## مستقبل صناعة الإعلام العربي في توظيف تقنيات الذكاء الاصطناعي: دراسة استشرافية (2024–2034)

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# The Future of the Arab Media Industry in Utilizing Artificial Intelligence Technologies: A Foresight Study (2024 to 2034)

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### مستقبل صناعة الإعلام العربي في توظيف تقنيات الذكاء الاصطناعي: دراسة استشرافية (2024–2034) د. محمد وسام عامر – جامعة كامبريدج، المملكة المتحدة د. عبد الله محمد أطبيقة – جامعة سرت، ليبيا الملخص

تبحث هذه الدراسة في مستقبل صناعة الإعلام العربي في الفترة من 2024 إلى 2034 في ضوء التزايد المطرد في دمج تقنيات الذكاء اللصطناعي(Al) . وتحدد الدراسة القطاعات الإعلامية الرئيسية التي يُرجح أن تتأثر بالذكاء اللصطناعي مثل: إنتاج المحتوى، وإعداد الأخبار، والتحرير، والتفاعل مع الجمهور، وتقترح استراتيجيات للتنفيذ الفعّال. وتعتمد الدراسة على منهج المسح الوصفي، مستندة إلى "النظرية الموحدة لقبول واستخدام التكنولوجيا(UTAUT) ". وتم جمع البيانات من خلال استبيان إلكتروني لعينة قصدية مكونة من 264 مشاركًا من 18 دولة عربية، شملت نخب أكاديمية ومهنيين إعلاميين عاملين في مؤسسات إعلامية عربية.

كشفت النتائج أن 70.5% من المشاركين يعتقدون أن الذكاء الاصطناعي سيقومون بأتمتة المهام الروتينية مثل كتابة الأخبار وتحرير الفيديوهات، مما يُحسّن الكفاءة. ومع ذلك، أشار 41.6% إلى أن التكاليف العالية للتنفيذ تُعد عائقًا كبيرًا. ورغم هذه التحديات، يتوقع 45.5% تأثيرًا قويًا للذكاء الاصطناعي على المشهد الإعلامي مستقبلاً، إلا أن مستوى الاستخدام الحالي لا يزال محدودًا (31.1%). ولم تُظهر النتائج وجود فروق ذات دلالة إحصائية بين المتغيرات الديموغرافية.

تُسهم هذه الدراسة علميًا في تقديم رؤية استشرافية لدور الذكاء الاصطناعي المتطور في الإعلام العربي، وتحديد فجوات التنفيذ، وتقديم رؤى عملية لصانعي السياسات وقادة المؤسسات الإعلامية لتعزيز تبنى الذكاء الاصطناعي بشكل أخلاقي وفعّال وشامل في مجال الصحافة.

**الكلمات المفتاحية**: صناعة الإعلام العربي؛ الذكاء الاصطناعي(Al) ؛ دمج التكنولوجيا؛ القطاعات الإعلامية؛ التأثير المستقبلي.

# The Future of the Arab Media Industry in Utilizing Artificial Intelligence Technologies:

A Foresight Study (2024 to 2034)

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Abstract

This study explores the future of the Arab media industry from 2024 to 2034 in light of the increasing integration of artificial intelligence (AI) technologies. It identifies key media sectors likely to be affected by AI—such as content creation, news production, editing, and audience engagement—and proposes strategies for effective implementation. The study employs a descriptive survey methodology grounded in the Unified Theory of Acceptance and Use of Technology (UTAUT). Data were collected via an electronic questionnaire from a purposive sample of 264 respondents across 18 Arab countries, including academic elites and media professionals working with Arab media institutions. Findings reveal that 70.5% of respondents believe AI will automate routine tasks like news writing and video editing, enhancing efficiency. However, 41.6% cite high implementation costs as a significant barrier. Despite these challenges, 45.5% anticipate a strong future impact of AI on the media landscape, though current usage remains limited (31.1%). No statistically significant differences were found across demographic variables. This study contributes scientifically by offering foresight into the evolving role of Al in Arab media, identifying implementation gaps, and providing actionable insights for policymakers and media leaders to foster ethical, effective, and inclusive Al adoption in journalism.

**Key words:** Arab Media Industry; Artificial Intelligence (AI); Technology Integration; Media Sectors; Future Impact

The media industry, traditionally centered on human creativity and storytelling, is undergoing a transformative revolution through the integration of artificial intelligence (AI) technologies (see Guzman & Lewis, 2024). All now performs tasks once limited to human expertise, leveraging advancements in machine learning, natural language processing, and data analytics (Khan, 2023). As digital media reshapes production and consumption, its impact is far greater than anticipated (Jenkins, 2006). Across radio, television, and film, digital strategies have shifted from auxiliary roles to becoming primary revenue drivers (Johnson, 2022). All tools, including predictive analytics, recommendation engines, and audience segmentation, are redefining global audience engagement (Manoharan, 2024). Sahota (2023) highlights the competitive race among media institutions to adopt AI technologies effectively.

While AI offers opportunities for media innovation (Nasser & Abu-Naser, 2024), it introduces challenges such as ethical concerns and cybersecurity risks, particularly privacy violations. If unaddressed, these issues may erode professional integrity. Al-Sanousi (2024) emphasizes the importance of ethical media practices rooted in journalistic codes of conduct to ensure AI's responsible use. Authors (2023) identify weak technological infrastructure as a significant barrier to AI adoption, while 82.7% of participants in Palestine and Libya anticipate AI's transformative potential for Arab media institutions.

This study foresees the future of Arab media in the AI era, focusing on opportunities, challenges, and ethics shaping the industry from 2024 to 2034. By employing a foresight approach, it aims to provide insights and recommendations for sustainable, ethical AI-driven media development in the Arab world. The study highlights AI's role in reshaping media through content creation, audience engagement, and efficiency. While global adoption progresses (Diakopoulos, 2019), Arab media lags, presenting both opportunities and challenges. This study addresses the central question: what is the future of Arab media in the AI era, and how can innovation balance ethical standards? In answering the central question, this study aims to achieve the following

main objective: To foresee the future of the Arab media industry, considering the integration of AI technologies, through a foresight study for the period from 2024 to 2034. Additionally, the study aims to achieve the following sub-objectives: 1) To identify the areas of media that will be affected by AI technologies in the future of Arab media production. 2) To examine the barriers to effectively employing AI technologies in the future. 3) To determine the level of AI adoption by Arab media institutions. 4) To propose recommendations and strategies for the future use of AI in Arab media production.

