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Original-Forschungsarbeit

Zukunft des öffentlichen Vertrauens in Medien im Zeitalter der künstlichen Intelligenz: Szenarienplanung für den Iran 2036

Amir Garousi[1]*, Mahmood Jamali[2], Einollah Keshavarz Turk[3]

[1] *Doktorand im Medienmanagement, Universität Tehran, Teheran, Iran*

[2] *Doktorand im Medienmanagement, Universität Tehran, Teheran, Iran*

[3] *Außerordentlicher Professor für Zukunftsstudien, Imam-Khomeini-International-Universität, Tehran, Iran*

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Zusammenfassung:

Das öffentliche Vertrauen in Medien ist ein zentraler Bestandteil des Sozialkapitals und der kommunikativen Legitimität, wird jedoch zunehmend durch die schnelle Integration von Künstlicher Intelligenz und synthetischen Medien in die Nachrichtenproduktion und -verbreitung herausgefordert. Diese Studie untersucht alternative Zukünfte des öffentlichen Vertrauens in Medien im Zeitalter der KI und entwickelt szenariobasierte Erkenntnisse für den Iran bis zum Jahr 2036. Unter Verwendung eines Zukunftsstudien-Ansatzes kombiniert die Forschung Environmental Scanning und eine systematische Überprüfung akademischer und politischer Quellen (2018–2025) mit einer zweirundigen Delphi-Befragung von fünfzehn Expert:innen aus Medien, KI und Governance. Eine Strukturanalyse mittels der MICMAC-Methode untersuchte Einfluss–Abhängigkeits-Beziehungen zwischen Schlüsselvariablen und identifizierte Medien-Transparenz und die Qualität der KI-Regulierung als zwei kritische Unsicherheiten, die die zukünftigen Vertrauensverläufe prägen. Auf Basis dieser Achsen wurden vier alternative Szenarien entwickelt: Smart Trust, Total Distrust, Islands of Trust und Imposed Trust, die jeweils unterschiedliche Konfigurationen von Governance-Entscheidungen, Technologieeinsatz und Reaktionen des Publikums darstellen. Die Ergebnisse zeigen, dass zukünftige Muster des öffentlichen Vertrauens nicht technologisch deterministisch sind, sondern hauptsächlich durch institutionelle Transparenz, regulatorische Maßnahmen und Governance-Entscheidungen bestimmt werden. Die Studie schließt mit der Empfehlung, verantwortliche KI-Governance zu stärken, Medien-Transparenz zu erhöhen und in Medienkompetenz der Bevölkerung zu investieren, um das Mediensystem des Iran in eine nachhaltige und vertrauensbasierte Zukunft zu steuern.

Schlüsselwörter: zukunftsstudien, öffentliches vertrauen, medien, künstliche intelligenz, szenarienplanung

* Korrespondierender Autor ✉ garousi@ut.ac.ir https://orcid.org/0009-0003-5431-6705

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مقاله پژوهشی

آینده اعتماد عمومی به رسانه‌ها در عصر هوش مصنوعی: برنامه‌ریزی سناریویی برای ایران ۲۰۳۶

امیر گروسی[۱*]، محمود جمالی[۲]، عین‌الله کشاورز ترک[۳]

۱ دانشجوی دکتری مدیریت رسانه، دانشگاه تهران، تهران، ایران

۲ دانشجوی دکتری مدیریت رسانه، دانشگاه تهران، تهران، ایران

۳ دانشیار مطالعات آینده، دانشگاه بین‌المللی امام خمینی، تهران، ایران

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چکیده:

اعتماد عمومی به رسانه‌ها بخش اساسی سرمایه اجتماعی و مشروعیت ارتباطی است، اما با یکپارچگی سریع هوش مصنوعی و رسانه‌های مصنوعی در فرایند تولید و توزیع اخبار، چالش‌های فزاینده‌ای را تجربه می‌کند. این مطالعه آینده‌های جایگزین اعتماد عمومی به رسانه‌ها در عصر هوش مصنوعی را بررسی کرده و دیدگاه‌های مبتنی بر سناریو برای ایران تا افق ۲۰۳۶ ارائه می‌دهد. با استفاده از رویکرد مطالعات آینده، پژوهش از طراحی روش‌های ترکیبی بهره می‌برد که اسکن محیطی و مرور نظام‌مند منابع علمی و سیاست‌گذاری (۲۰۱۸–۲۰۲۵) را با دو دور مشاوره دلفی شامل پانزده کارشناس در زمینه رسانه، هوش مصنوعی و حاکمیت ترکیب می‌کند. تحلیل ساختاری با استفاده از روش MICMACبرای بررسی روابط تأثیر–وابستگی بین متغیرهای کلیدی انجام شد و شفافیت رسانه و کیفیت مقررات هوش مصنوعی به‌عنوان دو عدم‌قطعیت حیاتی که مسیرهای اعتماد آینده را شکل می‌دهند، شناسایی شدند. بر اساس این محورها، چهار سناریوی جایگزین توسعه یافتند :اعتماد هوشمند، بی‌اعتمادی کامل، جزایر اعتماد و اعتماد تحمیلی، که هرکدام ترکیب متفاوتی از انتخاب‌های حاکمیتی، کاربرد فناوری و پاسخ مخاطب را نشان می‌دهند. یافته‌ها نشان می‌دهند که الگوهای آینده اعتماد عمومی فناورانه تعیین‌شده نیستند، بلکه عمدتاً توسط شفافیت نهادی، سازوکارهای قانونی و تصمیمات حاکمیتی هدایت می‌شوند. مطالعه نتیجه می‌گیرد که تقویت حاکمیت پاسخگو در هوش مصنوعی، افزایش شفافیت رسانه‌ای و سرمایه‌گذاری در سواد رسانه‌ای مخاطبان برای هدایت اکوسیستم رسانه‌ای ایران به سمت آینده‌ای پایدار و مبتنی بر اعتماد ضروری است.

واژگان کلیدی: مطالعات آینده، اعتماد عمومی، رسانه، هوش مصنوعی، برنامه‌ریزی سناریویی

* نویسنده مسئول

https://orcid.org/0009-0003-5431-6705

garousi@ut.ac.ir

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Original Research Paper

Futures of public trust in media in the age of artificial intelligence: Scenario planning for Iran 2036

Amir Garousi[1]*, Mahmood Jamali[2], Einollah Keshavarz Turk[3]

[1] *PhD Student in Media Management, University of Tehran, Tehran, Iran*

[2] *PhD Student in Media Management, University of Tehran, Tehran, Iran*

[3] *Associate Professor of Futures Studies, Imam Khomeini International University, Tehran, Iran*

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Abstract

Public trust in media constitutes a core component of social capital and communicative legitimacy, yet it is increasingly challenged by the rapid integration of artificial intelligence and synthetic media into news production and distribution processes. This study explores alternative futures of public trust in media in the age of artificial intelligence and develops scenario-based insights for Iran toward the horizon of 2036. Adopting a futures-studies approach, the research employs a mixed-methods design that combines environmental scanning and a systematic review of academic and policy sources (2018–2025) with a two-round Delphi consultation involving fifteen experts in media, artificial intelligence, and governance. Structural analysis using the MICMAC method was applied to examine influence–dependence relationships among key variables, leading to the identification of media transparency and the quality of AI regulation as the two critical uncertainties shaping future trajectories of public trust. Based on these axes, four alternative scenarios were developed—Smart Trust, Total Distrust, Islands of Trust, and Imposed Trust—each illustrating a distinct configuration of governance choices, technological use, and audience responses. The findings demonstrate that future patterns of public trust are not technologically deterministic but are primarily driven by institutional transparency, regulatory arrangements, and governance decisions. The study concludes that strengthening accountable AI governance, enhancing media transparency, and investing in media literacy among audiences are essential for steering Iran's media ecosystem toward a sustainable and trust-based future.

