CeADAR
Ireland's Centre for AI

AI ROUNDUP 2024

from the lens of **AI NewsHub**

Trends & Projections for 2025

ainewshub.ie
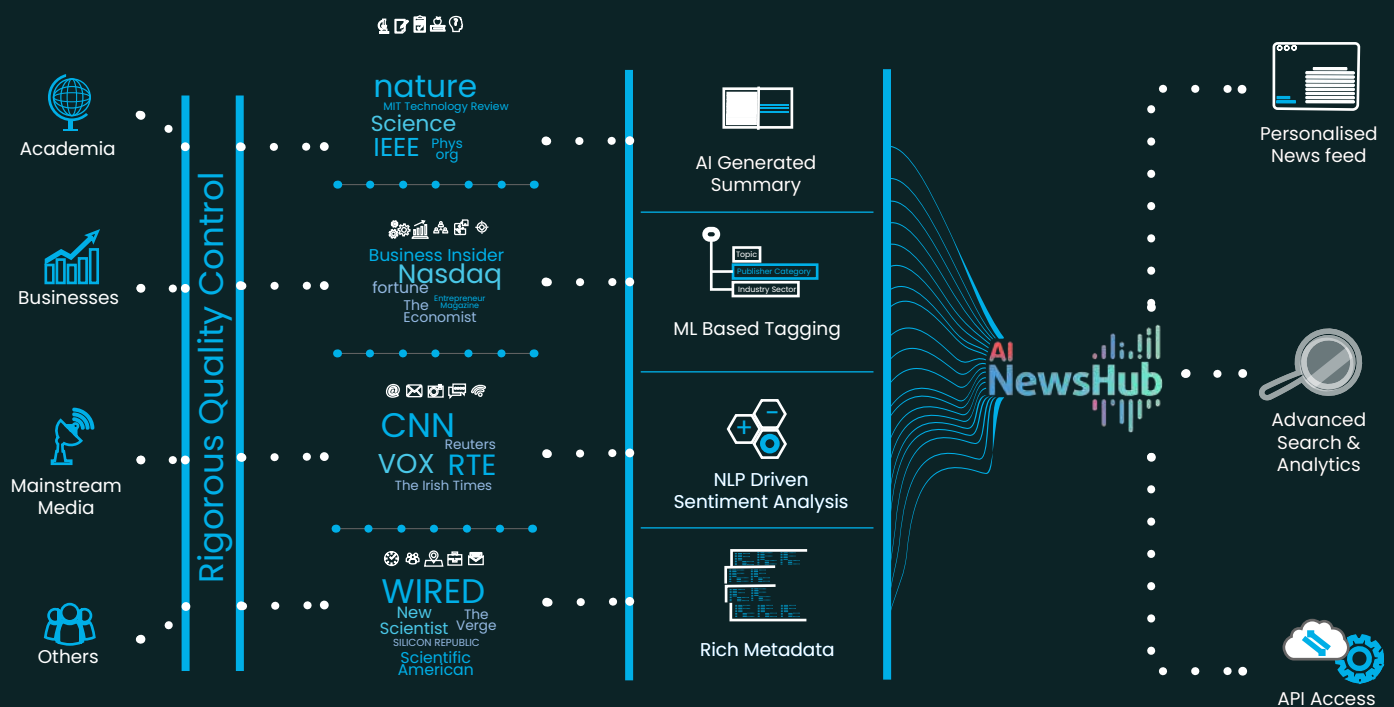
AI NewsHub

AI NewsHub

Reliable AI News Anywhere, Anytime

A smart and easy-to-use digital news platform for AI

AI NewsHub is a cutting-edge platform revolutionising the way you stay informed about the ever-evolving landscape of Artificial Intelligence (AI) and Machine Learning (ML). AI NewsHub employs advanced AI algorithms for seamless news curation and enrichment. This platform ensures that you receive the most relevant and up-to-date information from trustworthy publishers worldwide. With the power of Natural Language Processing (NLP)-generated summaries, quality-controlled content, and personalised news feeds, AI NewsHub provides an unparalleled and tailored experience. Dive into the world of AI with confidence, exploring our advanced search and analytics functionalities to access precise information effortlessly. Unlock a premium experience with exclusive access to a vast AI article database, enriched with paginated content and advanced search tools.

Simplified Access to AI News: Enriched, Searchable and Actionable

Academia

Businesses

Mainstream Media

Others

Rigorous Quality Control

nature
MIT Technology Review
Science
IEEE Phys org

Business Insider
Nasdaq
fortune
The Economist
Entrepreneur Magazine

CNN
Reuters
VOX RTE
The Irish Times

WIRED
New Scientist The Verge
SILICON REPUBLIC
Scientific American

AI Generated Summary

ML Based Tagging
Topic
Publisher Category
Industry Sector

NLP Driven Sentiment Analysis

Rich Metadata

AI NewsHub

Personalised News feed

Advanced Search & Analytics

API Access

NLP Generated Summaries

AI Powered News Curation and Enrichment

Quality Controlled Publishers

Personalised News Feeds

Advanced Search and Analytics Functionalities

Premium Content Access

INTRODUCTION

Explore the AI landscape of 2024 in our white paper, covering key trends, regional variations, and influential publishers. Delve into quarterly insights, industry sectors, and curated news platforms, offering a comprehensive overview of the dynamic AI landscape. This document offers a comprehensive overview of the pivotal developments that defined the AI landscape in 2024.