#### Al Technologies and Arab Media Institutions

In a procedural definition, this study sees Artificial Intelligence (AI) technologies refer to computer systems or programs designed to perform tasks that typically require human intelligence. These technologies leverage advanced algorithms and computational methods to simulate cognitive functions such as learning, reasoning, decision-making, problem-solving, and perception. Al technologies characterized by their ability to adapt to new data, make predictions, and respond dynamically to complex or unforeseen situations, often mimicking human behavior and thought processes (see Goodfellow, 2016; Kietzmann, Hermkens, McCarthy, & Silvestre, 2011; Russell & Norvig, 2016). The intersection of artificial intelligence (AI) and media presents transformative opportunities and challenges for Arab media institutions, as highlighted in recent studies. Al technologies have demonstrated significant potential in optimizing content production, improving journalistic efficiency, and enhancing audience engagement. For instance, (Authors) emphasized the role of economic factors, government support, and technological infrastructure in shaping AI adoption in Libya and Palestine, despite barriers such as weak infrastructure and limited resources. Similarly, Imam (2024) explored AI's dual impact in Egyptian newsrooms, showing how it streamlines production and automates routine tasks while identifying challenges such as public distrust and resistance to technological change. Saleh (2024) found that Al technologies

positively correlate with improved organizational performance in Arab media, provided those resources, training, and infrastructure are in place. These findings reflect the uneven integration of Al across Arab media, driven by structural and societal factors.

However, these studies also underscore the critical challenges to AI integration in Arab media, including deficiencies in infrastructure, financial constraints, ethical concerns, and societal resistance. Mohammad (2024) highlighted the lack of infrastructure and professional training in Saudi Arabian newsrooms, a common theme in Arab media, where digital literacy and organizational readiness remain underdeveloped. Badawi (2024) emphasized the transformative potential of AI in visual content production, while AI-Desouky (2023) demonstrated its critical role in combating misinformation through fact-checking tools. These advancements, however, require alignment with journalistic values to preserve public trust. Ibrahim (2023) pointed to ethical and professional challenges in Iraq, including inadequate technical skills and the dominance of traditional practices, while Bahri (2023) revealed AI's ability to enhance journalistic productivity, accuracy, and audience engagement in Egyptian newsrooms.

Addressing these challenges requires a strategic approach to AI integration. Investments in infrastructure and workforce training are key to building readiness. Additionally, government support, regulations, and technological advancements are crucial to advancing AI adoption in less-developed markets. AI-powered tools like automated fact-checking, audience segmentation, and content personalization can boost efficiency and counter misinformation but must align with ethical standards to maintain integrity.

The future of AI in Arab media hinges on balancing innovation with societal and ethical concerns. While AI drives advancements in visual content and audience engagement, its success depends on supportive policies, infrastructure, and overcoming resistance to change. By adopting a balanced approach that upholds

journalistic ethics, Arab media can leverage Al to create a dynamic and trustworthy media landscape.

2. Theoretical Framework—UTAUT: Explain how each construct specifically maps onto your survey design and analysis.

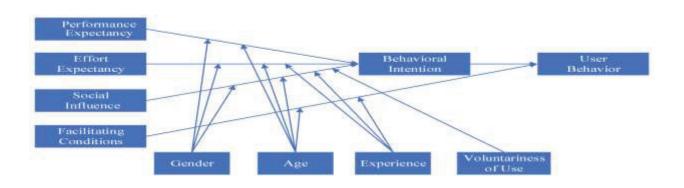
Research Theory: Unified Theory of Acceptance and Use of Technology (UTAUT)

This study is based on the Unified Theory of Acceptance and Use of Technology (UTAUT), a well-established model for studying technology adoption and barriers. Proposed in 2003, UTAUT was validated by Venkatesh and Morris using longitudinal data on IT users. The model identifies behavioral intention as the key determinant of technology use, influenced by four constructs: performance expectancy, effort expectancy, social influence, and facilitating conditions, moderated by age, gender, experience, and voluntariness of use (Marikyan & Papagiannidis, 2021). Each UTAUT construct was directly mapped onto the survey instrument used in this study. Performance Expectancy items measured the perceived usefulness of AI tools in improving media production quality and efficiency. Effort Expectancy questions assessed perceived ease of learning and using AI tools. Social influence was captured through items on peer, managerial, and institutional encouragement to adopt AI. Facilitating conditions were measured through availability of resources, training, and technical support.

UTAUT is highly relevant for analyzing AI adoption in Arab media institutions, as it identifies key constructs—Effort Expectancy, Performance Expectancy, Facilitating Conditions, and Social Influence—that assess factors like ease of AI use, expected benefits, infrastructure, and cultural influences shaping attitudes. Despite challenges such as limited infrastructure, financial constraints, and organizational readiness, UTAUT enables a nuanced exploration of these barriers and drivers (see AI-Mimar, Qamar, and Mir, 2023; EI Nemr, 2024; Marikyan, & Papagiannidis, 2021). The model's moderating variables—Age, Gender, Experience, and Voluntariness of Use—offer further insights into demographic and contextual factors. Age and experience reflect differing perspectives on AI, while gender highlights variations in engagement.

Voluntariness of Use is critical in hierarchical media environments, where autonomy may be restricted. By integrating these dimensions, UTAUT provides a comprehensive framework for understanding and predicting AI adoption in Arab media, offering practical and theoretical insights into Al's transformative potential (Akinnuwesi et al., 2022; Dwivedi, Rana, Jeyaraj, Clement, and Williams, 2019; Terblanche & Kidd, 2022). Compared to other models like Diffusion of Innovations and the Technology Acceptance Model (TAM), UTAUT offers a broader and empirically stronger framework for this study. While TAM focuses primarily on perceived usefulness and ease of use, and Diffusion of Innovations emphasizes innovation characteristics and adopter categories, UTAUT integrates these with additional social and facilitating dimensions. This makes it particularly suitable for media contexts in the Arab world, where structural constraints and social dynamics significantly influence technology use. Furthermore, UTAUT allows for comparative insight across countries with varying digital capacities. In nations with strong digital infrastructure, facilitating conditions may play a less dominant role, whereas in less digitally developed contexts, such as parts of Libya or Yemen, these same conditions can become critical barriers. This cross-contextual flexibility enhances UTAUT's explanatory power in the current study. UTAUT provides the most comprehensive lens for exploring AI adoption in Arab media institutions, especially given its ability to integrate personal, social, and infrastructural variables into a unified predictive model.

