

Review Article

Generative AI as a Catalyst for Participatory Journalism: A Scoping Review of Opportunities, Risks, and Emerging Practices

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Background: The public release of large language models (LLMs) since late 2022 has repositioned artificial intelligence from a back-office newsroom instrument to a public-facing interface through which audiences increasingly encounter, interrogate, and co-create news. Yet scholarship remains predominantly newsroom-centric, leaving the audience-facing dimension of generative AI comparatively under-theorised. **Objectives:** This research paper conducts a scoping review to identify all theoretical frameworks and empirical studies about generative AI usage in participatory journalism. The study answers four research questions which investigate theoretical frameworks and core research domains and organisational implementation methods and the complete set of ethical and legal and credibility risks. The research team implemented Arksey and O'Malley's six-stage framework together with PRISMA-ScR reporting guidelines to search five databases which included Scopus and Web of Science and EBSCO/LISTA and ProQuest Central and Google Scholar for peer-reviewed English-language publications that appeared between 2022 and 2025 and had open or hybrid access. The data collection process involved creating charts which showed author details and publication date and country of origin and theoretical framework and research method and target industry and AI system used and core study topics and results about public involvement. **Results:** The charted corpus reveals theoretical plurality spanning participatory journalism theory, uses and gratifications, UTAUT, disruptive innovation, and cultural political economy alongside a methodological reliance on qualitative, newsroom-centric designs. The applications group into five main categories which include conversational news interfaces and AI anchors and personalisation and immersive storytelling and accessibility tools but the system faces four major security threats which consist of hallucination and opacity and authorship ambiguity and North South resource asymmetries. **Conclusion:** Generative AI enables user participation through a conversational interface which allows them to generate content while the system maintains the decision-making power. The shift from user-generated content to AI content requires research about audience preferences and developers need to enforce disclosure systems which prove AI content authenticity.

1. INTRODUCTION

The public release of Chat GPT in November 2022, followed in rapid succession by Google's Gemini, Anthropic's Claude, and text-to-video systems such as Open AI's Sora, marks the most consequential technological inflection point for journalism since the consolidation of social media platforms. The first two waves of newsroom automation depended on controlled information and fixed patterns yet generative artificial intelligence (AI) systems now generate natural content through unrestricted natural language instructions while maintaining large-scale user interactions [1], [2]. News organizations received this capability at a time when their institutional strength became extremely weak because their audience trust levels dropped while they depended on platforms and citizens stopped watching news and their financial resources decreased which made audience interaction essential for their survival [3]. All publishing houses across the globe have started to use generative AI for news content creation and audience interface development but their approaches differ between cautious and bold implementation [4], [5].

Journalism has a well-established record which demonstrates how technology evolved to enable audience participation in news production. The Web 2.0 period during the mid-2000s established basic research about participatory journalism which showed that audiences actively contribute through comments and citizen reporting and user content submissions [6], [7].

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Bruns developed the concept of "produsage" which described how digital platforms allowed users to become both content creators and content consumers [8]. Research shows that news organizations allow audience participation during the interpretation process through comments on published articles but they maintain control over the selection and composition phases [7]. Research during the 2010s studied algorithmic and automated journalism through three main areas which included template-based news production and robot reporting systems and content recommendation algorithms while researchers focused on how these technologies affected newsroom operations and professional standards and content trustworthiness [9], [10], [11], [12]. The human-machine communication field started to study how journalism roles and organizational structures would transform when machines started to function as communicators instead of being used as simple communication tools [13]. The operational reality of generative AI has transformed the theoretical question into a practical situation.

What distinguishes the post-2022 moment is the migration of AI from the back office to the front stage. Industry surveys indicate that news organisations initially deployed generative AI for behind-the-scenes tasks such as transcription, translation, summarisation, and metadata tagging [4], but a growing number now expose AI directly to audiences: conversational chatbots grounded in newsroom archives, AI-generated news anchors, automatically personalised briefings, synthetic voice editions, and interactive story formats [5], [14]. These deployments reconfigure the audience's position. Where Web 2.0 participation was contributory audiences supplied comments, photographs, and tips that journalists filtered generative AI enables conversational and co-creative participation, in which audiences interrogate the news archive directly, shape the framing and depth of what they receive, and in some cases co-produce content with the system itself. This shift raises questions that existing participatory journalism theory, developed for a human-to-human participatory ecology, only partially anticipates.

Academic researchers responded to the topic at a fast pace although their replies were not equally distributed. Research data from Bibliometric studies indicates that AI in journalism publications have experienced a sharp increase since 2022 yet most research concentrates on newsroom operations through studies about journalists' perspectives and their professional identity and their editorial work and their production processes. The research studies about audiences number far fewer than the combined total of studies focused on journalists' perspectives and their editorial guidelines and their professional identity and their production processes [15], [16], [17]. The most closely related prior synthesis, a scoping review by Chalikiopoulou, Saridou, and Veglis covering 2022–2024, mapped thirty studies on generative AI and audience participation and confirmed both the theoretical plurality of the field and the scarcity of audience-centred empirical work [18]. The evaluation took place before three essential changes occurred which included the development of retrieval-augmented newsroom chatbots and the execution of extensive international audience research and the initial government regulations for AI disclosure. The review failed to establish a dedicated analysis for evaluating ethical aspects and legal issues and credibility problems which had become an essential research subject. The current review builds upon previous studies through four distinct approaches which include extending the research period until 2025 and expanding the search terms to include LLM and ChatGPT related studies and adding Web of Science to the database selection and developing a specific research question about ethical and legal challenges and credibility problems because these issues have become more important in academic research and professional environments.

The urgency of an audience-centred synthesis is underscored by what is now known about public attitudes. The Reuters Institute's 2024 Digital News Report, surveying audiences across 28 markets, found that only a minority of respondents felt comfortable using news made by humans with AI assistance (36%), and fewer still with news made mostly by AI under human oversight (19%) [3], [19]. Complementary qualitative work across six countries found comfort varies sharply by task: audiences tolerate AI in transcription and translation far more readily than in the authorship of hard news about politics or war [20]. In the United States, Pew Research Center data from 2024 show that roughly half of adults expect AI to have a negative effect on the news people receive over the next two decades, and two-thirds are highly concerned about inaccurate AI-generated information [21]. These findings suggest that the participatory promise of generative AI is being pursued by news organisations against a backdrop of substantial audience scepticism a tension that any credible account of AI-mediated participation must confront.