Keywords: futures studies, public trust, media, artificial intelligence, scenario planning

* Corresponding Author ✉ garousi@ut.ac.ir https://orcid.org/0009-0003-5431-6705

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1. Introduction

Public trust in the media has always been one of the main pillars of the stability of the political system and social cohesion. In modern societies, media serve not only as tools for transmitting news but also as key actors in shaping public opinion, strengthening social capital, and creating collective solidarity (Coleman, 1990). In fact, the level of people's trust in the media is considered an important criterion for assessing the health of social communications and the legitimacy of political institutions. However, over the past two decades, the decline in public trust in the media has been widely noted by researchers and international institutions. The annual report of the Reuters Institute shows that the average public trust in news media globally decreased to about 40% in 2023; moreover, many countries have faced a downward trend in this index in recent years, which indicates a crisis of trust in the media arena (Newman et al., 2023).

The emergence of new technologies, especially artificial intelligence, has added further complexity to this issue. Artificial intelligence algorithms are now used at all stages of the news cycle, from production and editing to distribution and content personalization. This transformation, on the one hand, provides opportunities for improving content quality, increasing speed, and responding to individual audience needs; on the other hand, it brings serious threats, including the spread of fake news, rapid dissemination of rumors, and the emergence of phenomena such as deepfakes that can blur the boundary between reality and imagination in the public sphere (Floridi & Chiriatti, 2020). Such conditions have turned the issue of trust in the media into one of the critical topics in the era of artificial intelligence.

The significance of this topic is heightened in Iran. Iranian society, with generational and cultural diversity in media consumption patterns, has a distinct encounter with new technologies. Younger generations have turned more to social media and digital platforms, while older generations are still somewhat dependent on traditional media. This generational gap, along with varying levels of media literacy among social groups, causes public trust in Iran to be neither uniform nor homogeneous, but multilayered and pluralistic. In addition, the role of regulatory policies in managing or restricting the media can have a direct impact on public trust. As a result, the future of trust in the media in Iran in the context of artificial intelligence will

not only be a reflection of technological developments but also the product of complex interactions among society, policy, and technology.

Therefore, the present research, utilizing a futures studies approach and especially the scenario writing method, seeks to draw a perspective of the future of public trust in the media in Iran up to the horizon of year 1415 SH. In this regard, the study presents alternative scenarios for possible futures of public trust by identifying macro trends, main drivers, and critical uncertainties. The ultimate goal of the research is to help policymakers, media managers, and researchers design effective strategies to strengthen public trust in the face of rapid transformations in artificial intelligence by clarifying probable paths.

2. Literature Review

Domestic research has generally focused on three main axes: trust in national media, the role of social networks in public opinion, and forward-looking applications of artificial intelligence in media. Safavi et al. (1402 SH), by designing a model for science journalism in the era of new media, emphasized components such as communication between the scientific community and the public, empowering journalists, and strengthening infrastructures. Although this research highlights the importance of trust in media in the scientific domain, its focus on science journalism has caused broader dimensions of public trust in media, especially in political and social areas, to be overlooked. Ajlali and Khatibi (1403 SH), by examining the role of social networks and algorithms in cognitive warfare, showed that algorithms can intensify fake news and create filter bubbles. This study has effectively revealed the threats of artificial intelligence in the arena of public opinion, but it has limitations in the field of futures studies and scenario writing, and has merely limited to case analysis. Mohammadnejad and Shahmohammadi (1400 SH) focused on strategies to enhance trust in national media news and used SWOT and QSPM methods, providing suggestions such as strengthening adherence to legal standards and structural revision. The strength of this research is addressing operational policy-making, but its limitation is its sole focus on national media and a lack of attention to digital and social media. In the field of futures studies, two studies by Taghipour et al. (1404 SH) and Al-Mohammad and Asadi (1403 SH) are prominent.

Taghipour, using Delphi and scenario writing, showed that artificial intelligence can improve content quality, but challenges such as privacy also exist. Al-Mohammad and Asadi also focused on constants, trends, and uncertainties of future journalism with the Pilkan five-factor model. Both studies have provided a valuable perspective on future media transformations, but they have paid less attention to "public trust" as a key variable. Overall, domestic studies, although emphasizing the importance of artificial intelligence, trust in national media, and future transformations in journalism, often lack a comprehensive framework for combining these three dimensions in the form of futures studies on public trust.

At the international level, research has more broadly addressed dimensions of trust, fake news, and the impact of artificial intelligence on journalism. Vaccari and Chadwick (2020) showed that deepfakes more often cause doubt and cynicism than deception, and thus intensify the crisis of trust. Opdahl et al. (2023), in contrast, have a more optimistic approach and introduce artificial intelligence as a tool for strengthening trust through improving journalism quality. These two studies together show that trust can be both weakened and strengthened. Peña Fernández et al. (2023), emphasizing the social dimension of generative artificial intelligence, addressed the risks of media dependency on technological platforms and the threat to journalists' independence. This view has great importance in clarifying social consequences, but it has paid less attention to forward-looking perspectives. Toff and Simon (2024) examined the issue of disclosing the use of artificial intelligence in news production and showed that labeling can reduce trust unless the sources used are transparently clarified.

This research is one of the first efforts to empirically test the relationship between "technological transparency" and "public trust." In other research, Neyazi et al. (2025) examined the role of information seeking in shaping trust in artificial intelligence and showed contradictory results in traditional and social media. Karaaslan et al. (2024) analyzed public attitudes toward automated news and stated that people's awareness of artificial intelligence journalism is relative, and concerns still persist. Kim et al. (2023) also technologically addressed the use of artificial intelligence and blockchain in detecting fake news, while Jungherr and Schroeder (2023) and Robles and Mallinson (2025) focused on structural and governance dimensions of public

trust in the arena of artificial intelligence. Overall, international studies compared to domestic ones have less thematic fragmentation and a more comprehensive view of the link between artificial intelligence and public trust, but scenario writing in futures studies in this area is still very limited. A structured overview of prior domestic and international studies is provided in Appendix A.

Overall, domestic studies tend to address public trust through normative or institutional lenses, often focusing on national media and short-term policy concerns, while international scholarship emphasizes empirical assessment of AI-driven media practices with limited contextualization for non-Western governance environments. What remains underdeveloped in both streams is an integrated futures-oriented framework that conceptualizes public trust as an outcome of interacting technological, regulatory, and socio-cultural dynamics over time. This study addresses this gap by combining futures studies methodologies with a governance-sensitive understanding of AI-mediated media trust in the Iranian context.

