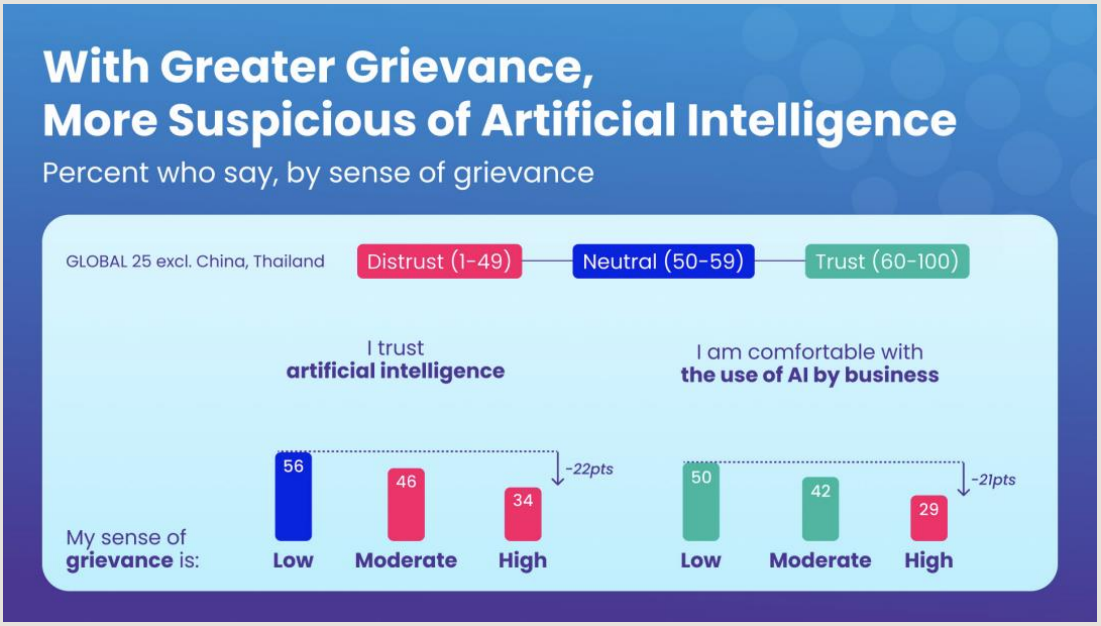


Figure 1: The figure adopted from the Edelman Trust Barometer (2025).

1.1.1 The Intertwining of Trust in Institutions and Trust in AI

The 2025 Edelman Trust Barometer shows a clear trend: people who feel a stronger sense of grievance — those who believe that the system has failed or excluded them — tend to trust artificial intelligence less and feel less comfortable with its use by businesses. This decline in confidence reflects more than technological scepticism; it points to a deeper decay of institutional and social trust. This helps explain the 22-point drop in AI trust among those with high grievance in the survey. For many, the technology is not viewed as a tool for transparency, but rather as another source of informational uncertainty.

1.1.2 The Role of Culture in Trust Mediation

Attitudes toward AI and institutional trust are also culturally mediated. Depending on whether a country has high institutional trust or not, citizens may view AI as a tool for efficiency and public benefit, or exclusion and manipulation. There is also a clear trust gap between the Global North and South. Citizens in Western democracies, such as the US, UK, Germany, and Japan, generally show low and declining trust in AI (37–47%). In contrast, many countries in the Global South, particularly in Asia and the Middle East (China, India, UAE, Indonesia, Saudi Arabia), exhibit high and stable trust in the technology (70–77%). This pattern suggests that trust is not merely about elections or democratic participation but shaped by

broader structural, social, cultural, and governance factors, creating a North–South divide.

1.1.3 Trust Within Organizations

Another challenge concerns how AI affects trust within organisations. The development of AI in collective and institutional settings has indeed direct effects on interpersonal trust between members of communities, whether corporate, scientific, or educational. Beyond individual interactions, AI affects how these communities negotiate shared norms. When the use of AI is introduced without clear standards, it can generate uncertainty not only linked to the technology itself, but also about people's intentions, competencies and responsibilities. The absence of a shared understanding of what is an acceptable or legitimate use of AI may erode the mutual expectations underlying cooperation. While there are some generally shared intuitions on this issue (for example, the use of AI is considered more legitimate for administrative support than hiring decisions), establishing explicit and acceptable frameworks for the use of AI is therefore a social and democratic necessity. (For related insights, see KT4D Social Risk Toolkit Module B: AI, trust and awareness, "AI and the valuation of human work" DOI 10.5281/zenodo.17977403).

1.2 Policy Challenges

The European Union (EU) is tackling AI's societal effects through a multifaceted set of policies, with implications for institutional trust. On the regulatory front, laws like the GDPR, the Digital Services Act (DSA), and the Digital Markets Act (DMA) govern data processing and the behaviour of major online platforms where disinformation often spreads. The EU AI Act (Regulation (EU) 2024/1689) addresses democratic threats more directly by classifying systems that influence voting as "high-risk," while new democracy-focused policies like the European Democracy Shield [Brussels, 12.11.2025 JOIN (2025) 791 final - European Democracy Shield: Empowering Strong and Resilient Democracies] are designed to combat foreign information manipulation and protect media pluralism. The central policy challenge, however, is that AI can also indirectly disrupt democracy in ways that static risk categories fail to capture. At the same time, the EU focus has shifted towards innovation and deregulation, as evident in the Digital Omnibus and the AI Continent Action Plan. The latter includes initiatives like the Apply AI Strategy, the Cloud and AI Development Act, and the development of AI Factories. While digital sovereignty and public AI infrastructure is certainly needed to build trust, one can also identify a tension between upholding democratic processes and promoting rapid, profit-driven AI deployment across society.