A further gap concerns geography. Research and deployment alike are concentrated in the Global North, yet some of the most distinctive audience-facing experiments have emerged elsewhere: Rappler's archive-grounded chatbot in the Philippines [22], AI news anchors in the Gulf [23], and transcription and translation tools serving indigenous- and local-language audiences in Africa and Latin America [24], [25]. Research about Global South journalism practices has established boundaries which prevent the application of Northern theoretical frameworks to all contexts [26] The political economy of generative AI which Northern companies control through their ownership of foundational models and training data and computing power has made the previous warning more urgent.

Two definitional clarifications delimit the scope of this review. The term "generative AI" describes machine learning systems which include transformer-based large language models and diffusion-based media generators that produce original text and images and audio and video content from natural language input which separates the research focus from previous news automation systems that used rules and templates [2], [17]. The definition of "participation" according to the participatory journalism tradition requires audience members to take part in any of the news production or distribution

stages instead of simply watching or reading content [6]. The definition includes user communication with news systems because Section 4 demonstrates that users who assemble journalistic content through their actions become involved in content selection and processing activities although they do not create any new content themselves. Engagement metrics such as time spent or click-through are treated as correlates of participation, not as participation itself, a distinction that matters because several charted deployments optimise the former while claiming the latter. These delimitations exclude adjacent literatures on computational propaganda, on AI in advertising, and on general-purpose chatbot use that happens to touch news except where charted studies bring them into direct contact with journalistic participation.

Against this background, the present scoping review addresses four research questions. RQ1: Which theoretical and empirical approaches are currently employed to examine generative AI's impact on audience participation in journalism? RQ2: What are the primary application domains, target sectors, and emerging focus areas in recent studies on generative AI in journalism? RQ3: How do media organisations deploy generative AI tools to enhance audience participation, engagement, and co-creation with news content? RQ4: What ethical, legal, and credibility challenges arise from the integration of generative AI in participatory journalism practices? A scoping review is appropriate because the field is young, heterogeneous in method and discipline, and not yet amenable to the effect-size aggregation of a systematic review; the objective is to map the terrain, identify conceptual clusters, and expose gaps that should orient future inquiry [27], [28]. The remainder of the article proceeds as follows: Section 2 assembles the theoretical framework; Section 3 details the methodology; Section 4 presents and discusses the results by research question; and Section 5 concludes with implications and a future research agenda.

2. THEORETICAL FRAMEWORK

No single theory adequately captures the encounter between generative AI and participatory journalism, because the phenomenon spans audience behaviour, organisational adoption, professional norms, discourse, and political economy. This review therefore assembles an integrative framework from seven complementary traditions, each of which illuminates a distinct facet of the object of study and each of which recurs explicitly or implicitly in the charted literature.

2.1 Participatory Journalism Theory

The foundational lens is participatory journalism theory, developed through comparative newsroom research in the late 2000s [6], [7]. Its central insight is that participation is not a binary but a staged process: audiences may be admitted at access and observation, selection and filtering, processing and editing, distribution, or interpretation, and news organisations have historically confined participation to the peripheral stages while retaining control over the core [7]. This stage model provides a precise vocabulary for assessing what generative AI changes. A conversational news chatbot, for instance, admits the audience into selection and processing the user determines which threads of the archive are assembled and how they are framed in ways that comment sections never did. At the same time, the theory's companion concept of gatekeeping-turned-gatewatching cautions that apparent openings can conceal new closures: if the "gate" is now an algorithmic system, participation occurs on terms set by model designers rather than editors, and the notion of participatory fatigue documented in the UGC era [29] may find an algorithmic analogue in audiences' unwillingness to invest effort in conversing with machines.

2.2 Uses and Gratifications Theory

Uses and gratifications (U&G) theory studies media reception through audience perspective by exploring which four types of needs people fulfill through their media consumption [30]. The U&G theory predicts that generative systems will become popular for AI-driven personalisation because they fulfill user needs better than current solutions. The system fulfills cognitive needs through its on-demand explainers which help users find their way. Users can fulfill their needs for control and interactivity by using conversational interfaces. The system meets user needs for convenience through its delivery of personalized briefings. The theory provides a crucial advantage because it shows how individual preference fulfillment might create problems for journalism to serve its public purpose. The system which delivers content based on viewer preferences fails to provide essential material which citizens need for their democratic duties. The charted studies use U&G to study how people interact with AI-generated video and conversational content which makes it the only audience-based theory in the research collection [18].

2.3 Technological Appropriation and Socio-Technical Adoption

Technological appropriation theory describes how users transform technologies through interpretation and domestication which leads to social alterations of their original design [31]. The initial weblog studies discovered that journalism established control over a disruptive online platform by integrating its operations with existing professional practices. Newsrooms now establish control over generative AI through editorial guidelines which combine human oversight with archived content review according to [32]. The socio-technical perspective extends this to infrastructure: adoption depends

not merely on attitudes but on compute resources, data availability, and organisational capacity conditions that are unevenly distributed globally and that shape starkly different appropriation trajectories in resource-constrained newsrooms [24].

2.4 2Media Framing Theory

Framing theory studies how people select important facts from reality to present their messages about particular issues [33]. The review functions through two different operational frameworks which work independently from each other. The research community presents two opposing perspectives about generative AI through their work which shows both its potential for creating new opportunities (efficiency and engagement and accessibility) and its potential to create risks (misinformation and job loss and trust erosion). The public develops their understanding of AI through news reporting because most viewers who lack direct experience with newsroom AI systems base their opinions on what they see in media representations. The difference between publisher excitement and public skepticism about AI becomes clear through international survey data which shows this trend [20].

