OPEN ACCESS
Scientechno: Journal of Science and Technology
Vol. 5 No. 4. August 2026, pp. 425-441
DOI. 10.70177/ Scientechno.v5i4.4377

Research Article

FROM PRINT MAGAZINES TO MULTIPLATFORM ECOSYSTEMS: A LITERATURE REVIEW OF MEDIA CONVERGENCE STRATEGIES IN THE DIGITAL ERA

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Article Info
Received: April 13, 2026
Revised: June 16, 2026
Accepted: August 19, 2026
Online Version: October 31, 2026

Abstract
Prior research on print-to-digital transformation has largely examined web migration, newsroom integration, social-media expansion, or business adaptation as separate developments, leaving insufficient explanation of how these changes combine as a developmental organizational process and how platformization creates uneven capability growth. This integrative literature review synthesizes peer-reviewed empirical studies of print-origin media, including expanded magazine-specific evidence, selected through predefined inclusion and exclusion criteria from Crossref and Garuda/SINTA-linked records and updated through 1 September 2026. Eligible studies were screened for methodological transparency and analyzed through thematic synthesis. The findings reconceptualize convergence as a six-layer developmental process: legacy digitization, multiplatform expansion, newsroom and workflow integration, content reconfiguration, audience-and-data orchestration, and organizational/business renewal. The review identifies asymmetric media convergence as a recurrent condition in which outward platform proliferation advances faster than internal capabilities, governance, direct audience relationships, or sustainable revenue structures. Platformization intensifies this asymmetry because algorithms, metrics, data infrastructures, and monetization rules increasingly shape distribution and audience relations. The proposed framework distinguishes digital presence from integrated capability and positions platform resilience, editorial quality, workforce adaptation, and owned audience relationships as conditions for sustainable transformation.

Keywords: Digital Transformation, Media Convergence, Multiplatform Journalism, Platformization, Print Magazines

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Journal Homepage https://research.adra.ac.id/index.php/Scientechno
How to cite: Robinsah, Panuju, R., Abror, D., S. Maella, N. F., & Sugeng, D. (2026). From Print Magazines to Multiplatform Ecosystems: A Literature Review of Media Convergence Strategies in the Digital Era. *Scientechno: Journal of Science and Technology*, *5*(4), 425–441. https://doi.org/10.70177/Scientechno.v5i4.4377
Published by: Yayasan Adra Karima Hubbi

INTRODUCTION

Print magazines were built around a bounded editorial object: an issue assembled through periodic planning, page-oriented editing, visual design, printing, and physical distribution. Digital communication disaggregates that object. Stories can now circulate as searchable web articles, short video, podcasts, newsletters, social posts, live updates, and interactive packages long before or after an issue reaches readers. The strategic challenge is therefore not simply whether a magazine should have a website. It is how a print-origin organization redesigns editorial routines, content architecture, audience relationships, and revenue while preserving the distinctive value of a periodical product (Jenkins, 2006; Kolodzy, 2013).

This study uses print magazines as its focal interpretive unit while drawing comparative evidence from newspapers and other print-origin news organizations. That boundary is deliberate. Magazine-specific research remains much thinner than newspaper research, yet both operate with legacy print routines and face comparable pressures of digitization, newsroom integration, platform distribution, and business renewal. The comparison is analytically useful only when magazine-specific differences are kept visible. Magazines normally work with slower periodicity, stronger thematic curation, more deliberate visual identity, and a longer editorial life cycle than daily newspapers. Recent studies of Sindo Weekly, Tempo Magazine, Cosmopolitan Indonesia, Elle Brasil, and magazines in Georgia show that digital transformation can preserve rather than erase these functions when print and digital channels are assigned differentiated roles (Natalia & Yoedtadi, 2020; Pratopo & Kusajibrata, 2018; Apresianti, 2025; Ferreira et al., 2025; Osepashvili, 2024).

Classic convergence scholarship provides essential pieces of the transformation problem but does not fully explain the contemporary configuration. Dailey et al. (2005) conceptualized newsroom collaboration as a continuum from cross-promotion and cloning toward cooperation, content sharing, and fuller convergence. Singer (2004) documented the diffusion of convergence through newsroom practice, while Deuze (2004) examined multimedia journalism as a changing professional form. Kolodzy (2006, 2013) shifted attention from medium-centered production toward story-centered cross-media journalism, and Erdal (2011) treated cross-media as both an organizational and textual process. Together these perspectives establish that convergence is deeper than operating multiple channels.

Their limitation is not that they are obsolete, but that the object of coordination has expanded. Earlier models primarily explain relations among media units, professional roles, and content forms that are substantially controlled by the publisher. Contemporary news organizations also operate through infrastructures they do not control. Social and search platforms organize visibility algorithmically, supply audience metrics, define technical affordances, and mediate monetization and participation. Platformization therefore changes convergence from an internal integration problem into a coupled problem of internal coordination and external dependence (Poell et al., 2023; Nielsen & Fletcher, 2023; Chua & Westlund, 2022; Grover & Baik, 2024).