Figure 1 illustrates the UTAUT framework (Wang et al., 2021)



#### Methodological Note

This research is classified as descriptive, encompassing survey (exploratory), developmental (prospective), relational (correlational), and content analysis, all relying on survey methodology (see Deacon, Pickering, Golding, & Murdock, 2021). Data collection utilized an electronic questionnaire, distributed to the study's target sample. The study focuses on the future of the Arab media industry through the lens of artificial intelligence technologies. A purposive sample was employed, selecting 264 participants from academic elites and media practitioners based on traits relevant to the study. Participants were distributed as follows: Libya (36), Egypt (42), Mauritania (4), Lebanon (14), Qatar (8), Syria (10), Oman (6), Tunisia (12), Yemen (10), Morocco (12), Kuwait (16), Iraq (18), Sudan (12), Saudi Arabia (12), Algeria (10), Bahrain (4), UAE (18), and Jordan (20). Academic elites comprised 156 participants (59.1%), and media practitioners 108 (40.9%). Purposive sampling was justified in this study due to the specialized nature of the research topic, which required informed perspectives from individuals with direct experience in media and academic fields relevant to Al integration. This non-random method ensured the inclusion of participants who possess the knowledge and insight necessary to provide meaningful responses aligned with the study's objectives. However, the use of purposive sampling presents limitations concerning the generalizability of findings. Since participants were not selected randomly, the results may not fully represent the broader population of media professionals and academics across the Arab world. Therefore, caution should be exercised in extrapolating these findings beyond the sampled group.

The questionnaire's validity was reviewed by 10 media experts from Egypt, the UAE, Saudi Arabia, Jordan, and Algeria. Based on their feedback, structural and linguistic modifications were made for clarity. Reliability was assessed using Cronbach's Alpha via SPSS V26, yielding a coefficient of 0.886, confirming high internal consistency.

#### **Research Questions**

To achieve these objectives, this study seeks to answer the following questions:

- 1. Which areas of media will be affected by AI technologies in the future of Arab media production?
- 2. What is the impact of AI technologies on improving media production efficiency?
- 3. What is the impact of AI technologies on improving media content quality?
- 4. To what extent will the future of Arab media production be affected by the integration of AI technologies?
- 5. What barriers does the Arab media industry face that could hinder the effective integration of AI technologies in the future?
- 6. What is the level of Al adoption among Arab media institutions?
- 7. What performance outcomes are expected if AI technologies are integrated into Arab media production in the future?
- 8. What efforts are required to integrate AI technologies into Arab media production in the future?
- 9. What resources and facilities are available to support the integration of Al technologies into Arab media production in the future?

#### Research Hypotheses

In answering these questions, this study also aims to test the following two hypotheses:

- There are no statistically significant differences in the extent to which the future
  of the Arab media industry will be affected by the integration of AI technologies,
  attributed to variables such as gender, educational level, age, the institution
  they work for, and years of experience.
- 2. There are no statistically significant differences in the extent of Al adoption by Arab media institutions, attributed to variables such as gender, educational level, age, the institution they work for, and years of experience.

#### Field Study Results

#### First: Results Related to the Research

Table (1) shows the areas of media that will be affected by the future of the Arab media industry considering the use of artificial intelligence technologies (N=264).

	Frequency	Percentage
Media Areas	(T)	(%)
Publishing media content on social media platforms	100	40.0
faster and more effectively	130	49.2
Creating augmented reality media content, such as 3D	128	48.5
images and videos	120	40.5
Predicting audience behavior, such as their future	124	47
expectations and needs	124	47
Creating media content for virtual reality, such as	122	46.2
games and virtual tours	122	40.2
Creating personalized media content for each user	120	45.5
based on their interests and behavior	120	40.0
Creating interactive media content, such as games and	118	44.7
quizzes	110	77.7
Video editing	116	43.9
Writing news	114	43.2
Measuring the impact of media content on the	114	43.2
audience, such as views and comments	114	45.2
Producing television programs	112	42.4
Analyzing audience data, such as their interests and	112	42.4
behavior, to better understand their needs	112	72.7
Improving the quality of live broadcasting and adding	110	41.7
new features such as real-time translation	110	71.7
Enhancing transparency in the media industry by	96	36.4
revealing AI algorithms used in media content creation	3	00.4
Combating fake news by analyzing media content and	94	35.6
detecting misleading information	<b>5</b> 7	00.0
Protecting users' personal data by ensuring it is not	86	32.6
used without authorization	00	02.0

Table 1: The areas of media that will be affected by the future of the Arab media industry

The results in Table (1) highlight the transformative potential of AI technologies in reshaping the Arab media industry across five key dimensions. First, Faster and More Effective Dissemination (49.2%) emerges as the most recognized benefit, with respondents emphasizing AI's ability to enhance the speed, precision, and reach of content distribution on social media platforms, meeting real-time audience demands. Second, Creation of Augmented Media Content (48.5%) is identified as a significant trend, with AI enabling the production of immersive and dynamic content, such as 3D visuals and videos, catering to audiences seeking interactive digital experiences. Third, Enhancing Transparency (36.4%) is seen as a means to address concerns about media bias by revealing the algorithms and methodologies behind content creation, fostering greater trust. Fourth, Combatting Fake News (35.6%) highlights AI's critical role in detecting misinformation, reinforcing journalistic integrity, and combating disinformation. Finally, Protecting Personal Data (32.6%) reflects growing public awareness of privacy concerns and AI's potential to safeguard user data by ensuring ethical media practices.

The findings suggest that AI technologies offer both operational efficiencies and strategic advantages, particularly in dissemination and content creation. However, the relatively lower emphasis on transparency, fake news mitigation, and data protection signals areas requiring greater investment and development. This underscores the dual challenge of utilizing AI for efficiency while meeting societal demands for ethical accountability and trust in media practices.

Table (2) shows the positive effects of utilizing artificial intelligence (AI) technologies to improve the efficiency of media production.

Positive Effects of AI on Media Production Efficiency	Agree	Neutral	Disagree	Mean	Standard Deviation
Automating routine tasks such as news writing and video editing, saving time and effort for journalists and media professionals	186 (70.5%)	34 (12.9%)	44 (16.7%)	1.46	0.766

Increasing the speed of media production, enabling media organizations to keep up with events and developments more quickly	176 (66.7%)	72 (27.3%)	16 (6.1%)	1.39	0.602
Reducing media production costs, enabling media organizations to invest in other areas such as content and creativity	158 (59.8%)	76 (28.8%)	30 (11.4%)	1.52	0.693

Table 2: Positive Effects of Utilizing Al Technologies to Improve Media Production

Efficiency

The findings from Table (2) reveal strong agreement on the positive impact of Al technologies in enhancing media production efficiency. A majority (70.5%) highlighted Al's ability to automate repetitive tasks, such as news writing and video editing, freeing media professionals to focus on creative and strategic activities. This automation saves time, enhances efficiency, and improves content quality. Additionally, 66.7% emphasized Al's role in speeding up production processes, helping organizations remain competitive by responding quickly to events and meeting audience demands for timely content. Furthermore, 59.8% noted Al's ability to lower production costs, allowing resources to be redirected toward innovation and creative storytelling, supporting sustainability in the media landscape.