2.5 Disruptive Innovation Theory

Christensen's disruptive innovation theory shows how established companies which focus on their current clients and value systems lose their position to new technologies which start at a low level but develop in ways that established companies fail to recognize [34]. Generative AI matches the pattern of disruption in an uncomfortable way because AI-generated news content falls short of professional journalism standards for accuracy and accountability but provides better convenience and interactive features and minimal production expenses which are typical characteristics of disruptive technologies. The theory predicts, and the charted literature partly confirms, a bifurcated institutional response: defensive integration (adopting AI within existing products) and exploratory reinvention (new conversational and personalised products), with smaller and local outlets least able to afford either [5].

2.6 Unified Theory of Acceptance and Use of Technology (UTAUT)

UTAUT explains technology acceptance through the elements of performance expectancy and effort expectancy and social influence and facilitating conditions [35]. The framework which originated in business environments now explains how audiences in news media accept AI-generated and AI-mediated content through their perception of personalization benefits and their ability to use chatbots and their social environment and their trust in disclosure labels. The experimental data shows that audiences fail to identify automated text from human-written content [10] and research shows that people view machine-written content as less credible although the effect remains small [36], [37] and AI-generated content labels reduce audience belief in content accuracy regardless of its truthfulness or human origin [38]. The level of acceptance depends on more than just the quality of output because it also depends on how people receive their work and what they expect to receive.

2.7 Cultural Political Economy

The research field of cultural political economy places generative AI within the framework which includes ownership systems and dependency relations and discourse-based acceptance. The production of foundational models takes place at a limited number of firms which possess substantial financial resources. The news organizations which develop audience-facing services through these models need to establish new dependencies with their infrastructure which surpasses the platform dependencies that social media platforms required during their operational period [5], [39]. The perspective brings forward essential questions which adoption-centric theories fail to address because it studies the origin of language in models and the source of AI attention value distribution and the way innovation discourse supports unequal social systems. The analysis of Global South evidence requires this method because training data and imported tools create doubts about knowledge dependence which Ubuntu-based journalism ethics along with other normative frameworks attempt to resolve [40], [26].

The analysis system consists of multiple levels because participatory journalism theory defines participation and U&G and UTAUT describe how audiences receive content and appropriation and disruption theories describe how organizations develop and framing shows how discourse creates its environment and cultural political economy reveals the fundamental social rules which enable all these developments to occur. The layers are not merely additive but mutually corrective. Acceptance models, read alone, tend to treat low audience comfort as a friction to be engineered away; political economy reframes the same reluctance as potentially reasonable resistance to opaque and asymmetric arrangements. Conversely, political-economic critique, read alone, can dismiss documented gains in accessibility and inclusion; the appropriation lens restores attention to the agency of newsrooms including resource-poor ones in bending imported tools to local purposes. The framework thus commits the review to a form of symmetrical scepticism: claims of participatory empowerment are tested against the structural conditions of the systems that deliver it, and claims of structural capture are tested against the concrete practices through which organisations and audiences appropriate, resist, and repurpose the technology. Table III in Section 4 maps these frameworks onto the charted studies.

3. METHODOLOGY

3.1 Design and Protocol

This study employs a scoping review design, which is appropriate for mapping the extent, range, and nature of research activity in an emergent and methodologically heterogeneous field, and for identifying gaps rather than aggregating effect sizes [27]. The review follows the six-stage framework of Arksey and O'Malley (1) identifying the research question; (2) identifying relevant studies; (3) study selection; (4) charting the data; (5) collating, summarising, and reporting the results; and (6) optional stakeholder consultation, which was not undertaken and is reported in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) checklist [27], [28]. The charting protocol additionally draws on Engelke's codebook for systematically categorising research on online participatory journalism, adapted to capture generative-AI-specific variables [41]. The design deliberately parallels, and extends, the protocol of the antecedent review by Chalikiopoulou et al. [18], enabling cumulative comparison across the two mappings.

3.2 Search Strategy

Five sources were searched: Scopus, Web of Science, EBSCO (Library, Information Science and Technology Abstracts, LISTA), ProQuest Central, and Google Scholar. The selected sources provide access to major peer-reviewed communication and journalism and media studies journals together with their interdisciplinary publications in information science and human-computer interaction. The following query string was applied, adapted to the syntax of each database: ("generative AI" OR "AI-generated content" OR "large language models" OR "Chat GPT") AND ("journalism" OR "news" OR "news media") AND ("audience participation" OR "audience engagement" OR "reader interaction" OR "participatory journalism" OR "user-generated content"). The publication window was restricted to January 2022 through 2025, a boundary justified by the public release of Chat GPT in late November 2022, which marks the point at which generative AI became widely available to both newsrooms and audiences; the inclusion of 2022 captures anticipatory and early-adoption scholarship. In Google Scholar, where filtering options are limited, results were screened manually against the same criteria. Reference lists of included studies were hand-searched to identify additional eligible publications (backward snowballing).

3.3 Eligibility Criteria

Studies were included if they were (a) peer-reviewed journal articles, reviews, or full conference papers; (b) published in English; (c) published between 2022 and 2025; (d) available under open-access or hybrid open-access arrangements, to ensure verifiability of the evidence base; and (e) substantively concerned with generative AI in journalism with explicit relevance to audience participation, engagement, interaction, or co-creation. Studies were excluded if they were grey literature or non-peer-reviewed material (with the exception of a small number of authoritative industry research reports retained as contextual not charted evidence); focused primarily on health sciences or purely computational contributions without a journalism dimension; predating 2022; or addressed AI in journalism without any audience-facing dimension. Table I summarises the criteria and their rationale.

TABLE I. PRISMA-SCR INCLUSION AND EXCLUSION CRITERIA.

