

Regional Media Sentiment Analysis of AI in Entrepreneurship: A Comparative Study of the UK, USA and Europe

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Abstract: The rapid growth of the global economy is increasingly driven by innovation, with artificial intelligence being at the core of business processes transformation. As AI continues to reshape industries, the entrepreneurial economy must adapt to these changes to stay competitive. Often, media narratives influence perceptions and guide decision-making. Our study provides comparative sentiment analysis of how AI integration into entrepreneurship is portrayed by regional media in the UK, USA, and Europe. Analyzing 905 news articles collected via GNews API between August 5, 2024 and April 1, 2025, we applied the VADER tool to assess sentiment in headlines and article descriptions on a daily and weekly basis. The results reveal regional differences and distinct sentiment patterns between headlines and content, highlighting a complex media narrative around AI adoption. By associating media coverage to entrepreneurial perception, our research contributes to the literature on technology-driven economic changes and offers a foundation for future studies exploring the intersection of media news, innovation, and business strategy.

Keywords: sentiment analysis of news; entrepreneurship; artificial intelligence.

JEL classification: L26; O33.

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1. INTRODUCTION

As technology evolves, the innovation process becomes more accessible for companies. Artificial intelligence (AI) is playing a key role in driving competitive advantage and improving operational efficiency. Yet, AI adoption depends on factors such as company size, organizational culture, and technological readiness. Companies face challenges such as the need for IT infrastructure, digital skills, and strong leadership support (Ghani *et al.*, 2022; Kinkel *et al.*, 2022). Additionally, external pressures, such as government regulations and competitive dynamics, along with employee acceptance and the need for upskilling, further affect AI integration (Horani *et al.*, 2023; Vogel *et al.*, 2023).

Beyond these internal factors, media coverage is another powerful influence on corporate decisions and public perceptions of AI. Media outlets shape how AI is viewed, either as a beneficial innovation or a potential risk. Different channels, from social media to traditional newspapers and television, contribute to varying levels of public trust and caution (Cui and Wu, 2021; Neyazi *et al.*, 2023). These narratives shape how entrepreneurs view the risks and benefits of AI.

Our study is centered around an important research question: "How do media portrayals of AI differ across the UK, USA, and Europe, and what implications do these differences have for entrepreneurial decision-making and technological adoption?" To explore this question, we conduct empirical analysis. Our approach involves a comparative sentiment analysis that quantitatively evaluates the tone of media coverage regarding AI's transformative role in the economy. Through this, we aim to identify regional trends showing how varying media narratives may influence entrepreneurial perceptions and actions.

The decision to focus on the UK, USA, and Europe is intentional, reflecting their unique cultural attitudes and regulatory environments. The USA, has a rapid pace technological advancement environment. The UK, on the other hand, tends to take a more measured approach, weighing the potential benefits of innovation against potential risks. Meanwhile, European media often includes more regulatory and ethical considerations. Additionally, a common thread among all these regions is the shared language of English, which improves data availability.

By concentrating on these regions, our study addresses a gap in the existing literature, which has often prioritized the technical and organizational aspects of AI adoption over the influence of media in shaping public and entrepreneurial perceptions. The insights generated through our analysis contribute to the academic and business debate on AI-driven innovation. Moreover, we hope that our study will serve as a foundation for future research exploring the long-term effects of media sentiment on technological adoption and innovation.

2. NEWS MEDIA INFLUENCE

News media has a strong influence on how people see the world, especially in today's competitive and diverse markets. As news organizations compete for attention and revenue, they have adopted a mix of traditional and social media. This change has led to more personalized content, especially on regional platforms, making the news more engaging for consumers. People also participate more in creating and discussing news, which increases the media's impact. News outlets not only share information but also strengthen regional interests and shape public attitudes (Kerrigan and Graham, 2010).

Economic news, particularly about downturns or recessions, can significantly affect consumer confidence, regardless of the actual economic situation. For example, a study in the Netherlands showed that negative economic news could lower confidence even during stable times. This highlights the media's power in shaping how people feel and behave, especially in areas sensitive to economic changes (Hollanders and Vliegthart, 2011; Damstra and Boukes, 2021). Also, studies have found that bias in economic reporting can influence how people feel about the economy and lead to changes in financial and political decisions. For example, Dutch newspapers sometimes add a “spin” to economic news to make it more memorable, which can affect how consumers view the economy. Even when this spin doesn't match the actual situation, it can cause a short-term drop in consumer confidence. Negative or dramatic news can make people more pessimistic about the economy, even if conditions are stable (Alsem *et al.*, 2008).

News media also shapes how people view innovation and technology. Urban areas, where economic growth is often tied to technological progress, tend to get more positive media coverage of new technologies. This helps speed up the adoption of these technologies in cities. In contrast, areas that focus less on innovation might see slower adoption because of how the media presents technological developments (Toole *et al.*, 2012; Sama, 2019; Ozgun and Broekel, 2021).

