FUTURE TRENDS

Report

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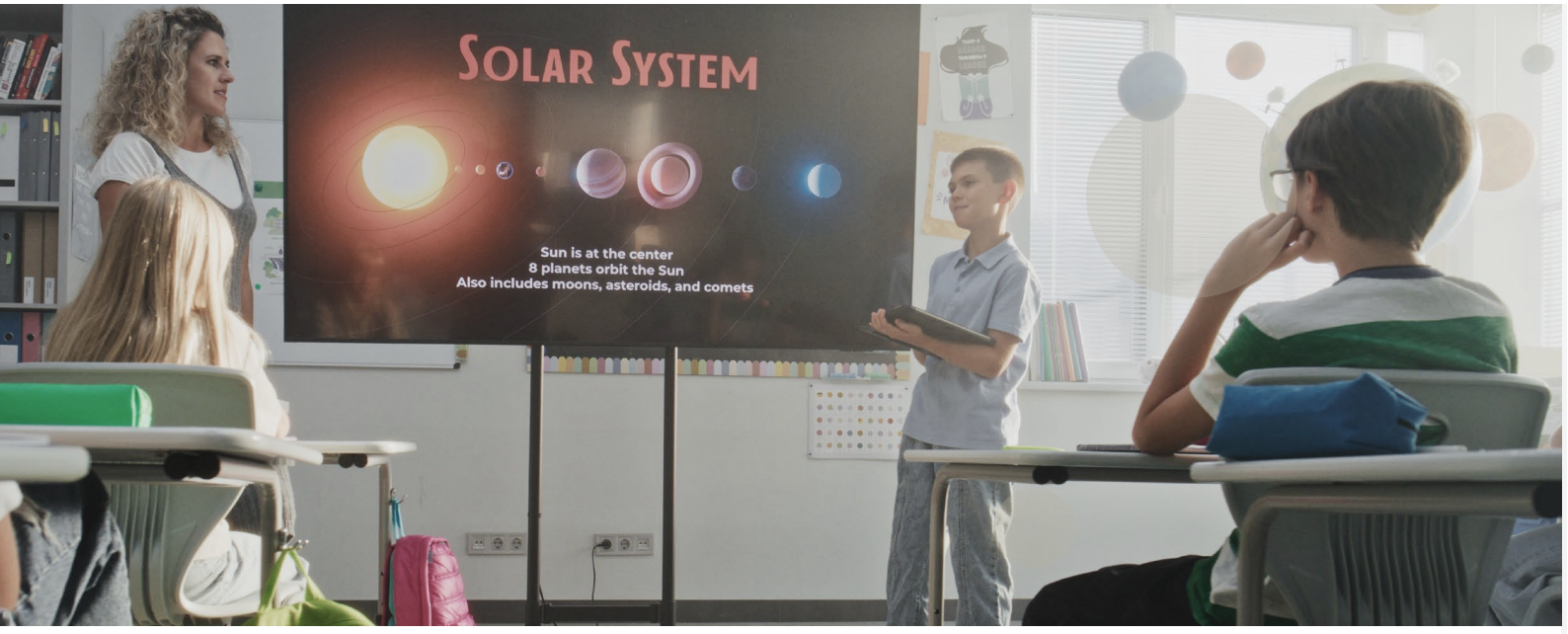

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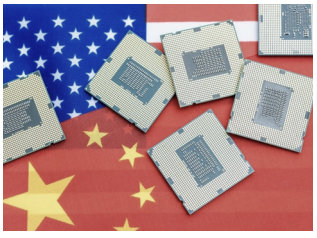

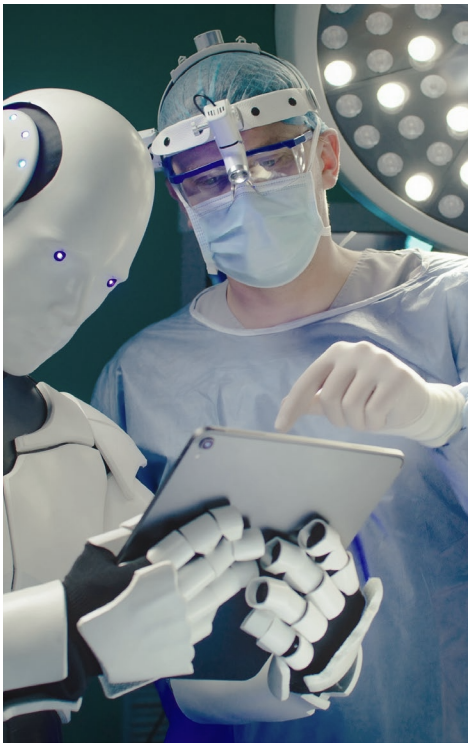

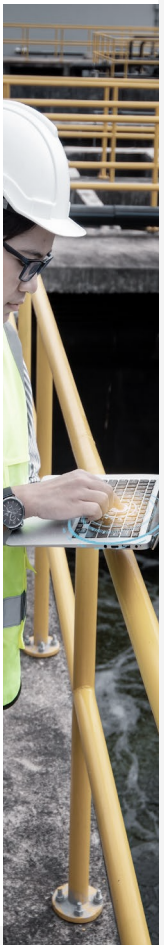

Future Trends Report

Future Trends Report, published in English and Arabic by TRENDS Virtual Office in Montreal, stands out as a distinctive publication dedicated to highlighting:
1. the most important forward-looking studies that aim to identify future trends, analyze various variables that may influence these trends, and determine the best future scenarios.
2. the most important applied studies that explore the application of knowledge, scientific theories, and information to solve current problems and overcome future challenges.
3. the most important illustrative and graphic forms that visually summarize significant studies, helping readers understand the trends and challenges of the future world.

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1 Prospective research

Ultra-Processed Food and Frailty

Konieczynski, E. M., Sahni, S., Jacques, P. F., & Naumova, E. N. (2025). Ultra-Processed Food and Frailty: Evidence from a Prospective Cohort Study and Implications for Future Research. Nutrients, 17(16), 2631.

This study investigates the effects of ultra-processed food (UPF) consumption on the onset of frailty and physical wasting among middle-aged and older people. Frailty is a significant health issue among aging populations, showing low physiological reserve and susceptibility, and is strongly connected to disability, hospitalization, and death rates.

Poor dietary quality is identified as a significant risk factor for the development of frailty, however, there is inadequate data about the effects of ultra-processed food consumption on this health issue.

This study, which used data from a mean follow-up period of 10.8 years with a prospective study design and a total of 2,547 participants in the Framingham Offspring Cohort, found a significant effect of UPF intake on the development of frailty. UPF intake was measured via a validated food frequency questionnaire, while frailty, according to this study, was measured with the Fried frailty phenotype model, which consists of weight loss, weakness, fatigue, slowness, and decreased physical activity. This study employed a cumulative and mixed model to estimate the impact of UPF intake on the incidence of frailty after adjusting for other variables.