These findings demonstrate Al's transformative potential by improving efficiency, speed, and cost-effectiveness. Consistency with prior studies, such as Haddad and Ismat (2023), reinforces Al's central role in shaping future media operations. Participants agree that Al enables organizations to optimize resources, adapt to market needs, and maintain a competitive edge while fostering innovation in content creation and delivery.

Table (3) shows the positive effects of utilizing artificial intelligence (AI) technologies to improve the quality of media content.

Positive Effects of AI on Media Content Quality	Agree	Neutral	Disagree	Mean	Standard Deviation
Creating enhanced reality media content, such as 3D images and videos	126 (47.7%)	104 (39.4%)	34 (12.9%)	1.65	0.699
Creating personalized media content for each user, based on their interests and behavior	124 (47.0%)	112 (42.4%)	28 (10.6%)	1.64	0.669
Creating interactive media content, such as games and quizzes	148 (56.1%)	86 (32.6%)	30 (11.4%)	1.55	0.691

Table 3: Positive Effects of Utilizing Al Technologies to Improve Media Content

Quality

The findings from Table (3) highlight AI's potential to significantly enhance media content quality through personalization, interactivity, and immersive experiences. Nearly half of participants (47.0%) agreed that AI could generate personalized content tailored to users' interests and behaviors, improving relevance and user satisfaction. Additionally, 56.1% recognized AI's capacity to create interactive content, such as games and quizzes, emphasizing its ability to transform passive consumption into active audience engagement. Moreover, 47.7% noted AI's role in producing augmented reality content, like 3D images and videos, which enrich user experiences and foster greater audience interaction.

These findings underscore Al's transformative role in delivering tailored, interactive, and immersive media content. Participants increasingly recognize how Al can elevate the media experience, making it more engaging and innovative in today's competitive digital landscape.

Table (4) shows the positive effects of utilizing artificial intelligence (AI) technologies on expanding the reach to the audience.

Positive Effects of AI on Expanding Audience Reach	Agree	Neutral	Disagree	Mean	Standard Deviation
Predicting audience behavior, such as their expectations and future needs	108 (40.9%)	100 (37.9%)	56 (21.2%)	1.80	0.766
Creating interactive media content, such as games and quizzes	128 (48.5%)	102 (38.6%)	34 (12.9%)	1.64	0.700
Publishing media content on social media faster and more effectively	144 (54.5%)	78 (29.5%)	42 (15.9%)	1.61	0.748

Table 4: Positive Effects of Utilizing Al Technologies to Expand Audience Reach:

The findings from Table (4) emphasize AI's transformative role in expanding audience reach and engagement. A majority of respondents (54.5%) highlighted AI's ability to enhance the speed and efficiency of content dissemination on social media platforms, enabling media organizations to meet growing demands for timely and relevant content. By leveraging AI technologies, organizations can broaden their audience reach and improve the effectiveness of their distribution strategies. Additionally, 48.5% of participants acknowledged AI's potential to create interactive content, such as games and quizzes, which plays a crucial role in fostering deeper audience engagement through dynamic and engaging experiences.

Furthermore, 40.9% of respondents recognized Al's ability to predict audience behavior, offering valuable insights into their preferences, expectations, and evolving needs. This predictive capability equips media organizations to tailor content that resonates with audiences, ensuring alignment with their interests. Collectively, these findings highlight Al's critical contribution to broadening content reach and deepening engagement by leveraging interactivity and behavior-driven insights. Integrating these capabilities allows media organizations to adapt more effectively to audience demands, delivering personalized and impactful media experiences.

Table (5) shows the positive effects of utilizing artificial intelligence (AI) technologies on enhancing media ethics.

Positive Effects of AI on Enhancing Media Ethics	Agree	Neutral	Disagree	Mean	Standard Deviation
Protecting users' personal data by ensuring it is not used without authorization	90 (34.1%)	112 (42.4%)	62 (23.5%)	1.89	0.754
Enhancing transparency in the media industry by revealing the AI algorithms used in creating media content	96 (36.4%)	108 (40.9%)	60 (22.7%)	1.86	0.759
Combating fake news by analyzing media content and detecting misleading information	104 (39.4%)	106 (40.2%)	54 (20.5%)	1.81	0.753

Table 5: Positive Effects of Utilizing Al Technologies on Enhancing Media Ethics

The findings from Table (5) explore the perceived potential of AI technologies to enhance media ethics, revealing mixed opinions and significant neutrality among respondents. For example, 42.4% of participants remained neutral on AI's ability to protect users' personal data by preventing unauthorized use, reflecting uncertainty regarding its role in addressing privacy concerns. Similarly, 40.9% expressed neutrality on whether AI could enhance transparency in the media industry by disclosing the algorithms used to create content, indicating hesitancy about AI's capacity to foster openness and accountability. Additionally, 40.2% were neutral about AI's effectiveness in combating fake news through content analysis and detection of misleading information, highlighting doubts about its reliability in addressing misinformation.

These results suggest a recognition of AI's potential to improve ethical practices in media, particularly regarding data protection, transparency, and misinformation mitigation. However, the pervasive neutrality indicates a lack of consensus or confidence in AI's practical impact. This may stem from limited knowledge or exposure to AI applications among respondents, underscoring the need for targeted awareness campaigns and educational initiatives. By promoting a deeper understanding of AI's capabilities and limitations, media professionals and

stakeholders can better leverage AI technologies to uphold and enhance ethical standards in media practices, fostering trust and accountability in the industry.

Table (6) shows to what extent the future of the Arab media production will be affected by using artificial intelligence (AI) technologies.

Degree of Impact	Frequency (N)	Percentage (%)
Very Great Extent	120	45.5%
Great Extent	70	26.5%
Moderate Extent	52	19.7%
Low Extent	12	4.5%
Very Low Extent	10	3.8%
Total	264	100%

Table 6: views on the future of the Arab media production will be affected using artificial intelligence (AI) technologies.

The responses in Table (6) indicate that the majority of participants believe Al technologies will have a profound impact on the future of the Arab media industry. Notably, 45.5% of respondents anticipate a very high impact, while 26.5% predict a high impact. A smaller proportion, 19.7%, expect a moderate impact, whereas only 4.5% foresee a low impact, and just 3.8% believe the impact will be very low. These results align with findings from Shams El-Din (2022), which highlighted the increasing influence of AI technologies on media professionals and industry dynamics. The findings suggest widespread recognition of AI's transformative potential in the Arab media industry, reflecting an understanding of its capacity to reshape content creation, distribution, and audience engagement. However, they also reveal underlying concerns, primarily related to the economic costs of adopting Al technologies and fears among media professionals about potential job displacement. The strong consensus on AI's significant impact underscores a growing awareness of its importance in shaping the future of media. Nonetheless, the apprehensions regarding costs and workforce disruption indicate a need for strategic planning and robust support systems. These measures would enable media organizations to integrate AI effectively, ensuring that its benefits are

maximized while addressing challenges related to financial investment and workforce adaptation.