Media hype, as illustrated by the Gartner Hype Cycle, demonstrates how new technologies – such as AI, blockchain, and electric vehicles – experience phases of high expectations followed by disappointment and eventual productivity. While such hype can generate significant attention and investment, it may also lead to disillusionment when expectations are unmet (Bakker, 2010; Morini, 2016). Media hype can also influence government policies around technological innovations. Hype cycles can speed up or delay the creation of regulations, especially for areas like AI or green technologies. Some experts have noticed that AI hype is used to attract funding or shape policy, but it can also divert attention from important societal issues, making regulation more complex (Züger *et al.*, 2023).

The role of media becomes even more complex in the context of AI. AI hype in journalism can distort the understanding and regulation of technologies by emphasizing short-term productivity gains over journalism's civic role, thereby obscuring critical debates on ethics, accuracy, and societal implications (Spyridou and Ioannou, 2025). At the same time, a comprehensive review has highlighted that AI is rapidly transforming digital media through automation, personalization, and content curation. Despite these enhancements in creativity and efficiency, AI also presents challenges such as privacy concerns, job displacement, and algorithmic bias – underscoring the importance of responsible adoption. Public trust in AI is significantly influenced by how media frames its ethics and controllability. Long-term analysis of media coverage, such as that of New York Times articles, reveals that both the tone and perceived morality of AI critically impact public acceptance and subsequent technology adoption (Khan, 2022). Moreover, visual media representations – especially in German outlets – often depict AI with futuristic or dystopian imagery, amplifying either enthusiasm or skepticism depending on whether these portrayals evoke hope or fear (Krause, 2024).

Media coverage thus serves a double-edged role in innovation. While increased visibility can attract investment and stimulate technological progress, excessive scrutiny or an overemphasis on short-term outcomes may divert resources away from long-term research and development efforts, particularly in fast-evolving sectors like AI and blockchain (Dai *et al.*, 2021). Furthermore, the gap in media coverage between developed and developing countries increases the “digital divide” and affects the adoption of new technologies. Media

access and content availability about technologies like AI and blockchain often favor developed countries. In developing regions, limited access to media and technology slows down the spread of new technologies. Media in developed countries sometimes exaggerates the impact of emerging technologies, while media in developing areas may not have the resources to cover them in detail. This difference can further widen the digital divide (Freeman and Freeland, 2015). Local media markets also affect how people access and understand news. In the U.S., for example, people in large cities have more access to national and international news, while rural areas rely mostly on local media. This creates different “information cultures” in various regions, where local media strongly influences what people know and how they act (Althaus *et al.*, 2009).

3. SENTIMENT ANALYSIS

Sentiment analysis, or opinion mining, involves extracting emotions and opinions from text. A major aspect of this techniques is web content mining, which gathers information from online sources (Atanasova *et al.*, 2010). This is particularly valuable in areas like financial news, where analyzing online content helps organizations understand public sentiment and market trends.

Provost and Fawcett provided further methodological clarity by detailing how open-source libraries in Python and R can be utilized to vectorize text data, train classification models, and score sentiments without resorting to expensive software solutions (Provost and Fawcett, 2013). By utilizing these tools, companies can make better-informed decisions based on data insights. This approach is also, widely applied in market research, where companies track customer preferences and emotions, adjusting strategies based on feedback (Pang and Lee, 2008; Cambria *et al.*, 2013).

Research shows how sentiment analysis aids entrepreneurship. Palahan (2022) examines how sentiment analysis tools help entrepreneurs by extracting important business sentiments from a large number of news articles. This research highlights the value of AI in helping entrepreneurs make decisions in global trade and investment, showing its practical application in business intelligence (Palahan, 2022). Similarly, Shirsat *et al.* (2017) used sentiment analysis to categorize news articles based on their positive or negative tone, focusing on business and entrepreneurship news from BBC. Their study shows that computational techniques like tokenization and stop-word removal can provide useful insights into business trends (Shirsat *et al.*, 2017).

Complementing these approaches, Waters *et al.* (2021) also contribute to this area by analyzing the emotions of entrepreneurs on Twitter, applying sentiment scoring to measure the emotional expressions of social entrepreneurs. They found that social entrepreneurs tend to express more positive emotions, and those transitioning to entrepreneurship show more positive sentiments in online conversations. This is helpful for understanding how AI tools can analyze entrepreneur behavior on social media (Waters *et al.*, 2021).

4. METHODOLOGY

To start our sentiment analysis for the USA, UK, and European regions, we divided the process into three steps.

The first step involved selecting relevant keywords for our news search. We conducted a brief literature review to identify the potential benefits and challenges of AI adoption (Table no. 1). Our findings guided the keyword selection.