UPF was not significantly related to the incidence of frailty, contrary to the initial hypothesis and results reported in some previous cohort studies. Even when individual components of frailty were considered, a positive association between higher UPF consumption and a slight loss in physical function was observed because higher UPF was significantly related to slower gait speeds in the combined group and weaker grip strength in men, although the magnitudes of these effects were small and unclear in clinical importance. Additionally, the hypothesis was unfounded in suggesting an association between UPF and long-term weight changes.

In terms of limitations mentioned in the paper, there is a possible concern in classifying UPFs. In their discussion of limitations, they mentioned possible inaccuracies in classifying UPFs given data collection constraints in food frequency questionnaires and also because of the way UPF foods were grouped in the NOVA food classification system. Their study group was predominantly composed of Caucasians.

The piece ends by encouraging more refined methods of research into UPF, incorporating the use of artificial intelligence resources in order to enhance classification, identify mechanisms, and formulate more realistic dietary advice. Instead of advising complete avoidance of UPFs, the researchers emphasize the importance of more finely tuned, evidence-based advice regarding the potential negative and positive uses of processed food, especially among the elderly population.

Poor dietary quality is identified as a significant risk factor for the development of frailty.

In terms of limitations mentioned in the paper, there is a possible concern in classifying UPFs.

Prospective research

Failure Analysis Methodologies

Mokhtarzadeh, M., Rodríguez-Echeverría, J., Semanjski, I., & Gautama, S. (2025). Hybrid intelligence failure analysis for industry 4.0: a literature review and future prospective. Journal of Intelligent Manufacturing, 36(4), 2309-2334.

This paper performs a critical review of how failure analysis methodologies are being transformed through the integration of artificial intelligence and human expertise within manufacturing environments in Industry 4.0. Failure analysis is a critical activity pertaining to the identification of potential and actual failures, determination of root causes and consequences, and the subsequent improvement of system reliability, quality, and cost efficiency.

Conventionally, the process is based on proactive approaches, such as FMEA, or reactive ones like RCA and FTA. However, the increasing availability of sensor data, Internet of Things technologies, and advanced analytics creates new opportunities for more intelligent and automated ways of failure analysis.

The authors distinguish between three broad approaches to failure analysis: expert-driven, data-driven, and hybrid intelligence methodologies. Expert-driven methods rely heavily on human knowledge and experience and are particularly valuable when data are scarce or systems are highly complex, though they are vulnerable to subjectivity and bias. Data-driven approaches, by contrast, use statistical methods and machine learning algorithms to detect patterns and predict failures, but their effectiveness depends strongly on data availability and quality. Drawing on a systematic review of 86 high-quality studies selected from over 7,000 publications, the article analyzes how intelligence has been introduced into FMEA, RCA, and FTA methodologies. The review categorizes failure analysis into four main stages: failure structure identification, failure detection, risk analysis, and output generation. Across these stages, a wide range of tools are identified, including Bayesian networks, neural networks, clustering and classification algorithms, rule-based systems, and fuzzy logic methods. Among these, Bayesian networks emerge as particularly promising due to their ability to model uncertainty, represent failure propagation, integrate expert knowledge with data, and provide transparent, interpretable results.

The review also points out the existing gaps in the literature. The literature is dominated by investigations of root cause identification or failure ranking, while very few research papers are devoted to automatic mitigation techniques or decision support. The article ends by underlining the managerial, as well as the research, challenges related to failure analysis in hybrid intelligence. From a managerial perspective, these tools have the benefits of decreased downtime, quality management, and leveraging organizational knowledge. Moreover, researchers must consider the investigation of failure propagation mechanisms, the accommodation of multiple data sources, the creation of explainable artificial intelligence systems, and the construction of supportive interfaces to enable productive collaboration between humans and artificial intelligence. This article links hybrid intelligence to a highly necessary means to enhance failure analysis related to manufacturing systems with a high degree of complexity.

Failure analysis is essential for identifying potential and actual failures, determining root causes and consequences, and improving system reliability, quality, and cost efficiency.

Prospective research

AI and Wastewater Treatment

Alprol, A. E., Mansour, A. T., Ibrahim, & Ashour, M. (2024). Artificial intelligence technologies revolutionizing wastewater treatment: Current trends and future prospective. Water, 16(2), 314.

This review article provides an overview of how water and wastewater treatment systems are being remodeled by artificial intelligence, machine learning, and Internet of Things technologies.

Within the framework of increasing global water scarcity, enhanced pollution, and rising pressures from regulatory requirements, the authors develop a case for why conventional monitoring and treatment practices can no longer guarantee sustainable and resilient management of water. AI-driven technologies offer new opportunities for better efficiency, accuracy, automation, and decision-making across the entire water cycle.

First, basic concepts of AI, ML, artificial neural networks, deep learning, and IoT systems are reviewed; each section highlights the ability of AI systems to process large, complex datasets and model nonlinear relationships typical of water systems. IoT-enabled systems that leverage sensor networks, cloud computing, and data-driven algorithms allow for near real-time monitoring of water quality parameters such as dissolved oxygen, nutrients, pH, turbidity, and microbial indicators. Smart systems can also minimize dependency on costly laboratory analyses while enabling rapid responses to changing conditions. The authors proceed to explore the utilization of AI and ML algorithms in various major water and wastewater treatment stages, such as chlorination, disinfection by-products, adsorption, membrane filtration, and biological treatments. It is noted that artificial neural networks are currently the models applied to different problems because of their predictive power, which is high even for accurate estimates of parameters such as biochemical.

One major benefit derived from this paper is the highlighting of soft sensors as tools that rely on models created by artificial intelligence to estimate those difficult-to-estimate variables. This technology can be perceived as less expensive compared to the traditional physical sensor solution in wastewater treatment plants because accuracy in detecting elements such as ammonia, nitrogen levels, and microbe indicators in real time is still difficult.

Apart from the treatment processes, the paper goes further to discuss the use of AI technology in the management of surface water, groundwater, as well as drinking water. The use of AI models has become pervasive in the prediction of water quality, tracing sources of pollution, flood risk analysis, and the optimization of water distribution systems. This paper further discusses the use of AI technology in making water systems resilient to climate change and urbanization. The concluding section of the article discusses future research streams, such as integration, the development of transparent AI, and the increase in decentralized and circular water systems, among others.

Water and wastewater treatment systems are being remodeled by AI, ML, and IoT technologies.

AI models are widely used for predicting water quality, tracing pollution sources, analyzing flood risks, and optimizing water distribution systems.

Prospective research

Prospective Life Cycle Assessment of Emerging Technologies

Marson, A., Benozzi, A., & Manzardo, A. (2025). Looking to the future: prospective Life Cycle Assessment of emerging technologies. Chemistry–A European Journal, 31(25).