The distinction among digitization, multiplatform presence, and convergence is especially important for legacy media. Digitization converts a legacy product or workflow into digital form. Multiplatform presence expands distribution across channels. Integrated convergence requires coordination of planning, newsgathering, assets, production roles, platform-specific storytelling, analytics, governance, and economic objectives. A publication may therefore be highly visible on Instagram, YouTube, TikTok, or podcast platforms while still maintaining fragmented workflows. Conversely, an internally integrated newsroom can remain strategically vulnerable when audience discovery and monetization depend heavily on external platforms.

Indonesian evidence makes this uneven development unusually visible. Solopos developed digital products and single-newsroom arrangements; Radar Jogja moved through cross-promotion, cloning, cooperation, content sharing, and podcasting; Serambi Indonesia combined a single newsroom with multiskilling and platform adaptation; Tempo has alternated between

integration, de-convergence, and renewed platform-oriented restructuring; and larger groups such as Media Group, Mahaka, MNC, and Tribun have linked editorial integration to leadership and business changes (Prihartono, 2016; Wahyuningsih & Zulhazmi, 2020; Karunianingsih, 2021; Amal, 2022; Suryawati & Alam, 2022; Diana, 2018; Iskandar et al., 2025; Suri, 2024; Tripalupi & Irawan, 2025; Arnofia et al., 2026). These cases also show the costs of transformation: heavier workloads, resistance to changed routines, uneven skills, and pressure to optimize for metrics (Adzkia, 2017; Sari, 2022).

Existing research is therefore fragmented in two senses. Empirically, many studies identify a single intervention a website, podcast, social account, integrated newsroom, multiskilled reporter, or new business modelwithout showing how the interventions depend on one another. Conceptually, legacy convergence models emphasize internal integration while platformization scholarship emphasizes external infrastructures, power, datafication, and algorithmic distribution. What remains insufficiently explained is how legacy media move across these domains as a developmental transformation and why outward platform expansion can advance much faster than the organizational capabilities required to sustain it.

This review addresses that gap through three questions. First, what strategic patterns recur in the transformation of print-origin publishing into multiplatform ecosystems? Second, which organizational, editorial, technological, audience, and business capabilities distinguish integrated convergence from simple digital expansion? Third, how does platformization reshape this transformation by creating uneven or dependent forms of convergence?

The study makes two linked theoretical contributions. First, it reconceptualizes media convergence as a six-layer developmental organizational transformation that moves from legacy digitization and multiplatform expansion toward newsroom integration, content reconfiguration, audience-and-data orchestration, and organizational/business renewal. The framework is developmental rather than mechanically linear: later capabilities build on earlier enabling conditions, yet organizations may advance unevenly, reverse course, or revisit prior layers. Second, the review introduces asymmetric media convergence as its principal novelty, defining the condition in which outward platform proliferation and visibility advance faster than the internal capabilities needed to coordinate workflow, workforce, governance, owned audience relationships, and sustainable revenue. This concept links classic convergence theory to platformization and is particularly relevant to print-oriented media in emerging and Global South markets, where resource constraints can magnify uneven transformation.

RESEARCH METHOD

Research Design

This study employed an integrative literature review because the research field combines heterogeneous evidence: qualitative newsroom case studies, interviews, organizational ethnographies, comparative analyses, cross-platform content studies, and conceptual work. Integrative reviews are appropriate when the purpose is to connect diverse empirical and theoretical traditions, build categories, and develop a higher-order explanation rather than estimate a single pooled effect (Whittemore & Knafl, 2005). Following Snyder (2019), the review treats search logic, eligibility, extraction, appraisal, and synthesis as explicit parts of the research method.

The review used two evidence layers. A focused empirical corpus was used to derive the six transformation layers and test negative or contradictory cases. Foundational and recent conceptual literatureincluding mediamorphosis, convergence continuum, multimedia and cross-media journalism, platform configuration, and platformizationwas used to define analytical distinctions and interpret the empirical patterns. Conceptual sources were not counted as empirical cases.

Research Target/Subject

The target of this study was peer-reviewed empirical research examining the digital transformation and media convergence strategies of print-origin and legacy news organizations, with particular emphasis on print magazines transitioning into multiplatform media

ecosystems. As an integrative literature review, the study did not involve individual human participants. Instead, its units of analysis were published empirical studies investigating organizational, technological, editorial, audience-related, and business dimensions of media convergence.

The focused empirical corpus consisted of 24 peer-reviewed studies selected according to predefined inclusion and exclusion criteria. Eligible studies examined print-origin or legacy media organizations and provided identifiable research methods and findings relevant to at least one dimension of transformation: legacy digitization, multiplatform expansion, newsroom and workflow integration, cross-platform content production, audience and data management, platform dependency, or organizational and business adaptation. Studies addressing general internet usage, unrelated digital marketing activities, technology adoption outside media organizations, or insufficiently documented empirical findings were excluded.

Particular attention was given to magazine-specific evidence, including studies of Sindo Weekly, Tempo Magazine, Telaah Strategis, Cosmopolitan Indonesia, Elle Brasil, and magazines in Georgia. Empirical studies of newspapers and other legacy news organizations were also included as comparative evidence to examine broader convergence patterns while maintaining the distinctive editorial and organizational characteristics of magazine publishing. The selected studies provided the empirical foundation for identifying six interdependent layers of media convergence and examining asymmetric convergence across organizational capabilities.