Table (7) illustrates the barriers that might hinder the effective implementation of AI technologies in the future in the Arab media industry.

Barriers to the Adoption of Al Technologies in the	Approval	Mean	Standard
Arab Media Industry	Ratings	Score	Deviation
High cost of AI technologies for some Arab media	110	1.78	0.755
institutions	(41.6%)	1.70	0.755
Use of AI technologies leads to job loss in the	126	1.76	0.811
media industry	(47.7%)	1.70	0.011
Al technologies are used to spread fake news	130	1.75	0.670
and media misinformation	(49.3%)	1.75	0.070
Al algorithms suffer from bias, affecting the	104	1.74	0.684
quality of media content	(39.4%)	1.74	0.004
Some Arab countries face cultural challenges in	132	1.70	0.781
adopting new technologies like Al	(50.0%)	1.70	0.701
Al technologies raise concerns about privacy and	122	1.67	0.695
the use of personal data	(46.2%)	1.07	0.033
Many Arab media institutions suffer from a lack of	162	1.61	
investment in AI technologies, limiting their ability	(61.4%)		0.835
to adopt them effectively	(01.470)		
Many Arab countries lack laws and regulations to	148	1.57	0.712
govern the use of AI technologies in media	(56.0%)	1.57	0.7 12
The media workforce needs retraining to develop	142	1.56	0.668
new skills for dealing with AI technologies	(53.7%)	1.50	0.008
Many Arab countries lack the necessary digital	140		
infrastructure to operate AI technologies		1.55	0.634
efficiently	(53.0%)		
The Arab media industry suffers from a lack of	166		
expertise in AI, limiting its ability to use these	(62.9%)	1.49	0.704
technologies effectively	(02.370)		

Table 7: significant barriers to the future adoption of AI technologies in the Arab media industry

The data in Table (7) identifies key barriers to adopting AI technologies in the Arab media industry. The most significant obstacle, cited by 62.9% of respondents, is the lack of AI expertise, with a mean score of 1.49 and a standard deviation of 0.704. Similarly, 61.4% pointed to insufficient investment in AI, limiting media institutions' ability to adopt these technologies, with a mean score of 1.61 and a standard deviation of 0.835. Another critical barrier is the absence of laws and regulations governing Al use, noted by 56.0% of respondents, with a mean score of 1.57 and a standard deviation of 0.712. Additional challenges include privacy concerns (46.2%), cultural resistance (50.0%), and fears of job losses due to Al adoption (47.7%). These findings align with Wafi (2023), who highlighted economic, regulatory, cultural, and skills-related challenges as major obstacles to implementing Al in Arab media. High costs make Al technologies inaccessible to some organizations, while concerns about job displacement, algorithmic bias, and the spread of misinformation further hinder adoption. Addressing these barriers is essential for integrating AI into the Arab media industry. Solutions must focus on building expertise, increasing investments, developing regulatory frameworks, and addressing privacy and cultural concerns to ensure Al's effective and ethical deployment in media organizations.

Table (8) shows the degree of AI technology usage by Arab media institutions.

Degree of Al Technology Usage by Media Institutions	Frequency (T)	Percentage (%)
Very Low Degree	82	31.1
Medium Degree	74	28.0
Low Degree	60	22.7
Very High Degree	26	9.8
High Degree	22	8.3
Total	264	100

Table 8: The degree of AI technology usage by Arab media institutions

The data in Table (8) reveals that AI usage in Arab media institutions remains limited. A significant proportion of respondents, 31.1%, reported very low usage, while

28.0% indicated medium usage. Additionally, 22.7% noted low usage, and only 9.8% observed very high AI implementation, with 8.3% reporting high usage. These findings suggest that AI adoption in the Arab media sector is still minimal, with most institutions only utilizing AI to a limited extent.

This low adoption can be attributed to several challenges facing media organizations. The high percentage of respondents reporting low or very low usage likely reflects reluctance to invest in AI due to concerns about high costs, lack of technical expertise, and cultural resistance to new technologies. Additionally, worries about algorithmic bias and job displacement may contribute to the cautious approach toward AI adoption in the media industry.

Table (9) shows the expected performance of AI technologies in the development of the Arab media industry if adopted in the future.

Expected Performance of Al Technologies in Media Development	Agree (T)	%	Neutral (T)	%	Disagree (T)	%	Mean	Standard Deviation
Al technologies will be cost-effective for the Arab media industry	130	49.2%	76	28.8%	58	21.9%	1.93	0.712
Al technologies will align with the needs of the Arab media industry	126	47.7%	88	33.3%	50	18.9%	1.86	0.711
Al technologies will make it easier for journalists and media professionals to use them	150	56.8%	78	29.5%	36	13.6%	1.73	0.892
Al technologies will be easy to use for users	124	46.9%	86	32.5%	54	20.4%	1.73	0.780
There will be clear benefits to using Al technologies in the Arab media industry	122	46.2%	112	42.4%	30	11.3%	1.65	0.677

Table 9: positive outlook towards the potential benefits of AI technologies for the Arab media industry

The results in Table (9) indicate a generally positive outlook regarding the potential benefits of AI technologies in the Arab media industry. A majority of respondents, 56.8%, agree that AI will simplify tasks for journalists and media professionals, recognizing its potential to streamline media production processes. Additionally, 49.2% believe AI will be cost-effective, suggesting expected financial benefits in resource allocation. Moreover, 47.7% think AI will align with the specific needs of the Arab media industry, indicating confidence in its sector-specific applicability.

Furthermore, 46.9% of participants believe AI will be user-friendly, while 46.2% agree that it will offer clear benefits. These findings reflect an optimistic view of AI's usability and advantages. However, variations in opinions, particularly concerning ease of use and cost, highlight a need for targeted training and support. Despite these concerns, the overall results emphasize that AI is seen as having the potential to significantly improve media practices in the Arab world, provided the necessary resources and guidance are available.

Table (10) shows the expected effort required for AI technologies to develop the Arab media industry if adopted in the future.