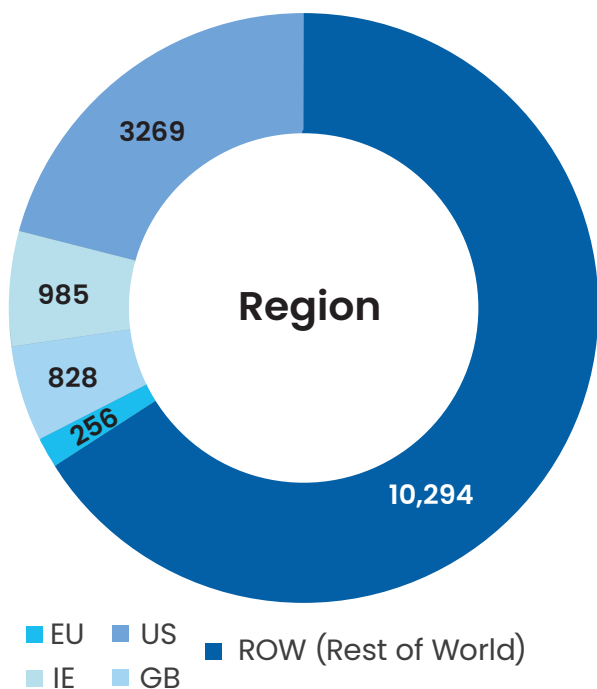**AI NewsHub Team**
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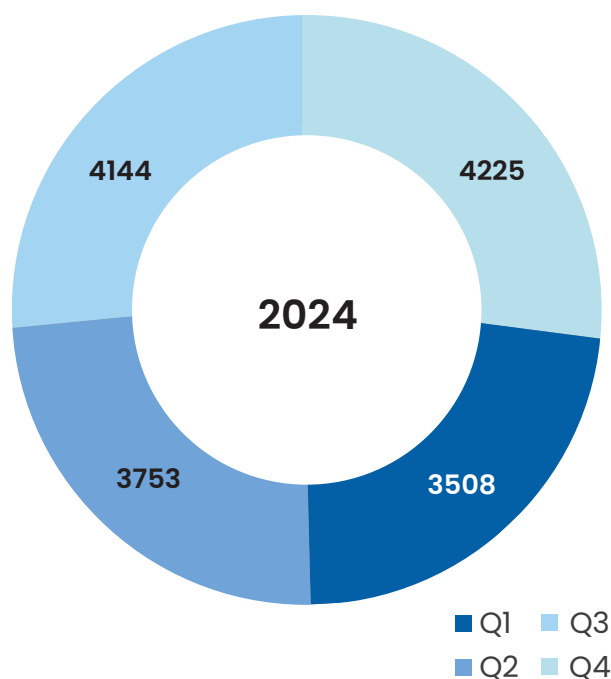# REGIONAL INSIGHTS: ANALYSING THE QUANTITY OF AI ARTICLES IN 2024

In 2024, global interest in AI technologies was reflected in 15,632 articles on AI NewsHub—a 4.5% rise from the previous year. The United States contributed 3,269 articles (20.9%), highlighting its significant role in AI advancements. The United Kingdom, Ireland, and the European Union followed with 985 (6.3%), 828 (5.3%), and 256 (1.6%) articles, respectively. AI discussions were most prominent outside traditional AI hubs, with 65.8% of global coverage coming from diverse international sources. Together, these figures reveal not only the growing importance of AI technologies worldwide but also the varying levels of regional participation in this rapidly evolving field.

The Rest of World (ROW) encompasses global news coverage, excluding specific reporting on the IE, US, EU, and GB regions.

Region

3269
985
828
256
10,294

- EU
- US
- IE
- GB
- ROW (Rest of World)

QUANTIFYING QUARTERLY TRENDS: THE VOLUME OF AI ARTICLES THROUGHOUT 2024

The quarterly distribution of AI-related articles in 2024 reveals a consistent upward trend, reflecting the growing global interest in AI technologies. Starting with 3,508 articles in Q1, the volume increased steadily to 3,753 in Q2, showcasing a 7% rise in just three months. This momentum accelerated further in Q3, with 4,144 articles, marking a 10% growth from Q2, and peaked in Q4 at 4,225 articles—a 21% increase compared to Q1. This upward trend reflects the growing global interest in AI, fuelled by innovations, key industry events, and increased AI adoption across sectors. The consistent growth across quarters highlights the dynamic and evolving nature of the AI landscape.

2024

4144
4225
3753
3508

- Q1
- Q3
- Q2
- Q4

UNVEILING TRENDS IN AI NEWS: A FOCUS ON MACHINE LEARNING, GENERATIVE TECHNOLOGIES, BIG TECH IMPACT, AND ETHICAL CONSIDERATIONS

A lot has happened in the world of AI in 2024. We analysed the most frequently occurring words from content at AI NewsHub and identified following key areas of interest.