Research Procedure

The bibliographic search used two primary discovery sources and one indexing-verification source. Crossref was used for international bibliographic and DOI metadata discovery, while Garuda was used to identify Indonesian scholarly records. SINTA was used to verify Indonesian journal indexing and to follow linked journal records. Direct journal websites were used only to retrieve or verify full text, bibliographic details, methods, and findings; they were not treated as an unnamed search database. The core empirical search period was 1 January 2016 to 1 September 2026, and the final search update was completed on 1 September 2026. Older sources were retained only when they were foundational to convergence theory or review methodology.

The principal English Boolean search string was ("media convergence" OR "journalism convergence" OR "multiplatform journalism" OR platformization) AND ("print media" OR newspaper OR magazine OR "legacy media"). The principal Indonesian string was ("konvergensi media" OR "jurnalisme multiplatform" OR platformisasi) AND ("media cetak" OR "surat kabar" OR majalah OR "media legacy"). These strings were applied to title, abstract, and keyword fields where the interface supported field restriction; otherwise, full-record keyword searching was used. Additional combinations introduced newsroom, newsgathering, workflow, audience, analytics, business model, and digital transformation, while magazine-specific searches paired magazine/majalah with convergence, multiplatform, newsroom, digital transition, and business adaptation.

Instruments, and Data Collection Techniques

This study employed a structured literature extraction framework as the primary research instrument to systematically collect and organize relevant information from the selected publications. The framework was designed to capture key aspects of media convergence and digital transformation across different organizational and empirical contexts. The extracted information included publication year, media context, research design, principal platform or transformation focus, newsroom and workforce implications, content strategy, audience and data practices, organizational and business implications, and reported constraints. For magazine-specific studies, additional attention was given to the continuing functions of print, including editorial curation, collectability, visual identity, periodicity, subscription value, and

brand authority.

Data collection was conducted through systematic examination of the selected journal articles, using full-text publications whenever available and bibliographic records where appropriate. Relevant information was identified, extracted, and organized according to the predefined analytical categories. The final focused empirical corpus consisted of 24 peer-reviewed studies, combining magazine-specific research with comparative evidence from newspapers and other legacy news organizations. This approach enabled the review to capture both the distinctive characteristics of magazine publishing and broader organizational developments in media convergence.

To ensure the methodological relevance and analytical usability of the collected evidence, a quality appraisal framework was applied to the selected studies. Each study was assessed based on the clarity of its research objectives, empirical context or data sources, methodological approach, analytical procedures, and findings relevant to the research questions. Studies that did not provide sufficient methodological transparency or adequately documented findings were not retained as core empirical evidence. Given the methodological diversity of the reviewed studies, including qualitative case studies, comparative research, organizational ethnography, interviews, and cross-platform content analysis, the appraisal did not employ a single numerical risk-of-bias score. Instead, it served as a threshold for assessing methodological transparency and analytical suitability.

The extracted data were subsequently organized into an evidence-to-framework matrix to establish connections between individual empirical findings and the analytical dimensions of media convergence. This process provided the empirical basis for the subsequent thematic coding and synthesis, while maintaining the relevance of magazine-specific evidence within the broader discussion of multiplatform media transformation.

Data Analysis Technique

The first coding round used categories repeatedly found in convergence research: digitization, platform expansion, newsroom, newsgathering, content, audience, data/metrics, organization, and business. A second interpretive round asked how these categories depend on one another developmentally. This produced six layers: legacy digitization; multiplatform expansion; newsroom/workflow integration; content reconfiguration; audience-and-data orchestration; and organizational/business renewal. The layers are cumulative in capability requirements but not mechanically sequential.

Negative-case reasoning was retained throughout the synthesis. Evidence of de-convergence, fragmented workflows, limited platform adaptation, workload escalation, or platform dependency was treated as theoretically informative rather than as failure to fit the model. Comparing those cases with outward platform expansion produced the concept of asymmetric convergence. An evidence-to-framework matrix was then used to trace which studies supported each layer and to avoid presenting the final framework as an ungrounded author interpretation.

Table 1. Review Protocol and Analytical Focus

Component	Specification
Review type	Integrative literature review
Search period	1 January 2016-1 September 2026; earlier foundational sources retained only for theory/method
Primary discovery/index sources	Crossref (international bibliographic/DOI metadata); Garuda (Indonesian scholarly records); SINTA (indexing verification and linked journal records)
Search fields	Title/abstract/keywords where supported; otherwise full-record keyword searching
English Boolean example	("media convergence" OR "journalism convergence" OR

	"multiplatform journalism" OR platformization) AND ("print media" OR newspaper OR magazine OR "legacy media")
Indonesian Boolean example	("konvergensi media" OR "jurnalisme multiplatform" OR platformisasi) AND ("media cetak" OR "surat kabar" OR majalah OR "media legacy")
Core empirical corpus	24 peer-reviewed empirical studies
Eligibility focus	Digitization; platforms; newsroom/workflow; content; audience/data; organization/business
Quality approach	Methodological/reporting transparency and analytical usability; no pooled risk-of-bias score
Synthesis	Two-round thematic coding plus negative-case reasoning and evidence-to-framework mapping
Full-text/bibliographic verification	Direct journal websites; used for verification/retrieval, not as an unnamed search database
Last search date	1 September 2026

RESULTS AND DISCUSSION

Characteristics of the Reviewed Literature

The 24-study empirical corpus is dominated by qualitative case-based research, which is consistent with a field concerned with newsroom routines, organizational change, and management choices. Indonesian cases are the largest group, while comparative and international studies add evidence on cross-platform adaptation, platformization, and magazine transition. Importantly for the title and scope of this review, the revised corpus includes direct magazine evidence from Sindo Weekly, Tempo Magazine, Telaah Strategis, Cosmopolitan Indonesia, Elle Brasil, and Georgian magazines. Newspaper and network cases are retained as comparative legacy-media evidence rather than treated as interchangeable with magazines.