Table no. 1 – Potential benefits and challenges of AI adoption

Potential benefits and challenges	References
AI business growth automation	Soni <i>et al.</i> (2019); Malik <i>et al.</i> (2022); Modhoriye <i>et al.</i> (2023); Nigmatov and Pradeep (2023); Paul <i>et al.</i> (2023); Rubab and Forman Christian (2023)
AI optimizing business processes	Nigmatov and Pradeep (2023); Paul <i>et al.</i> (2023); Rubab and Forman Christian (2023)
AI-enhanced decision making in business	Cubric (2020); Nigmatov and Pradeep (2023); Rubab and Forman Christian (2023)
AI reshaping business models	Soni <i>et al.</i> (2019)
AI driving innovation in business	Soni <i>et al.</i> (2019); Cubric (2020); Malik <i>et al.</i> (2022); Modhoriye <i>et al.</i> (2023); Rubab and Forman Christian (2023)
AI market deployment strategies	Soni <i>et al.</i> (2019)
AI in improving competitiveness for SMEs	Paul <i>et al.</i> (2023)
AI improving business competitiveness	Modhoriye <i>et al.</i> (2023); Nigmatov and Pradeep (2023); Paul <i>et al.</i> (2023); Rubab and Forman Christian (2023)
AI-powered resource allocation optimization	Cubric (2020); Nigmatov and Pradeep (2023); Paul <i>et al.</i> (2023)
AI-driven revenue streams in business	Nigmatov and Pradeep (2023); Paul <i>et al.</i> (2023)
AI-enhanced customer experience personalization	Soni <i>et al.</i> (2019); Cubric (2020); Modhoriye <i>et al.</i> (2023); Nigmatov and Pradeep (2023); Paul <i>et al.</i> (2023); Rubab and Forman Christian (2023)
AI boosting operational efficiency	Soni <i>et al.</i> (2019); Cubric (2020); Rubab and Forman Christian (2023)
AI predictive analytics in business	Cubric (2020); Modhoriye <i>et al.</i> (2023); Nigmatov and Pradeep (2023); Paul <i>et al.</i> (2023); Rubab and Forman Christian (2023)
AI job security concerns	Soni <i>et al.</i> (2019); Cubric (2020); Malik <i>et al.</i> (2022)
AI job displacement in business	Soni <i>et al.</i> (2019); Modhoriye <i>et al.</i> (2023); Nigmatov and Pradeep (2023)
Algorithmic bias in AI adoption	Cubric (2020); Nigmatov and Pradeep (2023)
AI cybersecurity vulnerabilities	Cubric (2020); Modhoriye <i>et al.</i> (2023); Nigmatov and Pradeep (2023)
AI privacy breaches in business	Cubric (2020); Malik <i>et al.</i> (2022); Modhoriye <i>et al.</i> (2023)
AI stress among employees	Malik <i>et al.</i> (2022); Nigmatov and Pradeep (2023)
AI increasing complexity in business operations	Cubric (2020); Malik <i>et al.</i> (2022); Paul <i>et al.</i> (2023)
AI employee trust issues	Soni <i>et al.</i> (2019); Cubric (2020)
Ethical challenges of AI in business	Soni <i>et al.</i> (2019); Nigmatov and Pradeep (2023); Rubab and Forman Christian (2023)

Source: own creation based on literature review

The keywords we used were simplified versions of the potential benefits and challenges identified in the literature.

Before analyzing how positive or negative the articles were using the VADER (Valence Aware Dictionary for Sentiment Reasoning) tool, we remove any duplicates. This tool helps us measure the sentiment of text, whether it's positive, negative, or neutral. VADER gives a score ranging from -1 (very negative) to +1 (very positive). We applied it to both the titles and descriptions of the articles.

After getting the sentiment scores, we compared the sentiment across the USA, UK, and Europe using bar charts, which helped us see the differences in how AI was discussed in each region. We also created charts to show how these scores changed each day and week. This allowed us to track how AI was being portrayed over time.

5. RESULTS

The sentiment analysis scores displayed in [Figure no. 3](#), indicate that both titles and descriptions across all regions generally lean toward a positive sentiment, even if only marginally, with scores that remain close to zero. Nevertheless, descriptions generally exhibit a more positive sentiment than titles across all regions.

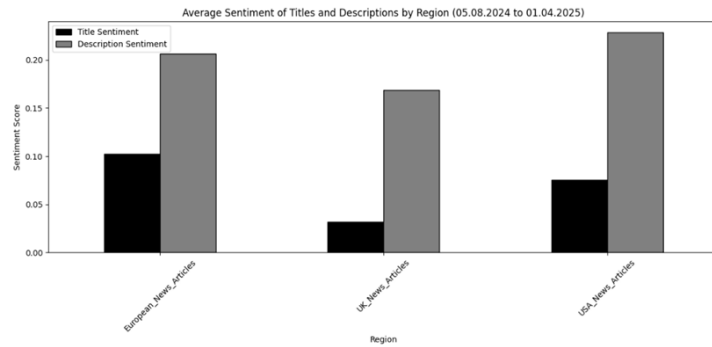


Figure no. 3 – Average sentiment of titles and description by region
 Source: own creation