3. Theoretical Foundations

3.1. Artificial Intelligence and the Transformation of Media Trust

In this study, public trust in media is defined as a relational and dynamic expectation through which audiences assess the credibility, integrity, and accountability of media institutions based on their perceived transparency, governance arrangements, and performance over time. Public trust is operationalized not as a fixed attitude toward individual media messages, but as a systemic outcome emerging from repeated interactions among media organizations, technological infrastructures—particularly artificial intelligence systems—and regulatory frameworks. From this perspective, trust reflects audiences' confidence that media actors will use technologies responsibly, disclose relevant information about content production processes, and remain accountable to societal norms and public interests under conditions of uncertainty.

Public trust in the media, from the perspective of classical communication theories, is a fundamental component of social capital and a mechanism for reducing uncertainty in collective actions. In this framework, media act as

institutions that strengthen norms of cooperation and consolidate social cohesion by providing access to credible information (Coleman, 1990). However, the rise of new technologies—and especially artificial intelligence—has qualitatively transformed the dynamics of trust formation and reproduction. In recent decades, a range of media innovations from satellites and the internet to social networks and digital platforms have continuously shifted the boundaries of content production and distribution. However, the turning point is the entry of artificial intelligence, which not only provides new tools to media actors but redefines the essence of production, editing, distribution, and content consumption processes and expands the scope of action from a single human organization to a dynamic network of journalists, algorithms, audiences, and technological infrastructures (Floridi & Chiriatti, 2020). In this perspective, public trust in the era of artificial intelligence is the result of a multilevel interaction among three intertwined domains: media as communication institutions, artificial intelligence as a transformative agent, and audiences as active receivers and interpreters of messages. Empirical research on digital public discourse further indicates that audiences interpret AI-driven transformations through emotionally structured narratives that shape perceptions of institutional credibility and legitimacy in online environments (Sabbar & Khiyaban, 2023). This reinforces the understanding of trust as an interactional and discursively mediated process rather than a purely technical or procedural outcome.

Findings from recent research show that artificial intelligence has found an effective presence in most links of the news production cycle: from automated production of text and images, estimation and analysis of big data, to personalized distribution and audience exposure to content. In this regard, empirical findings in the local context confirm that effective implementation of artificial intelligence in media is not realized solely by relying on "technology"; rather, it requires the alignment of three interrelated domains: causal factors such as data infrastructure and computational capacity, financial investment, and precise knowledge of audience characteristics; contextual factors such as specialized training of journalists, media richness, skilled human capital, and organizational knowledge maturity; and intervening factors such as organizational and social culture, regulatory environment, institutional collaborations, and managers' attitudes. In other words, success in utilizing artificial intelligence is the result of aligning structural, cultural, and

managerial components and rather than a purely technological achievement (Soltanpour et al., 2024). This conclusion is consistent with foundational definitions of artificial intelligence; a definition that considers it "the study and construction of agents that do the right thing," referring both to machines' capability to perform complex tasks and to the capacity for goal-setting, reasoning, and adaptation in uncertain environments. The current successes of artificial intelligence are owed to leaps in machine learning and especially deep learning that have provided computational sufficiency for perceptual and linguistic tasks (Jungherr & Schroeder, 2023).

From a policy and organizational perspective, responsible implementation of artificial intelligence in media requires complementary strategies: general and specialized education to enhance journalists' digital competencies and increase audiences' media literacy; strengthening the link between media practitioners and technology experts; forecasting sustainable financing mechanisms for innovative projects; and finally establishing intelligent monitoring systems for algorithms to control errors, biases, and unintended side effects. The natural consequence of such strategies—if properly designed and implemented—is increasing data processing speed, improving verification accuracy, enabling automated routine production, and allocating human time to more analytical and value-added tasks; which can simultaneously improve organizational efficiency and the quality of news experiences (Soltanpour et al., 2024). However, just as artificial intelligence has the capacity to facilitate the realization of shared social values, it can also create conditions for weakening them. For this reason, "public trust" must be the axis of designing artificial intelligence governance frameworks (Schiff et al., 2021). Empirical research on large-scale social media discourse further indicates that public perceptions of artificial intelligence are shaped by contested geopolitical narratives, technological rivalry, and affective responses such as fear and skepticism, all of which influence how the legitimacy of AI governance is evaluated in the public sphere (Salehi et al., 2025). This reinforces the view that trust in AI-mediated systems emerges within broader discursive and political contexts rather than being determined solely by technical performance. A critical review of artificial intelligence governance literature shows that the dimension of public trust has been insufficiently conceptualized as a foundational component, and this absence has created "blind spots" in decision-making in

policy-making for emerging technologies; a situation in which social distrust turns into real policy challenges, but governance mechanisms are unable to anticipate and respond to it in a timely manner (Robles & Mallinson, 2025; Veen et al., 2011). At the newsroom level, increasing dependence on technological platforms and generative services can threaten editorial independence, weaken the symbolic position of journalists, and ultimately lead to the erosion of professional social capital (Peña Fernández et al., 2023). Therefore, balancing technological efficiency and normative values of journalism—including honesty, transparency, and social responsibility—is a necessary condition for rebuilding and sustaining public trust; neglecting this balance increases the risk of turning artificial intelligence from an "opportunity" to a "threat" for media legitimacy (Floridi & Chiriatti, 2020; Peña Fernández et al., 2023).

3.2. Transparency, Labeling, and Multidimensional Levels of Trust

At the micro level of audience encounter with content, one of the most controversial policy interventions is "disclosure/labeling," of the use of artificial intelligence in news production. Empirical evidence shows that merely labeling "produced with artificial intelligence" does not necessarily lead to increased trust and can even have a negative effect on the evaluation of news credibility—even when the accuracy and fairness of labeled content do not meaningfully differ from human-produced text. Moreover, sensitivity to this label is more intense among audiences who previously had higher trust in media or better knowledge of journalism processes. However, when media, in addition to the label, transparently disclose the list of sources, data processing methods, and the level of human intervention, the negative effect of labeling decreases considerably. These findings confirm that "multilayered transparency"—not merely attaching a label—is the key to rebuilding trust and must be formulated in the form of a comprehensive communication policy with a clear explanation of content production mechanisms (Toff & Simon, 2024). It becomes even more significant when we consider when we consider the rapid growth of synthetic media in digital ecosystems: analyses show that in the period from December 2022 to October 2023, the prevalence of synthetic media on platform X has had a noticeable jump, and the limited sample examined has gained over 1.5 billion views—a jump that intensified with the release of Midjourney and shows that monitoring, measuring, and

understanding the dynamics of synthetic media proliferation is an increasing necessity for protecting public trust (Corsi et al., 2024).