The literature also shows a temporal shift. Earlier work emphasizes survival, digitization, newsroom convergence, and multimedia competence. Studies after 2022 increasingly foreground platform affordances, audience metrics, organizational isomorphism, datafication, direct-versus-platform-mediated audience relations, and the negotiation of platform dependency. The transformation problem has therefore expanded from integrating owned media units to governing an ecosystem that includes infrastructures controlled by technology companies.

Table 2 summarizes the 24 empirical studies retained for the focused synthesis. Conceptual and methodological works are used for theoretical framing and review design but are not counted as empirical cases.

Table 2. Core Empirical Studies Included in the Focused Synthesis

Study	Context	Approach	Key contribution
Prihartono (2016)	Solopos, Indonesia	Qualitative case study	Print-online convergence; coordination of legacy and digital operations
Adzkia (2017)	CNN Indonesia, Rappler, Tribunnews	Interviews / qualitative	Multimedia work expands output but creates time, equipment, and workload pressures
Diana (2018)	Tempo Inti Media, Indonesia	Case study	De-convergence linked to cultural resistance, workload, quality concerns, and a shift to digital apps
Pratopo & Kusajibrata	Tempo Group,	Qualitative case study	Newsroom 3.0 integrates tempo.co, Koran Tempo, and Tempo Magazine

(2018)	Indonesia		
Natalia & Yoedtadi (2020)	Sindo Weekly magazine, Indonesia	Qualitative case study	Print-online convergence combined with product, price, promotion, and distribution strategy
Wahyuningsih & Zulhazmi (2020)	Radar Jogja, Indonesia	Qualitative	Cross-promotion, cloning, cooperation, content sharing; incomplete full convergence
Hutomo & Ritonga (2021)	Telaah Strategis magazine, Indonesia	Qualitative	Portal, digital magazine, social platforms, and e-commerce as survival diversification
Karunianingsih (2021)	Radar Jogja Digital, Indonesia	Qualitative	Podcasting broadens audience segmentation and cross-platform reach
Amal (2022)	Serambi Indonesia	Qualitative	Single newsroom, multiskilling, and platform-specific content adaptation
Sari (2022)	Lahat Pos Group, Indonesia	Qualitative	Convergence reshapes recruitment, competence expectations, workload, and management
Suryawati & Alam (2022)	Solopos, Indonesia	Case study	Digital unit, organizational redesign, single newsroom, multiplatform reporters
Dvir-Gvirsman & Tsuriel (2022)	News practitioners and audiences	Empirical platform study	Audience relations become mediated by social-platform infrastructures
Hase et al. (2023)	German news outlets	Cross-platform content analysis	Technical adaptation is stronger than deep topic/language adaptation across platforms
Nielsen & Fletcher (2023)	46 countries	Comparative survey analysis	Degree of news platformization varies substantially across media systems
Laaksonen et al. (2024)	Media organization	Organizational ethnography	Metrics and platform norms encourage organizational isomorphism
Osepashvili (2024)	Magazines in Georgia	Interviews with editors/journalists	Digital transition expands online activity but intensifies readership, resource, and revenue challenges
Suri (2024)	MNC Media, Indonesia	Qualitative	Multiplatform transition reconfigures structure, workflow, production volume, and business efficiency
Apresianti (2025)	Cosmopolitan Indonesia	Qualitative case study	Cross-platform adaptation, younger-audience strategy, influencers, and organizational resistance/resource constraints
Ferreira et al. (2025)	Elle Brasil / Elle View	Comparative qualitative case	Same brand/team differentiates print depth and collectability from digital accessibility and timeliness
Iskandar et al. (2025)	Media Group Network & Mahaka	Qualitative	Newsroom, newsgathering, and content convergence vary by organizational arrangement

Muthmainnah & de-Lima-Santos (2025)	Media Indonesian legacy-to-digital-native journalists	10 semi-structured interviews	Legacy and digital-native structures differ in innovation, technology orientation, reputation, and routines
Tripalupi & Irawan (2025)	Tribun Network, Indonesia	Case study	Editorial integration, flexible leadership, platform optimization, and revenue diversification
Arnofia et al. (2026)	Tempo Inti Media, Indonesia	Qualitative case study	Integrated production, data-driven practices, platform-oriented restructuring, and dependency tensions
Lestari & Yesicha (2026)	Riau Pos TikTok, Indonesia	Qualitative	Short-video data journalism creates reach opportunities alongside verification/workload challenges

Legacy Digitization

The first layer converts legacy content and workflow into reusable digital form. Websites, electronic editions, digital archives, and content-management systems can make material searchable, reduce physical distribution constraints, and provide a base for later experimentation. Yet digitization can remain print-centered when articles are produced primarily for the page and only uploaded afterward. In Dailey et al.'s (2005) terms, such transfer resembles cloning rather than deep convergence.