Dimension	Inclusion criterion	Exclusion criterion	Rationale
Publication type	Peer-reviewed journal articles, reviews, full conference papers	Grey literature, editorials without review, theses, blog posts	Expert evaluation safeguards the credibility of charted evidence
Language	English	Other languages (English abstract only)	Accuracy of full-text data extraction
Period	2022–2025	Pre-2022	Post-ChatGPT public availability; captures the generative turn
Access	Open access or hybrid open access	Fully paywalled publications	Verifiability and reproducibility of the evidence base
Topical focus	Generative AI in journalism with an audience participation/engagement dimension	Health or purely computational focus; newsroom-only studies with no audience dimension	Alignment with RQ1–RQ4

3.4 Study Selection and PRISMA-ScR Flow

Records retrieved from the five sources were exported, deduplicated, and screened in two phases: title-and-abstract screening against the eligibility criteria, followed by full-text assessment of the remaining records. Screening decisions were recorded with reasons for exclusion at the full-text stage (wrong topical focus; no audience dimension; access status; publication type). Figure 1 reports the PRISMA-ScR flow. In total, [42] records were identified across the five sources ([n-

Scopus] Scopus, [n-WoS] Web of Science, [n-EBSCO] EBSCO/LISTA, [n-ProQuest] ProQuest Central, [n-GS] Google Scholar); [39] duplicates were removed; [43] records were screened at title/abstract level, of which [44] were excluded; [1] full texts were assessed for eligibility, of which [24] were excluded with reasons; and [45] studies satisfied all criteria, from which the analytically central subset of 24 studies charted in Table II was extracted for detailed analysis.

Figure 1 (description). The PRISMA-ScR flow diagram comprises three vertical stages. Identification: records identified from Scopus, Web of Science, EBSCO (LISTA), ProQuest Central, and Google Scholar, with duplicate records removed before screening. Screening: records screened at title/abstract level, with exclusions; full-text reports assessed for eligibility, with exclusions itemised by reason (no audience-participation dimension; health/computational focus; access status; publication type; pre-2022). Included: studies included in the scoping review and charted for analysis.

3.5 Data Charting and Synthesis

A charting form was developed a priori and piloted on five studies before full application. For each included study the following variables were extracted: author(s), year, country or region of focus, theoretical framework(s), methodology, target sector, generative AI tool or application examined, focus area, and key findings regarding audience participation. Charting followed Engelke’s adapted codebook categories for participatory journalism research [41], with the “results regarding the journalist–audience relationship” variable recoded to capture audience-facing generative AI mechanisms specifically. Consistent with scoping review methodology, no formal quality appraisal of included studies was performed, since the objective is mapping rather than evidentiary weighting [27]; this is acknowledged as a limitation in Section 5. Synthesis proceeded through descriptive numerical summary of study characteristics and thematic narrative synthesis organised by research question.

4. RESULTS AND DISCUSSION

4.1 Overview of the Charted Corpus

Table II presents the 24 studies charted for detailed analysis. The corpus is heavily weighted towards 2023–2025, consistent with the bibliometric surge that followed the public availability of LLMs [15]. The research covers regions which include North America and Europe and China and sub-Saharan Africa and multi-country comparative studies but the research depth varies across these areas. The research studies stem from journalism and communication studies and information science and human–computer interaction and knowledge management which makes the field multidisciplinary according to the previous research [18]. The publication venues focus their work in a restricted number of journals which include Digital Journalism and Journalism Practice and Journalism and Media and Emerging Media as their main platforms thus indicating that digital journalism outlets established their authority before AI-journalism venues appeared.

TABLE II. OVERVIEW OF STUDIES CHARTED IN THE REVIEW (N = 24).

Ref.	Author(s), year	Country/region	Method	Theoretical lens	AI tool/application	Focus area
[42]	de-Lima-Santos & Ceron, 2022	Global	Document/framework analysis	Socio-technical systems	AI subfields in news work	Current perceptions, future outlook
[39]	Helberger et al., 2022	Netherlands/EU	Normative-theoretical	Normative media theory	Journalistic AI systems	Norms for responsible AI
[43]	Trattner et al., 2022	Norway/Europe	Research agenda	Responsible innovation	Media technology & AI	Challenges, research directions
[44]	Diaz Ruiz & Nilsson, 2023	Global	Case study	Identity-driven controversy	Algorithmic circulation	Disinformation, echo chambers
[1]	Pavlik, 2023	USA	Demonstrative essay	Human–AI collaboration	ChatGPT	Journalism & media education
[24]	Gondwe, 2023	Sub-Saharan Africa (5 countries)	Interviews	Technological appropriation	ChatGPT	Global South engagement with generative AI
[45]	Peña-Fernández et al., 2023	Spain	Conceptual analysis	Professional sociology	Generative AI in media	Social dimension, professional roles
[32]	Gutierrez Lopez et al., 2023	UK/Switzerland	Co-design, interviews	Socio-technical design	AI-driven newsroom tools	Embedding AI in work routines

[46]	Petridis et al., 2023	USA	HCI experiment	Human–AI interaction	LLM ideation tool (AngleKindling)	Angle ideation with LLMs
[47]	Serafini, 2023	Italy/general	Theoretical	Epistemology of journalism	Algorithms, filter bubbles	Epistemic fragmentation
[17]	Shi & Sun, 2024	China/global	Review	Descriptive-analytical	Generative AI (text, video)	Development, application, ethics
[16]	Cools & Diakopoulos, 2024	USA/Europe	Interviews	Sense-making/adoption	Generative AI in newsrooms	Journalists' perceived perils/possibilities
[2]	Guzman & Lewis, 2024	USA	Commentary	Human–machine communication	Generative AI	Consequences for media industries
[14]	Caswell, 2024	UK (BBC)	Case analysis	Structured journalism	Conversational interfaces, LLMs	From structured news to language models
[15]	Ioscote et al., 2024	Global	Systematic retrospective	Bibliometric	AI in journalism (2014–2023)	Field mapping
[40]	Gondwe, 2024	Sub-Saharan Africa	Normative-theoretical	Ubuntu ethics	AI/robot journalism	Normative framework for African newsrooms
[20]	Fletcher & Nielsen, 2024	Six countries	Cross-national survey	Audience attitudes	Generative AI in news	Public opinion, comfort by task
[19]	Ross Arguedas, 2024	28 markets	Survey (DNR 2024)	Audience attitudes	AI in journalism	Awareness, comfort, transparency
[38]	Altay & Gilardi, 2024	Multi-country	Experiments	Attribution/perception	AI-labelled headlines	Effects of AI labels on perceived accuracy
[18]	Chalikiopoulou et al., 2025	Greece (corpus: global)	Scoping review	Participatory journalism	Generative AI applications	Audience participation mapping (2022–2024)
[25]	Gondwe, 2025	Tanzania	Evaluation study	Cultural sensitivity	AI translation in newsrooms	Translation accuracy, reliability
[48]	Guenther et al., 2025	Germany	Interviews	Adoption/professional roles	(Generative) AI	Science journalists' perceptions and uses
[49]	Li, 2025	China	Empirical study	Knowledge management	AI virtual anchors	Impact on traditional anchors
[50]	Yongbo, 2025	Global	Review	Technology–ethics–audience	AI news anchors	Audience response to AI anchors