Of course, public trust is not merely the outcome of regulation and institutional intervention; audience characteristics, lived experiences, and their media/data literacy also play a determining role in trust evaluation. Changes in news tastes, increasing need for speed and accuracy, and direct encounter with fake news on social networks have increased audiences' sensitivity to content authenticity and credibility. For groups that have experienced fake news encounters, simple labeling is not sufficient, and they demand more reassuring mechanisms for verification. In contrast, audiences less familiar with content production processes and technological boundaries may perceive the "produced with artificial intelligence" label as a threat to news authenticity, but more literate audiences see it as a sign of transparency and accountability (Brewer et al., 2022). This pattern is consistent with the literature on the formation of public attitudes toward emerging technologies: public evaluations often form before encountering official information and under the influence of cultural and media framings; hence, post hoc communication interventions, if lacking subtlety, may lead to strengthening "pre-existing pessimistic stereotypes" instead of repairing trust (Druckman & Bolsen, 2011; Brewer et al., 2022). As a result, media literacy is not just a side educational policy but the axis of trust strategy. Recent integrative research on AI literacy emphasizes that effective literacy extends beyond technical skills to include ethical awareness, critical evaluation of algorithmic systems, and informed engagement with AI's societal implications (Khodabin et al., 2022). This supports the view that media literacy must function as a multidimensional capacity enabling audiences to interpret transparency signals and assess AI-mediated content. It must enhance audiences' understanding of algorithmic mechanisms, technical limitations, and verification methods through layered programs of general and specialized education to strengthen the ability to distinguish between transparency signs and "fake trust signals" (Soltanpour et al., 2024; Toff & Simon, 2024).

For operational formulation of trust in the era of artificial intelligence, one can distinguish four interconnected levels from a systemic perspective. The first level is "infrastructure and investment": access to up-to-date hardware/software, high-quality data, and sustainable financing is a necessary condition for effective utilization of AI capacities; weaknesses at

this level not only brings technical inefficiency and errors but translates into trust erosion in the audience experience (Soltanpour et al., 2024). This proposition is consistent with broader evidence: lack of information transparency and public participation opportunities in relation to emerging technologies reduces social acceptance and sows the seeds of policy distrust (Veen et al., 2011). The second level is "institutional capabilities": without technological and ethical competencies of journalists and managers, and without an explicit strategy for responsible use of artificial intelligence, technology application is reduced to superficial and non-transparent interventions, and trust is damaged (Peña Fernández et al., 2023; Soltanpour et al., 2024). The third level is "audience characteristics": media/data literacy, experiences of encountering fake news, and content consumption preferences shape the the stability of trust/distrust (Brewer et al., 2022; Druckman & Bolsen, 2011). And the fourth level is "policy-making and regulation": transparent laws, support for information freedom, and ethical frameworks for AI application can strengthen trust; in contrast, monopolistic control or regulatory ambiguity intensifies trust gaps (Schiff et al., 2021; Robles & Mallinson, 2025). The sum of these four levels determines the probable paths of trust over the mid-term horizons: if multilayered transparency is accompanied by effective governance and institutional/social empowerment, artificial intelligence becomes a tool for intelligent trust rebuilding; but in the absence of this balance, the same technology can become an engine for producing doubt, polarization, and legitimacy erosion (Floridi & Chiriatti, 2020; Toff & Simon, 2024; Corsi et al., 2024).

Based on this, the theoretical foundations of media trust in the era of artificial intelligence can be formulated in a concise summary: trust is not a linear output of content quality, but the consequence of dynamic interaction among infrastructure, institutional capacity, audience characteristics, and governance; artificial intelligence has a dual capacity that, with appropriate institutional and policy design, can be directed toward "intelligent trust"; and "meaningful transparency"—relying on disclosure of sources, process, and human role—along with enhancing media literacy, is the key to neutralizing side effects of labeling and curbing risks of synthetic media (Soltanpour et al., 2024; Schiff et al., 2021; Robles & Mallinson, 2025; Veen et al., 2011; Peña Fernández et al., 2023; Toff & Simon, 2024; Corsi et al., 2024; Brewer et al., 2022; Druckman & Bolsen, 2011; Floridi & Chiriatti, 2020; Jungherr & Schroeder, 2023).

3.3. Conceptual Framework of the Article

Public trust in the media in the era of artificial intelligence is a multidimensional phenomenon shaped by the interaction of three main domains: trust as social capital, media as communication and information institutions, and new technologies, especially artificial intelligence, as a transformative agent in content production and distribution. In this framework, drivers such as technological transformation in the domain of algorithms, blockchain, and intelligent content production, media policy-making and regulation, citizens' level of media and data literacy, and the degree of media transparency and accountability act as key drivers. However, the future of public trust is not merely a function of these drivers but is heavily influenced by two critical uncertainties: first, the level of media transparency and accountability to audiences; second, the degree of intervention and regulation of artificial intelligence in media processes. These two factors can change the future path in the direction of strengthening or weakening public trust. Based on this, the conceptual framework of the article is based on the assumption that the combination of drivers and uncertainties will lead to the formation of alternative scenarios for public trust in Iran. These scenarios include intelligent trust (when media are transparent and AI acts responsibly), total distrust (in the absence of transparency and technology abandonment), islands of trust (trust of part of society in specific media), and imposed trust (superficial trust resulting from control and monopoly of information flow). Thus, the present conceptual framework seeks to provide an integrated image of the link between public trust, media, and artificial intelligence and, with a futures studies approach, explain the probable paths of this link in the horizon of year 1415 SH for Iran.

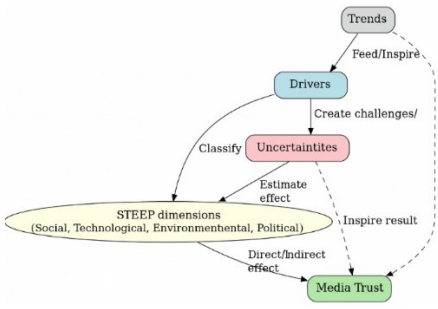

Figure 1. Research Conceptual Model

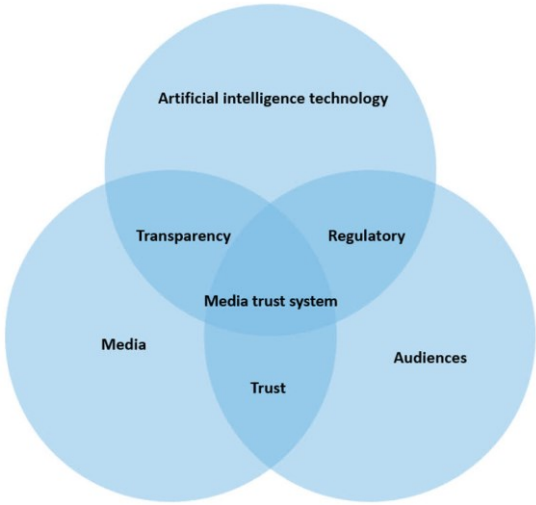

Figure 2. Research Conceptual Model

4. Methodology

This research was conducted using a scenario-based futures studies approach in the form of a mixed exploratory-explanatory study. Its goal was to draw alternative futures of public trust in media in the era of artificial intelligence up to the horizon of year 1415 SH in Iran. The research design has been carried out in several consecutive steps.

In the first step, through environmental scanning and systematic review of sources (2018–2025), including scientific articles, policy documents, and professional reports, a set of trends, drivers, and uncertainties related to media trust and artificial intelligence applications were identified. Then, using the STEEP framework (social, technological, economic, environmental/infrastructural, and political-governance), these findings were classified and clustered to form the initial portfolio of drivers and uncertainties. The search strategy was designed based on combining Persian/English keywords including ["media trust", "AI", "synthetic media", "algorithmic transparency", "fact-checking", "Iran"] and their Persian equivalents. Databases Google Scholar, Scopus, Web of Science, and professional institutes' reports were searched during the period 2018–2025. Entry criteria: (1) direct focus on media trust/AI application in news; (2)

specified methodology; (3) access to full text. Exit criteria: (1) non-peer-reviewed articles/press notes; (2) content overlap; (3) unrelated subject scope. In total, 571 records were identified; after removing duplicates (129) and screening titles/abstracts (330), 112 texts remained for full review, and finally 34 sources entered the analysis.