Magazine cases illustrate both the value and limits of this layer. Sindo Weekly maintained online and print editions as part of a survival strategy (Natalia & Yoedtadi, 2020), while Telaah Strategis used a digital magazine and portal as elements of a broader diversification effort (Hutomo & Ritonga, 2021). Georgian magazines similarly used digital channels to respond to weakening print readership but continued to confront resource and revenue constraints (Osepashvili, 2024). Digitization therefore changes accessibility, but not necessarily editorial logic, work allocation, audience ownership, or business sustainability.

Multiplatform Expansion

The second layer is the outward expansion of channels. Solopos connected print with web and other media services; Radar Jogja added digital news and podcasting; MNC and Tribun operate across multiple platforms; and magazine cases extend a single editorial brand across print, websites, social media, and other digital products (Prihartono, 2016; Karunianingsih, 2021; Suri, 2024; Tripalupi & Irawan, 2025; Apresianti, 2025; Ferreira et al., 2025). Expansion changes both geography and temporality: a periodic local product can become continuously accessible and reach audiences far beyond its print circulation area.

However, the literature repeatedly shows that visible expansion is easier than internal integration. Radar Jogja advanced through several convergence practices without reaching the most integrated stage (Wahyuningsih & Zulhazmi, 2020). Organizations can launch accounts and formats quickly while assignment systems, editorial priorities, asset management, and responsibility boundaries remain fragmented. This gap is the first major form of asymmetric convergence: channel-capability asymmetry.

Newsroom and Workflow Integration

The third layer coordinates planning, newsgathering, production assets, and professional roles across channels. Single-newsroom arrangements at Serambi Indonesia and Solopos, as well as larger network structures, show that integration can reduce duplicated reporting and make one reporting process serve several outputs (Amal, 2022; Suryawati & Alam, 2022; Iskandar et al., 2025). Tempo's Newsroom 3.0 model explicitly connected tempo.co, Koran Tempo, and Tempo Magazine through integrated news gathering and processing (Pratopo &

Kusajibrata, 2018).

Integration also redistributes labor. Adzkia (2017) and Sari (2022) show that multimedia expectations increase technological demands and workloads. Tempo's later de-convergence provides a crucial negative case: integration was not self-sustaining when cultural resistance, increased workload, and perceived quality decline outweighed its benefits (Diana, 2018). Recent studies of Indonesian newsrooms continue to show that structural change, training, and leadership must accompany technology adoption (Muthmainnah & de-Lima-Santos, 2025; Rustam et al., 2025; Arnofia et al., 2026). The evidence therefore supports collaborative multiskilling rather than the assumption that every journalist should perform every task simultaneously.

Content Reconfiguration

The fourth layer changes the editorial unit from a medium-specific article to a coordinated story package. Kolodzy's (2013) story-centered logic is strongly supported: a print feature can provide depth and visual coherence; a website can host searchable background and updates; a podcast can extend an interview; video can explain a key element; and social posts can act as entry points. The aim is not identical duplication but differentiated contribution.

Magazine evidence makes the principle concrete. Ferreira et al. (2025) show that Elle Brasil can maintain a shared brand and editorial line while print emphasizes analytical depth and collectible design and digital emphasizes current, accessible circulation. Cosmopolitan Indonesia connects platform-specific content, social engagement, influencer collaboration, and cross-platform campaigns (Apresianti, 2025). Short-video data journalism at Riau Pos similarly demonstrates the opportunity to translate complex reporting into native platform formats while preserving verification and context (Lestari & Yesicha, 2026). Hase et al. (2023), however, caution that technical adaptation often advances further than deeper communicative adaptation. The developmental task is therefore selective reconfiguration, not indiscriminate customization.

Audience and Data Orchestration

The fifth layer treats audience knowledge as a cross-platform capability. Print-centered audience information traditionally comes from circulation, subscriptions, surveys, correspondence, or events. Digital systems add continuous behavioral traces such as clicks, completion rates, watch time, referrals, shares, comments, registrations, and conversions. These data can improve editorial learning, but they can also reduce the concept of public value to what platforms make measurable.

Platform mediation creates a tension between reach and relationship. Dvir-Gvirsman and Tsuriel (2022) show that platform infrastructures increasingly shape how journalists relate to audiences, while Nielsen and Fletcher (2023) demonstrate that direct and platform-mediated pathways vary across media systems. Laaksonen et al. (2024) show how metric infrastructures can normalize similar organizational practices. A sustainable legacy-media strategy should therefore combine rented reach with owned relationships: social platforms may support discovery, but websites, newsletters, memberships, subscriber systems, applications, or community channels preserve direct audience knowledge and reduce vulnerability to algorithm changes.

Organizational and Business Renewal

The sixth layer aligns leadership, workforce design, revenue, product roles, and platform governance. Convergence cannot remain an editorial project if the organization still allocates resources and evaluates success through a purely print-era structure. Tribun's transformation combines editorial integration with flexible leadership, platform optimization, and revenue diversification (Tripalupi & Irawan, 2025). MNC evidence similarly links multiplatform production to changes in structure and efficiency (Suri, 2024). Tempo's recent platform-oriented transformation connects newsroom integration, data-driven production, and organizational restructuring with new dependency on third-party platforms (Arnofia et al.,

2026).