Machine Learning Focus
The prevalence of terms like "machine learning" and "deep learning" highlights the ongoing dominance of ML-driven innovations. Generative AI maintained a **leading position in AI** discourse, with increasing applications across creative industries, enterprise automation, and AI-driven software development.

Big Tech Influence
Companies such as **Nvidia, Meta, and OpenAI** played a pivotal role in AI breakthroughs, with significant investments in **AI-powered chips, foundational models, and cloud-based AI solutions**. This reflects a broader trend where Big Tech continues to shape AI adoption across industries.

Business and Innovation
Frequent mentions of terms such as "startup," "funding," and "AI adoption" indicate a thriving ecosystem of AI entrepreneurship. AI-powered automation is driving efficiency in finance, healthcare, and marketing, with more companies integrating AI into their core operations.

Ethical Considerations
Discussions surrounding AI ethics intensified in 2024, with notable focus areas including bias mitigation, transparency, and responsible AI development. The adoption of frameworks such as the Seoul Declaration for Safe, Innovative, and Inclusive AI further demonstrates global efforts toward ethical AI regulation.

TOP 3 PUBLISHERS IN EACH REGION

Publishers play a pivotal role in disseminating knowledge, sparking discussions, and analyzing the implications of AI advancements. Below, we highlight the top publishers from each region based on the volume of AI-related articles they have published.
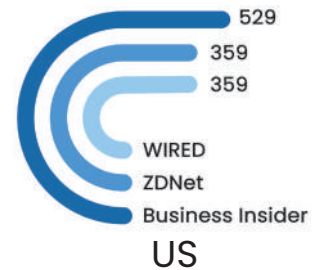

269
260
142

Irish Examiner
Silicon Republic
The Irish Times

Ireland

The Irish Times (Ireland):
The Irish Times provided in-depth reporting on AI's impact within Ireland and globally. In 2024, they featured stories on Ireland's burgeoning AI startups and the government's strategies to position the country as a leader in AI research and development [1] . Their coverage emphasized the importance of education and infrastructure in supporting this growth.

Business Insider (US):
Business Insider leads with 529 AI-related articles, offering in-depth insights into AI's impact on finance, healthcare, and retail. Business Insider's reporting often bridges the gap between technical advancements and their commercial implications, appealing to both professionals and curious readers.
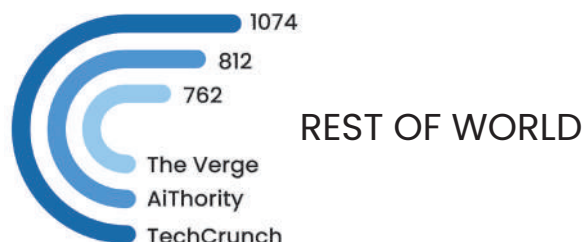
529
359
359

WIRED
ZDNet
Business Insider

US

POLITICO Europe (Europe):
POLITICO Europe has been instrumental in analyzing AI's intersection with European policy and regulation. In 2024, they extensively covered the European Union's deliberations on the AI Act [2] , aiming to establish comprehensive frameworks for AI deployment across member states. Their reporting provided insights into the balance between fostering innovation and ensuring ethical standards.

54
39
24

eeNews Europe
Tech.eu
POLITICO Europe

Europe

Yahoo News UK (UK):
Yahoo News UK dominates AI coverage in the UK region with 235 articles. It explores a wide array of topics, from groundbreaking AI innovations to the technology's impact on everyday life, making it a key player in spreading AI awareness across the UK.

235
111
109

The Independent
Daily Mail
Yahoo News UK

UK

1074
812
762

The Verge
AiThority
TechCrunch

REST OF WORLD

ANALYSIS OF PUBLISHER CATEGORY DISTRIBUTION: PERCENTAGE BREAKDOWN IN 2024

Sci-Tech: Extensive coverage in technology and scientific research signals breakthroughs in AI algorithms, innovative product launches, and collaborative efforts shaping the future of technology.

Mainstream: Dominant coverage reflects widespread interest, suggesting mainstream adoption, breakthroughs in consumer applications, and influential societal discussions.

Business: Significant focus on AI in the business sector indicates pivotal roles in corporate strategies, with potential events including major companies reshaping industries with AI applications.

Academics: Substantial academic contributions point to a year of active research and scholarly discussions, potentially yielding breakthroughs in AI theories, models, or ethical frameworks.