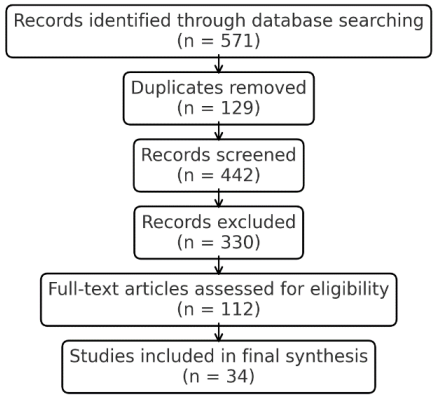

Diagram 1. Research PRISMA

In the next stage, an expert panel consisting of 15 specialists in media, information technology, policy-making, and civil society was formed. Using the Delphi technique, the list of key factors was reviewed and completed, and based on experts' scoring, the most important drivers and uncertainties were identified.

After that, using structural analysis (MICMAC), relationships among variables were examined to clarify the degree of influence and dependence of each factor. The results of this stage enabled the selection of two critical uncertainties—"media transparency level" and "intensity and quality of artificial intelligence regulation"—as the main axes for scenario writing.

In the scenario writing step, based on combining these two axes, four alternative scenarios were drawn: intelligent trust, total distrust, islands of trust, and imposed trust. For each scenario, an analytical narrative, implications, and signposts were developed. Finally, using stakeholder workshops, proposed policies and strategies for each scenario were evaluated to provide a set of resilient policy options for managing the future trajectories of public trust in media.

This integrative approach, while relying on secondary data and expert opinions, seeks to provide a comprehensive and reliable image of the future of media trust in the era of artificial intelligence for Iran. Details regarding the composition of the expert panel are provided in Appendix B.

Experts were selected through purposive and snowball method to cover diversity in media/editorial, AI technology, governance, and civil society domains. Entry criteria: at least 10 years of related professional/research experience, at least three published works or policy projects related to the topic, familiarity with media trust/AI topic, and readiness to participate in 2 Delphi rounds. In total, invitations were sent to 17 people; 15 agreed and 15 experts completed the first round questionnaire. All participation was voluntarily, without financial compensation and based on informed consent.

Table 1. Drivers and Uncertainties Scoring Matrix

Factor	Importance 1-9	Uncertainty 1-9	Influence (MICMAC) 0-3	Dependence 0-3
Transparency and accountability of the media	9	8	3	2
Intensity and quality of AI regulation in the media	9	9	3	3
Audience media and data literacy	8	6	2	2
Editorial independence and newsroom governance	8	7	3	2
Maturity of data infrastructure and fact-checking	7	5	2	1
Media business model (advertising dependency)	7	7	2	3

Delphi was conducted in two rounds. In each round, experts evaluated the identified factors along the dimensions of importance and uncertainty using a nine-point Likert scale. Consensus criteria were defined a priori as a median score of at least 7 and an interquartile range (IQR) of 1 or less, which are commonly accepted thresholds in Delphi-based futures research. Across the two rounds, these criteria were met for the core drivers and uncertainties retained for further analysis.

The overall level of agreement among experts was assessed using Kendall's coefficient of concordance, which indicated a satisfactory degree of consensus ($W = 0.74$, $p < 0.001$). Internal consistency of the Delphi questionnaire in the first round was evaluated using Cronbach's alpha, yielding an acceptable reliability coefficient ($\alpha = 0.79$). After each round,

anonymized group feedback (median values and dispersion indicators) was provided to participants to facilitate reflection and convergence in subsequent assessments.

To enhance methodological transparency and replicability, this study reports key reliability and consensus indicators for the Delphi process, including interquartile ranges, Kendall's coefficient of concordance, and internal consistency measures. Expert selection followed clearly defined criteria regarding experience, domain diversity, and familiarity with AI-mediated media governance, ensuring both epistemic robustness and contextual relevance.

5. Findings

The results of implementing futures studies stages and analyzing qualitative and quantitative data showed that, in Iran, public trust in media in the era of artificial intelligence by the horizon year 1415 SH is influenced by a set of key drivers and uncertainties. The first set of findings concerns the Delphi analysis and driver identification. Experts reached consensus that transparency in content production process, the level of audience media literacy, and the quality of artificial intelligence regulation are three central factors shaping the future of public trust. Alongside these factors, editorial independence and the maturity of technological infrastructure (such as intelligent fact-checking systems and open databases) were also identified as influential variables, though with lower priority than critical uncertainties. The extended STEEP analysis informing the identification of key drivers and uncertainties is reported in Appendix C.

Findings from the MICMAC analysis showed that two variables—"media transparency and accountability" and "intensity and quality of artificial intelligence regulation"—exhibit the highest degree of influence and uncertainty. These two variables were selected as axes for scenario design. In contrast, factors such as media business models, societal news consumption patterns, and journalists' independence level were introduced as sensitive and dependent variables whose changes are subject to transformations in the main variables.

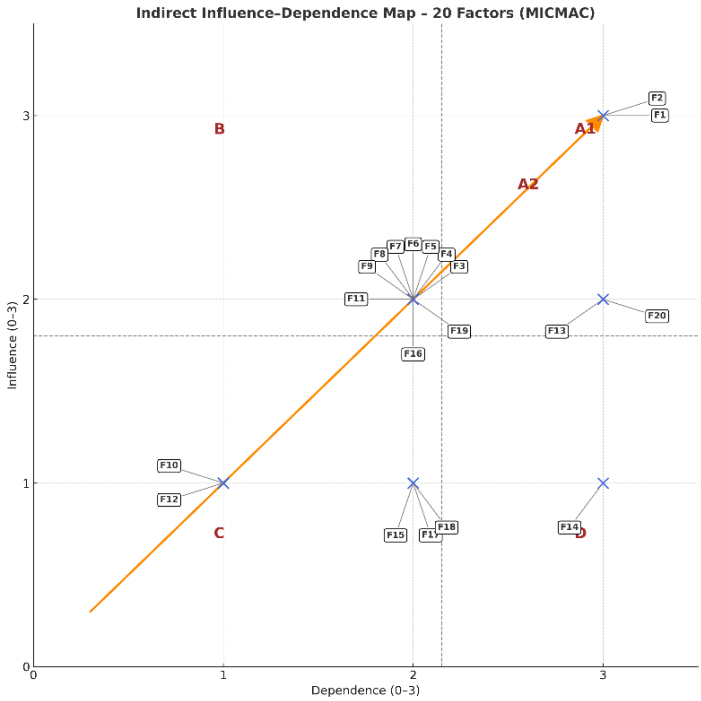

Figure ۳. Indirect Influence–Dependence Map of 20 Key Drivers of Public Trust in Media (MICMAC Analysis)

This figure visualizes the distribution of twenty key drivers derived from the Delphi and MICMAC structural analysis. The X-axis represents the level of dependence, and the Y-axis represents the degree of influence on a 0–3 scale. The dashed lines mark the mean values and divide the plane into four standard quadrants (A1, A2, B, C).