For magazines, renewal often means assigning print a differentiated economic and editorial function rather than simply withdrawing from it. Sindo Weekly linked print-online convergence to a wider marketing mix, Cosmopolitan used cross-platform collaboration to sustain the brand, and Elle Brasil differentiated the experiential value of print from digital immediacy (Natalia & Yoedtadi, 2020; Apresianti, 2025; Ferreira et al., 2025). The literature therefore supports portfolio sustainability: each channel should contribute a defined combination of reach, relationship, authority, revenue, retention, or archival value.

Platformization and Asymmetric Convergence

Across the six layers, the strongest recurring pattern is uneven development. The framework is developmental because the layers represent progressively broader capabilities: Layers 1-2 establish digital accessibility and external reach; Layers 3-4 convert that reach into coordinated editorial production; and Layers 5-6 institutionalize audience intelligence, governance, and economic resilience. These capabilities are interdependent rather than strictly sequential, so organizations can advance, stall, or reverse at different points. The reviewed organizations often expand outward before they integrate inward. This condition is asymmetric media convergence: an organization appears digitally advanced because it occupies many platforms while its workflow, skills, governance, audience ownership, or revenue capacity remain less developed. Platformization can continually reproduce the asymmetry because external infrastructures change algorithms, formats, data access, and monetization rules faster than legacy organizations can redesign internal routines.

Three empirical patterns make this clear. First, channel-capability asymmetry appears when platform portfolios grow faster than integrated planning and staffing, as seen in incomplete convergence and workload problems (Wahyuningsih & Zulhazmi, 2020; Adzkia, 2017; Diana, 2018). Second, reach-relationship asymmetry emerges when audiences are large on third-party platforms but publishers have weak direct data and limited control over discovery; international platform research and recent Tempo evidence point to this dependency (Nielsen & Fletcher, 2023; Laaksonen et al., 2024; Arnofia et al., 2026). Third, output-resource and innovation-revenue asymmetries appear when organizations are expected to produce more formats without proportional staffing or sustainable monetization (Sari, 2022; Suri, 2024; Masduki, 2024).

Table 3 maps the empirical evidence onto the six developmental layers and traces how individual studies support the framework. The matrix also shows why the layers should not be interpreted as six isolated themes: most empirical cases span multiple capabilities, and the recurrent management problem is coordination across those capabilities.

Table 3. Evidence to Framework Matrix

Study	L1	L2	L3	L4	L5	L6
Prihartono (2016)	●	●	●	●		
Adzkia (2017)			●	●		●
Diana (2018)		●	●			●
Pratopo & Kusajibrata (2018)		●	●	●		●
Natalia & Yoedtadi (2020)	●	●				●
Wahyuningsih & Zulhazmi (2020)	●	●	●	●		
Hutomo & Ritonga (2021)	●	●				●
Karunianingsih (2021)		●		●	●	
Amal (2022)		●	●	●		●
Sari (2022)			●			●
Suryawati & Alam (2022)	●	●	●	●		●
Dvir-Gvirsman & Tsuriel (2022)					●	
Hase et al. (2023)		●		●	●	
Nielsen & Fletcher (2023)		●			●	
Laaksonen et al. (2024)					●	●

Osepashvili (2024)	●	●		●	●	●
Suri (2024)		●	●	●		●
Apresianti (2025)		●		●	●	●
Ferreira et al. (2025)	●	●		●	●	
Iskandar et al. (2025)		●	●	●		●
Muthmainnah & de-Lima-Santos (2025)			●			●
Tripalupi & Irawan (2025)		●	●	●	●	●
Arnofia et al. (2026)	●	●	●		●	●
Lestari & Yesicha (2026)		●		●	●	●

Note. L1 = legacy digitization; L2 = multiplatform expansion; L3 = newsroom/workflow integration; L4 = content reconfiguration; L5 = audience/data orchestration; L6 = organizational/business renewal.

Table 4 translates the six-layer synthesis into core capabilities, diagnostic questions, and the principal asymmetry or risk associated with each layer.

Table 4. Print-to-Multiplatform Convergence Strategy Framework

Strategic layer	Core capability	Diagnostic question	Main asymmetry / risk
Legacy digitization	Make content and workflow digitally accessible, searchable, and reusable.	Is the core workflow digital and reusable rather than merely scanned or reposted?	E-edition presence is mistaken for convergence.
Multiplatform expansion	Build a differentiated portfolio of channels.	Does each platform have a defined editorial/audience role?	Channels multiply faster than capabilities or purpose.
Newsroom/workflow integration	Coordinate planning, reporting assets, roles, and production.	Can one reporting process efficiently serve several outputs without degrading quality?	Duplicate work or workload intensification.
Content reconfiguration	Use medium-specific strengths within coherent story packages.	Is content adapted and connected rather than simply cloned?	Context loss, fragmented identity, or excessive customization.
Audience/data orchestration	Use engagement and analytics while preserving direct audience relationships.	Do metrics inform rather than dictate journalism, and are owned relationships growing?	Reach-relationship asymmetry and platform dependency.
Organizational/business renewal	Align leadership, workforce, revenue, product roles, and platform governance.	How does each product contribute to sustainability and resilience?	Digital activity expands without viable resources or revenue logic.