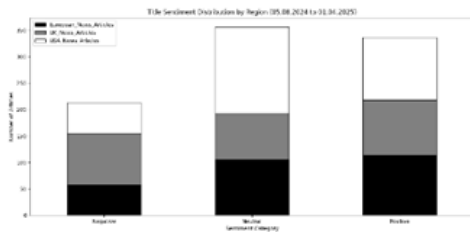


Figure no. 4 – Title sentiment distribution by region
 Source: own creation

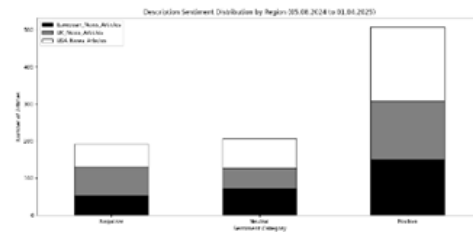


Figure no. 5 – Description sentiment distribution by region
 Source: own creation

[Figures no. 4](#) and [no. 5](#) illustrate the distribution of title and description sentiment across European, UK, and USA news articles.

From these distributions, a few patterns emerge. Europe and the USA feature titles leaning more toward positive and neutral sentiment, while UK titles show a relatively higher share of negative sentiment. Additionally, descriptions across all three regions skew towards positive than their corresponding titles. This can be noticed in the UK and the USA, where half or more descriptions are categorized as positive. Overall, these results reinforce that news article descriptions tend to contain more positive language than the often more concise titles.

Overall, media portrayals of artificial intelligence tend to be neutral-to-positive. While headlines often use negative or attention-grabbing language, especially in the UK, the articles' content generally presents a more optimistic view of AI. This suggests that media outlets aim to balance the initial impact of headlines with content that emphasizes the benefits and potential of AI, despite critical tones in the titles.

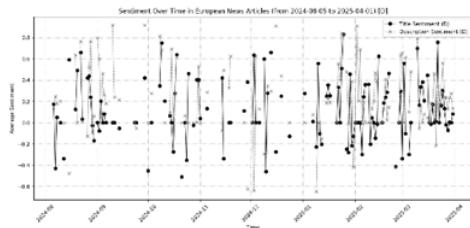


Figure no. 6 – Sentiment over time in European articles (days)

Source: own creation

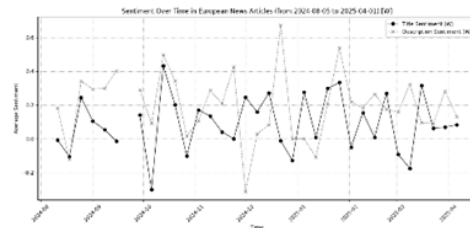


Figure no. 7 – Sentiment over time in European articles (weeks)

Source: own creation

Both the daily and weekly sentiment trends in European news articles show similar patterns of fluctuation, but differ in the timing and intensity of their peaks and troughs. In both cases, the description sentiment tends to show more extreme values compared to the title sentiment.

In the daily analysis of European News Articles, titles showed more volatile sentiment – bottoming at -0.51 (October 21, 2024) and peaking at 0.83 (January 25, 2025) – while descriptions ranged from a high of 0.92 (September 29, 2024) to a low of -0.65 (January 9, 2025). The weekly analysis displays a more moderated sentiment, with title scores between -0.30 (October 6, 2024) and 0.43 (October 13, 2024), and descriptions between -0.31 (December 1, 2024) and 0.67 (December 22, 2024).

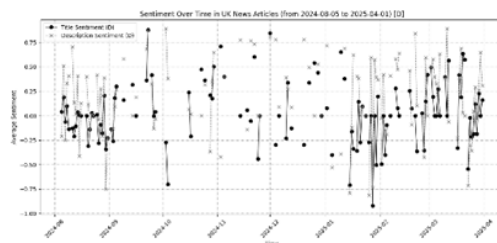


Figure no. 8 – Sentiment over time in UK articles (days)

Source: own creation

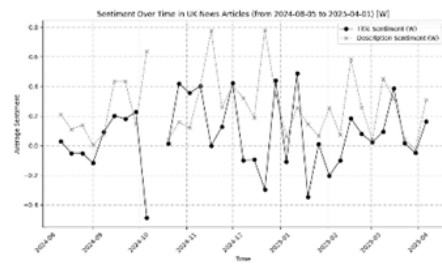


Figure no. 9 – Sentiment over time in UK articles (weeks)

Source: own creation

Combined with previous findings that titles and descriptions predominantly display neutral-to-positive sentiment results suggest that while headlines occasionally adopt sharper, negative tones to capture attention, the broader media narrative on artificial intelligence remains measured and slightly optimistic.

Overall, the daily trends capture sharper, more frequent shifts in sentiment, whereas the weekly trends show a smoother, averaged perspective of the sentiment changes over time.

The coverage of AI in the UK generally leans toward a neutral-to-positive portrayal, although there are notable negative spikes that highlight ongoing concerns about potential risks. This combination of skepticism and optimism reflects a media environment that recognizes AI's transformative potential while remaining mindful of its challenges.