Health: Integration of AI technologies in healthcare is evident, with real events possibly involving AI-driven diagnostics, personalized medicine breakthroughs, or enhanced patient care and research.
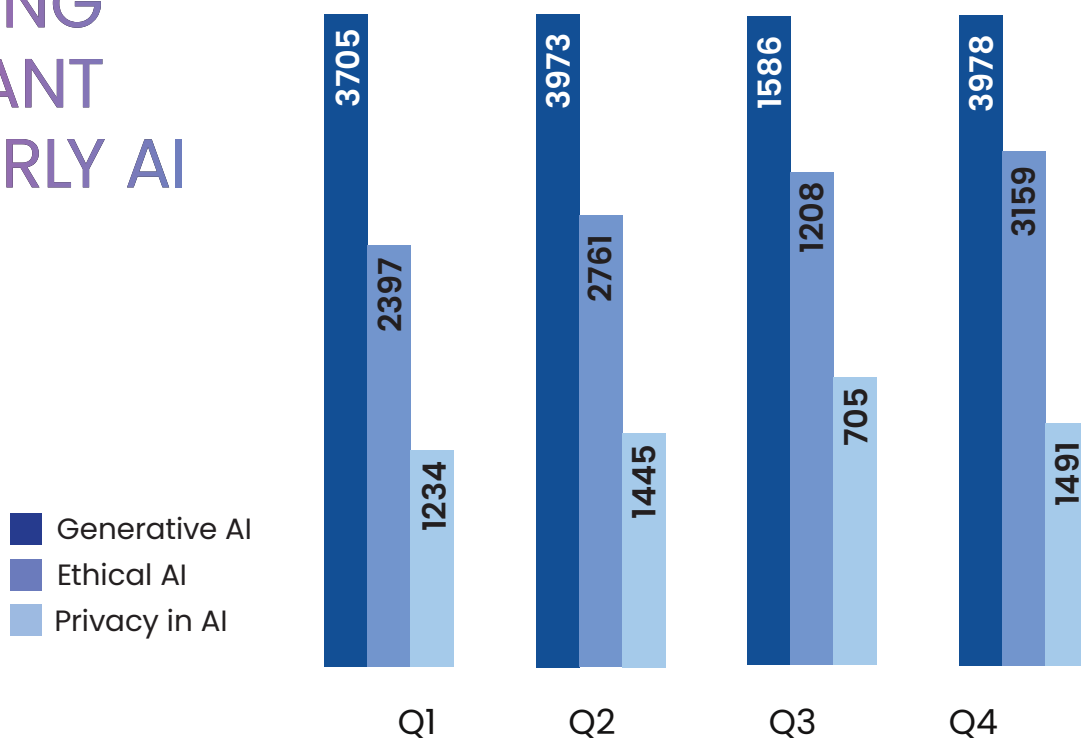
Government: Growing interest in AI's impact on public policies and services, with potential real events including government initiatives for smart governance, public services, or regulatory responses to AI advancements.

Legal: Heightened interest in legal implications of AI, with potential real events including landmark legal cases, regulatory changes, or ethical debates shaping the legal framework.

Food: Emerging focus on AI applications in the food sector, with potential events involving innovations in precision farming, supply chain optimization, or sustainability practices.

Environment: Limited coverage in environmental publications suggests a nascent exploration of AI applications, with potential real events involving AI-driven solutions for climate monitoring, conservation efforts, or sustainable practices.

Sci-tech (43.3%)

Mainstream (35.3%)

Business (10.8%)

Academic (7.98%)

Health (1.48%)

Government (0.64%)

Legal (0.40%)

Environment (0.032%)

Food (0.044%)

In 2024, the growing dominance of Sci-Tech publishers in AI coverage reflects an increasing demand for in-depth, expert-driven analysis, shifting away from the broader coverage seen in mainstream media. This change reflects an increasing emphasis on specialized, in-depth coverage of AI technologies and innovations. However, mainstream media and business oriented publishers maintained a strong presence, remaining among the top three contributors.

EXPLORING DOMINANT QUARTERLY AI TOPICS IN 2024

Legend:
- **Generative AI**
- **Ethical AI**
- **Privacy in AI**

Q1: Generative AI 3705, Ethical AI 2397, Privacy in AI 1234
Q2: Generative AI 3973, Ethical AI 2761, Privacy in AI 1445
Q3: Generative AI 1586, Ethical AI 1208, Privacy in AI 705
Q4: Generative AI 3978, Ethical AI 3159, Privacy in AI 1491

Generative AI: The Dominant Topic

Generative AI consistently led the conversation throughout 2024, starting with 3,705 articles in Q1 and peaking at 3,978 in Q4. This steady growth highlights its central role in AI advancements, driven by innovations and widespread applications in creative and technical domains. Notably, events like Nvidia AI Summit 2024, held in Washington during Q4, emphasized generative AI's transformative potential, further fueling discussions in this area[3].

Ethical AI: A Growing Priority

Ethical AI gained significant traction, with coverage increasing from 2,397 articles in Q1 to 3,159 in Q4. This rise underscores the growing concerns about responsible AI development. The adoption of the Seoul Declaration for Safe, Innovative, and Inclusive AI during the AI Seoul Summit highlighted global commitments to ethical AI practices, contributing to heightened media attention[4].

Privacy in AI: Sustained Focus on Data Protection

Though less prominent than other topics, Privacy in AI saw steady attention, increasing from 1,234 articles in Q1 to 1,491 in Q4. This growth underscores the ongoing emphasis on safeguarding user data as AI becomes more integrated into everyday life.