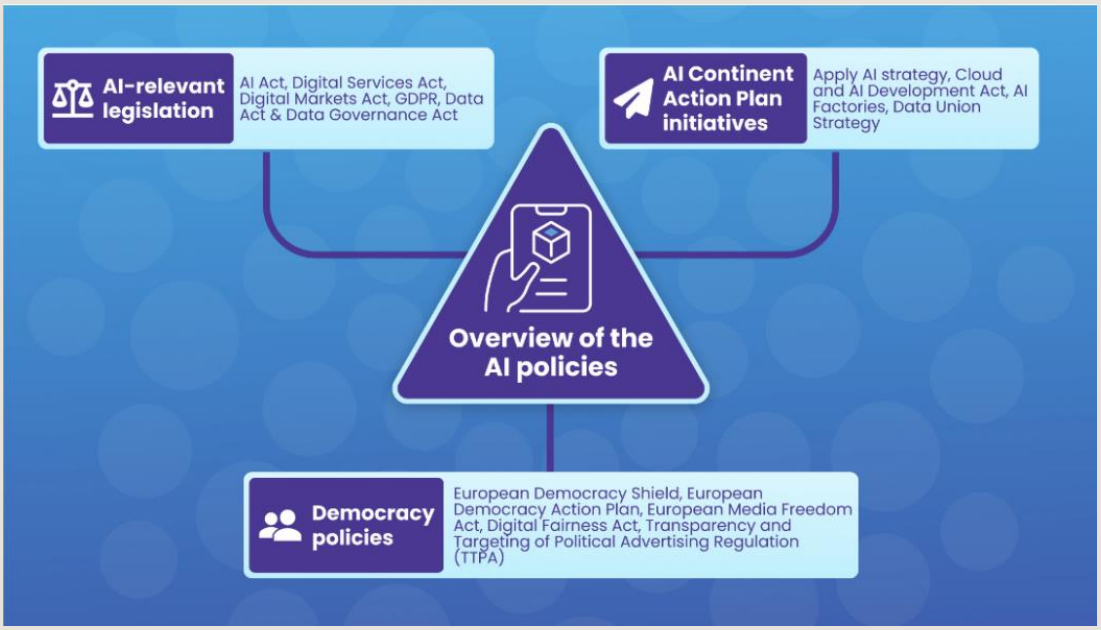


Figure 2: Overview of the AI-related Policies.

| 2 AI as a New Actor in the Trust Equation

Recommendation 1: Ensure the Traceability and Authenticity of Information by Public Institutions

Public institutions should establish systems that guarantee the traceability and authenticity of the information they produce and disseminate (for example, through authenticated digital signatures or institutional origin labels certifying that the content comes from an identifiable public body). These mechanisms should include a visible and easily understandable sign or label, allowing citizens to recognise genuine institutional communication.

Why it is important: As AI-generated content is growing exponentially, citizens face growing uncertainty about the origin and reliability of information. Ensuring that information coming from public bodies can be clearly identified and traced back to their legitimate source is therefore essential to maintain trust and to prevent the manipulation of public discourse.

Recommendation 2: Encourage Organizations to Communicate on Shared Rules of AI Use to Sustain Social Trust

Each organisation that deploys AI systems (whether in public administration, research, education, business, or civil society) should establish and make available its own shared rules for AI use, such as universities' guidelines for the use of generative AI. Ideally these are

discussed internally and informed by a clear mapping of how AI is used across the organisation's activities.

Why it is important: When organisations adopt AI tools without clear internal standards, uncertainty arises not only about the technology but also about human intentions, competencies, and responsibilities. Collaborators and citizens need to know when and how AI is expected to be used. Without this shared understanding, interpersonal and institutional trust may be undermined. When organisations adopt AI tools without clear internal standards, uncertainty arises not only about the technology but also about human intentions, competencies, and responsibilities. Collaborators and citizens need to know when and how AI is expected to be used. Without this shared understanding, interpersonal and institutional trust may be undermined.

Digital and AI literacy cannot be universalised; it must reflect local languages, social norms, and cultural values.

Recommendation 3: Foster Contextualised Critical Digital Literacy Programmes

Design and implement contextual critical digital literacy programmes within local institutions (schools, libraries, and civil society organisations) that integrate and embed social, linguistic, and political specificities of each community. These should include critical consumption skills, including analysis and awareness.

Why it is important: Digital and AI literacy cannot be universalised; it must reflect local languages, social norms, and cultural values. A culturally contextualised approach ensures that citizens understand and trust the digital tools that shape democratic participation.

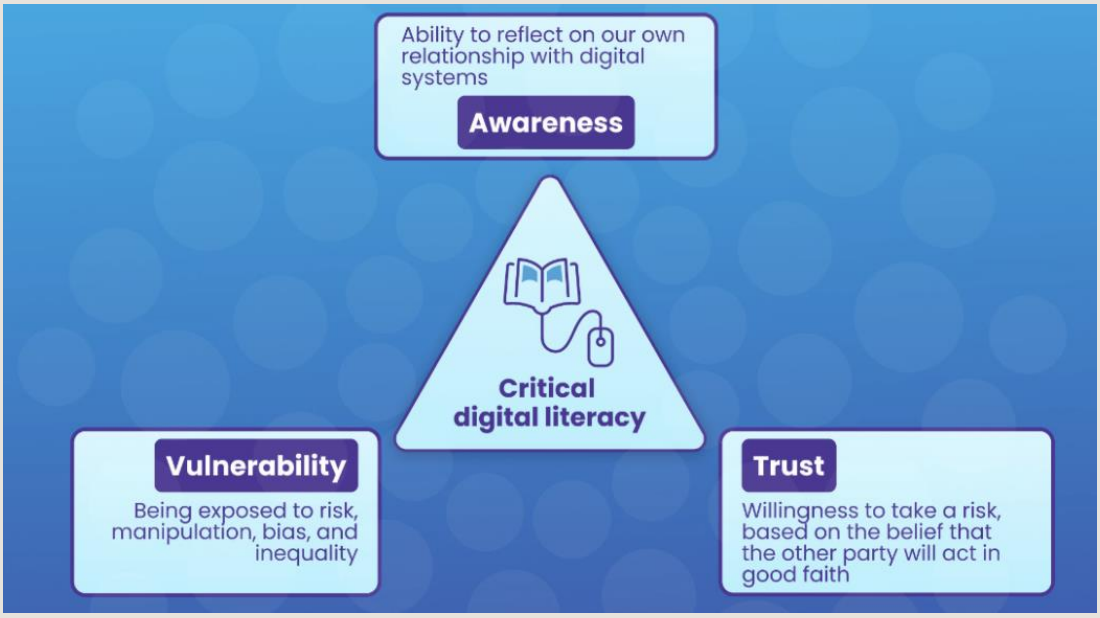


Figure 3: Illustration of the Components of Critical Digital Literacy: Awareness, Trust, and Vulnerability

Recommendation 4: Ensure AI Governance is Responsive to Interculturality and Cultural Differences

Utilise United Nations forums like Global Digital Compact4, the Global Dialogue on AI Governance5 and the Independent International Scientific Panel on AI6 to incorporate intercultural perspectives to AI governance. Ensure that all regions, communities and cultures are heard about their views on trust, risk, and the role of technology to shape AI policies from the start to better align it with the needs of the people it aims to serve.