The results indicate that F1 (Transparency & Accountability) and F2 (AI Regulation) exhibit the highest influence and dependence values, positioning them as the main scenario axes shaping the future of public trust in media. Additional variables such as F13 (Platform Governance in Elections) and F20 (Data Governance & Interoperability) also appear in the upper quadrants, highlighting the institutional and technological dynamics driving the evolution of trust in AI-mediated journalism.

Table 2. Key Factors Identified in the MICMAC Analysis and Their Influence–Dependence Scores

Code	Factor	Influence (0–3)	Dependence (0–3)
F1	Transparency & Accountability	3	3
F2	AI Regulation (Scope & Enforcement)	3	3
F3	Audience Literacy (Media/Data)	2	2
F4	Personalization & Recommenders	2	2
F5	Synthetic Media (Text/Audio/Video)	2	2
F6	Authenticity Tooling (C2PA/Watermark)	2	2
F7	Automated News Agents (Newsbots)	2	2
F8	Automated Fact-checking	2	2
F9	Data Infrastructure & Access	2	2
F10	Cybersecurity & XAI	1	1
F11	Privacy Concerns & Data Rights	2	2
F12	Influencers & Citizen Journalism	1	1
F13	Platform Governance in Elections	2	3
F14	Business Model (Ad Dependence)	1	3
F15	Revenue Diversification (Subs/Micro)	1	2
F16	Cost Pressure & Newsroom Automation	2	2
F17	Migration Across Platforms (Audiences)	1	2
F18	News Fatigue & Avoidance	1	2
F19	Deepfake Risk	2	2
F20	Data Governance & Interoperability	2	3

This table presents the twenty key STEEP drivers derived from the Delphi rounds and MICMAC structural analysis. Influence and dependence values (scale 0–3) indicate each variable's systemic role. The variables F1 (Transparency & Accountability) and F2 (AI Regulation) show the highest scores and were selected as the main scenario axes.

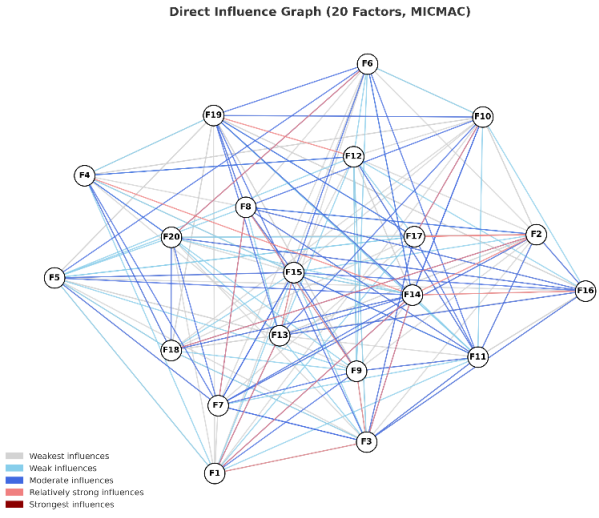

Figure 4. Direct Influence Graph

This graph illustrates the network of direct relationships among the twenty key factors identified in the MICMAC analysis. Each node (F1–F20) represents a variable, and the arrows and colored lines indicate the direction and strength of their direct influences. The color gradient represents five levels of influence intensity: light gray – weakest, sky blue – weak, royal blue – moderate, light coral – relatively strong, and dark red – strongest.

The dense central cluster indicates strong interdependence among core variables, while F1 (Transparency & Accountability) and F2 (AI Regulation) exert the strongest influence over other factors, consistent with the indirect influence–dependence analysis.

Table 3. Trends Analysis

Dimension	International Trends	Local/Iranian Trends	Comparative Notes
Social	Declining public trust in traditional news media; growth of news consumption on social media (especially TikTok and Instagram); the emergence of "news fatigue" and active news avoidance; increased sensitivity to AI-generated content labeling.	Generational trust gap (younger audiences gravitate more toward social media and domestic/foreign messaging apps); reliance on national television as the primary news source for older generations; rapid growth of Telegram channels and Instagram pages as alternatives to official media.	Globally, platforms dominate; in Iran, the duality between national television and social media is more pronounced.
Technological	The development of generative language models (ChatGPT, Gemini, etc.); the use of AI in news production and distribution; content authentication tools (C2PA); the threat of deepfakes.	Initial focus on domestic Persian language-processing tools; challenges in accessing computing infrastructure and GPUs; expansion of news bots on Telegram; sensitivity to fake news on WhatsApp and Instagram; the absence of national standards for content verification.	Global: rapid innovation and platform competition. Iran: focus on the Persian language, limited access to advanced technologies, and weaknesses in official fact-checking systems.
Economic	Crisis in media revenue models; reliance on targeted advertising; development of subscriptions and micropayments; venture capital investment in AI startups.	official media's heavy reliance on government funding; lack of sustainable revenue models in private media; limitations on targeted digital advertising (due to regulations and filtering); growth of informal advertising on Instagram and Telegram.	International: financial crisis accompanied by revenue innovation. Iran: lack of financial diversity and reliance on government funding or informal advertising markets.

Dimension	International Trends	Local/Iranian Trends	Comparative Notes
Environmental /Infrastructural	Expansion of cloud and 5G infrastructure; international content authentication standards (C2PA); growing concerns about energy consumption and the sustainability of large models.	Inequality in access to high-speed internet; broadband limitations and filtering; absence of a national system for content authenticity labeling; challenges in digital archiving of media; reliance on foreign infrastructure for AI tools.	Global: focus on sustainability and data security. Iran: focus on access and infrastructural limitations.
Political/Governmental	Adoption of AI regulations (e.g., the EU AI Act); policies on algorithmic transparency and accountability; professional reports (AP, BBC, EBU) on AI use in newsrooms; emphasis on audience rights.	Emphasis on "trust-building" in national media and top-down policymaking; absence of clear regulations on AI-generated content; security-oriented approach to media and social platforms; efforts to legislate against fake news and control content.	International: regulation for transparency and audience rights. Iran: regulation for content control and management with a focus on national security.

This table was designed to compare international and local/Iranian trends in the domain of media trust and artificial intelligence applications. At the global level, transformations revolve more around technological innovation, the trust crisis, and new media financial models. Media worldwide face phenomena such as declining public trust, rapid growth of artificial intelligence content production, the emergence of deepfakes, and pressure for transparency in AI use. In Iran, however, conditions are very different, and many trends are tied to structural, economic, and governance limitations. Media trust in the country is shaped by the duality between national media and social networks, and the generational gap in news consumption patterns is very prominent. From a technological perspective, although movements have been made in Persian language processing, limited access to computational infrastructures and the absence of national standards for content validation have hindered progress. Additionally, severe dependence on the government budget and weakness of sustainable revenue models for media, along with policymaking that is more security-oriented than transparency-oriented, distinguish the future of media trust in Iran from the global path. In the following, alternative scenarios for public trust were designed.