Expected Effort for Al Technologies in Media Development	Agree (T)	%	Neutral (T)	%	Disagree (T)	%	Mean	Standard Deviation
It will require significant effort to raise awareness								
about the benefits of Al	100	E4 E0/	70	00 50/	50	10.00/	4 07	0.777
technologies among	136	51.5%	78	29.5%	50	18.9%	1.67	0.777
workers in the Arab								
media industry								
It will require significant								
effort to integrate Al								
technologies into the	124	46.9%	106	40.1%	34	12.8%	1.66	0.697
current workflow of the								
Arab media industry								

It will require significant								
effort to overcome the								
ethical and legal								
challenges associated	136	51.5%	84	31.8%	44	16.6%	1.65	0.751
with using Al								
technologies in the Arab								
media industry								
It will require significant								
effort to ensure the								
responsible and ethical	146	55.3%	70	26.5%	48	18.1%	1.63	0.776
use of AI technologies in								
the Arab media industry								

Table 10: expected effort required for AI technologies to develop the Arab media industry

The results in Table (10) highlight the widespread recognition that integrating and responsibly using AI technologies in the Arab media industry will require substantial effort. A majority of respondents (55.3%) agree that ensuring the ethical use of AI will demand significant effort, indicating shared concerns about its potential ethical implications. Additionally, 51.5% of participants believe considerable effort is needed to raise awareness about AI's benefits among media professionals, emphasizing the need for education on its advantages. Similarly, 51.5% also agree that overcoming ethical and legal challenges related to Al in media will require considerable effort, reflecting the complexities of regulating Al applications. Furthermore, 46.9% of respondents agree that integrating Al into existing workflows will require significant effort, highlighting the challenges of adapting current systems to accommodate new technologies. Overall, these results underscore the need for focused efforts on awareness-building, ethical considerations, and integration into media practices. While the potential benefits of Al are widely acknowledged, addressing these challenges will be critical for ensuring its effective and responsible implementation in the Arab media industry.

Table (11) shows the available facilities to support AI technologies in the development of the Arab media industry if adopted in the future.

Available Facilities for Al Technologies in Media Development	Agree (T)	%	Neutral (T)	%	Disagree (T)	%	Mean	Standard Deviation
Many companies offer Al solutions tailored to the needs of the Arab media industry	110	41.6%	86	32.5%	68	25.7%	1.93	0.764
Many non-profit organizations provide support and advice to the Arab media industry on using Al technologies	128	48.4%	70	26.5%	66	25.0%	1.98	0.720
There are many conferences and events held regularly to discuss the latest developments in AI and their impact on the Arab media industry	106	40.1%	96	36.3%	62	23.4%	1.87	0.766
Many social media groups allow journalists and media professionals to exchange information and experiences on using AI technologies	112	42.4%	100	37.8%	52	19.7%	1.82	0.739

Table 11: available facilities to support AI technologies in the development of the Arab media industry

The findings in Table (11) indicate that several support systems and resources are available to assist the Arab media industry in adopting and utilizing AI technologies, though awareness and engagement with these resources vary among respondents. Nearly half (48.4%) agree that non-profit organizations provide support and guidance on AI technologies, highlighting their role in facilitating the adoption process. Additionally, 41.6% of participants believe that AI solutions tailored to the

specific needs of the Arab media industry are available, suggesting a growing market for sector-specific technological solutions. Furthermore, 42.4% of respondents note the presence of social media groups where media professionals exchange information on AI, indicating informal but valuable channels for collaboration. Similarly, 40.1% agree that conferences and events regularly address AI's impact on the Arab media industry, demonstrating the importance of organized gatherings for raising awareness and encouraging discussions. While these support systems exist, a significant portion of respondents remain neutral or disagree on the level of support available. This suggests that barriers to widespread awareness or engagement with these resources may exist, indicating a need for more effective promotion and facilitation of AI adoption in the Arab media sector.

Table (12) shows the social impacts of AI technologies on the development of the Arab media industry if adopted in the future.

Social Impact of Al Technologies in Media Development	Agree (T)	%	Neutral (T)	%	Disagree (T)	%	Mean	Standard Deviation
The community will reward institutions that use AI responsibly and ethically	132	50%	74	28.0%	58	21.9%	1.94	0.707
The community will accept the use of AI in the workplace significantly	118	44.6%	94	35.6%	52	19.7%	1.84	0.729
The community will encourage the use of Al in the workplace to improve productivity and efficiency	104	39.3%	102	38.6%	58	21.9%	1.83	0.763

Table 12: the social impacts of AI technologies on the development of the Arab media industry

The findings in Table (12) reveal a growing optimism about the use of AI technologies in the media industry, particularly when adopted responsibly and ethically. Half of the respondents (50%) agree that institutions implementing AI ethically will be rewarded, reflecting a belief that the community values ethical AI practices. Additionally, 44.6% of participants believe the community will accept the widespread use of AI in the workplace, indicating increasing comfort with AI integration into daily operations. Furthermore, 39.3% agree that the community will encourage AI use to enhance productivity and efficiency, highlighting recognition of AI's potential to streamline operations and improve output. Overall, these results suggest growing societal acceptance of AI in the media industry, with an emphasis on its ethical use and positive impact on efficiency and productivity. The expectation that responsible AI adoption will be rewarded indicates optimism about the technology's role and its ethical application in the sector.

Table (13) shows the behavioral intentions regarding AI technologies in the development of the Arab media industry if adopted in the future.

Behavioral Intentions for Al Technologies in Media Development	Agree (T)	%	Neutral (T)	%	Disagree (T)	%	Mean	Standard Deviation
I will use AI technologies to measure the impact of my work	114	43.1%	102	38.6%	48	18.1%	1.75	0.745
I will use AI technologies to create creative content	126	47.7%	96	36.3%	42	15.9%	1.68	0.734
I will use AI technologies to communicate with the audience more effectively	132	50%	88	33.3%	44	16.6%	1.67	0.748
I will use AI technologies to collect and analyze data	140	53%	80	30.3%	44	16.6%	1.64	0.754

Table 13: the behavioral intentions regarding AI technologies in the development of the Arab media industry

The findings from Table (13) highlight a clear trend towards adopting AI technologies for both practical and creative purposes in the Arab media industry. Over half of the respondents (53%) expressed an intention to use AI for data collection and analysis, underscoring its potential to support informed decision-making and streamline operations. Additionally, 47.7% agreed that AI would significantly contribute to creative content generation, highlighting its role in enhancing innovation within the media sector. Furthermore, 50% of participants indicated their intention to use AI to improve communication with their audience, reflecting an understanding of its potential for fostering better engagement. Another significant finding is that 43.1% of respondents agreed that AI would help measure the impact of their work, indicating awareness of the importance of tracking media performance to improve results. Overall, these results suggest strong confidence in AI's ability to transform various aspects of media production, from content creation to audience engagement and performance evaluation, emphasizing its growing influence on the future of the Arab media industry.