Why it is important: AI now affects countries and communities across the world, but many are still not represented in international discussions. Intercultural dialogue is crucial for understanding how different communities conceptualise trust, risk and authority. Without this dialogue, AI governance risks being shaped by narrow cultural assumptions that may not translate across contexts.

Recommendation 5: Establish Mandatory Human Oversight for All AI Systems Involved in Critical Decision-Making, Particularly in Employment, Education, Healthcare, and Legal Contexts

Implement a Democracy-in-the-Loop framework that genuinely enables the public and affected communities to shape how ML systems are developed and governed throughout their lifecycle. Transparency in this context means ensuring information is understandable and actionable for those it affects, rather than simply making technical documentation available. Individuals must have robust mechanisms to challenge AI-

assisted decisions and seek redress when systems fail them. This means addressing the power asymmetries that ML systems create or amplify by requiring impact assessments and by providing resources for marginalised communities to participate in governance processes.

Why it is important: AI and automated decision-making systems are becoming increasingly prevalent in essential services. Whilst this may lead to cost and efficiency savings, to foster public trust and confidence in AI assisted decisions - and ultimately in our democratic institutions - requires that human oversight and accountability must remain central. Existing frameworks, such as human-in-the-loop and human-on the-loop provide some level of accountability, however, more must be done to protect and bolster our democratic and cultural values, as key pillars of trust in institutions.

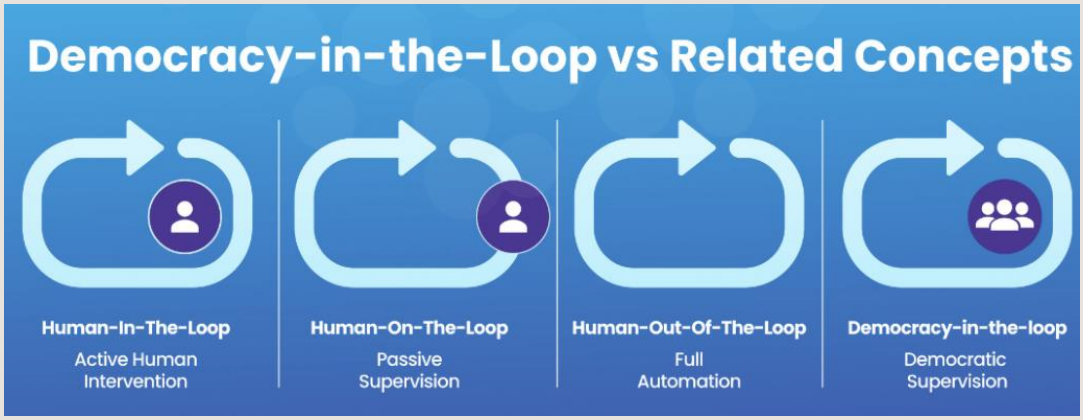


Figure 4: Illustration of the Democracy-in-the-Loop and Related Concepts

Recommendation 6: Ensure Epistemic Responsibility in Online Knowledge Dissemination Through Increased Scrutiny and Regulation of Online Platforms

Scrutiny of AI-driven algorithms should ensure that these platforms promote accurate and verifiable information, rather than content that is misleading or inaccurate. The EU ought to enforce the Digital Services Act and Digital Markets Act in a robust way to steer the behaviour of large platforms that act as epistemic gatekeepers

Why it is important: Knowledge dissemination has increasingly moved online to search engines and social media platforms. Those who control these platforms are therefore mediators of epistemic trust and have immense power in shaping what knowledge is disseminated and how

Recommendation 7: Adopt Broader, Infrastructural Lens to Democratic AI Governance

Leverage different policies like the AI Act, Digital Services Act, Digital Markets Act and European Democracy Shield in harmony to tackle concentration of power in AI at the infrastructural layer. Incentivise investments into digital public infrastructure for a sovereign, democratically governed European AI stack.

Why it is important: Focusing merely on AI systems deployment disregards the importance of decision-making in the design and development processes. Democratic governance and trust are difficult to realise afterwards if the digital public sphere is owned by large private platforms and gatekeepers with profit incentives.

Recommendation 8: Ensure Sufficient Capacities to Enforce Current AI Regulation

Invest into public sector capacities for implementation and enforcement of current AI and data regulation to provide legal certainty. Make robust enforcement of democratic safeguards a tangible competitive advantage that distinguishes the EU from unreliable, authoritarian countries by providing sufficient resources to national authorities and the EU AI Office.

Why it is important: The EU has established a strong digital rulebook to protect fundamental rights, but these rules are only effective if they are properly enforced. Haphazardly implemented Digital Omnibus risks undermining citizens' trust in these safeguards.

“ Democratic governance and trust are difficult to realise afterwards if the digital public sphere is owned by large private platforms and gatekeepers with profit incentives.

| 3 About KT4D Project

The Knowledge Technologies for Democracy (KT4D) project offers a distinctive approach to the growing tensions between AI and big data technologies, and democratic processes. We do this by placing cultural values and identity formation at the heart of our understanding.

The KT4D project uniquely positions technologies such as AI and big data as advanced knowledge technologies (AKTs), addressing the challenge of integrating a cultural perspective into the study of technology and democracy.

The project recognises that AKTs have become fundamentally interwoven into our societies, our cultures and indeed into our expectations and conceptions of democratic governance and exchange.

The project recently released the KT4D Toolkit that collects all KT4D results in one place, empowering stakeholders with knowledge, methods, and tools for democratic resilience in the AI era.

Bibliography

Edelman. (2025). 2025 Edelman Trust Barometer. Edelman. https://www.edelman.com/trust.

European Commission. (2025, November 19). Proposal for a regulation of the European Parliament and of the Council amending Regulations (EU) 2024/1689 and (EU) 2018/1139 as regards the simplification of the implementation of harmonised rules on artificial intelligence (Digital Omnibus on AI) (COM(2025) 836 final; 2025/0359 (COD)).

European Commission. (2025, April 9). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: AI Continent Action Plan (COM(2025) 165 final).

United Nations. (2024, September 22). Global Digital Compact. Adopted as part of the Pact for the Future at the Summit of the Future, New York.

United Nations. (n.d.). Global Dialogue on AI Governance.

United Nations. (2025, August 26). Independent International Scientific Panel on AI. Established by Resolution A/RES/79/325.