Figure 1 makes the developmental logic explicit. The six layers broaden from digital accessibility and reach, through editorial integration and story reconfiguration, toward audience-data governance and organizational sustainability. The arrows indicate capability dependence rather than an irreversible sequence; the cross-cutting platformization band shows

why external infrastructures can accelerate some layers while destabilizing others.

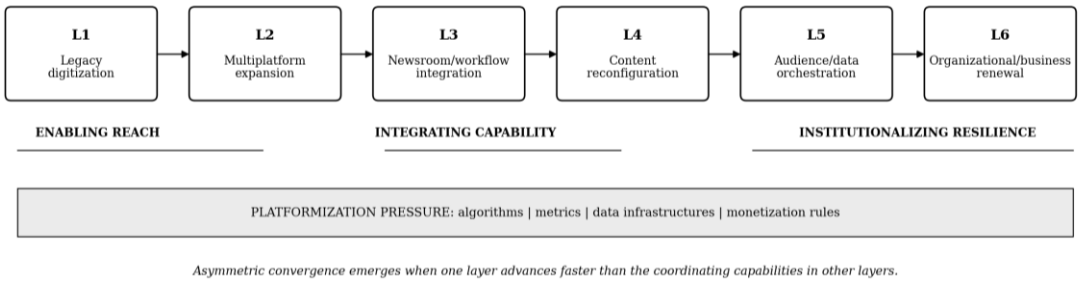


Figure 1. Developmental Logic of The Six-Layer Convergence Framework and Asymmetric Convergence

Reinterpreting Media Convergence

The synthesis supports a shift from treating convergence as a state to treating it as coordinated capability development. Classic convergence models remain useful for identifying newsroom collaboration and cross-media production, but they do not by themselves indicate whether platform expansion, audience-data relationships, or revenue structures have matured at the same pace. The six-layer framework resolves this limitation by making the dependent capabilities explicit. An organization can therefore be assessed not by whether it is 'converged' in the abstract, but by where coordination is strong, where it is weak, and where one layer is advancing without the others.

This interpretation also explains why convergence can be reversible. Tempo's move from integrated Newsroom 3.0 to de-convergence is not an anomaly outside the theory; it demonstrates that later-layer capabilities can fail when workflow integration produces unsustainable labor or quality trade-offs (Diana, 2018; Pratopo & Kusajibrata, 2018). Development is cumulative in requirement but adaptive in direction. Organizations may integrate, separate, and re-integrate functions as technologies, markets, and professional cultures change.

From Technical Integration to Organizational Transformation

The framework places organizational transformation at the center because every layer ultimately changes decisions about people, routines, resources, and accountability. A content-management system does not create convergence if reporting assets remain siloed. A single newsroom does not guarantee convergence if platform teams duplicate work. Multiskilling does not improve convergence if it simply transfers several specialist tasks to one overloaded reporter. Audience analytics do not create audience orientation if metrics become automatic substitutes for editorial judgment.

The stronger cases align technology with differentiated product roles and human capability. This is visible in the contrast between channel multiplication and deliberate portfolio design. Magazine publishers have particular reason to resist a uniform real-time logic. Their print products can retain value through curation, thematic depth, visual composition, and bounded reading experiences, while digital channels extend discovery, continuity, audiovisual explanation, and community. Organizational transformation is therefore not the abandonment of print routines but the selective redesign of which routines remain valuable and which must change.

Platformization as a Structural Force

Platformization deepens the framework because it introduces actors whose infrastructure is external to the publisher. Internal convergence can optimize planning and production while leaving distribution strategically dependent. Poell et al. (2023) characterize platform power as negotiated rather than absolute, and Chua and Westlund (2022) show that publishers can both build platform presence and counterbalance dependency. Recent evidence also shows that newsrooms adopt distinct strategies toward social media depending on resources and editorial

priorities (Kiberg et al., 2026).

This means that platform resilience should be treated as an outcome spanning Layers 5 and 6. Practical indicators include diversified referral sources, direct subscriber or member relationships, portable archives, first-party data practices, strong brand recognition, and the ability to migrate formats when platform conditions change. Grover and Baik (2024) further suggest that news organizations can internalize platform-like data logics, which creates a second-order risk: dependency may be reproduced inside owned products through datafication even when direct traffic increases.

Asymmetric Convergence as the Main Novelty

Asymmetric convergence captures what existing models often leave implicit: digital transformation can be extensive without being coherent. Whereas classic convergence models primarily classify forms or degrees of integration, the present concept compares the relative pace of development across interdependent capabilities. It is therefore a relational diagnostic rather than a new linear maturity scale. Layer 2 may outrun Layer 3, producing many platforms but fragmented workflows; Layer 5 may outrun Layer 6, producing sophisticated metrics without governance or revenue clarity; and Layer 3 may outrun workforce capacity, generating integration on paper while intensifying labor. A magazine may even possess strong internal editorial coordination yet weak direct audience relationships, creating platform dependence despite organizational competence.