Second: Demographic Data Analysis and Statistical Results:

First: Demographic Data

Table 14: Demographic Data of the Sample

Variable	Description	N	%
Gender	Male	158	59.8
Gender	Female	106	40.2
	30 to less than 35 years	40	15.2
Age	35 to less than 40 years	60	22.7
Age	40 to less than 45 years	48	18.2
	45 years and above	116	43.9
	Master's Degree	62	23.5
Educational Level	Doctorate	112	42.4
	Post-doctorate	90	34.1
	5 to less than 10 years	70	26.5
Years of Experience	10 to less than 15 years	74	28
	15 years and above	120	45.5
Total		264	100

Table 14: Demographic Data of the Sample

The results from Table 14 offer valuable context for interpreting the study's findings by presenting a comprehensive view of the sample's demographic composition. The gender distribution is relatively balanced, with 59.8% male and 40.2% female respondents, ensuring diverse perspectives on Al's impact in the Arab media industry. Although slightly more male participants were surveyed, the significant proportion of female respondents ensures that both genders' viewpoints are considered. Regarding age, 43.9% of participants are aged 45 or older, suggesting the sample is mainly composed of senior professionals with extensive industry experience. This group's insights are crucial for assessing Al's potential in shaping the media landscape. Additionally, 41% of respondents are aged 35-45 years, offering a balance of experience and forward-thinking views on Al's future role. Younger participants (aged 30-35) contribute modern, tech-savvy perspectives on Al's impact.

The study's participants are highly educated, with 42.4% holding a PhD and 34.1% possessing post-doctoral qualifications. This high level of academic attainment enhances the credibility of the study, ensuring that the insights are based on a thorough understanding of media trends, technological innovations, and Al's broader implications. Furthermore, 45.5% of respondents have 15 or more years of experience in the industry, providing long-term perspectives on media challenges and opportunities. The 28% with 10 to 15 years of experience offer additional depth to the study. Together, these educational and professional characteristics suggest that the respondents possess a high level of expertise, enabling them to provide informed views on the adoption and integration of Al in the Arab media industry.

In conclusion, the demographic diversity—across gender, age, education, and career stage—ensures the study reflects a broad range of perspectives. These professionals, with their knowledge and experience, are well-equipped to evaluate Al's role in media, making the findings both credible and relevant for understanding Al's potential impact on the future of the Arab media industry.

Table 15: Characteristics of Academic Elites and Communication Professionals in Arab Media Institutions According to the Institutions They Work For

Institution Type	N	%
University	156	59.1
News Website	16	6.1
Digital Content Production Agency	16	6.1
Social Media Networks	14	5.4
Satellite Channel	12	4.5
Audio Radio	12	4.5
News Agency	12	4.5
Print Newspaper	10	3.8
Online Radio	8	3
Online Newspaper	8	3
Total	264	100

Table 15: Characteristics of Academic Elites and Communication Professionals in Arab Media Institutions

The results provide a valuable overview of the distribution of academic elites and communication professionals across various sectors of the Arab media industry. A majority of respondents (59.1%) work in universities, reflecting a strong academic presence in the sample. This suggests that many participants hold research, teaching, and leadership roles, offering a scholarly perspective on Al integration in the media industry. The prominence of academics also highlights the potential influence of universities in shaping the adoption and regulation of emerging technologies like Al. A smaller portion of the sample (6.1%) works in news websites and digital content production agencies, offering insights into the practical aspects of media production such as digital journalism, content creation, and multimedia editing. Their experiences are relevant for understanding the day-to-day challenges and opportunities in implementing AI in content production and media distribution. Another notable segment (5.4%) works in social media networks, an essential area in modern media transformation. This group's insights into Al applications in personalized content delivery, audience targeting, and algorithmic moderation are crucial for understanding Al's impact on social media engagement and content

distribution. The remaining respondents are spread across traditional media sectors: 4.5% in satellite channels, audio radio, and news agencies, and 3.8% in print newspapers. While these sectors are increasingly adopting AI for content automation and operational efficiency, their smaller representation indicates that digital and academic sectors may have more influence on AI adoption discussions. Finally, 3% of respondents work in online radio and newspapers, reflecting the shift toward digital platforms in traditional media. The distribution of professionals across these diverse sectors illustrates the varied roles AI will play in transforming the Arab media industry, with distinct perspectives from academic elites, digital content producers, and traditional media professionals.

#### Third: Hypothesis Testing

First Hypothesis: "There are no statistically significant differences between the degree to which the future of Arab media will be affected by the use of Al technologies due to the variables (gender, educational level, age, the institution they work for, and years of experience)." To test this hypothesis, One-Way ANOVA was used to check for significance between the sample groups regarding the degree to which the future of Arab media will be affected by Al technologies. The data analysis revealed the following results, as shown in Table No. (16).

Table 16: Differences Between Respondents Regarding the Degree to Which the Future of the Arab Media Industry Will Be Affected Using Artificial Intelligence Technologies Based on Gender, Educational Level, Years of Experience, Institution, and Age.

I Variable I	Sources of		Degrees of		F Value	Significance	p-value	Significance
	Difference	Squares	Freedom	Square		Level	p ::	
	Between	1.232	4	0.308	1.283	0.280	Not	
	Groups	1.232	4	0.306	1.203	0.200	Significant	
Gender	Within	30.488	127	0.240				
	Groups	30.400	121	0.240				
	Total	31.720	131					

Educational	Between Groups	0.852	4	0.213	0.367	0.832	Not Significant
Level	Within Groups	73.663	127	0.580			
	Total	74.515	131				
Years of	Between Groups	0.481	4	0.120	0.170	0.953	Not Significant
Experience	Within Groups	89.784	127	0.707			
	Total	90.265	131				
	Between Groups	38.855	4	9.714	1.183	0.322	Not Significant
Institution	Within Groups	1043.228	127	8.214			
	Total	1082.083	131				
Age	Between Groups	3.371	4	0.843	0.655	0.625	Not Significant
	Within Groups	163.538	127	1.288			
	Total	166.909	131				

Table 16: Differences between Respondents Regarding the Degree to Which the

Future of the Arab Media Industry

The analysis of Table 16 reveals that there is no statistically significant relationship between the degree to which the future of the Arab media industry will be influenced using artificial intelligence technologies and demographic or professional variables such as gender, educational level, age, institution, and years of experience. This suggests that perceptions regarding the impact of AI on the industry's future are broadly consistent across diverse groups, regardless of their background or professional standing. Consequently, the null hypothesis is accepted, indicating that these variables do not lead to significant differences in how the future impact of AI technologies is perceived within the Arab media sector.

Second Hypothesis: The second hypothesis states that there are no significant differences between the degree to which Arab media institutions use artificial intelligence technologies, according to variables such as gender, educational level, age, institution, and years of experience. To test this hypothesis, one-way ANOVA

analysis was used to determine the significance of differences between groups in terms of the degree of AI use by Arab media institutions. The data analysis, as shown in the table, supports the acceptance of this hypothesis.