Economic Leverage and Political Alignment: China's Strategic Engagement in the Gulf

By Eric Malin[11]

| 1 Introduction

In March 2023, China brokered a historic rapprochement between Saudi Arabia and Iran —two regional rivals whose antagonism had long shaped Middle Eastern geopolitics (Fulton, 2021). This Beijing-mediated agreement, which restored diplomatic relations severed in 2016, raised fundamental questions about the evolving architecture of global power and China's growing influence in the Gulf.

To explore these dynamics, this study focuses on three Gulf countries—Saudi Arabia, the United Arab Emirates, and Iran—that represent contrasting types of Chinese economic engagement and political alignment. Saudi Arabia and the UAE are key economic partners of both China and the West, reflecting different degrees of economic dependence and strategic flexibility. Iran, by contrast, is subject to extensive international sanctions and relies heavily on China as an economic and political partner out of necessity. This comparative design enables a nuanced analysis of how economic statecraft operates across diverse regional contexts.

Unlike traditional Western powers, China has no military presence in the region but has systematically expanded its economic footprint. Over the past decade, China has become Saudi Arabia's largest trading partner (Fulton, 2019), the UAE's main source of non-oil trade growth, and Iran's economic lifeline despite sanctions (Fulton, 2020). Chinese foreign direct

[11] Project Assistant, Beyond the Horizon

investment and bilateral trade volumes have increased exponentially, reshaping infrastructure and economic interdependence.

Yet, the link between this economic engagement and political alignment remains complex. The Gulf states, while maintaining deep security partnerships with the United States, increasingly align politically with China in selective and strategic ways.

> **“Unlike traditional Western powers, China has no military presence in the region but has systematically expanded its economic footprint.**

This article investigates how China’s economic instruments translate into political influence in the Gulf and why the conventional assumption, that economic dependence directly predicts political alignment, does not fully explain the observed patterns. Emphasis is placed on the interplay between economic incentives and strategic, institutional, and geopolitical mediators shaping the outcomes.

| 2 Theoretical Framework

The notion of power in international relations has evolved well beyond the traditional hard-versus-soft power dichotomy, as discussed by Nye (2004) and Baldwin (1985). Building on this broader understanding, Baldwin (1985) introduces the idea of economic statecraft, which highlights how states strategically employ economic instruments to pursue foreign policy objectives. This form of statecraft spans a wide range of tools, including trade, investment, financial mechanisms, and engagement within international institutions.

China’s approach in the Gulf exemplifies this complex economic statecraft. While lacking cultural soft power appeal or military presence in the region, China leverages economic incentives—such as trade agreements, foreign direct investment, infrastructure financing, currency swap agreements, and participation in multilateral platforms like the AIIB and the Belt and Road Initiative (Blanchard & Murshed, 2016)—to create structural dependencies that influence political alignment.

A key theoretical insight comes from the concept of “sticky power,” (Hirschman, 1945; Mead, 2009) whereby economic relationships attract states but also entrap them through rising costs of disengagement. Chinese investments and trade create such “stickiness,” fostering economic vulnerability that translates into political leverage.

Further, the distinction between "sensitivity" and "vulnerability" interdependence (Keohane & Nye, 1977) is essential. Sensitivity measures short-term economic exposure, while vulnerability reflects a deeper, more binding dependence that constrains foreign policy autonomy. In the Gulf, some states exhibit high sensitivity without corresponding vulnerability due to diversified economic structures and institutional capacity, explaining why economic dependence does not automatically determine political alignment.

Building on these foundations, this article analyses how economic instruments function as tools of foreign policy in a multipolar world where influence is achieved not simply through coercion or attraction, but through complex relational dynamics combining material interdependence with strategic calculations.

| 3 Methodology

This study adopts a mixed-methods approach combining quantitative and qualitative analyses to investigate China's economic influence and political alignment in the Gulf region.

The quantitative component centres on the construction of the Economic Dependency Index (EDEP), a composite indicator measuring the degree of economic dependence of Saudi Arabia, the United Arab Emirates, and Iran on China (ChinaMed, n.d.; OEC, n.d.). The index incorporates two key dimensions: Chinese foreign direct investment (FDI) stock and bilateral trade volume, each expressed as a share of the country's GDP over the period 2014–2023. These components are normalized and combined to produce a comparable score for each country and year.

The qualitative component analyses four dimensions of political alignment: voting patterns in the United Nations, participation in China-led multilateral institutions (AIIB, BRICS+, BRI, SCO), official rhetoric and diplomatic discourse, and strategic postures vis-à-vis the United States.

This integrative methodology enables a comprehensive understanding of the interplay between economic dependencies and political behaviours, capturing nuances that single-method approaches might miss.

| 4 China's Economic Statecraft in the Gulf: Tools and Initiatives

China's expanding presence in the Gulf builds on a deep historical relationship and strategic imperatives related to energy security and

multilateral diplomacy (Leung, 2011). Unlike traditional powers, China relies on a complex portfolio of economic instruments rather than military means to exert influence.

4.1 Historical and Strategic Context

China's relations with the Middle East trace back to ancient Silk Road interactions, but have intensified recently due to China's rising global economic power and its urgent energy needs (Shichor, 2018). The Gulf region's strategic location—at the crossroads of Asia, Africa, and Europe—and its vast hydrocarbon resources make it central to China's global strategy. China also pursues a "periphery diplomacy" (周边外交 - zhōubiān wàijiāo) aimed at regional stabilization through infrastructure development and hedging against geopolitical risks via multilateral institutions (Swaine, 2014).

4.2 Economic Instruments Deployed

China's economic statecraft in the Gulf involves multiple complementary tools:

- **Foreign Direct Investment (FDI):** China channels investments into key sectors including energy, petrochemicals, transportation, and technology. This creates long-term entanglements and economic dependencies.
- **Loans and Infrastructure Financing:** state-owned banks like China Development Bank and Eximbank extend credit for large infrastructure projects, supporting energy terminals, ports, industrial zones, and transportation corridors under Belt and Road Initiative (BRI) frameworks (Gelpern et al., 2021; Horn et al., 2021).
- **Currency Swaps and Bilateral Financial Agreements:** RMB currency swap agreements with Gulf countries, including Saudi Arabia and the UAE, facilitate trade settlement in Chinese currency and support RMB internationalization, a strategic objective linked to reducing reliance on the US dollar.
- **Multilateral Financial Institutions:** the Asian Infrastructure Investment Bank (AIIB) provides a platform for financing projects aligned with China's geopolitical objectives, emphasizing connectivity, infrastructure, and energy development in the Gulf.
- **Trade Agreements and Tariff Policies:** China pursues preferential trade agreements with Gulf Cooperation Council (GCC) countries, institutionalizing economic relations and promoting a political narrative of mutual benefit and sovereignty.