Quarterly Fluctuations and Influencing Factors

The observed dips in Q3 across all topics may reflect a seasonal decline in AI-related events or publications. The resurgence in Q4 corresponds with significant announcements, such as new LLM models released by OpenAI, Google and DeepSeek, which likely reinvigorated media coverage and public interest in AI developments [5].
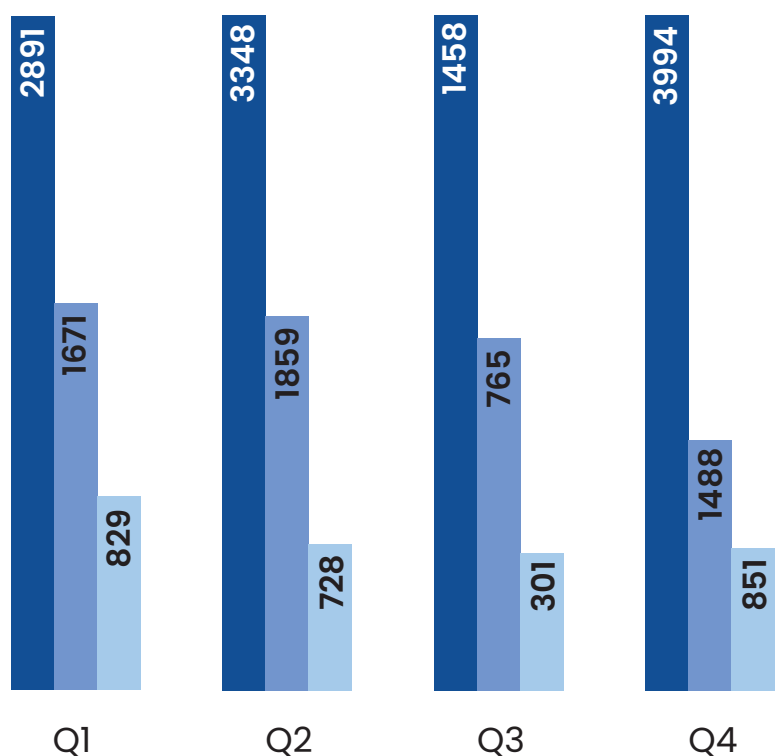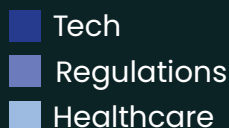
QUARTERLY TOP 3 INDUSTRY SECTORS

Healthcare

The healthcare sector experienced a decline in AI-related articles in Q2 and Q3, reaching a low of 301 articles in Q3. However, there was a notable resurgence in Q4, with 851 articles, possibly due to new AI applications in healthcare and increased investment in AI-driven medical technologies. The AI Index Report 2024 discusses the growing impact of AI in science and medicine, which may have contributed to this renewed interest [7].
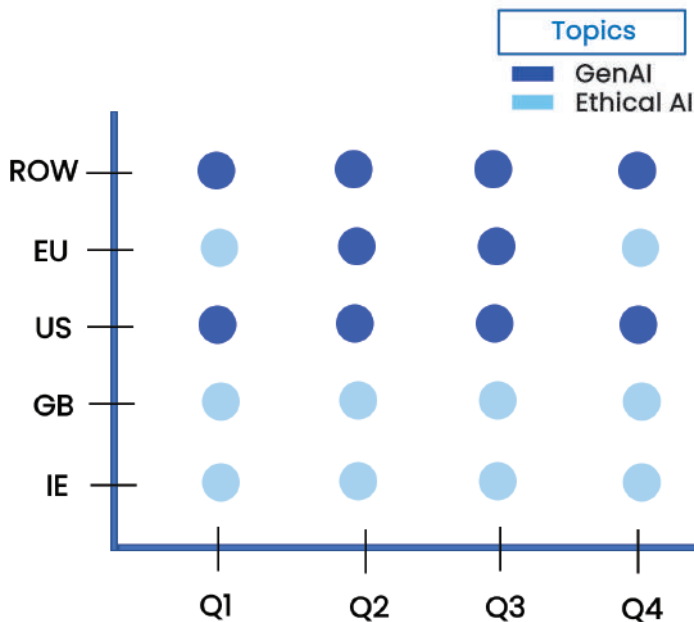
Regulatory Sector

AI-related discussions in the regulatory sector peaked in Q2 with 1,859 articles, reflecting heightened attention to AI governance during that period. The subsequent decline in Q3 and partial recovery in Q4 may correspond to the flow of policy debates and the introduction of new AI regulations. The AI Index Report 2024 highlights the increasing focus on AI governance and the need for clearer rules to mitigate AI harms [7].

Tech

The technology sector consistently led in AI-related coverage throughout the year. After a decline in Q3, the significant surge to 3,994 articles in Q4 can be attributed to major AI advancements and product launches. For instance, the release of DeepSeek's AI model in late 2024 demonstrated advanced capabilities comparable to leading companies like OpenAI and Meta, but at a significantly lower cost, indicating that smaller companies can compete effectively [6].