This article offers a thorough and current description of the use of prospective life cycle assessment (pLCA) as a methodological tool for studying the potential for emerging technologies to impact the natural world in the future.

Although the use of emerging technologies has been claimed to be part of the solution to ensuring sustainable development, the actual performance of emerging technologies in the natural world has been hard to discern due to a lack of available information and low levels of technological maturity, among other reasons. The current methods of retrospective LCA are inadequate to discern such patterns.

This article views the role of pLCA in the context of the 'design paradox' or Collingridge dilemma, where there are greater opportunities to shape environmental performance, yet a lack of understanding about potential effects in the early stages of emerging technologies. This problem can be overcome by projecting the development path of emerging technologies to a specified future time horizon and modeling it to a technologically upgraded level (TRL), which makes it relatively easy to compare, unlike established technology.

By systematically reviewing the literature published between 2021 and 2024 in 79 articles, the authors are able to point out the three core pillars of pLCA: evaluation of the initial technology readiness level, upscaling of the foreground systems, and development of scenarios. In fact, the systematic review underscores the need to precisely specify the initial TRL in the case of an emerging technology since a lower TRL indicates a high degree of uncertainty in the functional units that are inadequately described due to a lack of data.

Upscaling processes are the second key component in pLCA. A variety of methods have been utilized in the process of projecting laboratory or pilot data on an industrial scale through process simulations, engineering analysis, empirical scaling models, and learning curves.

Future scenario development, being the third pillar in pLCA, must be performed to ensure consistency across time. This can involve a range of parameters such as energy systems, supply chains, policies, and socio-economic factors. These have often been represented by tools such as integrated assessment models and shared socio-economic pathways. These help in adding realism, which can, however, add to methodological uncertainty. Transparency is thus required.

Concluding their paper, the authors signal important deficiencies in current pLCA practices that range from inconsistent approaches in their application to little utilization of upscaling. They demand improved and standardized frameworks of robust pLCA that will enable and facilitate innovation for sustainable ends in the evaluation of new and innovative technologies.

Despite opportunities to improve environmental performance, there is still a gap in understanding the potential impacts in the early stages of emerging technologies.

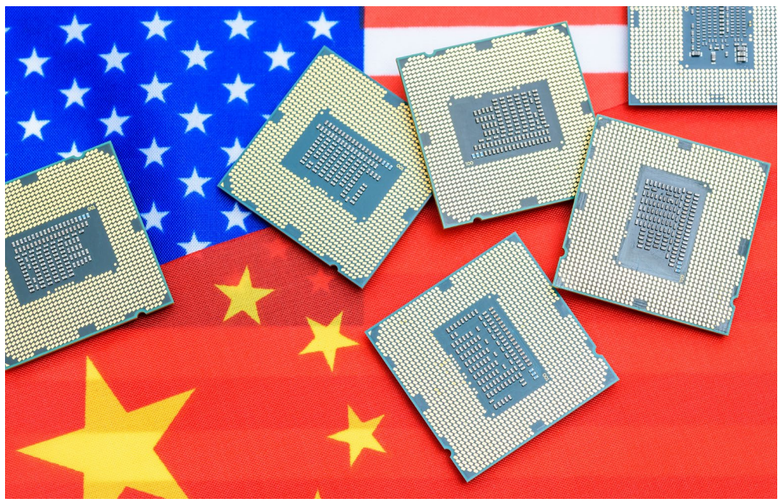
Future scenario development, being the third pillar in pLCA, must be performed to ensure consistency across time.

Prospective research

AI in the US-China Rivalry

Colmenares-Zapata, A. J. (2025). AI amid the US–China rivalry: Scenarios and policies for small states. Foresight and STI Governance, 19(1), 19–27.

This paper discusses the impact of AI on the global balance of power, with a special focus on the rivalry between the US and China and the impact of such rivalry on small states.



It highlights the increasing impact of AI, a dual-use and disruptive technology, on the innovation of military force, security, and global influence. Most of the existing work in this area concentrates on the superpowers. The paper addresses a critical research gap in understanding the impact of AI-based rivalry in the coming decades on states with low influence in the global arena.

Based on political realism and strategic foresight, the discussion adopts a prospective research approach that examines alternative futures through the year 2050. Specialists in political realism aim to interpret why states attempt to maximize their power within the anarchic international system. In contrast, the methodologies of foresight emphasize concepts such as uncertainty, the plurality of the future, and the capacity of present choices to influence long-term outcomes. This approach enables the author to diverge from making deterministic forecasts to develop structural scenarios. Methodologically, the research combines bibliometric research, expert surveys, and PESTEL analysis to create a matrix that identifies the major forces involved in the geopolitical rivalry related to AI developments. The dimensions create a four-scenario matrix that encompasses the potential use of AI in the realms of military and geopolitical affairs. The four possible futures include one that focuses on cyber warfare and digital manipulation alongside peaceful cooperation in space, one that emphasizes the militarization of cyberspace and space, one that centers on partial demilitarization, and finally one that highlights the stagnation of AI research along with conventional conflict. The competition between the United States and China resembles the space race and other historical competitions in terms of technological advancements, though it has more systemic implications due to the applications and use of AI across both civilian and military spheres. The article emphasizes the role of AI in maximizing efficiency and predictive abilities while also incurring risks such as algorithmic bias and data fraud.

The article concludes that the mid-century period will see AI playing a major role in influencing the security and geopolitics of the global arena. Using the approach and method of scenario planning, the monograph serves as a source of comprehensive knowledge, positioning strategic foresight as an essential tool for small nations within the new, AI-suffused global environment.

The rivalry between the US and China mirrors the space race and other historical contests in the realm of technological progress.

The mid-century is expected to witness a significant impact of AI on global security and geopolitics.

2 Applied research

Development of Futures Studies

Kristóf, T. (2024). Development tendencies and turning points of futures studies. European Journal of Futures Research, 12(1), 9.

In this article, Kristóf attempts to provide an overview of the history and development of futures studies as an applied scientific area. As the world celebrated the 50th anniversary of the World Futures Studies Federation, the focus on futures studies could not have been more timely or significant.

The issues associated with futures studies are multifaceted and are dealt with comprehensively by the book.

The study tackles the history of futures studies using the concepts of "development trends" and "turning points." Development trends pertain to the long-run developmental trajectory of the study of the future, while turning points are critical points of transformation. Kristóf arranges the study in a chronological manner, which begins at the turn of the previous century when futures thinking appeared that was scientifically informed in the fields of sociology, policy sciences, and technology assessment.

"The institutionalization of futures studies took place in the 1950s and 1960s, with strong ties to positivism and organizational efforts like the RAND Corporation during the era of Cold War thinking. Methods of both prediction and scenario thinking gained increasing importance in these years. However, questions of determinism and empiricism arose in these efforts, and there was also resistance in terms of philosophical underpinnings."