4.3 Gulf States' Participation in Chinese-Led Initiatives

Gulf countries actively engage in China-led economic initiatives, signaling institutional alignment beyond bilateral relations:

- Participation in the AIIB reflects strategic openness to China's multilateral financial apparatus.
- OPEC+ coordination with China influences global energy governance despite China's non-membership.
- The Belt and Road Initiative serves as an extensive platform for infrastructure diplomacy, embedding Gulf states in China's global economic network.

4.4 Asymmetrical Interdependence

While cooperation appears mutually beneficial, inherent asymmetries favour China strategically. These asymmetries create structural economic dependencies that condition political behavior over time without explicit coercion, a dynamic known as "vulnerability interdependence." Gulf states, while maintaining agency, face increasing opportunity costs associated with misalignment.

| 5 Case Studies: Saudi Arabia, UAE, and Iran

This chapter examines how China's economic statecraft operates across three Gulf countries with distinct strategic positions, economic structures, and geopolitical constraints. The analysis reveals that economic engagement creates conditions for political alignment, but the depth and nature of that alignment vary significantly based on state capacity, strategic vision, and security environments.

5.1 Saudi Arabia

Saudi Arabia exemplifies what can be termed "calibrated engagement"—a deliberate strategy of deepening institutional and economic ties with China while maintaining traditional security partnerships with the United States.

Chinese FDI in Saudi Arabia increased from $1.99 billion in 2014 to $3.52 billion in 2021, before settling down to $3.19 billion in 2023 (ChinaMed, n.d.). This volatility reflects the Kingdom's strategic calculations amid intensifying US-China competition rather than purely commercial dynamics. Most of the Chinese FDI has been concentrated in the energy sector (China Customs Statistics, 2014), underscoring China's strategic focus on resources critical to its economic security.

Year	Saudi Arabia (USD B)
2014	1.99
2015	2.43
2016	2.61
2017	2.04
2018	2.59
2019	2.53
2020	2.93
2021	3.52
2022	3.01
2023	3.19

Table 1. Chinese FDI Stock in Saudi Arabia (2014–2023, USD billions) – Source: World Bank

Bilateral trade has grown steadily, with China consistently absorbing over 76% of Saudi oil exports during the analysed period. Saudi Arabia's trade dependency on China averages 8.35% of GDP over the decade (OEC, n.d.), reflecting substantial but not overwhelming economic integration.

Saudi Arabia's political convergence with China accelerated markedly following Vision 2030's launch. The Kingdom introduced Mandarin into national school curricula (Alshammari, 2024)—a symbolic signal of long-term strategic reorientation; in 2019, Riyadh co-signed UN letters defending Chinese policies in Xinjiang and in August 2023 it was accepted into BRICS expansion and approved Shanghai Cooperation Organization membership (Nebehay, 2019). This alignment reflects deliberate strategic choices linked to domestic transformation objectives rather than economic coercion.

5.2 United Arab Emirates

The UAE demonstrates the highest economic dependence on China among the three cases, yet paradoxically maintains the greatest strategic

autonomy—exemplifying sophisticated compartmentalization of economic and security relationships.

Chinese FDI stock in the UAE grew from $1.36 billion in 2014 to $9.56 billion in 2023 (ChinaMed, n.d.)—a nearly sevenfold increase. Bilateral trade represents on average 15.92% of Emirati GDP (OEC, n.d.), the highest level among the three countries. This elevated trade exposure reflects the UAE's role as a regional commercial hub and re-export centre embedded in China's Belt and Road logistics networks.

Year	UAE Exports to China (USD B)	China Exports to UAE (USD B)
2014	16.8	28.8
2015	12.8	28.5
2016	11.8	26.5
2017	14.4	48.4
2018	19.6	38.7
2019	17.2	42.4
2020	18.5	41.4
2021	30.2	55.2
2022	47.4	67.1
2023	40.2	74.0

Table 2. Chinese FDI Stock in UAE (2014–2023, USD billions) – Source: World Bank

Year	UAE (USD B)
2014	2.33
2015	4.60
2016	4.89
2017	5.37
2018	6.44
2019	7.64
2020	9.28
2021	9.84
2022	11.88
2023	8.91

Table 3. Total Bilateral Trade between China and the UAE (2014–2023) – Source: OEC

Despite high economic integration, the UAE maintains sophisticated strategic hedging. Abu Dhabi supports China on selective issues like Hong Kong and Xinjiang but preserves robust Western security partnerships and demonstrates flexibility in UN forums. The UAE's 2023 BRICS+ invitation signals confidence in managing multiple institutional commitments without compromising core relationships (Asia Dialogue, 2020). This reflects superior institutional capacity to manage complex interdependence through economic diversification and strategic portfolio balancing.

5.3 Iran

Iran presents a fundamentally different profile: the lowest measured economic dependence yet the most comprehensive political alignment with China. This pattern reflects strategic necessity driven by Western sanctions rather than economic vulnerability per se.

Economic Integration: Iran's Chinese FDI stock remained relatively stagnant between $3-4 billion throughout 2014-2023 (U.S. EIA, 2014), despite the $400 billion strategic cooperation agreement signed in 2021. Western sanctions have structurally limited formal economic integration.

Year	Iran (USD B)
2014	3.48
2015	2.95
2016	3.33
2017	3.62
2018	3.23
2019	3.06
2020	3.53
2021	3.42
2022	3.39
2023	3.39

Table 4. Chinese FDI Stock in Iran (2014–2023, USD billions) – Source: World Bank

Despite modest economic integration, Iran demonstrates the most extensive political alignment. Tehran has embraced Chinese institutional frameworks, adopted Beijing's diplomatic rhetoric, and systematically aligned with Chinese positions in international forums. In July 2019, Iran publicly defended Chinese policies in Xinjiang at the UN Human Rights

Council. This comprehensive alignment emerges not from economic dependence but from sanctions-induced isolation that eliminates alternative partnerships, making China Iran's only viable strategic partner.