In 2024, publishers directed the highest attention towards the technology and Regulatory sectors, with subsequent interest in the Healthcare and education domains.

Legend:
- Tech
- Regulations
- Healthcare

	Q1	Q2	Q3	Q4
Tech	2891	3348	1458	3994
Regulations	1671	1859	765	1488
Healthcare	829	728	301	851

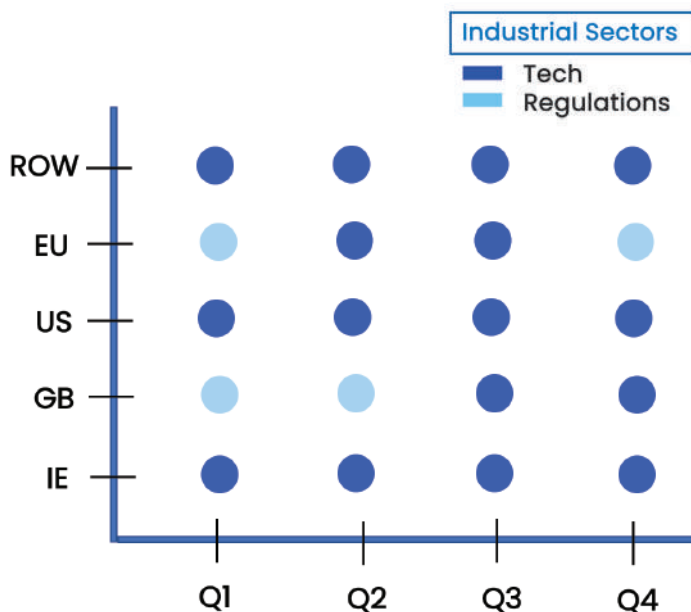# QUARTERLY TREND OF TOPICS AND INDUSTRY SECTORS IN EACH REGION

Tech dominated AI-related discussions across the US, UK, Ireland, and worldwide, maintaining strong coverage throughout each quarter. In contrast, Regulations saw a peak in Q1 and Q2, particularly in the UK and EU, reflecting increased focus on AI governance and policy-making. However, by Q3 and Q4, the focus shifted back to Tech, with significant coverage in the US and worldwide, suggesting a growing emphasis on technological advancements and innovations.

In 2024, Generative AI dominated discussions in the US and globally, maintaining steady attention throughout the year. The EU and the UK focused more on Ethical AI, particularly in Q1 and Q4, highlighting growing concerns about responsible AI practices and regulations. Ireland mirrored the UK's focus on Ethical AI, with steady discussions across all quarters. Notably, the EU exhibited a dual focus, with Generative AI appearing briefly in Q2 and Q3 but reverting to Ethical AI in Q4, emphasizing its priority on governance. These trends illustrate a regional balance between innovation in AI and addressing its ethical implications.

Topics
- GenAI
- Ethical AI

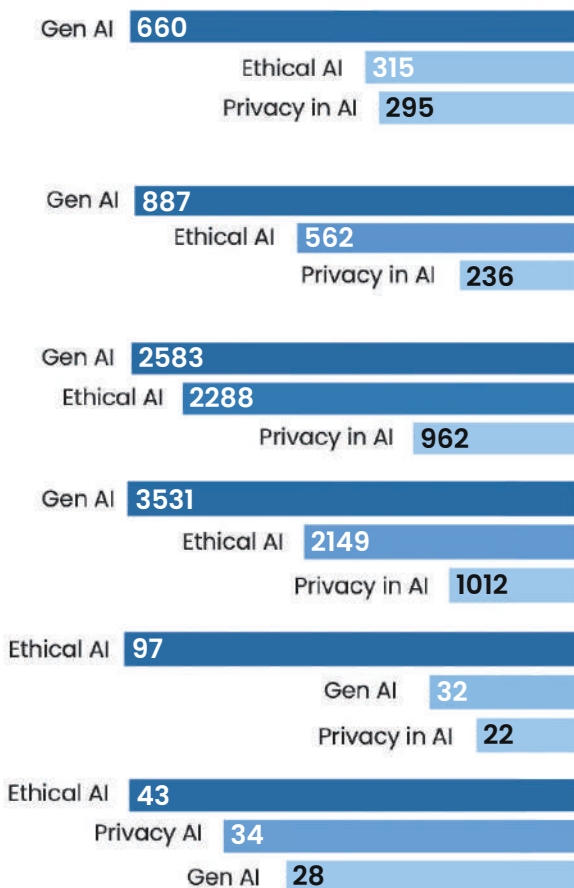**Industrial Sectors**
- Tech
- Regulations