4.2 RQ1: Theoretical and Empirical Approaches

The charted studies exhibit pronounced theoretical plurality, and more tellingly a substantial share proceed with no explicit theory at all, relying on descriptive mapping or practitioner-oriented analysis. Theoretical approaches which Section 2 presents consist of seven separate traditions. The reviews together with audience-mapping studies [18], [41] use Participatory journalism concepts as their basic framework. The newsroom and HCI studies [2], [32], [46] base their research on human–machine communication and socio-technical design theory. The studies about journalist and audience uptake [24], [48] use appropriation and adoption frameworks together with UTAUT-style acceptance constructs. The responsible-AI literature [39], [43] bases its foundation on normative theory. The critical strand [40], [26] operates under the framework of cultural political economy together with the normative structures which the Global South implements. Table III summarises this mapping.

TABLE III. THEORETICAL FRAMEWORKS IDENTIFIED IN THE CHARTED LITERATURE.

Framework	Core proposition	Exemplar studies	Application to generative AI and participation
Participatory journalism theory	Participation is staged; organisations control which production stages open to audiences	[6], [7], [18]	Locates conversational AI as an opening of selection/processing stages previously closed to audiences
Uses and gratifications	Audiences actively select media to gratify needs	[30], [18]	Explains uptake of personalised and conversational formats; flags tension with civic information needs
Technological appropriation / socio-technical adoption	Technologies are domesticated by professional and infrastructural contexts	[31], [24], [32]	Explains guardrailed, normalised integration of LLMs and divergent Global South trajectories
Media framing	Selection and salience construct issue understanding	[33], [20]	AI framed as risk vs. opportunity shapes both adoption decisions and public attitudes
Disruptive innovation	Inferior-but-convenient technologies displace incumbents along ignored trajectories	[34], [5]	Interprets institutional bifurcation between defensive integration and product reinvention
UTAUT / acceptance models	Acceptance depends on performance/effort expectancy, social influence, facilitating conditions	[35], [36], [38]	Models audience acceptance of AI-generated news; attribution effects moderate credibility
Cultural political economy	Media technologies embed ownership, dependency, and legitimisation structures	[39], [40], [26]	Foregrounds infrastructural dependency on model providers and North–South asymmetries

The corpus shows a clear dominance of qualitative research because it contains interviews with journalists and editors and case analyses of organisational initiatives and co-design studies and conceptual and normative essays. The available audience data exists in limited form because it appears only in three major survey studies [20], [19], [21] and in experiments which examined how people attribute things [38], [36]. The distribution shows a stronger version of the previous research findings which revealed that AI news production studies receive more attention than studies about audience reception [18], [15]. The evidence between the two sides remains uneven which results in major operational challenges. Newsrooms base their audience-facing design choices about chatbot deployment and AI content labeling and personalization boundaries on complete journalist opinion data but they lack sufficient audience behavior information. The available audience data creates problems for positive AI deployment stories because people show low acceptance of AI-generated news which depends on specific tasks [20] and disclosure requirements create negative effects on public opinions [38]. A field which aims to understand participation needs to stop using production-based data to determine its occurrence.

Research methodologies require an additional evaluation because researchers alter their unit-of-analysis during their research process. Researches which focus on audience engagement measure it through organizational indicators which include engagement-focused product launches and journalists' engagement beliefs and platform statistics from media outlets. Researches who focus on audience engagement measure it through organizational indicators which include product launches and journalists' beliefs and platform statistics from media outlets instead of directly measuring audience behavior. The migration pattern becomes evident because people cannot reach their original destinations yet this movement creates a feedback problem because developers utilize their estimated audience demand to justify their deployments and then use these deployments to prove the existence of demand. The best designs from the collection use two methods to break the circle: they conduct experiments which modify AI attribution to study perception changes [38] and they use national context comparisons and AI familiarity measurements to assess identical attitudes [20]. The combination of organizational case studies with separate audience evaluation through mixed-method designs stands as an uncommon approach which creates a new research area in methodology.

4.3 RQ2: Application Domains, Target Sectors, and Emerging Focus Areas

The main research target in the entire corpus focuses on established news organizations which include legacy broadcasters and national newspapers and digital-native outlets that were examined as separate entities and through market comparisons. The journalism education sector functions as a secondary field which investigates generative AI through its role as both an educational subject and an educational resource [1]. The research identifies five main clusters which represent the emerging focus areas in the field. Newsrooms have adopted generative tools which they now use to perform their work through the different stages of gathering and production and verification and distribution [16], [32], [48]. The second addresses audience-facing products conversational interfaces, AI anchors, personalisation which is the cluster most directly relevant to this review [14], [49], [50]. The third research area focuses on ethical standards together with legal requirements and

methods to establish reliable information which includes studies about misinformation spread and development of responsible-AI systems and normative guidelines [39], [43], [44]. The fourth research area investigates how AI implementation affects political economic systems and geographical distribution of technology in the Global South [24], [40], [25]. The fifth cluster which belongs to meta-scientific studies examines the scientific domain by using bibliometric analysis and review techniques [15], [18]. The audience-facing cluster which represents the smallest of all clusters continues to exist as a research gap that will remain relevant until 2025.