5.3 Comparative Analysis: Explaining Variation

The three cases reveal that economic engagement establishes foundations for political alignment, but the relationship is mediated by four key factors:

- **State Capacity:** the UAE's superior institutional sophistication allows management of complex interdependence while maintaining strategic flexibility despite high economic dependence.
- **Strategic Vision:** Saudi Arabia has integrated Chinese cooperation into Vision 2030, creating domestic momentum and constituencies that reinforce alignment beyond immediate economic incentives.
- **Security Constraints:** Iran's comprehensive alignment reflects strategic necessity under sanctions rather than economic vulnerability, demonstrating that political alignment can emerge from geopolitical isolation.
- **Geopolitical Opportunities:** great power competition offers Gulf states leverage to balance economic benefits with political flexibility—those with greater capacity exploit this more effectively.

| 6 Economic Dependency Index (EDEP)

The Economic Dependency Index (EDEP) was developed to capture and compare the degree of economic reliance on China among Saudi Arabia, the United Arab Emirates, and Iran during 2014–2023. It serves as a systematic, quantitative tool to highlight structural economic dependencies that may shape political alignment.

6.1 Index Components

The EDEP combines two key indicators:

- Chinese Foreign Direct Investment (FDI) stock: capturing long-term economic entanglement and strategic positioning.
- Bilateral trade volume: measured as the sum of imports and exports with China, reflecting economic integration and exposure.

Both variables are used as a share of each country's GDP for comparability across time and countries.

Country	FDI stock (% GDP)	Trade (% GDP)	EDEP Index (avg)
Saudi Arabia	1.38	8.35	4.865
United Arab Emirates	1.29	15.92	8.605
Iran	0.94	7.15	4.045

Table 5. Economic Dependency Index: aggregated results – Author's elaboration based on FDI stock and trade as % of GDP

6.2 Excluded Variables and Limitations

Attempts to include Chinese loans and debt shares as a percentage of GDP were abandoned due to the lack of consistent, granular, and transparent longitudinal data—especially for Iran, but also for Gulf monarchies where financing often takes the form of joint ventures or non-public agreements. This exclusion is crucial: while loans and debt would portray an even greater degree of dependency for some states, omitting them ensures the robustness of the index given available data.

6.3 Method of Construction

Raw annual values of Chinese FDI stock and bilateral trade with China were first collected for each country and year in the 2014–2023 period. These series were then rescaled to a common 0–1 range through min–max normalization, ensuring comparability across countries and over time. The EDEP for each country-year is calculated as the simple arithmetic mean of the normalized FDI and trade indicators, assigning equal weight to both components.

6.4 Benchmarking Economic Dependency: the Case of Cambodia

In order to better contextualize the values of economic dependency calculated for the Gulf countries, this study adopts Cambodia as a benchmark country. Cambodia is widely recognized as one of the states most economically reliant on China—both in terms of trade and foreign direct investment. Several sources, including the Lowy Institute Asia Power Index, academic studies on Sino-Cambodian relations, and reports from CSIS and Brookings Institution, consistently highlight Cambodia's deep integration into China's economic sphere, often citing it as an archetype of Chinese economic statecraft in Southeast Asia.

Using Cambodia's ten-year average ratios of Chinese FDI stock and bilateral trade as a percentage of GDP (2.18% and 26.57%, respectively) as reference (100%), the scores previously calculated for Saudi Arabia, the UAE, and Iran were normalized on a scale from 0 to 1. This allows for an intuitive comparative interpretation: a normalized score of 1 would indicate a level of economic dependency comparable to that of

Cambodia—arguably the upper bound of contemporary economic entanglement with China.

Country	FDI stock (% GDP, normalized)	Trade (% GDP, normalized)	FDEP Index (avg)
Saudi Arabia	1.38 / 2.18 ≈ 0.633	8.35 / 26.57 ≈ 0.314	**0.474**
United Arab Emirates	1.29 / 2.18 ≈ 0.592	15.92 / 26.57 ≈ 0.599	**0.596**
Iran	0.94 / 2.18 ≈ 0.431	7.15 / 26.57 ≈ 0.269	**0.350**

Table 13. Economic Dependency Index: normalized results – Author's elaboration based on Cambodia's reference ratios (FDI stock 2.18% of GDP; Trade 26.57% of GDP)

| 7 Correlation Between Chinese Economic Instruments and Political Alignment

This section moves beyond descriptive metrics and investigates whether—and how—economic dependence on China translates into observable political alignment among Saudi Arabia, the United Arab Emirates, and Iran across four key dimensions:

1. Voting behaviour at the United Nations
2. Participation in China-led institutions
3. Official rhetoric and diplomatic discourse
4. Strategic positioning vis-à-vis the United States

Empirical analysis reveals that economic engagement consistently establishes a permissive foundation for political alignment, but the depth and character of alignment are shaped by mediating factors that quantitative measures alone do not capture (Zhao, 2022).

Iran exhibits the highest degree of political alignment with China across every dimension—consistent UN voting, rhetorical convergence, and institutional participation—despite having the lowest formal EDEP score. Here, alignment is primarily explained by strategic necessity and the absence of Western alternatives due to sanctions.

Saudi Arabia sits at an intermediate EDEP level, but demonstrates a clear trend toward deeper political alignment, as evidenced by joining BRICS+, opening to educational cooperation, and accelerating institutional agreements. Political alignment is driven by deliberate national transformation objectives, especially Vision 2030, and reflects both material incentives and long-term strategic vision.

UAE holds the highest EDEP, embodying maximum economic integration but maintains significant strategic autonomy. The UAE compartmentalizes support for China on selective issues, preserves

Western security ties, and exhibits flexibility in international forums—a result of state capacity, diversification, and hedging strategies.

This nuanced pattern implies that while Chinese economic instruments create room for alignment, actual political behaviour is mediated by factors such as institutional capacity, domestic transformation projects, security context, and geopolitical opportunity structures.

The findings challenge the linear and deterministic assumption often found in international political economy literature: higher economic dependence does not directly or proportionally generate higher political alignment.

Political alignment can emerge from strategic constraints (sanctions, isolation), not only from economic vulnerability. Conversely, high economic dependence, when paired with robust institutional capacity, can be leveraged for autonomy and hedging rather than subservience.

| 8 Conclusion

This article advances a nuanced understanding of how China's economic engagement translates into political influence in the Gulf. China's presence is now a structural reality, making it a key actor in the region's economic growth and strategic diversification. Yet, the link between economic dependence and political alignment is mediated by state capacity, strategic vision, security environment, and regional competition.

The Gulf cases demonstrate that economic engagement by a great power creates permissive conditions for alignment, but material advantage alone is insufficient for sustained influence. China's most effective statecraft leverages the unique context of each partner, creating stakeholder constituencies, institutional dependencies, and policy path dependencies that interact with domestic reform agendas and shifting geopolitical realities.

“ China's presence is now a structural reality, making it a key actor in the region's economic growth and strategic diversification.