Daily, sentiment scores for titles ranged from a strongly positive 0.88 on September 23, 2024, to a particularly negative -0.92 on January 28, 2025. Descriptive sentiment scores vary similarly, reaching a high of 0.89 on October 3, 2024, and a low of -0.81 on January 26, 2025. When viewed weekly, sentiment appears more moderate: title scores dipped to -0.49 on October 6, 2024, and peaked at 0.49 on January 12, 2025. Meanwhile, descriptive scores ranged between a high of 0.78 on December 22, 2024, and a low of -0.03 on March 30, 2025.

The daily coverage of AI shows significant fluctuations influenced probably by specific events or topics. However, the weekly patterns indicate a more consistent narrative.

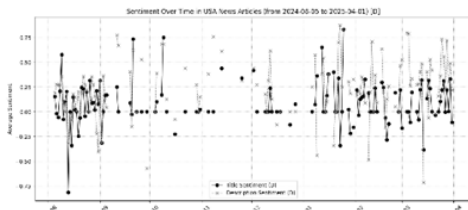


Figure no. 10 – Sentiment over time in USA articles (days)

Source: own creation

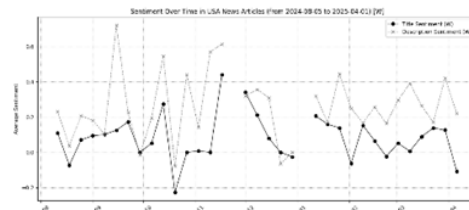


Figure no. 11 – Sentiment over time in USA articles (weeks)

Source: own creation

Both the daily and weekly sentiment trends in USA news articles exhibit fluctuations, but the daily analysis shows more shifts compared to the weekly analysis. In both cases, the findings align with trends in European and UK articles, where descriptions tend to be more positive.

In the day-to-day analysis, USA News Articles show notable swings, with title sentiment dipping to -0.81 (August 13, 2024) and rising as high as 0.83 (January 25, 2025). Descriptions follow a similarly broad range, peaking at 0.88 (January 23, 2025) and bottoming at -0.71 (March 14, 2025). These daily trends reflect sharper, more frequent sentiment changes in the news articles. In contrast, the weekly analysis shows a smoother trend. Title sentiment moves from 0.44 (November 17, 2024) to -0.23 (October 20, 2024), while description sentiment ranges from 0.72 (September 15, 2024) to -0.08 (October 20, 2024). This smoother pattern indicates that while individual daily reports can be highly positive or negative, the overall week-by-week portrayal skews neutral-to-positive.

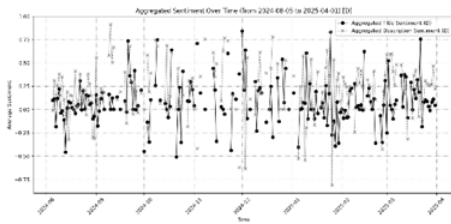


Figure no. 12 – Aggregated sentiment over time (days)

Source: own creation

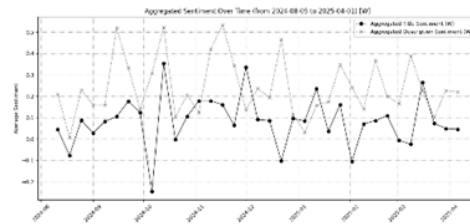


Figure no. 13 – Aggregated sentiment over time (weeks)

Source: own creation

These aggregated patterns align with observations in Europe, the UK, and the USA individually: while titles may occasionally spike sharply – positive or negative – descriptions tend to offer a more consistently positive or balanced view.

Headlines are often crafted to grab attention quickly, using sensational or extreme language. While headlines aim for immediate impact and engagement, often exaggerating sentiment, the body of the article tends to provide more detailed context. This gap in sentiment reflects a common editorial strategy: using headlines to spark interest while employing body text for detailed analysis and context.

European headlines may touch on ethical or regulatory challenges but ultimately focus on AI's innovative potential and its role in economic growth. In contrast, UK coverage displays a more divided sentiment in headlines, often leaning towards negative framing. This inclination may stem from cultural tendencies toward caution. Factors like post-Brexit uncertainty deepen this critical tone. However, similar to Europe, the descriptive content in UK articles tends to be more optimistic. Meanwhile, in the USA, while headlines occasionally emphasize the risks associated with AI, descriptions generally present a strong neutral-to-positive outlook. This reflects the country's strong tech industry and innovation-driven economy, which highlights AI's transformative potential despite some negative sentiments in headlines.

6. DISCUSSIONS

One of our findings was the notable difference in sentiment between titles and descriptions of articles. Descriptions across the USA, UK, and Europe generally displayed more positive sentiment compared to the titles. This divergence suggests that while the media may use more sensational or cautious headlines to capture readers' attention, the body of the articles provides a more balanced or optimistic perspective on AI. This aligns with previous research which has shown that media outlets often adopt a more critical or provocative tone in headlines to attract readership (Alsem *et al.*, 2008; Freeman and Freeland, 2015). For example, a news article from the USA discusses the impact of an IPO, featuring a title sentiment score of -0.49. It focuses on a significant entrepreneurial event: the challenges faced during CoreWeave's IPO. Despite the negative headline, the article's description has a score of 0.3626, indicating that there is still underlying confidence in emerging AI ventures (Yildirim, 2025). Additionally, there is a CNBC article covering LVMH CEO Bernard Arnault's family office investing in AI startups. This article has a neutral title, but its description carries a positive score of 0.47 (Frank, 2024).