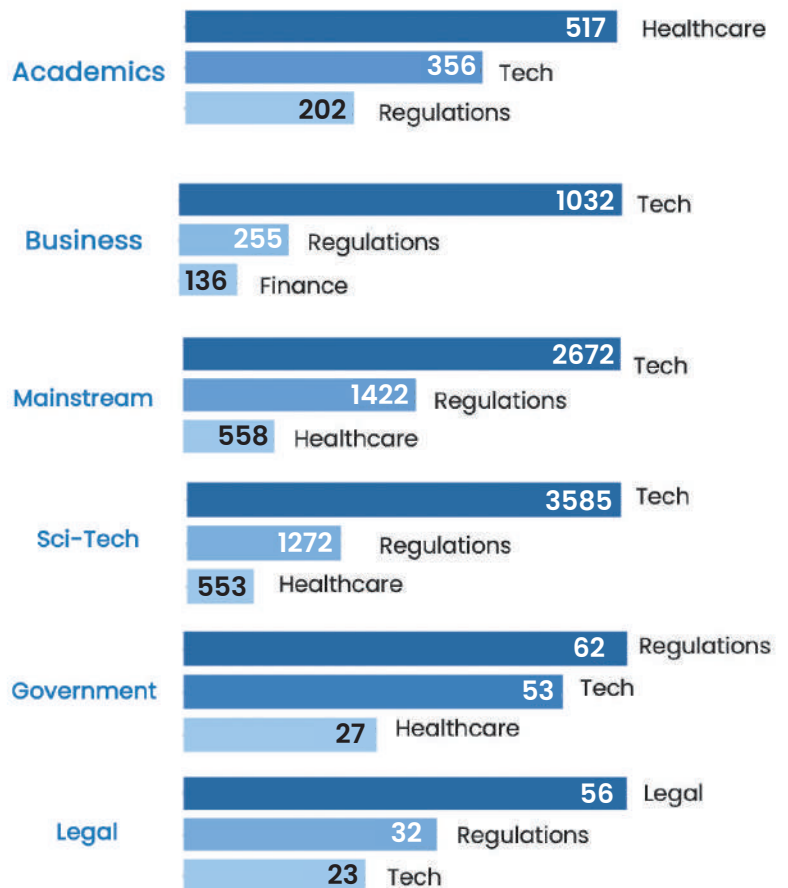# TOP 3 INDUSTRIAL SECTORS AND TOPIC IN PUBLISHER CATEGORY

In contrast to 2023, business-oriented publishers shifted their focus from sectors like Energy and Healthcare to Regulations and Finance. Academic publishers, on the other hand, redirected their attention towards Healthcare and Regulations. Mainstream and Sci-tech publishers produced a significant volume of articles covering Tech, Regulations, and Healthcare, with a notable emphasis on Generative AI, followed by discussions on Ethical AI and Privacy AI.

In 2024, trends largely mirrored those of 2023, with government and legal-focused publishers expressing heightened concerns around Ethical AI and Privacy AI. Meanwhile, the remaining publishers continued to prioritize Generative AI as the dominant topic of discussion.

TOPIC

Academics
- Gen AI: 660
- Ethical AI: 315
- Privacy in AI: 295

Business
- Gen AI: 887
- Ethical AI: 562
- Privacy in AI: 236

Mainstream
- Gen AI: 2583
- Ethical AI: 2288
- Privacy in AI: 962

Sci-Tech
- Gen AI: 3531
- Ethical AI: 2149
- Privacy in AI: 1012

Government
- Ethical AI: 97
- Gen AI: 32
- Privacy in AI: 22

Legal
- Ethical AI: 43
- Privacy AI: 34
- Gen AI: 28

SECTOR

Academics
- Healthcare: 517
- Tech: 356
- Regulations: 202

Business
- Tech: 1032
- Regulations: 255
- Finance: 136

Mainstream
- Tech: 2672
- Regulations: 1422
- Healthcare: 558

Sci-Tech
- Tech: 3585
- Regulations: 1272
- Healthcare: 553

Government
- Regulations: 62
- Tech: 53
- Healthcare: 27

Legal
- Legal: 56
- Regulations: 32
- Tech: 23

2025 OUTLOOK
A REFLECTION ON 2024 AND ANTICIPATION FOR 2025

Predicting trends in the rapidly evolving field of AI remains a challenge, yet as we step into 2025, it's essential to reflect on the advancements and challenges that defined 2024 and set the stage for what lies ahead.

In 2024, Ireland unveiled a refreshed National AI Strategy, reinforcing its commitment to becoming an international leader in the responsible and ethical use of artificial intelligence. This updated strategy emphasizes a people-centered approach, aiming to harness AI for the benefit of businesses, public services, and society at large [8]. Central to this initiative is CeADAR, Ireland's national center for AI, which plays a pivotal role in supporting organizations across the country. Funded by Enterprise Ireland and the IDA, CeADAR assists startups, SMEs, and large enterprises in understanding, adopting, and leveraging AI and machine learning technologies. Their services include developing AI strategies, creating prototypes, and offering independent, unbiased advice to ensure businesses remain competitive in a rapidly evolving global marketplace[10]. Additionally, as the designated European Digital Innovation Hub (EDIH) for AI in Ireland, CeADAR provides fully discounted services to enterprises with under 3,000 staff and public service organizations, further facilitating the integration of AI into various sectors [9].

As organizations prioritized automation, AI became integral to digital transformation. A PwC report highlighted its growing role in financial services, replacing manual risk assessments with AI-driven solutions [10]. This shift boosted efficiency and accuracy across industries, accelerating AI adoption. In 2024, a surge in AI product launches saw companies competing for an edge [11].