In other words, Chinese economic statecraft does not guarantee political obedience; instead, it expands the range of options for Gulf states to reposition themselves in a rapidly changing world, supporting hedging, diversification, and, in some cases, convergence.

The complexity, non-linearity, and context-dependence of this relationship have critical implications for both theory and practice, suggesting that influence in the 21st-century Gulf will depend more on sophisticated economic diplomacy than on military presence or simple trade volume (Baldwin, 2016). In this sense, the Gulf is not just a recipient of Chinese economic statecraft but a laboratory where new rules of great-power competition are being tested, negotiated, and resisted, offering a preview of how “geoeconomics” is shaping the international order.

Bibliography

Alshammari, H. (2024) 'Saudi Arabia begins Chinese-language classes at schools', Arab News, 10 September. Available at: https://www.arabnews.com/node/2570858/amp (Accessed: July 2025).

Asia Dialogue (2020) 'China's partnership diplomacy in the Middle East'. [Online]. (Accessed: July 2025).

Asian Infrastructure Investment Bank (AIIB) (2025) 'AIIB official data on country shares and voting rights'. Available at: https://www.aiib.org/en/about-aiib/governance/members-of-bank/index.html (Accessed: July 2025).

Baldwin, D.A. (1985) Economic Statecraft. Princeton, NJ: Princeton University Press.

Baldwin, D.A. (2016) Power and International Relations: A Conceptual Approach. Princeton, NJ: Princeton University Press.

Bayne, N. and Woolcock, S. (2017) The New Economic Diplomacy: Decision-Making and Negotiation in International Economic Relations (4th ed.). London: Routledge.

Blanchard, J-M.F. (2009) 'A Political Theory of Economic Statecraft', in Blanchard, J-M.F., Dombrowski, E.D. and Kirshner, D.A. (eds) Power and the Purse: Economic Statecraft, Interdependence, and National Security. London: Routledge, pp. 371–393.

Blanchard, J-M.F. and Murshed, S.M. (2016) 'The Political Economy of China's Infrastructure Diplomacy', The China Review, 16(1), pp. 1–26.

Calabrese, J. (2018) 'China's "One Belt, One Road" (OBOR) Initiative: Envisioning Iran's Role', in Ehteshami, A. and Horesh, N. (eds) China's Presence in the Middle East: The Implications of the One Belt, One Road Initiative. London: Routledge, pp. 173–184.

CEIC Data (n.d.) 'China: ODI: Asia: Cambodia'. Available at: https://www.ceicdata.com/en/china/outward-direct-investment-by-country/outward-investment-asia-cambodia (Accessed: July 2025).

China Customs Statistics (2014) 'China's Top Sources of Crude Oil'. Available at: https://www.customs.gov.cn (Accessed: July 2025).

ChinaMed (n.d.) 'ChinaMed Data – Middle East'. Available at: https://www.chinamed.it/chinamed-data/middle-east (Accessed: July 2025).

Fulton, J. (2019) 'China's Changing Role in the Middle East', Atlantic Council. Available at: https://www.atlanticcouncil.org (Accessed: July 2025).

Fulton, J. (2020) 'China's changing role in the Middle East', Atlantic Council Issue Brief, October. Available at: https://www.atlanticcouncil.org/in-depth-research-reports/issue-brief/chinas-changing-role-in-the-middle-east/ (Accessed: 10 July 2025).

Fulton, J. (2021) 'China and the Persian Gulf in the Age of the BRI: The View from the Gulf', in Zoubir, Y.H. (ed.) The Politics of China's Belt and Road Initiative. Cham: Palgrave Macmillan, pp. 207–228.

Gelpern, A., Horn, S., Morris, S., Parks, B. and Trebesch, C. (2021) How China Lends: A Rare Look into 100 Debt Contracts with Foreign Governments. Williamsburg, VA: AidData at William & Mary.

Horn, S., Reinhart, C.M. and Trebesch, C. (2021) 'China's Overseas Lending', Journal of International Economics, 133, 103539.

Huang, J. (2025) 'A Comparative Analysis of China's New Era Economic Diplomacy and the Economic Diplomacy Strategy of the Biden Administration', Journal of

Modern Social Sciences, 2(2), pp. 126–131. https://doi.org/10.71113/JMSS.v2i2.257

Keohane, R.O. and Nye, J.S. (1977) Power and Interdependence: World Politics in Transition. Boston, MA: Little, Brown.

Keohane, R.O. and Nye, J.S. (2012) Power and Interdependence (4th ed.). Boston, MA: Pearson.

Leung, G.C.K. (2011) 'China's energy security, the Malacca dilemma and responses', Energy Policy, 39(12), pp. 7612–7615.

Mearsheimer, J.J. (2001) The Tragedy of Great Power Politics. New York: W.W. Norton.

Nebehay, S. (2019) 'Saudi Arabia and Russia among 37 states backing China's Xinjiang policy', Reuters, 12 July. Available at: https://www.reuters.com/world/saudi-arabia-and-russia-among-37-states-backing-chinas-xinjiang-policy-idUSKCN1UA1FD/ (Accessed: July 2025).

Nye, J.S. (2004) Soft Power: The Means to Success in World Politics. New York: PublicAffairs.

Nye, J.S. (2011) The Future of Power. New York: PublicAffairs.

Observatory of Economic Complexity (OEC) (n.d.) 'OEC Data Portal'. Available at: https://oec.world/ (Accessed: July 2025).

Shichor, Y. (2018) 'China's Presence in the Middle East: Vision, Revision and Supervision', in Ehteshami, A. and Horesh, N. (eds) China's Presence in the Middle East. London: Routledge.

Swaine, M.D. (2014). Chinese Views and Commentary on Periphery Diplomacy. Carnegie Endowment.

Strange, S. (1988) States and Markets: An Introduction to International Political Economy (2nd ed.). London: Continuum.

Strange, S. (1994) 'Wake Up, Krasner! The World Has Changed', Review of International Political Economy, 1(2), pp. 209–219.

U.S. Energy Information Administration (EIA) (2014) 'Iran's Oil Exports by Destination'. Available at: https://www.eia.gov (Accessed: July 2025).

Woolcock, S. (2017) 'Factors Shaping Economic Diplomacy: An Analytical Toolkit', in Bayne, N. and Woolcock, S. (eds) The New Economic Diplomacy (4th ed.). London: Routledge.

