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INVESTIGATING INFORMATION INTEGRITY: PATHWAYS FOR RESEARCHING INFORMATIONAL PRACTICES ON DIGITAL PLATFORMS

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Introduction

The dynamics of contemporary communication are increasingly shaped by the widespread adoption of digital platforms and artificial intelligence (AI) systems (UN, 2019; UN General Assembly, 2022; UNESCO, 2021, 2023). In recent years, these developments have intensified concerns about hate speech amplification and information manipulation practices—such as misinformation and disinformation—prompting coordinated governance efforts at the international level. These initiatives have contributed to the consolidation of a global information integrity agenda (OECD, 2024b; UN, 2023a; 2023b).

Information integrity refers to the expected outcome of an informational ecosystem in which individuals have access to diverse, reliable, consistent, evidence-based, and accurate information, as well as to the media and information literacy necessary to evaluate the content they encounter while navigating false and misleading claims (OECD, 2024b; UN, 2023a; 2023b). This framework represents a shift from a predominantly reactive focus on countering harmful content toward a more proactive approach aimed at strengthening healthy and plural information ecosystems.

Research plays a central role in advancing this agenda. A growing body of studies has produced robust empirical evidence on media consumption habits, digital skills, perceptions of misinformation, and platform usage across different contexts (Aruguete

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et al., 2024; Banerjee et al., 2023; CGI.br, 2023; Gottfried, 2024; OECD, 2024a; 2024c; UNESCO & Ipsos, 2023). However, some dimensions remain underexplored, particularly the relationship between platform algorithms and individuals' informational practices.

This article addresses this gap by proposing research pathways for investigating how individuals interact with algorithmic systems on digital platforms, how they perceive algorithmic mediation, and how these interactions affect access to diverse and reliable information. Drawing on sociological literature on platforms and algorithms, as well as accumulated experience from international survey discussions, the article outlines key research topics, challenges, and methodological strategies for advancing quantitative and qualitative research in the field.

Platforms, algorithms, and information flows

Digital platforms can be understood as programmable infrastructures designed to organize interactions between users and oriented towards systematic collecting, processing, and monetizing data (van Dijck et al., 2018). As a business model, platforms position themselves as intermediaries for social, commercial, and informational exchanges, relying heavily on algorithms to personalize user experiences and optimize engagement.

The growing centrality of platforms since the mid-2000s has led scholars to describe a broader process of platformization of society, in which digital infrastructures actively shape social relations rather than merely reflecting them (Srnicek, 2017; van Dijck et al., 2018). Schmidt's (2017) three-sided platform architecture framework provides a useful analytical lens for understanding these dynamics and, therefore, how they impact information circulation. In this model, platform providers maintain privileged access to comprehensive backend data, while users interact with opaque, personalized frontends. This asymmetry underpins the growing importance of ranking algorithms, or Online Reputation Systems (ORSs), which classify and prioritize content based on engagement signals such as likes, shares, and comments (Gandini, 2016).

As platforms increasingly replace chronological feeds with algorithmically curated ones, these systems play a decisive role in shaping information exposure (van Dijck et al., 2018; Schmidt, 2017). Reputation and engagement metrics become visible and actionable resources, influencing not only user behavior but also editorial strategies and content production. These processes have significant implications for information diversity, reliability, and visibility, making them directly relevant to the information integrity debate (OECD, 2024b; UN, 2023a; 2023b)

Research pathways: algorithms and informational practices

Building on this framework, we propose three interrelated dimensions for organizing future research on algorithms and informational practices: (a) practices and dynamics of interaction, (b) acknowledgments and perceptions, and (c) skills for assessment and engagement.

Practices and dynamics of interaction

This dimension focuses on what individuals do within algorithmically mediated environments. Key topics include how people encounter information in social media feeds, how they decide what to read or watch, and how they use engagement features such as liking, sharing, commenting, or following. Research should also examine how users actively shape their feeds through available tools—such as muting topics, blocking sources, or adjusting preferences—and whether these practices are informed by their understanding of algorithmic functioning. Additionally, mapping perceived exposure to different types of media outlets (e.g., legacy versus alternative sources) can help clarify how algorithmic recommendation intersects with everyday information consumption.

Acknowledgments and perceptions of algorithmic systems

A second dimension addresses how individuals perceive algorithmic mediation and its consequences. One relevant topic is perceived exposure to AI-generated content and deepfakes, including the strategies people report using to identify such material. Another concerns perceptions of platforms' roles in amplifying false or misleading information and their broader impact on informational dynamics. Understanding these perceptions is crucial, as they shape trust, skepticism, and engagement with digital content.

Skills for assessing and interacting with algorithms

The third dimension centers on the competencies individuals mobilize when navigating algorithmic environments. This includes understanding how ranking and recommendation systems operate, recognizing differences between organic and recommended content, and distinguishing between chronological and curated feeds. It also involves awareness and effective use of personalization tools, as well as critical evaluation of search results within platforms, acknowledging that rankings reflect platform logics rather than neutral relevance.

Challenges for research on algorithms and information practices

Research in this field faces several recurring challenges. Coverage limitations in online samples tend to underrepresent individuals with lower connectivity, fewer devices, or less frequent internet use. Furthermore, the opacity and dynamism of algorithms

complicate measurement, as respondents vary widely in their awareness and understanding of algorithmic influence.

Social desirability and confirmation biases may lead individuals to overreport verification practices or algorithmic literacy, inflating estimates of critical engagement. Also, cross-national comparability remains difficult due to differences in media systems, platform use, and the cultural meaning of categories such as “legacy media.” Finally, the instability of terminology—including concepts like personalization, recommendation, and AI-generated content—poses challenges for both respondents and researchers.

Strategies for advancing research

To address these challenges, four complementary strategies are proposed. First, cognitive interviews are essential for testing how respondents interpret key concepts and for refining survey instruments addressing emerging or complex categories. Second, qualitative approaches—including interviews, focus groups, and digital ethnography—can contextualize survey findings and illuminate how algorithmic experiences are embedded in everyday practices.

Third, sustained collective methodological reflection is needed to improve question wording, operationalization, and cross-cultural adaptation, particularly in a rapidly evolving technological environment. Fourth, future research should explore innovative approaches to mitigating coverage errors, including weighting strategies sensitive to digital inequalities, to ensure that findings are socially representative.

Conclusion

The consolidation of the information integrity agenda marks an important shift in global efforts to address information manipulation while promoting access to diverse, reliable, and evidence-based information. This shift also generates a growing demand for empirical research capable of capturing how algorithmic systems shape informational practices.

By outlining key research dimensions, challenges, and strategies, this article contributes to organizing future investigations into the relationship between algorithms and information on digital platforms. Focusing on practices, perceptions, and skills offers a coherent framework for understanding how individuals navigate algorithmically curated environments and how these interactions affect information integrity. Addressing the methodological challenges identified here is essential for producing robust and comparable evidence capable of informing both research and policy.

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