4.4 RQ3: Organisational Deployment for Audience Participation, Engagement, and Co-Creation

The research findings from the charted studies and the documented organisational practice demonstrate various deployment methods which media organizations implement generative AI technology to change their audience strategies. The primary applications together with their conceptual framework structure appear in Table IV and Figure 2 which is explained in the following section. The three patterns require detailed analysis because they introduce innovative participation methods which differ from standard efficiency improvements.

The first and most significant is the archive-grounded conversational agent. Rappler’s Rai in the Philippines launched its public debut in October 2024 after serving as an AI moderator for focus-group discussions and now provides answers to user questions through the organization’s database which contains over 400,000 verified news articles that get updated regularly according to the newsroom editing rules [22]. Comparable retrieval-grounded interfaces Ask the Post AI at The Washington Post, Ask FT at the Financial Times, and Forbes’ Adelaide share the same architectural logic [51]: a retrieval-augmented generation (RAG) pipeline that constrains a general-purpose LLM to a curated archive [52]. The participatory significance is twofold. Architecturally, RAG converts the trust problem of open-web chatbots into a provenance proposition answer inherit the editorial accountability of the underlying archive which suggests a trust-building model in which brand loyalty and verifiability reinforce one another [51]. Theoretically, the conversational agent admits audiences into the selection and processing stages of the participation continuum [7]: the user, not the editor, determines which strands of reporting are assembled and at what depth. The BBC’s trajectory from structured-journalism experiments and early chat interfaces towards LLM-driven explainer generation illustrates how incumbents arrived at the same destination from a different starting point [14]. It must be stressed, however, that these systems reduce but do not eliminate fabrication risk, remain constrained by the topical coverage of the archive, and have already exhibited failure modes such as stale-index periods [51]; enthusiasm in the practitioner literature currently outruns independent audience-side evaluation.

The second pattern is synthetic presentation: AI-generated news anchors and voices. Kuwait News introduced its virtual presenter Fedha during April 2023 through a public launch which asked viewers to share their thoughts while planning to provide content in different regional accents. The Gulf region has seen the deployment of Kuwait News virtual presenter Fedha through their April 2023 launch which asked viewers to share their thoughts and planned to provide content in different regional accents. The UAE operates script-to-voice services which support accessibility for its users while African markets employ robot news readers to deliver content through their multiple regional languages. The research about audience reactions to AI anchors shows opposing results because these anchors reach more people while providing nonstop multilingual content at reduced costs yet studies show they fail to duplicate human presenters’ emotional impact and trustworthiness levels [49], [50]. Framed through U&G, synthetic anchors gratify convenience and accessibility needs while under-supplying the parasocial gratifications that anchor loyalty to human presenters a trade-off that may explain their concentration in bulletin-style and service formats rather than flagship news.

The third pattern is personalisation and adaptive delivery. Spanish outlets including El País, La Razón, RTVE, and El Español have worked with vendor tools such as Lynguo, Tailorcast, and OTTforyou for audience segmentation, podcast recommendation, and trend analysis [18]; automated metadata tagging improves discoverability and thereby the precision of recommendations; and real-time transcription robots extend live broadcasts to indigenous- and minority-language audiences, a participation gain of a distinctly inclusive kind [18], [25]. Alongside these, interactive and immersive storytelling AI-assisted narrative branching and VR/AR experiences such as the BBC’s Nile documentary work remains experimental but points towards co-creative formats in which audience choices shape narrative assembly [18]. Finally, in journalism education, generative tools are deployed both to train future journalists in AI-literate practice and to prototype audience-facing formats, positioning the classroom as an upstream site of participatory innovation [1].

TABLE IV. GENERATIVE AI APPLICATIONS FOR AUDIENCE PARTICIPATION IDENTIFIED IN THE REVIEW.

Application	Documented newsroom example	Audience impact
Archive-grounded conversational agents (RAG chatbots)	Rai (Rappler, Philippines); Ask The Post AI (Washington Post); Ask FT (Financial Times) [22], [51]	Conversational interrogation of vetted reporting; user-directed selection and depth; provenance-based trust
AI news anchors and synthetic voice	Fedha (Kuwait News); script-to-voice accessibility services (UAE); multilingual robot readers (African broadcasters) [23], [18]	Continuous, multilingual, accessible delivery; mixed evidence on emotional resonance and trust [49], [50]

Personalisation and recommendation	Lynguo, Tailorcast, OTTforyou deployments at Spanish outlets (El País, RTVE, La Razón, El Español) [18]	Higher engagement and relevance; risk of filter bubbles and epistemic fragmentation [53], [47]
Interactive and immersive storytelling (VR/AR)	BBC immersive documentary experiments; AI-assisted narrative tools [18], [14]	Empathetic, exploratory engagement with complex stories; co-creative narrative choices
Transcription and translation for language inclusion	Real-time indigenous-language transcription robots; AI translation in Tanzanian newsrooms [18], [25]	Inclusion of linguistically marginalised audiences; accuracy and cultural-sensitivity limits
Video automation	Wibbitz, Wochit, and Synthesia services used by BBC, Reuters, The Economist [18]	Fast, visually engaging formats tuned to audience interests
Automated metadata tagging	LLM-based tagging for classification and discoverability [18]	Improved navigation and precision of personalised delivery
Journalism education applications	ChatGPT-integrated curricula and human–AI co-writing pedagogy [1]	AI-literate future journalists; upstream innovation in participatory formats

Figure 2 (description). The conceptual framework links three tiers. Tier 1 (technology): generative AI capabilities language generation, retrieval-augmented grounding, synthesis of voice/video, and preference modelling. Tier 2 (participation mechanisms): conversational interrogation of archives; personalised and adaptive delivery; synthetic presentation and accessibility; co-creative and immersive storytelling; and inclusion through transcription/translation. Tier 3 (outcomes and challenges): on the outcome side, engagement, reach, inclusion, and provenance-based trust; on the challenge side, generative model errors, opacity and disclosure costs, filter bubbles and epistemic fragmentation, authorship and labour disruption, and North–South asymmetry. Moderating conditions editorial guardrails, disclosure policy, regulatory frameworks, and infrastructural resources sit between Tiers 2 and 3.