In the UK, for example, the titles were more negative, reflecting a cautious stance towards AI. In contrast, the descriptions in UK media were generally positive, suggesting that while the initial media narrative may focus on risks or challenges, the detailed content reflects optimism about AI's potential benefits for business. This may reflect the public's mixed emotions about AI, where concerns about job displacement and ethical risks are balanced by recognition of AI's role in innovation and operational efficiency. For example, The Guardian's article on retail automation titled "Robot Packers and AI Cameras: UK Retail Embraces Automation to Cut Staff Costs" illustrates a similar dynamic. The headline has a sentiment score of -0.27, indicating a negative tone, while the article's overall description is neutral. Although the headline highlights the potential for job losses, the detailed discussion emphasizes that AI-driven automation can help reduce costs and improve operational efficiency. It encourages businesses to adopt technology while carefully managing the associated disruptions (Butler, 2025).

Our findings also resonate with studies that highlight how different regions exhibit varying levels of optimism about technological advancements (Morini, 2016). For instance, the USA showed more positive sentiment in both titles and descriptions compared to the UK and Europe. This finding could be explained by the USA's broader emphasis on entrepreneurial culture and its history of early adoption of emerging technologies, which media narratives reflect. By contrast, European media coverage tends to emphasize regulatory concerns and ethical implications more frequently, as reflected in the lower sentiment scores, particularly in titles (Kerrigan and Graham, 2010). For example, a report from SiliconRepublic highlights that Neura Robotics, based in Germany, recently raised €120 million. This significant investment comes with various regulatory challenges. Although the headline appears neutral, the article emphasizes the growing entrepreneurial rate and strategic shifts toward AI adoption. The description's sentiment score for this report is 0.34 (Mather, 2025).

Another finding was the notable fluctuation in sentiment over time, particularly daily. This volatility is influenced by factors such as new investments in technology, concerns about job displacement, and discussions surrounding the potential and tangible benefits of AI in fields like medicine, finance, artificial content creation, and robotics. Such fluctuations indicate that media portrayals of AI are highly responsive to short-term events and news cycles (Bakker, 2010). These dynamics prompt enterprises to re-assess their strategies, suggesting that while initial media narratives may produce caution, broader discussions ultimately create an environment that encourages AI adoption and innovation.

This study has several limitations that need to be considered in future research. Future studies should extend the analysis period to more than six months and include more regions, such as Asia and Africa, as well as diverse languages. This approach would help capture a broader perspective on the portrayal of AI in the media. Additionally, while sentiment analysis tools like VADER are useful, they may miss the complexity of emotions, and the study did not account for social media platforms, which play a growing role in shaping public opinion.

Future studies could investigate how these media sentiments translate into actual business decisions and AI adoption rates. Given the rapid evolution of AI, longitudinal studies that track sentiment over a longer period could offer deeper insights into how media narratives evolve alongside technological advancements (Palahan, 2022).

7. CONCLUSIONS

This study provided a comparative analysis of how media in the USA, UK, and Europe portrays AI, offering insights into regional differences in sentiment. Our findings reveal that while AI is generally portrayed positively in media descriptions, there are notable variations, particularly in the tone of article titles, which tend to be more cautious or negative in certain regions like the UK. The results suggest that media plays an important role in shaping public and entrepreneurial perceptions of AI, with potential implications for AI adoption rates and innovation.

This duality emphasizes the media's influential role in shaping public and entrepreneurial perceptions, which impacts AI adoption rates and strategic decision-making. In practical terms, for example, a more positive perception of AI in the USA could foster a culture that encourages rapid adoption and bold innovation. As a result, companies may be more inclined to invest quickly in new AI technologies. On the other hand, the more cautious approach observed in the UK and Europe, likely due to a stronger emphasis on regulations and ethics, suggests that businesses in these regions may adopt AI at a slower pace.

These findings suggest that business leaders should look past attention-grabbing headlines and focus on the full details when thinking about the risks and opportunities of AI. Policymakers and investors can use this deeper understanding to create fair rules and make smarter investment decisions. Given this context, companies should closely monitor media trends. Also, since views on AI differ from place to place, AI companies should adjust their messages to match local attitudes about technology and innovation. This approach may help reduce fears and shift the focus toward the long-term benefits of AI.

The study contributes to the existing literature by highlighting the influence of media sentiment on technological adoption and pointing out how regional media coverage reflects broader cultural attitudes toward AI and business innovation.

Future research should incorporate social media sources, extend the timeframe, and explore how media sentiment influences business decisions and policies. Expanding to more regions and languages will provide a deeper understanding of the global interplay between media, public perception, and AI adoption in business.