5.1. Future Scenarios of Public Trust in Media in the Era of Artificial Intelligence

Based on the analysis of drivers, uncertainties, and results obtained from the expert panel, two critical axes, namely the level of media transparency and accountability and the intensity and quality of artificial intelligence regulation, were selected as the main dimensions of the scenario writing matrix. The combination of these two axes outlines four alternative scenarios for the future of public trust in Iran with a time horizon of year 1415 SH, each providing a different image of the relationship between media, technology, and society.

Scenario One: Intelligent Trust (High Transparency and Efficient Regulation)

In this scenario, media actively utilize artificial intelligence technologies to enhance quality, speed, and accuracy in content production, but at the same time commit to disclosing processes and sources used. Laws and regulations are also designed in a way that, on the one hand, prevent monopoly and data misuse, and on the other hand, do not limit media innovation and creativity. In such conditions, public trust is not only preserved but strengthened due to the combination of "technological efficiency" and "institutional transparency." Indicators such as an increased rate of news consumption from credible domestic media, enhancement of media literacy, and reduction of fake news impact are signs of realizing this future.

Scenario Two: Total Distrust (Low Transparency and Weak Regulation)

This scenario represents the most critical possible situation. In conditions where transparency does not exist, and artificial intelligence regulation is inefficient or minimal, media and platforms move toward excessive use of technology for mass content production without accountability. The result is the spread of fake news, prevalence of deepfakes, and formation of a media legitimacy crisis. Public trust sharply decreases, and part of society even becomes deeply distrustful of the entire media system. Signs of this scenario include increased reliance on unofficial and foreign sources, growth of anti-media movements, and weakening of social capital.

Scenario Three: Islands of Trust (Relative Transparency and Insufficient Regulation)

In this scenario, some media organizations or platforms implement partial transparency and accountability policies, but the absence of comprehensive regulation prevents public trust from being rebuilt uniformly. As a result, society moves toward fragmentation of trust; one group becomes loyal to specific domestic or foreign media, while other groups remain in distrust or indifference. This scenario leads to the emergence of "islands of trust," which, although preventing total collapse of trust, intensifies social and informational gaps. Indicators of this situation include increased audience polarization and high diversity of news consumption sources without a common credible reference.

Scenario Four: Imposed Trust (Strict Regulation and Minimal Transparency)

This scenario describes a situation in which government or supervisory institutions control information flow through monopolistic and restrictive policies. Transparency remains at a minimal level, and audiences, due to limited alternatives or restricted access, are compelled toward apparent trust in official media. This type of trust is superficial and fragile and is based more on structural control than on media legitimacy. Signs of this scenario include reduced media diversity, power concentration in monopolistic media, and audiences' forced dependency on limited sources.

Overall, these four scenarios draw an image of possible futures of public trust in media in Iran. Intelligent trust is the desirable and sustainable scenario achieved through the combination of transparency and effective regulation. In contrast, total distrust is a serious threat to social capital and national cohesion. The islands of trust and imposed trust scenarios are also intermediate scenarios that, although preventing complete collapse, have consequences such as social gaps or superficial legitimacy. Therefore, choosing the future path depends on today's decisions in the domains of policymaking, public education, and the media's approach to new technologies. Supplementary findings from the validation workshop showed that experts evaluated the realization of the first scenario as the most desirable and the second scenario as the most probable in Iran's current conditions. This indicates that the gap between the current situation and the desirable future, especially in the domain of transparency policymaking and enhancing media literacy, is substantial. Overall, the research results showed

that the future of public trust in Iran depends more than anything on how technology and media governance interact, and any neglect of these domains can cause the deepening of the trust crisis in the coming decade.

Scenarios Policy Roadmap

The policy roadmap of this research, based on the four scenarios, shows that moving from undesirable scenarios toward the desirable situation, namely "intelligent trust," requires phased, coordinated, and multilevel actions. In the desirable scenario, media must move toward responsible integration of artificial intelligence along with maximum transparency and efficient regulation. This is achieved in the short term by developing a content production transparency charter, creating joint fact-checking units, and intensive training of journalists and editors in ethics and algorithmic bias. In the medium term, national labeling standards and supportive funds for small and local media must be institutionalized, and in the long term, the development of open news data infrastructure and annual algorithm audits by independent institutions can create sustainable trust. In contrast, the "total distrust" scenario is the most critical situation that requires urgent actions to contain the crisis. In the short term, the use of high-risk artificial intelligence modules, especially in sensitive news, should be suspended, and fake news prevention teams must be deployed in key events. Immediate transparency campaigns and regular reporting on errors can provide a basis for rebuilding credibility. In the medium term, reengineering of editorial processes and mandatory human review is necessary, and in the long term, creating specialized arbitration boards and national algorithmic risk assessment standards will contribute to policymaking stability.

In the "islands of trust" scenario, which indicates fragmentation of trust and part of society's loyalty to specific media, the main strategy must focus on converging scattered trusts. In the short term, developing an inter-media cooperation code and launching joint verification hubs is necessary; in the medium term, moving toward label standardization and mutual audits, and in the long term, forming a national media trust index coalition and developing a data transparency ecosystem can cause trust rebuilding at the macro level.

The "imposed trust" scenario also indicates a situation in which monopolistic media control leads to superficial trust. To transform this

apparent trust into sustainable trust, in the short term, a minimum level of transparency, such as periodic news sources reports, and creating independent complaint handling committees must be provided. In the medium term, gradual reduction of distribution monopoly and creating algorithmic accountability frameworks is necessary, and in the long term, safeguarding information freedom, sustainable diversification of media actors, and independent trust rankings can change the path of this scenario toward intelligent trust.

The key recommendation of this roadmap is that transitioning from undesirable scenarios toward intelligent trust requires linking actions in four domains: governance through adopting transparency standards and independent audits, infrastructure by supporting small media and developing fact-check hubs, human capacity by training and empowering newsrooms in ethics and technology, and audience level by layered media literacy enhancement and creating public transparency dashboards. Only by combining these actions can the path to a sustainable and trust-based future for media in Iran be guaranteed.

6. Conclusion

The findings of this research showed that public trust in media in the era of artificial intelligence is a multidimensional phenomenon influenced by the interaction among technology, policymaking, and audience behavior. Futures analysis based on two critical uncertainties—namely, the level of media transparency and the quality of artificial intelligence regulation—drew four alternative scenarios for the horizon year of 1415 SH: "intelligent trust," "total distrust," "islands of trust," and "imposed trust." Among these scenarios, intelligent trust is considered the most desirable scenario in which media, while utilizing artificial intelligence capacities to enhance content production quality and speed, operate with complete transparency in processes and sources and within an effective regulatory framework. In contrast, total distrust is the most critical possible future which, in the absence of transparency and efficient regulation, leads to the erosion of media legitimacy and weakening of social capital. The islands and imposed trust scenarios, although preventing complete trust collapse, will lead to strengthening social gaps or creating superficial trust.

Based on this, the proposed policy roadmap of the research emphasizes that moving toward the desirable scenario requires a set of coordinated actions at four levels of governance: infrastructural, institutional, and audience. At the governance level, developing national standards for content labeling and annual algorithm audits with independent institutional supervision is among the fundamental necessities. At the infrastructural level, creating supportive funds for small media and launching joint verification hubs can help reduce costs and increase transparency. In the institutional dimension, empowering newsrooms through educational programs in technological skills and professional ethics is necessary so that journalists can redefine their role in the era of artificial intelligence. Finally, at the audience level, enhancing media literacy in schools, universities, and general public, along with creating transparency dashboards, can rebuild trust based on participation and awareness.