Read across the three patterns, the evidence supports a central conceptual claim of this review: generative AI is shifting the modal form of audience participation from contributory to conversational and co-creative. In the UGC paradigm, audiences supplied inputs that journalists gatekept [6], [8]; in the generative paradigm, audiences interact with a system that assembles outputs on demand. This is a genuine expansion of participatory scope on the selection and processing stages, but it is participation with a machine intermediary, on terms encoded by system designers. The gatewatching problem thereby migrates inward: what requires scrutiny is no longer only which comments are moderated, but which sources a retrieval pipeline indexes, how a model ranks and paraphrases them, and what the system refuses or fails to surface.

The claim of “co-creation” nonetheless requires disciplined qualification, because the charted deployments occupy different points on a participation gradient. At the shallow end, personalisation and metadata-driven recommendation involve the audience only as a behavioural signal: participation is inferred from traces rather than enacted through choices, and the appropriate description is adaptive delivery, not co-creation. In the middle, conversational agents enact genuine user direction over selection, sequencing, and depth, but within a closed archive and a designed interaction space; the user co-determines the reading, not the reporting. Only at the deep end interactive storytelling in which audience inputs alter narrative structure, or educational and community settings in which audiences prompt, edit, and publish alongside professionals does the co-creative label apply in the strong sense the participatory literature reserves for shared production authority [6], [8]. Two organisational motives compress deployments towards the shallow end: engagement economics, since adaptive delivery scales while strong co-creation does not, and risk management, since every increment of audience authority over generation is an increment of liability for what is generated. The result visible in the corpus is a participatory architecture that is conversationally rich but productively conservative audiences may interrogate the news far more freely than before, while the boundary around who makes the news has, if anything, been reinforced by the guardrails that make interrogation safe to offer.

4.5 RQ4: Ethical, Legal, and Credibility Challenges

The fourth research question elicits the densest cluster of findings, and the charted studies converge on a set of interlocking challenges. Generative model errors remain the foundational risk: LLMs generate fluent falsehoods without epistemic self-awareness, a property rooted in their statistical architecture [54], and generative tools simultaneously lower the cost of producing synthetic disinformation, including deepfakes, that circulates through identity-driven controversy dynamics [44]. Archive-grounding mitigates but does not abolish the problem, and the corrective infrastructure of journalism — corrections policies designed for human-authored, discrete artefacts maps awkwardly onto dynamically generated answers [51].

Training data collections generate algorithmic bias which results in unequal knowledge distribution. The training of models with English-based Northern data produces insufficient representation of diverse knowledge systems which leads to incorrect classification and exaggerated portrayal of content from Global South regions according to African journalists who face unrepresentative databases and translation systems that ignore cultural nuances [24], [25]. The research directly

links to labor issues because people in various situations show signs of displacement fear [45], [16] although these fears reach their peak when workers must accept automated work systems because their unstable financial position prevents them from negotiating with automation processes [24].

Organizations encounter their most challenging theoretical problem when they must establish transparency and disclosure because this requirement creates an actual paradox instead of a basic lack. The basis for journalistic credibility depends on open disclosure but LLMs operate through hidden processes which their creators fail to understand thus endangering the core principle of transparency [12], [39]. The proposed solution to mark AI-based content conflicts with research findings which show that AI-generated labels decrease user trust in content regardless of its origin from humans or AI systems [38]. Publishers must deal with a disclosure penalty because their process transparency efforts will damage the trust they want to preserve during the present time when audience members possess their current level of AI knowledge [19]. The research findings do not permit organizations to hide their AI usage but they must conduct audience education programs while creating specific labels which show when AI helps authors versus when it writes content independently [20].

The main legal domain stands as authorship together with attribution and copyright protection. The attribution relation between directions faces disruption through generative systems because they create problems for determining who should get credit for AI-generated news content and what rules should apply to using journalistic archives for model training. The analyzed literature presents these questions instead of offering solutions to them. The process of legal work and licensing talks between publishers and model providers occurs outside of peer-reviewed publications which demonstrate the slow nature of legal work compared to academic research [5], [39]. Editorial independence develops an infrastructural component through the same process because external providers set limits which determine how independent editorial decisions can be when using their rented foundation models for core audience-facing operations [5].

Trust functions as the primary risk factor which affects all these particular risks because the audience evidence demands detailed analysis instead of quick summary. The 2024 Digital News Report revealed that most people across all studied markets preferred AI-generated news but those who understood AI better showed double the acceptance rate (26% compared to 13%) and acceptance levels differed between American and European respondents [3], [19]. The six-country qualitative evidence shows that audiences experience discomfort when working on particular tasks because they struggle with political and conflict reporting yet they encounter no difficulties when they perform transcription or translation or formatting tasks [20]. The data from Pew shows time-based information which reveals that 50% of American adults believe AI will create a worse news environment during the next twenty years while 59% predict there will be less journalism employment and 66% of respondents express strong worries about AI-created false information [21]. Three implications follow. The current lack of trust exists as a genuine problem which shows different levels across various sectors while showing no signs of becoming permanent; people develop their understanding and experiences through stages which might change their perspectives on literacy but researchers must conduct studies over time to separate the effects of learning from giving up; audiences create separate categories which call for different disclosure approaches when news organizations use AI technology. Trust will not automatically disappear when organizations start using AI because this process depends on how well people understand and approve of AI systems after they start using them.

Personalisation technology has brought back the filter bubble at a more severe level than before. Research during the Recommender-era demonstrated that machine gatekeepers which optimize for user engagement will disperse common knowledge bases which users share [53], [55]. The generative personalisation system creates two distinct versions of the same news event which users receive differently [47]. The combined risk stems from epistemic fragmentation because it destroys the shared information base which threatens to break down the democratic system that requires public dialogue. The research encounters a fundamental structural problem because AI-based news experiences delivery through unequal access between different social groups and within their respective communities. The same technologies which allow connected literate well-served audiences to join now create conditions which push people into social exclusion while making them more dependent on others [40], [26].