During the 1970s, futures studies experienced a paradigm shift, focusing on global challenges, limits to the environment, and alternative futures for societies. Landmark projects, such as the Club of Rome and the publication of "Limits to Growth," contributed to a more humanistic perspective. Scenario planning emerged, and the dismissal of a purely deterministic futurology marked a crucial point in the epistemology of futures studies.

The 1980s and 1990s marked the maturation and integration of futures studies. The theoretical foundations of futures studies have been enhanced through the application of critical realism and evolutionary approaches to highlight the roles of uncertainty, reflexivity, multi-methodologies, and ethics in future studies. Paradoxically, futures studies also experienced a fragmentation process because futures thinking expanded beyond academia to other sectors, such as policy, business, and consulting.

During the twenty-first century, greater emphasis has been placed on foresight, anticipation, and futures literacy. Futures studies have increasingly shifted from theory toward practice, especially in corporate, technological, environmental, and policy frameworks. The article identifies post-normal, metamodern, and integral futures as critical contemporary theoretical approaches, of which integral futures has emerged as particularly influential. Kristóf concludes by highlighting a series of future research directions, including artificial general intelligence, socio-technical transitions, sustainability, societal collapse, energy futures, decolonization, and systemic foresight.

The institutionalization of futures studies took place in the 1950s and 1960s, with strong ties with positivism and organizational efforts.

Development trends relate to the long-term evolution of futures studies, whereas turning points represent key moments of significant change.

Applied research

Conceptual Framework for Climate Change Disclosure

Alam, S. M., & Costa, E. (2025). Climate change disclosure: a conceptual framework and future research avenues. Corporate Social Responsibility and Environmental Management, 32(3), 4019-4034.

This paper presents a comprehensive overview of the growing literature on climate change disclosure (CCD) and develops a conceptual framework to help structure the increasingly fragmented literature on the topic.

The driving factor for the current study was the rising relevance of climate change disclosure to the area of sustainability governance and the achievement of the United Nations' Sustainable Development Goals. Applying a structured literature review research design, the research investigates a total of 285 scholarly articles published between 1992 and 2023. The authors take a generic definition of CCD, encompassing more than simply carbon emissions, climate risk disclosures, climate impacts, climate risk mitigation, climate governance structure, or organizational climate change responses. This broad definition addresses a conceptual ambiguity issue within the current literature, where CCD is frequently considered a synonym for more specific terms, namely carbon disclosure or climate emissions.

The review findings indicate that there has been increased interest in CCD studies since 2017, but the field is extremely diversified with a broad range of journals and fields of research. Quantitative research approaches widely dominate the field of CCD studies, with institutional theory, legitimacy theory, stakeholder theory, voluntary disclosure theory, and resource-based theories being widely used as frameworks for research. However, qualitative, mixed methods, and conceptual studies in the field of CCD appear underdeveloped and lacking interpretive analyses.

Through the method of thematic analysis, the authors have found that there are three overarching themes and subthemes in the CCD literature. The area of governance revolves, to a great extent, around the characteristics and complexion of the board, the impact of diversity, and organizational factors, which shape disclosure practices.

Based on these themes, the researchers have developed a new conceptual framework that encompasses the concept of CCD along with its push-pull factors, consequences, and theories that form an overarching part of it. The structural model describes the interlinkages among concepts such as structures of governance, regulatory frameworks, strategies, and the outcomes related to disclosures.

The paper concludes with recommendations for addressing some gaps in climate disclosure research and areas for further research. These areas cover an increased focus on qualitative and conceptual research, increased theoretical pluralism, a more in-depth examination of under-researched contexts/regions, a more significant nexus with actual climate results, and more. Overall, it can be asserted that this research makes a valuable contribution to systematizing the field of CCD and forming a framework for climate accounting and sustainability research.

Climate Change Disclosure (CCD) encompasses emissions, climate risks and impacts, mitigation, governance, and organizational responses.

Qualitative, mixed methods, and conceptual studies in CCD is underdeveloped and lacking interpretive analyses.

Applied research

Generative AI Solutions for Faculty and Students

Sekli, G. M., Godo, A., & Véliz, J. C. (2024). Generative AI solutions for faculty and students: A review of literature and roadmap for future research. Journal of Information Technology Education: Research, 23, 014.

This article looks at the rapid growth of generative artificial intelligence usage in higher education and focuses on real-world applications rather than just theoretical potential.

Whereas GenAI tools like ChatGPT have created significant enthusiasm regarding their potential to transform teaching and learning, there is a shortage of empirical evidence regarding documented use in real educational settings. This study intends to fill this gap through a systematic literature review that aims to consolidate applied cases of GenAI use, identify challenges, and highlight research gaps. The authors reviewed research studies, focusing on studies between 2022 and 2024, that prominently employed the PRISMA methodology and relied on the Web of Science database. Out of the pool of 487 articles searched, 44 were selected for empirical studies with strict inclusion criteria that emphasized practical implementation in academia. A thematic analysis was performed afterward to synthesize trends across research settings, disciplines, methodologies, and use cases.

The paper points out that there are seven broad areas in which GenAI tools have been used by faculty and students. These areas include the use of GenAI tools for preparing teaching materials, skill development, supporting students with assigned tasks, assessment of performance, providing feedback, acting as virtual assistants, and use in research assistance. Of these, teaching materials preparation dominates, with GenAI tools being employed for preparing course materials for various subjects such as history, medicine, language education, and engineering.

Additionally, GenAI usage for assessment and feedback purposes is emphasized within the text. Nevertheless, findings indicate a number of areas where GenAI usage faces inherent challenges, particularly regarding accuracy and reliability. Among these challenges is a "hallucination" effect, whereby GenAI provides erroneous or generated data, such as nonexistent citations.

Apart from technical challenges such as over-dependence on AI, academic integrity, bias, and inequity in accessing GenAI literacy skills such as prompt engineering are cited. It appears there is a great convergence of studies centered on ChatGPT, implying there has been little investigation into other developing GenAIs.

In conclusion, future research directions were discussed in the article to encourage the use of a more diverse range of methodologies in research studies into the use of GenAI in research or administrative work or the development of newer models of GenAI. This research places GenAI in the role of a developing but very effective educational technology that acts to supplement rather than supplant education.

Although GenAI tools like ChatGPT have sparked considerable enthusiasm, empirical evidence of their use in real educational contexts remains scarce.

Challenges include accuracy and reliability issues such as hallucinated content, as well as concerns over overreliance, academic integrity, bias, and unequal access to GenAI literacy skills.

Applied research

AI-Driven Intelligent Health Management Systems in Telemedicine

Wei, X., Pruś, K., Du, R., Mehta, R., Lin, S., & Zhu, X. (2025). AI driven intelligent health management systems in telemedicine: An applied research study. Journal of Computer Science and Frontier Technologies, 1(2), 78-86.