This diagnostic is particularly useful because it changes the managerial question from 'Which platform should we join next?' to 'Which capability is now constraining the ecosystem?' That shift helps explain why smaller publishers with fewer channels can be more strategically converged than larger organizations with extensive platform portfolios. It also makes negative cases theoretically productive: de-convergence, selective withdrawal, or slower platform adoption can represent rational attempts to reduce asymmetry rather than evidence of technological backwardness.

Indonesian, Global South, and Magazine Implications

The Indonesian corpus suggests that asymmetric convergence is intensified by resource constraints and by the simultaneous need to preserve legacy revenue while competing in platform markets. Local and regional publishers often possess strong community recognition but smaller specialist teams, which makes universal multiskilling and rapid channel expansion especially risky. Recent Indonesian research also shows tension between legacy reputation, startup-style digital structures, and algorithmic monetization (Muthmainnah & de-Lima-Santos, 2025; Suherman, 2025). These conditions make prioritization and owned audience relationships more important, not less.

The magazine cases add a distinct temporal and product insight. Print should not be evaluated against digital primarily on speed. Elle Brasil, Cosmopolitan Indonesia, Sindo Weekly, Tempo, and Georgian magazines illustrate a more coherent role differentiation: digital channels support discovery, interaction, timeliness, and continuity, while print can support curation, authority, visual identity, collectability, or premium experiences. The framework therefore rejects a simple migration narrative from paper to screen. The strategically mature outcome is a connected portfolio in which each medium has a justified function and the organization can coordinate those functions without surrendering editorial standards or becoming economically captive to platform volatility.

CONCLUSION

This integrative review shows that the transition from print magazines to multiplatform ecosystems is best understood as a layered organizational transformation rather than a technical migration. The synthesis identifies six interdependent capabilities: legacy digitization, multiplatform expansion, newsroom/workflow integration, content reconfiguration, audience-and-data orchestration, and organizational/business renewal. Treating the layers

developmentally clarifies why platform presence alone is a poor measure of convergence maturity: channels can multiply long before the newsroom, workforce, governance, and revenue system can coordinate them effectively.

The review's central theoretical contribution is the concept of asymmetric media convergence. Asymmetry occurs when one dimension of transformationespecially outward platform expansiondevelops faster than the capabilities needed to sustain it. Channel-capability, reach-relationship, output-resource, and innovation-revenue asymmetries help explain fragmented workflows, labor intensification, platform dependency, and digital activity without clear economic contribution. Platformization makes these imbalances structurally important because publishers operate within algorithmic and data infrastructures whose rules can change outside their control. The practical implication is that media managers should diagnose the weakest coordinating capability before adding another platform or format.

For magazine publishers, the framework supports functional differentiation rather than automatic substitution of print. Print can remain a high-involvement product organized around depth, curation, design, authority, or community, while digital channels perform discovery, updating, audiovisual extension, interaction, and conversion. The strategic objective is not to preserve paper for its own sake, but to connect editorial values, people, technologies, audiences, and revenue across a portfolio in which each medium has a defined role.

Several limitations qualify the synthesis. First, database coverage was concentrated on Crossref and Garuda, with SINTA used for indexing verification and linked records, rather than a fully exhaustive search of Scopus and Web of Science; relevant studies outside those discovery routes may therefore have been missed. Second, the review is affected by English/Indonesian language and geographic bias, with Indonesian qualitative case studies forming a large share of the evidence and potentially limiting transferability to other media systems. Third, the included studies are methodologically heterogeneous, spanning case studies, interviews, ethnography, comparative analysis, and cross-platform content research, so the synthesis cannot support pooled effect estimates. Fourth, the quality appraisal used a transparency and analytical-usability threshold rather than a common validated risk-of-bias instrument, which limits direct comparison of study quality. Fifth, the earlier search process did not preserve a complete PRISMA-style identification log, restricting retrospective reporting of identification and screening counts. Finally, selection and publication bias remain possible because successful, innovative, or otherwise distinctive transformation cases may be more likely to be documented than routine failures or abandoned initiatives. Future research should therefore test the six-layer framework and asymmetric-convergence propositions through longitudinal newsroom research, comparative magazine studies, direct audience analytics, and business-performance data across multiple media systems, with particular attention to how changing platform policies, algorithms, and data infrastructures alter the balance among convergence capabilities.

DECLARATION OF AI AND AI ASSISTED TECHNOLOGIES IN THE WRITING PROCESS

During the preparation and revision of this manuscript, the author(s) used Grammarly for grammar, punctuation, and sentence-level editing and ChatGPT (OpenAI) to support language editing, structural revision, and consistency checking. No AI system was used to generate or fabricate empirical data. The author(s) reviewed the revised text, verified citations and interpretations, and take full responsibility for the final content.

AUTHOR CONTRIBUTIONS

Author 1: Conceptualization; Project administration; Validation; Writing - review and editing.
Author 2: Conceptualization; Data curation; In-vestigation.

Author 3: Data curation; Investigation.
Author 4: Formal analysis; Methodology; Writing - original draft.
Author 5: Supervision; Validation.

DECLARATION OF COMPETING INTEREST

The authors declare that they have no known financial or non-financial competing interests, personal relationships, or institutional affiliations that could have influenced the research, analysis, or conclusions presented in this manuscript.

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