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References

- Alsem, K. J., Brakman, S., Hoogduin, L., & Kuper, G. (2008). The impact of newspapers on consumer confidence: Does spin bias exist? *Applied Economics*, 40(5), 531-539. <http://dx.doi.org/10.1080/00036840600707100>
- Althaus, S. L., Cizmar, A. M., & Gimpel, J. G. (2009). Media Supply, Audience Demand, and the Geography of News Consumption in the United States. *Political Communication*, 26(3), 249-277. <http://dx.doi.org/10.1080/10584600903053361>
- Atanasova, T., Kasheva, M., Sulova, S., & Vasilev, J. (2010). *Analysis of the possible application of Data Mining, Text Mining and Web Mining in business intelligent systems*. Paper presented at the 33rd international convention MIPRO.
- Bakker, S. (2010). The car industry and the blow-out of the hydrogen hype. *Energy Policy*, 38(11), 6540-6544. <http://dx.doi.org/10.1016/j.enpol.2010.07.019>
- Butler, S. (2025). Robot packers and AI cameras: UK retail embraces automation to cut staff costs. Retrieved from <https://www.theguardian.com/business/2025/jan/21/robot-packers-and-ai-cameras-uk-retail-embraces-automation-to-cut-staff-costs>
- Cambria, E., Schuller, B., Xia, Y., & Havasi, C. (2013). New Avenues in Opinion Mining and Sentiment Analysis. *IEEE Intelligent Systems*, 28(2), 15-21. *IEEE Intelligent Systems*. <http://dx.doi.org/10.1109/MIS.2013.30>
- Cubic, M. (2020). Drivers, barriers and social considerations for AI adoption in business and management: A tertiary study. *Technology in Society*, 62, 101257. <http://dx.doi.org/10.1016/j.techsoc.2020.101257>
- Cui, D., & Wu, F. (2021). The influence of media use on public perceptions of artificial intelligence in China: Evidence from an online survey. *Information Development*, 37(1), 45-57. <http://dx.doi.org/10.1177/0266666919893411>
- Dai, L., Shen, R., & Zhang, B. (2021). Does the media spotlight burn or spur innovation? *Review of Accounting Studies*, 26(1), 343-390. <http://dx.doi.org/10.1007/s11142-020-09553-w>
- Damstra, A., & Boukes, M. (2021). The Economy, the News, and the Public: A Longitudinal Study of the Impact of Economic News on Economic Evaluations and Expectations. *Communication Research*, 48(1), 26-50. <http://dx.doi.org/10.1177/0093650217750971>
- Frank, R. (2024). LVMH CEO Bernard Arnault's family office goes shopping for AI startups. Retrieved from <https://www.cnbc.com/2024/08/19/lvmh-ceo-bernard-arnaults-family-office-invests-in-ai-startups.html>
- Freeman, P. K., & Freeland, R. S. (2015). Agricultural UAVs in the U.S.: Potential, policy, and hype. *Remote Sensing Applications: Society and Environment*, 2, 35-43. <http://dx.doi.org/10.1016/j.rsase.2015.10.002>
- Ghani, E. K., Ariffin, N., & Sukmadilaga, C. (2022). Factors Influencing Artificial Intelligence Adoption in Publicly Listed Manufacturing Companies: A Technology, Organisation, and Environment Approach. *International Journal of Applied Economics, Finance and Accounting*, 14(2), 108-117. <http://dx.doi.org/10.33094/ijaefa.v14i2.667>
- GNews. (2015). Your News API to Search for the Latest and Historical Worldwide News. Retrieved from <https://gnews.io/>
- Hollanders, D., & Vliegthart, R. (2011). The influence of negative newspaper coverage on consumer confidence: The Dutch case. *SSRN*. <http://dx.doi.org/10.2139/ssrn.1430287>
- Horani, O. M., Al-Adwan, A. S., Yaseen, H., Hmoud, H., Al-Rahmi, W. M., & Alkhalifah, A. (2023). The critical determinants impacting artificial intelligence adoption at the organizational level. *Information Development*. <http://dx.doi.org/10.1177/02666669231166889>
- Kerrigan, F., & Graham, G. (2010). Interaction of regional news-media production and consumption through the social space. *Journal of Marketing Management*, 26(3-4), 302-320. <http://dx.doi.org/10.1080/02672570903566334>