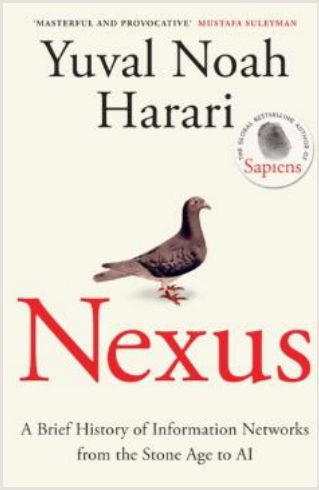
Zhao, S. (2022) 'China's Hedging Strategy in the Middle East: Balancing Relations with Competing Regional Powers', Journal of Contemporary China, 31(137), pp. 251–268.

Book Review:

Nexus: A Brief History of Information Networks from the Stone Age to AI by Yuval Noah Harari

Random House, 2024. ISBN: 9780593734223.

Timucin Ibu[12]



In Nexus, Yuval Noah Harari takes up a question that has become impossible to avoid: what exactly is information, and why has humanity become so powerful yet so incapable of using that power wisely? The result is an ambitious, wide-ranging book that attempts nothing less than a reinterpretation of human history through the lens of information networks. Like the sample review you attached, the book is best understood not simply as a work of synthesis but as an intervention. Harari is not content to narrate the rise of information technologies from writing to AI. He wants to overturn what he calls the "naive view of information": the comforting assumption that more information naturally yields more truth, more wisdom, and better politics. Instead, he argues that information's primary historical function is not representation but connection. Information binds people into networks, and those networks can be organized around truth, error, myth, bureaucracy, or delusion alike.

That argument gives Nexus its force. Harari's core claim is both simple and unsettling. Human beings do not dominate the world because they are uniquely rational; they dominate because they can cooperate flexibly in large numbers, and they do so through shared stories, symbols, and institutions. Stories create human-to-story chains that vastly exceed the limits of intimate, face-to-face trust. This is why religions, states, and markets can scale. What matters is less whether a story is true than

[12] IT & Social Media Manager at Beyond the Horizon

whether it coordinates action. Harari pushes this point with some aggression: the Bible, for instance, may be weak as an account of empirical reality, but it has been extraordinarily powerful as a mechanism for social connection. That is not a pious argument. It is a cold one.

The book's most provocative conceptual move comes in its definition of information itself. Harari rejects the standard view that information is essentially about representing reality. Instead, he argues that information creates reality by connecting points into networks. In this account, information "puts things in formation." Stories, bureaucratic documents, propaganda, music, DNA, and digital systems all belong to the same broad analytical frame because each organizes relations among otherwise disparate entities. This is an arresting idea, and often a fruitful one. It allows Harari to explain why fantasies, lies, and conspiracies can be historically consequential without treating them as mere distortions of an otherwise truth-seeking system. They are not anomalies. They are structurally normal products of network formation.

That conceptual reframing is what makes Nexus stronger than a routine AI alarm book. Harari does not begin with ChatGPT, machine learning, or Silicon Valley boosterism. He begins with deep history. The structure of the book makes this plain: the first part examines "Human Networks," including stories, documents, error-correction, and the contrast between democratic and totalitarian information flows; the second turns to "The Inorganic Network"; and the third addresses "Computer Politics," asking whether democracies can still sustain public conversation and whether totalitarian systems may eventually cede power not just to dictators but to algorithms. The historical sweep is one of Harari's greatest strengths. He insists that AI is not intelligible in isolation. It must be situated within a longer history of how humans have built authority, stored information, corrected mistakes, and organized cooperation.

> **"The problem of the twenty-first century is not a shortage of information, but the political and civilizational consequences of the kinds of networks information makes possible.**

Harari is at his best when he exposes the complacencies of liberal technophilia. The prologue is especially effective on this score. He identifies the deep modern faith that openness and information abundance will, in the long run, defeat falsehood and tyranny. Against

that optimism, he argues that delusional networks can be extraordinarily strong. Nazism and Stalinism were not fragile because they were false; they were formidable precisely because fiction can bind masses together with terrifying efficiency. That is the real relevance of AI for Harari. The danger is not primarily that robots will turn homicidal in some cinematic revolt. It is that artificial systems will intensify human conflict, undermine democratic conversation, and enable forms of totalitarian control that no previous regime could achieve. AI, in his formulation, is the first technology that can make decisions and generate ideas on its own. That makes it less a tool than an agent.

Still, the book has real weaknesses, and they should not be glossed over. Harari's grand style is intellectually seductive, but it often comes at the price of overcompression. He is brilliant at framing problems and less reliable when handling historical specificity. The same conceptual scheme is made to stretch across religion, empire, branding, populism, and machine intelligence. Sometimes it works. Sometimes it looks suspiciously like a universal solvent that dissolves important distinctions. Not every network is best understood through the same logic, and not every form of symbolic coordination belongs in one analytic basket simply because it connects people. Harari is too smart not to know this, but he is too committed to the architecture of his argument to stop himself.

There is also a recurring tendency toward rhetorical overreach. Harari's prose is clear, sharp, and memorable, but it is also engineered for maximum portability. That makes the book highly readable and often persuasive; it also makes it vulnerable to flattening complexity into aphorism. The claim that information is fundamentally about connection rather than representation is powerful, but it is also too neat. In some contexts, representation is not secondary. It is decisive. Harari knows this and occasionally admits it, yet the book's polemical energy depends on pushing the distinction harder than the evidence always allows. At times, Nexus reads less like a careful historical argument than like an elegantly constructed thesis in search of total explanatory reach.

Even so, the book's achievement is substantial. Harari has written a work that is intellectually accessible without being trivial, theoretically ambitious without collapsing into jargon, and historically sweeping without becoming entirely shapeless. More importantly, he has identified a genuine problem: modern societies remain attached to the fantasy that more data will save them, when in fact their central difficulty may lie in the design of the networks through which data circulates, authority is formed, and decisions are made. That diagnosis matters. It helps explain why disinformation, populism, and AI are not separate crises but

connected expressions of a deeper transformation in the conditions of collective life.

In sum, Nexus is not flawless, and anyone reading it should resist being swept away by its explanatory confidence. Harari sometimes writes as if he has found the master key to history. He has not. But he has found a very sharp tool for rethinking it. The book succeeds because it forces readers to confront a difficult possibility: that the problem of the twenty-first century is not a shortage of information, but the political and civilizational consequences of the kinds of networks information makes possible. That is a serious argument, and Nexus makes it with urgency, range, and considerable intellectual force.

BEYOND THE HORIZON

Davincilaan 1
1930 Zaventem
Belgium

https://behorizon.org
info@behorizon.org
+32 (0) 2 801 13 57-58