This paper describes the existing gap in imbalanced medical resource distribution worldwide, analyzing the potential role of AI technology in the improvement of telemedicine management systems for better healthcare accessibility, quality, and effectiveness. The report highlights that although telemedicine technology has successfully increased healthcare accessibility for people, it still faces the challenges of low intelligence, low inter-regional interaction, and low health data interoperability in current telemedicine management systems.

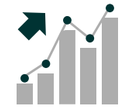
The new system relies on a distributed microservices architecture, combining three key functional components: remote diagnosis and treatment, AI-powered clinical decision support systems, and inter-regional medical collaboration. The system features an integrated data platform that incorporates medical databases, medical knowledge bases, and AI model repositories. Scalability, availability, and low latency are ensured by using Docker and Kubernetes for containerized deployment.

The remote consultation module allows real-time audio-visual communication using optimized WebRTC technology, enabling smooth interaction between patients and healthcare professionals. Electronic medical records support shared writing, while intelligent prescription review mechanisms detect contraindications independently. The system further allows multiple consultations, thereby facilitating cooperation among numerous specialists, making multidisciplinary care possible.

The main contribution of the study is an AI-based decision support module, which integrates deep learning and knowledge-based reasoning. A neural network using the enhanced ResNet, trained with transfer learning, proposes initial diagnoses, treatment recommendations, and medication advice. This is complemented by a large-scale medical knowledge graph that models relationships among diseases, symptoms, and treatments, enabling transparent and explainable reasoning to support, rather than replace, physicians.

Empirical analysis carried out on a wide range of telemedicine applications such as telemedicine consultation, primary healthcare support, and home-based chronic disease management has demonstrated considerable improvement in performance. The waiting time experienced by patients decreased by 65%, the time taken to access a specialist consultation decreased from weeks to days, and the distances traveled to access medical care have decreased considerably. A diagnostic accuracy rate above 92% and a patient satisfaction rate above 94% have been achieved, while the rate of medical errors decreased significantly. Additionally, there has been an improvement in the use of healthcare resources and a decrease in treatment costs.

The conclusion drawn in the article is that telemedicine solutions based on AI can greatly improve the accessibility, quality, and effectiveness of healthcare. It is stated in the abstract that future research directions could aim at developing the performance of the AI models themselves and the development of methods for secure data exchange.



Telemedicine has expanded healthcare access but remains constrained by limited intelligence, interregional interaction, and data interoperability.

AI-driven telemedicine can substantially improve healthcare access, quality, and effectiveness.

Applied research

Engagement Journalism Movement: An Applied Research

Robinson, S., Orozco, M., & Darr, J. P. (2025). How the Engagement Journalism Movement Is Changing Political News Content: An Applied-Research Study. Journalism & Mass Communication Quarterly.

This article examines whether in-depth engagement and solutions-oriented journalism training is discernible in changes in political news content. In reaction to criticisms of political journalism for horse-race coverage, episodic reporting, and sourcing from elites for decades,

this examination looks at whether engagement journalism practices could transform the way in which political stories are told. The study looks at content from 22 American news outlets that took part in the Democracy SOS (DSOS) media training initiative organized by the Solutions Journalism Network, Hearken, and Trusting News before the midterm election in 2022. Using an application-focused methodology in a mixed-methods design content analysis study, the scholars applied a content analysis process on 1,388 pieces of political news coverage in the aftermath of the election cycles in the years 2018, 2020, and 2022. Quantitative content analysis was conducted on four variables that closely related to the aim of the training and included horse-race frame, transparency, solutions-oriented reporting, and engagement tactics.

The data provide evidence of marked changes in the framing of politics over time. Firstly, there was a strong decrease in the amount of horse-race journalism between 2018 and 2022. This indicates a shift away from the kind of journalism that emphasizes polls, fundraising, and strategic maneuvering. Another aspect of journalism that was marked by a strong increase in transparency frames was the practice of so-called "radical transparency," which resulted from the lack of trust in the profession brought about by declining public confidence. The study further reveals the expansion of engagement journalism practices, conceived as the type of reporting that involves audience participation and engagement. Engagement increased the most across the variables. The need for citizen agendas, public forums, and views of non-elite community members has been growing among journalists. Solutions journalism increased too, but to a smaller degree.

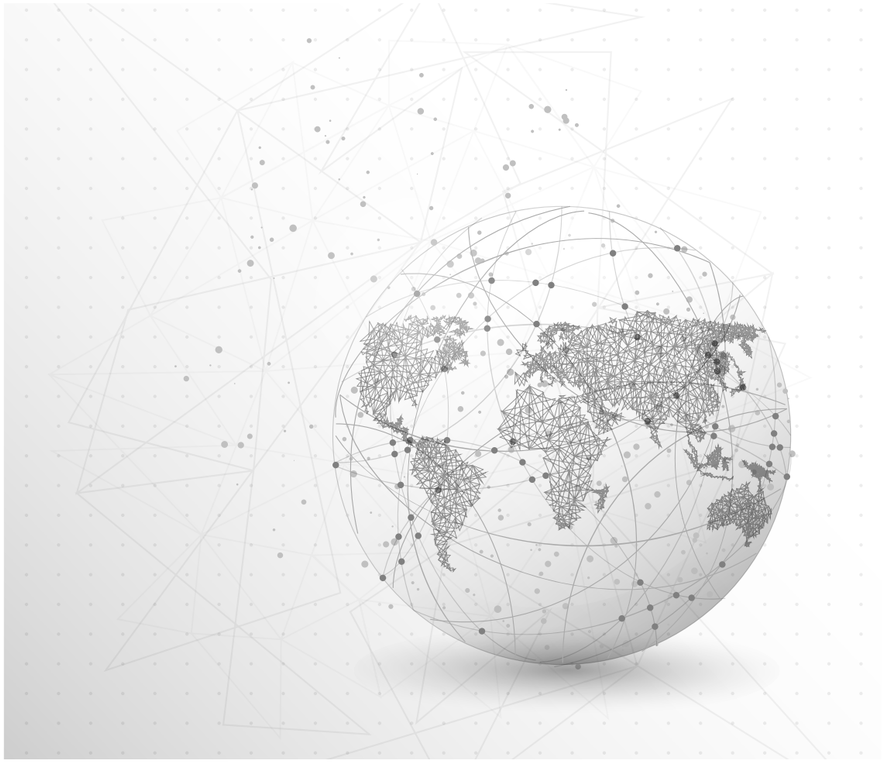
Significantly, the study proposes no causal link between the results of the DSOS training and the changes noted, due to the lack of control data and the pervasive dynamics of the industry. In fact, quantitative data and qualitative evidence illustrate the clear alignment of the objectives and the shift in the content.