Table 17: Differences Between Respondents Regarding the Degree to Which Arab Media Institutions Use Artificial Intelligence Technologies Based on Gender, Educational Level, Years of Experience, Institution, and Age

Variable	Sources of	Sum of	Degrees of	Mean	F Value	Significance	p-value	Significance
variable	Difference	Squares	Freedom	Square	i value	Level	p-value	
	Between	1.441	3	0.480	2.030	0.113	Not	
	Groups	1.441	J	0.100	2.000	0.110	Significant	
Gender	Within	30.279	128	0.237				
	Groups			0.201				
	Total	31.720	131					
	Between	17.474	3	5.825	4.989	0.003	Significant	
	Groups			0.020	1.000	0.000	Olgrinioarit	
Age	Within	149.435	128	1.167				
	Groups							
	Total	166.909	131					
	Between	0.566	3	0.189	0.326	0.806	Not	
Educational	Groups						Significant	
Level	Within	73.949	128	0.578				
	Groups							
	Total	74.515	131					
	Between	6.117	3	2.039	3.102	0.029	Not	
Years of	Groups	0		2.000	01102		Significant	
Experience	Within	84.148	128	0.657				
2,400.101.00	Groups			0.00.				
	Total	90.265	131					
	Between	75.202	3	25.067	3.187	0.026	Not	
	Groups	70.202	0	20.007	0.107	0.020	Significant	
Institution	Within	1006.881	128	7.866				
	Groups	1000.001	120	7.000				
	Total	1082.083	131					

Table 17: Differences between Respondents Regarding the Degree to Which Arab Media Institutions Use Artificial Intelligence Technologies

The results from Table 17 show that age plays a statistically significant role in determining the extent to which AI technologies are adopted in Arab media institutions. This suggests that different age groups may have varying levels of involvement or influence on AI implementation, potentially due to generational differences in familiarity, openness, or adaptability to emerging technologies. However, the findings reveal no significant relationship between the degree of Al adoption and variables such as gender, education level, type of institution, or years of experience. This indicates that Al adoption is more influenced by institutional priorities, technological infrastructure, and external market pressures than by personal characteristics or professional backgrounds. The rejection of the null hypothesis for age confirms its importance in Al adoption, while the acceptance of the null hypothesis for other variables highlights their limited influence. These results suggest that age-related factors, such as exposure to technological advancements or leadership roles, may shape Al integration in the Arab media industry, while the uniformity across other demographic and professional factors emphasizes the widespread applicability of Al across the sector.

#### Discussion

This study explores both the transformative potential and significant challenges associated with the adoption of artificial intelligence (AI) in the Arab media industry. The findings emphasize AI's capacity to revolutionize media work by automating routine tasks, improving content dissemination efficiency, and enhancing communication with audiences—aligning with global trends in AI-driven modernization and productivity improvements within media sectors worldwide. Despite the promising opportunities, the study highlights several persistent barriers hindering widespread AI adoption in Arab media institutions. A key finding is the gap between the recognition of AI's potential and its current limited adoption. While 70.5% of respondent's view AI as a tool for automating tasks such as news writing and video editing—potentially improving efficiency—only 31.1% report significant AI usage. Factors such as high costs, integration complexity, and a lack of tailored solutions are identified as major obstacles, reflecting systemic and infrastructural challenges in the industry. Additionally, nearly half of the respondents emphasize the

substantial effort needed to integrate Al into existing workflows, underscoring the importance of strategic planning and organizational support to overcome these challenges. A critical issue discussed is the social and ethical dimensions of Al adoption. Although the study finds optimism regarding society's acceptance of Al in the workforce, with 44.6% agreeing that society will embrace Al technologies, uncertainty persists concerning Al's impact on media ethics. Specifically, 40.2% of respondents remain neutral about Al's ability to combat fake news and enhance ethical media practices, signaling skepticism or insufficient awareness regarding AI's role in ethical journalism. This contradiction — between a positive outlook on AI ethics and widespread neutrality in practice—suggests a conceptual gap in understanding how AI can be implemented ethically and effectively. It reflects the need for clearer policy guidance, training on Al's ethical implications, and a stronger emphasis on responsible innovation. Compared to global studies, such as Diakopoulos (2019) and Marconi (2023), which report growing confidence in Al-driven solutions for misinformation management, the Arab context appears more cautious and fragmented, likely due to varied digital literacy and regulatory frameworks across the region.

Furthermore, the study reveals a statistically significant relationship between age and the degree of AI adoption, suggesting that younger professionals are more inclined to embrace AI technologies. However, no significant differences were found based on other demographic factors such as gender, education, or years of experience. This finding is crucial for developing training and development programs that cater to varying generational perspectives on technology adoption. The study also identifies available resources to support AI adoption, such as tailored AI solutions, non-profit organizations offering guidance, and platforms for knowledge sharing. Despite this, these resources are underutilized, pointing to the need for greater awareness and stronger collaboration among media institutions, technology providers, and policymakers. This underutilization stands in contrast to best practices observed in digitally advanced countries such as South Korea and Estonia, where public-private partnerships and centralized digital governance have facilitated more effective AI integration in media sectors.

The results collectively underscore the necessity for deliberate and structured efforts to address the challenges of AI adoption in Arab media. While there is substantial optimism about AI's potential to enhance productivity and efficiency, successful implementation requires a shift in attitudes, greater investment, and stronger support systems. Future research should explore the institutional dynamics and cultural factors contributing to the hesitation surrounding AI ethics and resource utilization in Arab media. The study suggests that overcoming barriers like high costs and a lack of expertise will require targeted interventions to fully unlock AI's potential in transforming media practices in the Arab world.

#### Conclusion

In conclusion, this study highlights both the significant opportunities and the challenges associated with the integration of artificial intelligence (AI) technologies in the Arab media industry. AI offers substantial potential to streamline workflows, improve operational efficiency, and enhance audience engagement, positioning media institutions to better meet the demands of a rapidly evolving digital landscape. However, for AI adoption to reach its full potential, barriers such as high implementation costs, limited expertise, and the considerable effort required for integration must be addressed. The study also underscores the importance of raising awareness about the ethical implications and societal benefits of AI, particularly in media contexts, while cultivating a culture of innovation and continuous self-development among media professionals. With growing societal acceptance of AI and an increasing willingness among professionals to leverage AI for tasks like data analysis and content creation, there is a strong foundation for progress.

To support this progress, the study recommends the development of updated media laws that explicitly address AI applications, including standards for transparency, accountability, and content authenticity. Governments and media regulators should establish independent ethics boards to monitor AI use in journalism and ensure compliance with professional and ethical codes. Additionally, cross-sector policies should promote the creation of national AI strategies for the media

industry, including frameworks for fair data use, workforce retraining, and public trust-building.

Nevertheless, realizing the full potential of Al requires coordinated efforts among policymakers, academic elites, and media organizations to create supportive environments, reduce costs, and provide essential training and development opportunities.

By embracing these strategies, the Arab media industry can overcome current limitations and establish itself as a global leader in Al-driven media innovation. This will ensure a more efficient, ethical, and impactful future for journalism and communication across the region, driving meaningful transformation in the media landscape.

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