4.6 Cross-Cutting Synthesis: The Generative Turn in Historical Perspective

Comparing the generative turn with the two prior participatory waves Web 2.0 UGC and algorithmic distribution clarifies both what is genuinely new and what is a recurrence. Three continuities stand out. First, in each wave, initial rhetoric promised audience empowerment while subsequent practice re-imposed institutional control: comment sections were moderated into marginality, social distribution was recaptured by platform algorithms, and generative interfaces are now wrapped in guardrails that predetermine the space of permissible conversation [7], [29]. Second, in each wave, credibility anxieties initially centred on the new form and gradually migrated to the surrounding system from “can readers report?” to “who amplifies them?”, and now from “can models write?” to “who grounds, indexes, and instructs them?” [9], [14]. Third, each wave widened a participation gap: those with skills, connectivity, and cultural capital participated disproportionately, and the awareness-linked comfort gradient in current survey data suggests the pattern is repeating [19].

The discontinuities are nonetheless substantive. The generative wave is the first in which the participatory counterpart is a synthetic interlocutor rather than other humans mediated by an institution; the human-machine communication literature anticipated this shift conceptually [13], but its normative implications whether conversation with an archive constitutes

public participation or privatised consultation remain unresolved. It is also the first wave in which the enabling infrastructure is not merely a distribution platform but a meaning-making system trained on contested corpora, which moves questions of bias and representation from the edges of the pipeline to its core [54], [24]. And it is the first in which the marginal cost of producing credible-seeming content approaches zero for audiences and bad actors alike, collapsing a scarcity on which journalism's epistemic authority partly rested [44], [5]. Taken together, these comparisons caution against both novelty inflation and premature normalisation: the generative turn extends familiar dynamics of participatory promise and institutional recapture, but it does so through an infrastructure whose opacity, concentration, and generativity are without precedent in journalism's technological history.

5. CONCLUSION AND FUTURE RESEARCH

This scoping review set out to map how scholarship between 2022 and 2025 has examined generative AI as a catalyst for participatory journalism. Across the four research questions, the findings can be summarised as follows. On theory (RQ1), the field is theoretically plural but unevenly theorised: participatory journalism theory, human-machine communication, appropriation and acceptance models, framing, disruptive innovation, and cultural political economy all appear, yet a substantial share of studies remains descriptive, and audience-native theories are the least exploited. On domains and focus areas (RQ2), research concentrates on newsroom adoption, ethics and credibility, political economy, and field-mapping, with the audience-facing cluster growing but still smallest the very gap this review was designed to expose. On deployment (RQ3), a coherent repertoire has crystallised: archive-grounded conversational agents, synthetic anchors and voices, personalisation and adaptive delivery, immersive and co-creative storytelling, and language-inclusion tools, which together shift participation from the contributory mode of the UGC era towards conversational and co-creative modes. On challenges (RQ4), hallucination, bias, opacity, disclosure penalties, authorship ambiguity, labour disruption, epistemic fragmentation, and infrastructural dependency form an interlocking set whose burdens fall unevenly along existing lines of inequality.

The synthesis crystallises a central paradox. The same Generative AI system which provides public access to news creation through content creation also enables users to explore archives at their preferred language level and participate in content development yet it permits content selection through its centralized system which depends on its underlying training data and its built-in protective features. The user interface experiences expanded participation but the core system infrastructure experiences reduced user involvement. Any evaluation which uses interface-based generative AI assessment methods to determine participation as a catalyst system will overestimate the amount of democratic access available to users. The assessment which focuses solely on infrastructure will fail to recognize the actual improvements in user access and inclusion and interactive capabilities which the research data demonstrates especially for users who speak minority languages.

The review establishes a normative framework which favors a combined human and AI system for participatory journalism instead of using AI to replace human work or banning AI interventions. The model uses generative systems to generate conversational outputs by retrieving and combining and translating and modifying approved journalistic content but humans maintain control over the core evidence which includes reporting and verification and correction and editorial choices that create an archive. The archive-based chatbot serves as the primary example which demonstrates this particular work distribution system while its initial data indicates that these design principles apply to various situations: base content generation on responsible data collections and apply identical correction procedures to AI-generated content and human-produced journalism and reveal AI participation through detailed explanations about specific roles and their contributions and maintain human escalation procedures for important questions. The model combines two governance systems with production methods because publishers and regulators and educators need to cooperate for audience AI understanding development which supports authentic disclosure practices. The model combines two governance systems with production methods because publishers and regulators and educators need to cooperate for audience AI understanding development which supports authentic disclosure practices.

Four research gaps merit priority. The first research area requires studies to track audience trust over time because current evidence depends on single-time measurements which show public attitudes during periods of limited knowledge; Panel research is needed to determine if people become more comfortable after repeated exposure because awareness levels suggest this possibility or if their initial doubts become more entrenched. Second, cross-cultural comparative analysis that treats non-Western contexts as theory-generating rather than merely data-supplying, testing whether frameworks such as Ubuntu-informed ethics or appropriation under infrastructural scarcity generalise. Third, regulatory and design research on AI disclosure that moves beyond whether to label towards how experimental work on label granularity, wording, and placement that can reconcile transparency with the documented disclosure penalty. Fourth, empirical work on generative AI and local journalism in the Global South, where the participatory stakes language inclusion, information poverty, dependency are highest and the evidence thinnest. Methodologically, all four gaps point the same way: the field must complement its newsroom-centric case studies with audience-centred designs interviews, focus groups, experiments, and behavioural trace studies because participation is, in the end, something audiences do, not something organisations deploy.

This review has limitations. Restricting inclusion to English-language, open-access, and hybrid-access publications will have excluded relevant scholarship, plausibly with a geographic skew; grey literature was excluded from charting despite the field's rapid practitioner-led development, and authoritative industry reports were used only as contextual evidence; and, consistent with scoping methodology, no quality appraisal of included studies was undertaken, so the map records the existence rather than the strength of evidence. Within these limits, the review offers a consolidated account of a field in formation one in which the question is no longer whether generative AI will reshape audience participation in journalism, but on whose terms, under what safeguards, and with what distribution of its benefits and harms.

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