In 2025, the integration of AI-driven automation is set to intensify, particularly within finance and healthcare sectors. Investment banks are poised to implement AI solutions aimed at automating repetitive tasks for junior bankers, such as the preparation and correction of pitchbooks, thereby enhancing efficiency and allowing professionals to focus on higher-value activities. Similarly, the healthcare industry is expected to leverage AI for predictive diagnostics and personalized treatment plans, improving patient outcomes and operational efficiencies [12].

Organizations are prioritizing transparency, fairness, and alignment with societal values to navigate the complex landscape of AI ethics and regulations. This includes adhering to international standards like ISO/IEC 42001, which guides responsible AI use by managing risks and opportunities while balancing innovation with governance [13].

Overall, the year ahead promises significant advancements in AI adoption across critical sectors, balanced by a concerted effort to address the accompanying ethical and regulatory challenges.

NAVIGATING THE AI LANDSCAPE IN **2025**
EMBRACING INNOVATION, STRATEGY, AND PREPAREDNESS

As AI continues to advance at an unprecedented pace, 2025 is set to be a defining year for businesses. Organizations must navigate a rapidly evolving landscape by balancing innovation with ethical considerations, collaboration, and sustainability.

Below are the three key pillars shaping the AI landscape in 2025:

1. Advancing Generative AI and Agentic AI Integration

In 2024, generative AI transformed industries, and in 2025, agentic AI emerges as a key innovation, advancing operations, customer interactions, and data-driven decisions. However, its integration will require strategic alignment with business objectives to ensure its scalability without unnecessary risks [14]. Meanwhile, agentic AI will redefine industries like logistics and finance by enabling autonomous, context-aware decision-making, pushing the boundaries of what AI systems can achieve. Governance and oversight will remain central to adoption. Companies will prioritize developing frameworks that address ethical considerations, bias reduction, and cybersecurity risks to ensure stakeholder trust [15].

2. Addressing the AI Skills Gap

The increasing sophistication of AI technologies calls for a workforce adept at managing and innovating with AI tools. In 2025, businesses will focus on:
- Upskilling and Reskilling: Comprehensive employee training programs will aim to bridge knowledge gaps, emphasizing hands-on experience with AI technologies [16].
- Cross-functional Collaboration: Fostering expertise that spans technical, managerial, and operational domains will enhance organizations' ability to align AI applications with strategic goals [17].

3. Fostering Ecosystem Collaboration

AI innovation in 2025 will hinge on partnerships that bring together enterprises, startups, academia, and governments. Collaboration will be crucial for addressing regulatory challenges and ethical concerns.
- Public-Private Partnerships: Joint efforts to create standardized governance models and ethical AI practices will gain momentum [10].
- Reducing Vendor Lock-ins: Companies will increasingly diversify their technology ecosystems to mitigate risks and foster greater innovation through collaborative efforts [12].

THE RISE OF AGENTIC AI AND THE EVOLUTION OF GENERATIVE AI IN 2025

In 2025, AI reshapes business landscapes globally. Generative AI remains transformative, while agentic AI—enabling autonomous decision making revolutionizes technology use, expanding AI's impact across industries. Generative AI, celebrated for its ability to convert unstructured data into actionable insights, will continue to lead advancements in content creation, customer engagement, and operational efficiency [17]. Businesses that integrated GenAI in previous years are now reaping its benefits, using it to automate complex workflows, enhance customer experiences, and support strategic decision-making.

However, the advent of agentic AI marks a new chapter in technological innovation. Unlike generative systems that produce outputs based on predefined inputs, agentic AI is designed to operate autonomously, adapting to dynamic environments and learning from interactions. This capability positions agentic AI as a game-changer for industries such as logistics, finance, and healthcare, where adaptive and context-aware systems can optimize processes in real time [11]. For example, in supply chain management, agentic AI systems can autonomously adjust to disruptions, ensuring continuity and efficiency [10].

Trust will remain central to AI adoption in 2025. As businesses deepen their reliance on these advanced systems, ensuring transparency, accountability, and ethical compliance will be paramount. Responsible AI practices—encompassing data accuracy, fairness, and inclusivity—will underpin efforts to build trust among stakeholders [15]. Companies will increasingly emphasize the creation of explainable AI systems to mitigate skepticism and address regulatory requirements [12].

Moreover, the convergence of generative and agentic AI will accelerate innovation, fostering entirely new business models. This synergy enables organizations to not only generate actionable insights but also act upon them autonomously. For businesses, this means moving beyond automation to systems that anticipate needs, adapt strategies, and execute tasks without constant human intervention [11].

As 2025 unfolds, the dual prominence of generative and agentic AI represents both opportunities and challenges. Organizations that invest in scalable infrastructures, upskill their workforce, and prioritize ethical AI implementation will be best positioned to thrive in this transformative era. The focus will not simply be on adopting these technologies but on harnessing their full potential to shape a more efficient, innovative, and inclusive future [17].

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