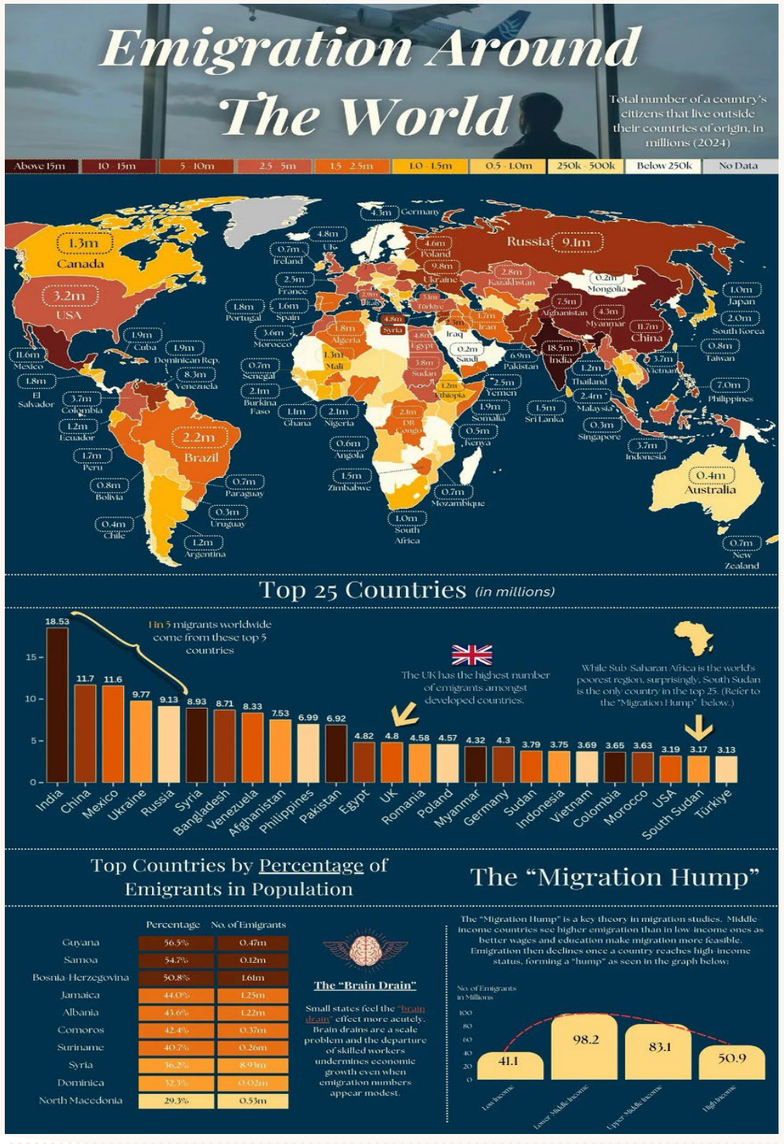
In conclusion, the article states the following: "Engagement journalism constitutes a paradigm shift in political journalism, with a focus on transparency, relation to the local community, and citizen engagement rather than the traditional game frames." Although the way in which solutions journalism is scalable and reaches the masses remains a problem, the article clearly outlines a shift in the content of political journalism due to engagement-focused training.

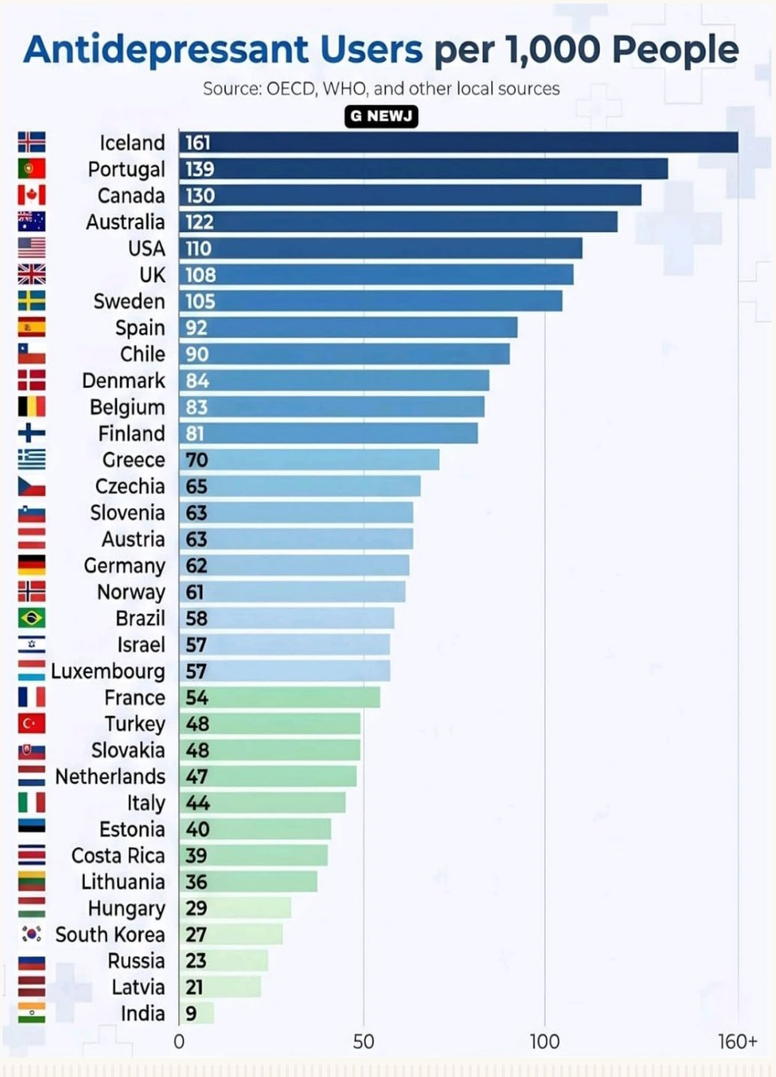
Engagement journalism constitutes a paradigm shift in political journalism, emphasizing transparency, community connection, and citizen engagement over traditional game-based framing.

There is a shift away from the kind of journalism that emphasizes polls, fundraising, and strategic maneuvering.