From a stakeholder perspective, the proposed scenarios imply differentiated policy priorities: regulators are primarily responsible for establishing transparent and enforceable AI governance frameworks; public service media must invest in institutional transparency, professional training, and accountable AI adoption; and private platforms are expected to operationalize algorithmic accountability, content provenance, and user-facing transparency tools. Aligning these actor-specific responsibilities is essential for steering the media ecosystem toward the intelligent trust scenario.

Overall, this research emphasizes that the future of public trust in media is not the product of a linear trend but the result of today's decisions and policies. The choice between a future based on intelligent trust or trapped in a state of total distrust depends on the commitment of media organizations and policymakers in pursuing transparency, accountability, and responsible regulation. Only through these coordinated actions can the path to a sustainable and legitimate future for media in Iran be secured.

Appendix A: *Review of Previous Studies*

Researcher(s)	Year	Research Field	Research Method	Research Findings	Research Limits
Safavi and colleagues	2023/2024	Science journalism and new media	Combined method (IS–M, PLS)	Model of science journalism with emphasis on trust and infrastructure	Limited to the field of science; lacks a macro-level perspective on public trust
Ejlali and Khatibi	2024/2025	Cognitive warfare and algorithms	Case-analytical	The role of algorithms in filter bubbles and the threat to democracy	Lacks futures studies and scenario writing
Mohammadnezhad and Shahmohammadi	2021	Trust in the National Media	Qualitative–Quantitative, SWOT, QSPM	Strategies for Enhancing Trust in IRIB News	Limited to the National Media; Lack of Attention to social media
Taghipour et al.	2025	Artificial Intelligence in Media	Futures Studies (Delphi Method)	Scenarios of Media Transformation and Challenges	Focus on Technology; Neglect of Public Trust
Almohammad and Asadi	2025	The Future of Journalism and Artificial Intelligence	Futures Studies (Pillkan Model)	Constants, Trends, and Uncertainties	Lack of Analysis of Trust in the Media
Wakari and Chadwick	2020	Deepfakes and Trust	Experimental Study	Cause Cynicism and a Crisis of Trust	Focus on the West; Limited Generalizability to Iran
Opdahl et al.	2023	Trustworthy Journalism with AI	Conceptual Article	AI Enhances Quality and Trust	No Future Scenario Building Included
Pena Fernández et al.	2023	Generative AI and the Social Dimension of Media	Systematic Review	Threat to Journalistic Independence	Lack of Futures Studies Approach
Tuff and Simon	2024	AI Labeling in News	Survey–Experiment	Labeling Reduces Trust; Source Transparency Has Positive Effects	Limited to the United States
Niazi et al.	2023	Trust in AI in Asia	Multi-country Survey	Information Seeking and Variable Trust	Cultural–Regional Limitations
Karaslan et al.	2024	Public Attitudes toward AI-Generated News	Survey	Moderate Awareness and Concerns about Trust	No Policy Analysis Included
Kim et al.	2024	AI and Blockchain for Fake News	Algorithm and Experiment	Improved Fake News Detection	Purely Technological Perspective
Jungherr and Schroeder	2023	AI and the Public Arena	Conceptual Analysis	Changes in the Function of the Public Arena	Lack of Empirical Data
	2023	AI, Public Trust, and Governance	Survey	Role of Trust in AI Governance	Focus on the United States

***Appendix B:** Composition of the Expert Panel*

Field	Count	key selection criteria
Media managers / editors	6	At least 10 years of newsroom/editorial leadership experience, familiarity with content policy-making
Universities (media, communication, futures studies)	5	Track record of publications and projects on media trust assessment and media policy
Digital rights	1	Experience in media literacy initiatives and error-monitoring projects
AI specialists	3	Expertise in AI-driven approaches to media analysis and decision-making

***Appendix C:** STEEP Framework*

	Social	Technological	Economic	Environmental/Infrastructural	Political/Governmental
Drivers	The shift in news consumption patterns toward mobile devices and social media; the rise of messaging apps and closed digital spaces; news fatigue and active avoidance of news; generational gaps in trust; demands for transparency and disclosure of AI use; the role of influencers and citizen journalism; heightened public sensitivity to privacy and data; the expansion of media and data literacy; personalization and recommender systems; audience migration across platforms.	Generative and multimodal language models; synthetic content production (text/audio/image/video); authenticity verification tools (C2PA/watermarking); ranking and recommender algorithms; automated news agents and newsroom robots; fact-checking automation; fact-checking platforms; cybersecurity and XAI tools; data governance (federated/privacy-preserving).	Cost-cutting pressures in newsrooms; productivity gains from automation; revenue diversification (subscriptions, micropayments, events/B2B services); the market for AI tools in the media sector; changes in the advertising and targeting market; venture capital investment in generative technologies; the costs of fact-checking and verification; opportunities for product innovation.	Cloud capacity and data-center scalability; advances in GPUs/TPUs and the semiconductor supply chain; broadband/5G expansion; content authentication standards (C2PA); digital archiving and training data; resilience and business continuity; energy optimization of models; secure content distribution and CDNs.	AI regulations (the EU AI Act and similar frameworks), the DSA/DMA, and the GDPR; newsroom AI policies (AP/BBC/EBU); transparency requirements and labeling of generative content; election integrity policies; content authenticity initiatives (CAI/C2PA); the role of media regulatory bodies; accountability and responsibility frameworks.
Uncertainties	Audience responses to "AI-generated" labeling; the impact of AI disclosure on trust (increase or decrease); levels of acceptance of automation across different groups; the persistence or intensification of polarization and filter bubbles; the effectiveness of media-literacy programs; sudden audience shifts across platforms; attribution and responsibility norms; changes in trust across generations and cultures.	The outcome of the "arms race" between deepfake generation and detection; the robustness of watermarking and content provenance systems; error/hallucination and quality assurance in LLMs; the degree of dependence on a few major providers (concentration); the status of intellectual property in training data; the future of open-source versus closed models; data provenance traceability; the safety of autonomous agents and the limits of their autonomy.	The durability of the subscription economy and direct payment models; the revenue share of publishers versus platforms; the impact of privacy regulations on advertising; energy and computing costs for small newsrooms; the return on investment of AI projects; employment implications and emerging skill requirements; the financial sustainability of local and investigative media; legal risks related to offenses/defamation stemming from AI errors.	Energy/carbon constraints and environmental policies; disruptions in the semiconductor supply chain and sanctions; the computing-access gap between countries and organizations; interoperability of authentication standards; the vulnerability of infrastructures to attacks and disruptions; the sustainability of long-term storage; ownership and access to media archives; the balance between edge and cloud processing.	The approach and strictness of regulation enforcement (scope/exemptions); legal liability assignment for generative content; international coordination and conflicts of law; the impact of governance on innovation and freedom of expression; researcher access to platform data; platform policies during election periods; data governance and cross-sector sharing; operational algorithmic auditing and transparency frameworks.

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