- Khan, A. K. (2022). Trust in Artificial Intelligence: Toward Measuring the Impact of Trust in Artificial Intelligence: Toward Measuring the Impact of Public Perception. Retrieved from https://www.semanticscholar.org/paper/Trust-in-Artificial-Intelligence%3A-Toward-Measuring-Khan/4ffc14f3711bee20f485492c22202e1fc812893c?utm_source=consensus
- Kinkel, S., Baumgartner, M., & Cherubini, E. (2022). Prerequisites for the adoption of AI technologies in manufacturing – Evidence from a worldwide sample of manufacturing companies. *Technovation*, 110, 102375. <http://dx.doi.org/10.1016/j.technovation.2021.102375>
- Krause, T. (2024). Robots and Code: A Case Study of the Depiction of Artificial Intelligence in German News Media. *M/C Journal*, 27(6). <http://dx.doi.org/10.5204/mcj.3119>
- Malik, N., Tripathi, S. N., Kar, A. K., & Gupta, S. (2022). Impact of artificial intelligence on employees working in industry 4.0 led organizations. *International Journal of Manpower*, 43(2), 334-354. <http://dx.doi.org/10.1108/IJM-03-2021-0173>
- Mather, C. (2025). Neura Robotics raises €120m to develop ‘cognitive’ robots. Retrieved from <https://www.siliconrepublic.com/start-ups/neura-robotics-germany-funding-cognitive-humanoid-tech>
- Modhoriye, P., Yadav, P., & Jadhav, D. (2023). AI transformation in business: Unveiling the dual effects of advancement and challenges. *International Journal of Scientific Research Engineering and Management*, 7.
- Morini, M. (2016). From “Blockchain Hype” to a Real Business Case for Financial Markets. *SSRN*. <http://dx.doi.org/10.2139/ssrn.2760184>
- Neyazi, T. A., Khai Ee, T., Nadaf, A., & Schroeder, R. (2023). The effect of information seeking behaviour on trust in AI in Asia: The moderating role of misinformation concern. *New Media & Society*, 27(4), 2414-2433. <http://dx.doi.org/10.1177/14614448231212804>
- Nigmatov, A., & Pradeep, A. (2023). *The Impact of AI on Business: Opportunities, Risks, and Challenges*. Paper presented at the 13th International Conference on Advanced Computer Information Technologies (ACIT).
- Ozgun, B., & Broekel, T. (2021). The geography of innovation and technology news—An empirical study of the German news media. *Technological Forecasting and Social Change*, 167, 120692. <http://dx.doi.org/10.1016/j.techfore.2021.120692>
- Palahan, S. (2022). News Analytics for Business Sentiment Suggestion. *International Journal of Advanced Computer Science and Applications*, 13(7). <http://dx.doi.org/10.14569/IJACSA.2022.0130779>
- Pang, B., & Lee, L. (2008). Opinion mining and sentiment analysis. *Foundations and Trends® in information retrieval*, 2(1-2), 1-135. <http://dx.doi.org/10.1561/15000000011>
- Paul, S., Daga, V., Gupta, T., & Aishwarya, S. (2023). A Study on the Impact of Artificial Intelligence in Small and Medium Enterprises. *International Journal For Multidisciplinary Research*. <http://dx.doi.org/10.36948/ijfmr.2023.v05i06.11145>
- Provost, F., & Fawcett, T. (2013). *Data Science for Business*: O'Reilly.
- Rubab, S. A., & Forman Christian, C. (2023). Impact of AI on business growth. *Business and Management Review*, 14(2). <http://dx.doi.org/10.24052/BMR/V14NU02/ART-24>
- Sama, R. (2019). Impact of Media Advertisements on Consumer Behaviour. *Journal of Creative Communications*, 14(1), 54-68. <http://dx.doi.org/10.1177/0973258618822624>
- Shirsat, V. S., Jagdale, R. S., & Deshmukh, S. N. (2017). *Document Level Sentiment Analysis from News Articles*. Paper presented at the International Conference on Computing, Communication, Control and Automation (ICCUBEA).
- Soni, N., Sharma, E. K., Singh, N., & Kapoor, A. (2019). Impact of artificial intelligence on businesses: from research, innovation, market deployment to future shifts in business models. Retrieved from <http://dx.doi.org/10.48550/arXiv.1905.02092>
- Spyridou, P., & Ioannou, M. (2025). Exploring AI Amid the Hype: A Critical Reflection Around the Applications and Implications of AI in Journalism. *Societies*, 15(2), 23. <http://dx.doi.org/10.3390/soc15020023>

- Toole, J. L., Cha, M., & González, M. C. (2012). Modeling the adoption of innovations in the presence of geographic and media influences. *PLoS One*, 7(1), e29528. <http://dx.doi.org/10.1371/journal.pone.0029528>
- Vogel, M., Strina, G., Said, C., & Schmallenbach, T. (2023). *The evolution of artificial intelligence adoption in industry: Artificial Intelligence and Social Computing*. <http://dx.doi.org/10.54941/ahfe1003282>
- Waters, J., Nicolaou, N., Stefanidis, D., Efstathiades, H., Pallis, G., & Dikaiakos, M. (2021). Exploring the sentiment of entrepreneurs on Twitter. *PLoS One*, 16(7), e0254337. <http://dx.doi.org/10.1371/journal.pone.0254337>
- Yildirim, E. (2025). Does CoreWeave's disappointing IPO signal an AI bubble? Retrieved from <https://qz.com/coreweave-ipo-ai-bubble-1851773579>
- Züger, T., Kuper, F., Fassbender, J., Katzy-Reinshagen, A., & Kühnlein, I. (2023). Handling the hype: Implications of AI hype for public interest tech projects. *TATuP - Zeitschrift Für Technikfolgenabschätzung in Theorie Und Praxis*, 32(3). <http://dx.doi.org/10.14512/tatup.32.3.34>