3 The future in numbers






Antidepressant Users per 1,000 People
Source: OECD, WHO, and other local sources
G NEWJ
Iceland 161
Portugal 139
Canada 130
Australia 122
USA 110
UK 108
Sweden 105
Spain 92
Chile 90
Denmark 84
Belgium 83
Finland 81
Greece 70
Czechia 65
Slovenia 63
Austria 63
Germany 62
Norway 61
Brazil 58
Israel 57
Luxembourg 57
France 54
Turkey 48
Slovakia 48
Netherlands 47
Italy 44
Estonia 40
Costa Rica 39
Lithuania 36
Hungary 29
South Korea 27
Russia 23
Latvia 21
India 9
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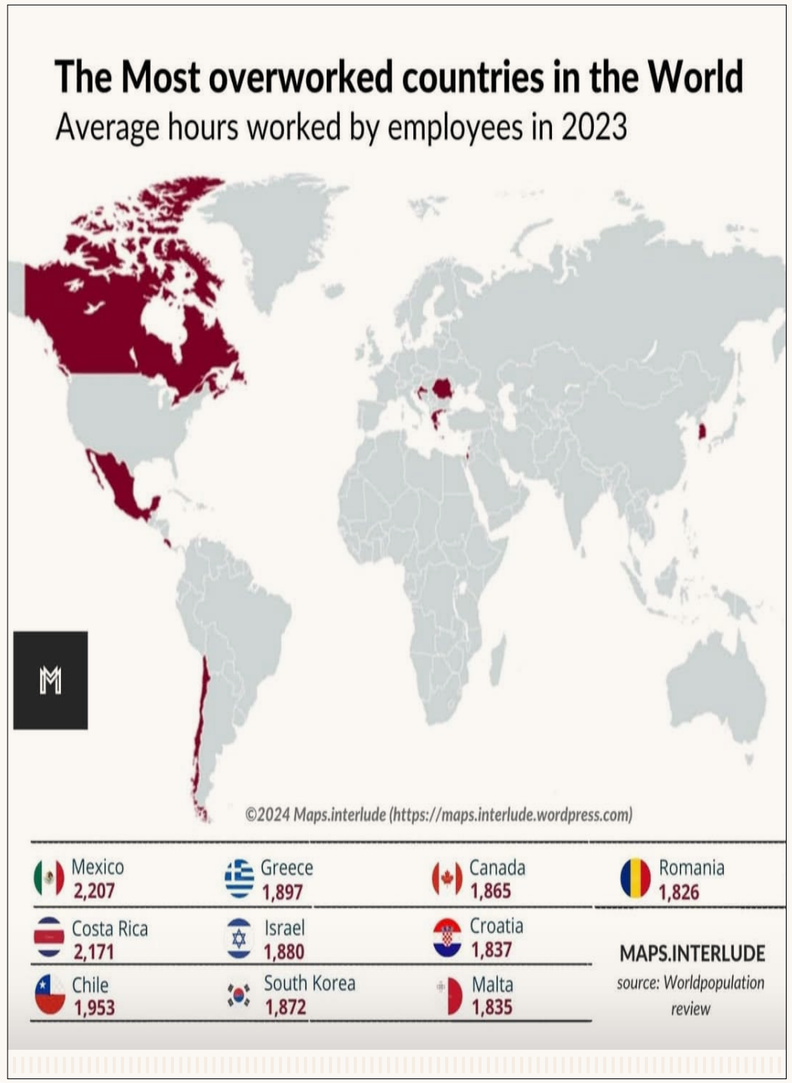
50
100
160+


The Most overworked countries in the World
Average hours worked by employees in 2023
©2024 Maps.interlude (https://maps.interlude.wordpress.com)
Mexico 2,207
Greece 1,897
Canada 1,865
Romania 1,826
Costa Rica 2,171
Israel 1,880
Croatia 1,837
Chile 1,953
South Korea 1,872
Malta 1,835
MAPS.INTERLUDE
source: Worldpopulation review

RankingRoyals

WHERE PEOPLE TRUST EACH OTHER THE MOST

From samples of roughly 1,000–1,500+ interviews of adults per country, conducted in waves. Responses shown to the question, “Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?” Possible answers include “Most people can be trusted”, “Do not know” and “Need to be very careful”. The UK includes England, Scotland, and Wales, with Northern Ireland listed separately. Major processing done by **Our World in Data.**

Agree with “Most people can be trusted”

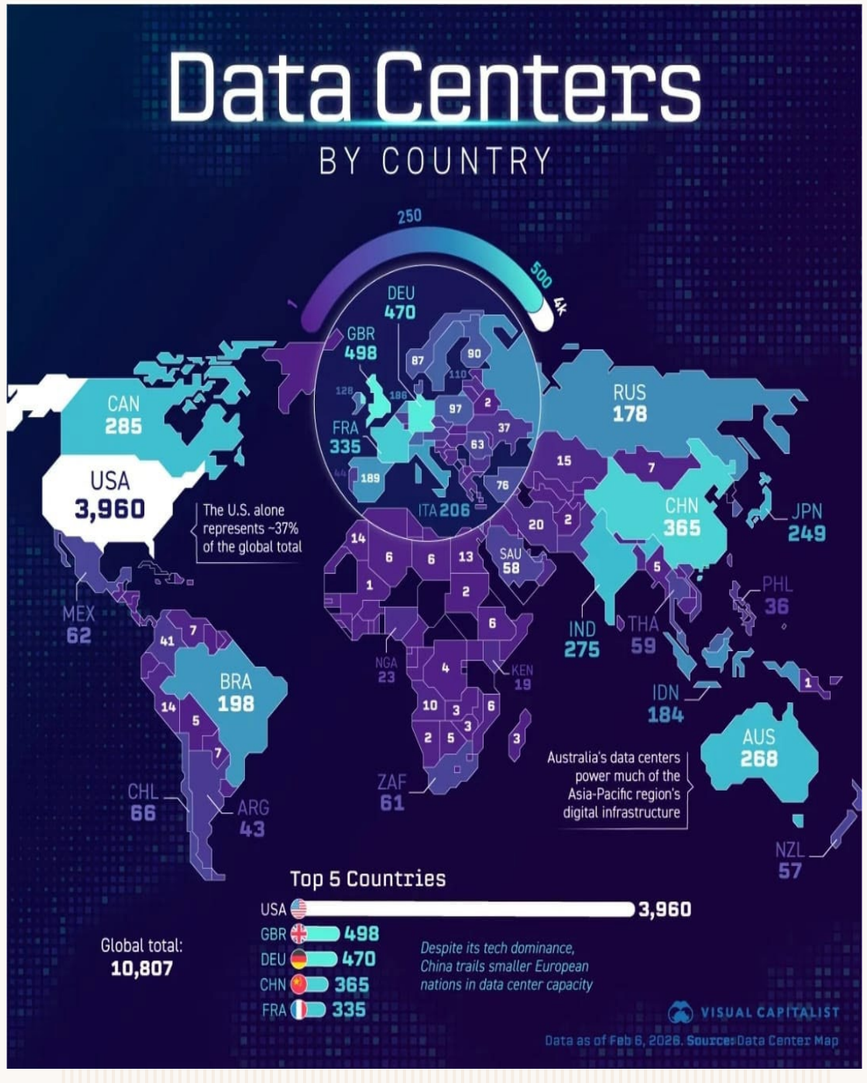
1.	Denmark	74%	11.	Australia	49%
2.	Norway	72%	12.	Canada	47%
3.	Finland	68%	13.	United Kingdom	43%
4.	China	63%	14.	Germany	42%
5.	Sweden	63%	15.	Macao SAR	41%
6.	Iceland	62%	16.	Spain	41%
7.	Switzerland	59%	17.	Belarus	40%
8.	Netherlands	57%	18.	Northern Ireland	39%
9.	New Zealand	57%	19.	United States	37%
10.	Austria	50%	20.	Hong Kong SAR	36%

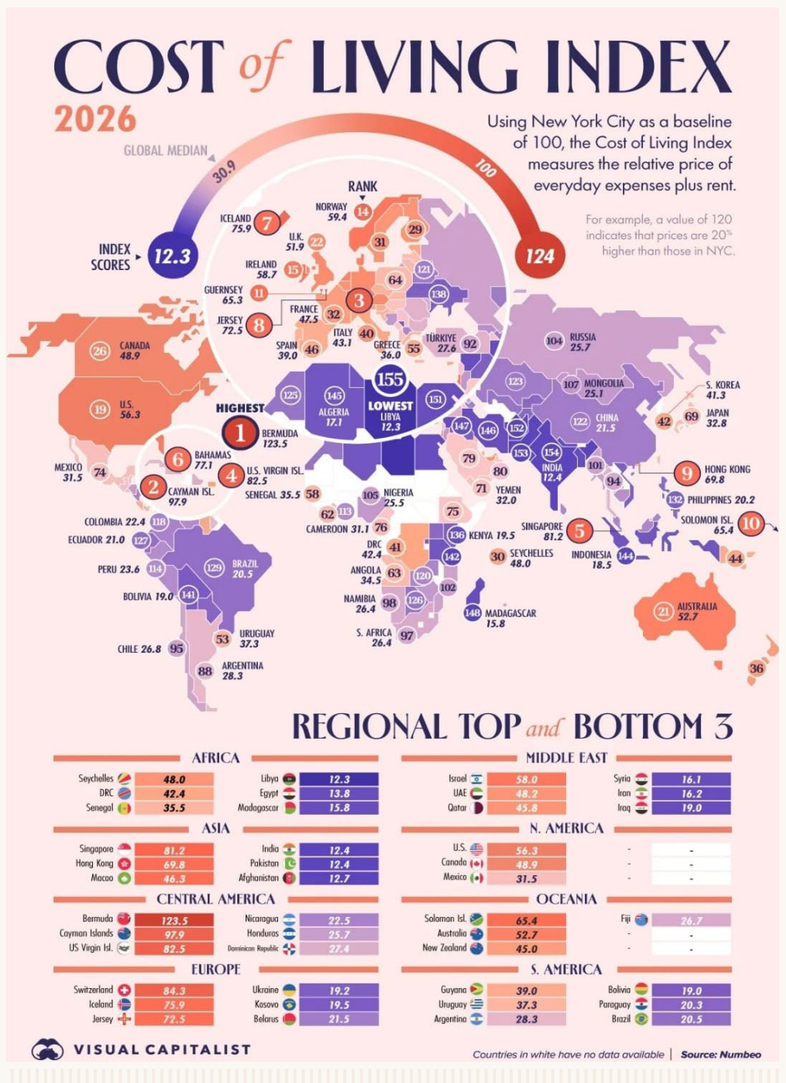
*Figures are rounded

Source: Integrated Values Surveys 2024

www.rankingroyals.com

RankingRoyals


Data Centers
BY COUNTRY
250
500
4K
USA
3,960
The U.S. alone represents ~37% of the global total
CAN
285
DEU
470
GBR
498
FRA
335
ITA 206
RUS
178
CHN
365
JPN
249
SAU
58
IND
275
THA
59
PHL
36
IDN
184
AUS
268
NZL
57
MEX
62
BRA
198
CHL
66
ARG
43
NGA
23
KEN
19
ZAF
61
Australia's data centers power much of the Asia-Pacific region's digital infrastructure
Top 5 Countries
USA 3,960
GBR 498
DEU 470
CHN 365
FRA 335
Global total:
10,807
Despite its tech dominance, China trails smaller European nations in data center capacity
VISUAL CAPITALIST
Data as of Feb 6, 2026. Source: Data Center Map


COST of LIVING INDEX
2026
Using New York City as a baseline of 100, the Cost of Living Index measures the relative price of everyday expenses plus rent.
For example, a value of 120 indicates that prices are 20% higher than those in NYC.
GLOBAL MEDIAN
30.9
100
INDEX SCORES
12.3
124
RANK
HIGHEST
1 BERMUDA 123.5
LOWEST
155 LIBYA 12.3
ICELAND 75.9
NORWAY 59.4
U.K. 51.9
IRELAND 58.7
GUERNSEY 65.3
JERSEY 72.5
FRANCE 47.5
ITALY 43.1
SPAIN 39.0
GREECE 36.0
TÜRKIYE 27.6
CANADA 48.9
U.S. 56.3
ALGERIA 17.1
RUSSIA 25.7
MONGOLIA 25.1
S. KOREA 41.3
JAPAN 32.8
CHINA 21.5
INDIA 12.4
HONG KONG 69.8
PHILIPPINES 20.2
SOLOMON ISL. 65.4
SINGAPORE 81.2
INDONESIA 18.5
SEYCHELLES 48.0
KENYA 19.5
YEMEN 32.0
NIGERIA 25.5
CAMEROON 31.1
DRC 42.4
ANGOLA 34.5
NAMIBIA 26.4
S. AFRICA 26.4
MADAGASCAR 15.8
AUSTRALIA 52.7
BAHAMAS 77.1
U.S. VIRGIN ISL. 82.5
CAYMAN ISL. 97.9
SENEGAL 35.5
MEXICO 31.5
COLOMBIA 22.4
ECUADOR 21.0
PERU 23.6
BOLIVIA 19.0
CHILE 26.8
BRAZIL 20.5
URUGUAY 37.3
ARGENTINA 28.3
REGIONAL TOP and BOTTOM 3
AFRICA
Seychelles 48.0
DRC 42.4
Senegal 35.5
Libya 12.3
Egypt 13.8
Madagascar 15.8
MIDDLE EAST
Israel 58.0
UAE 48.2
Qatar 45.8
Syria 16.1
Iran 16.2
Iraq 19.0
ASIA
Singapore 81.2
Hong Kong 69.8
Macao 46.3
India 12.4
Pakistan 12.4
Afghanistan 12.7
N. AMERICA
U.S. 56.3
Canada 48.9
Mexico 31.5
CENTRAL AMERICA
Bermuda 123.5
Cayman Islands 97.9
US Virgin Isl. 82.5
Nicaragua 22.5
Honduras 25.7
Dominican Republic 27.4
OCEANIA
Solomon Isl. 65.4
Australia 52.7
New Zealand 45.0
Fiji 26.7
EUROPE
Switzerland 84.3
Iceland 75.9
Jersey 72.5
Ukraine 19.2
Kosovo 19.5
Belarus 21.5
S. AMERICA
Guyana 39.0
Uruguay 37.3
Argentina 28.3
Bolivia 19.0
Paraguay 20.3
Brazil 20.5
VISUAL CAPITALIST
Countries in white have no data available | Source: Numbeo