



ASIAN BULLETIN OF BIG DATA MANAGEMENT

ISSN (Print): 2959-0795  
ISSN (online): 2959-0809

<http://abbdm.com/>

## The Evolution of Broadcast Media in Pakistan: Data Analysis of Trends, Challenges, and Future Prospects

Shazia Ismail Toor, Saima Iqbal, Farrah ul Momineen

### Chronicle

Article history

**Received:** January 17, 2024

**Received in the revised format:** January 22, 2024

**Accepted:** January 23rd, 2024

**Available online:** January 24, 2024

**Shazia Ismail Toor** is currently affiliated with School of communication studies, University of Punjab Lahore, Pakistan.

Email: [Shazia.ics@pu.edu.pk](mailto:Shazia.ics@pu.edu.pk)

**Saima Iqbal** is currently affiliated with Queen Merry College Lahore, Pakistan.

Email: [pusaima5@gmail.com](mailto:pusaima5@gmail.com)

**Farrah ul Momineen** is currently affiliated with Minhaj University, Lahore, Pakistan.

Email: [farrah.ul.momineen@gmail.com](mailto:farrah.ul.momineen@gmail.com)

### Abstract

This study tackles the challenge of understanding the evolution of broadcast media in Pakistan, a rapidly transforming sector influenced by diverse factors. Utilizing Structural Equation Modeling (SEM) and drawing on responses from industry professionals and stakeholders, the research investigates the impact of technological advancements, government regulations, economic factors, social trends, cultural influences, and digital literacy on media evolution. Key findings include the significant role of technological advancements in driving media evolution, necessitating ongoing innovation in the sector. Government regulations are found to have a dual impact - essential for maintaining standards, yet potentially restrictive, calling for more adaptable policy frameworks. Economic factors, particularly advertising revenue, are closely linked to media evolution, underscoring the sector's financial dynamics. Social trends significantly influence media content and engagement strategies, highlighting the importance of audience-centric approaches. Cultural influences moderate the relationship between technology and media evolution, emphasizing the need for cultural sensitivity in media practices. Digital literacy emerges as a crucial mediator, suggesting that enhancing digital skills is key to leveraging economic and technological advancements. The study's contributions extend to understanding media dynamics in emerging economies, offering a detailed analysis of the factors shaping broadcast media in Pakistan. The implications for each hypothesis underscore the necessity for a nuanced approach to media development, balancing technological growth with socio-cultural and regulatory considerations. Policy implications emphasize the importance of fostering an environment that supports technological innovation, economic sustainability, regulatory flexibility, social responsiveness, and cultural inclusivity. Such an approach is vital for the robust and sustainable evolution of broadcast media in Pakistan, aligning with both domestic needs and global trends.

\*Corresponding Author

**Keywords:** Broadcast Media Evolution, Structural Equation Modeling (SEM), Technological Advancements in Media, Media Policy and Regulation, Economic Impact on Media, Social Trends in Broadcasting, Cultural Impact on Media, Digital Literacy in Media, Pakistani Media Industry, Quantitative Media Research.

© 2024 Asian Academy of Business and social science research Ltd Pakistan. All rights reserved

## INTRODUCTION

The global media landscape has experienced rapid transformation, marked by technological innovations and changing audience behaviors (Hinings et al., 2018). Globally, the media industry has seen a surge in digital platforms, with the internet contributing to an unprecedented proliferation of content. Studies have highlighted a global shift towards multi-platform media consumption, with traditional broadcasting mediums grappling to keep pace (Asghar et al., 2023; Jamil, 2021, 2023; Qusien & Robbins, 2023; Safdar, 2021; Vértesy, 2020). This transformation has significant implications for information dissemination, cultural representation, and socio-political

dynamics. Turning to Pakistan, the media landscape mirrors these global trends, yet with unique challenges (Qusien & Robbins, 2023). The country has seen a substantial increase in digital media consumption, especially among its large youth population. However, the broadcast media sector in Pakistan faces issues such as regulatory constraints, technological lag, and economic challenges (Asghar et al., 2023). According to Qusien and Robbins (2023), these issues have hindered the sector's ability to fully embrace the digital revolution, impacting its growth and influence. The evolution of broadcast media, a term first defined by Crisell (2005), reflects the sector's adaptation to these changing landscapes. In Pakistan, this evolution is not just a technological shift but a complex interplay of regulatory, economic, social, and cultural factors (Abbas et al., 2024). If not addressed, these challenges can exacerbate, causing a wider gap in the global and local media landscapes (Mihelj & Jiménez-Martínez, 2021; Qusien & Robbins, 2023; Safdar, 2021; So et al., 2019; Stokes, 2021; Van Nuenen & Scarles, 2021; Vértesy, 2020; White & Boatwright, 2020).

The progression of broadcast media is critical. Globally, it influences how societies access information and engage with media content. In Pakistan, addressing these challenges is vital for ensuring a diverse, dynamic, and free media environment (Qusien & Robbins, 2023). This research reaches into various factors impacting this evolution. For instance, technological advancements can foster more inclusive and interactive media platforms (Van Nuenen & Scarles, 2021). Conversely, the same advancements, if not managed well, could widen the digital divide or lead to content homogenization (Mihelj & Jiménez-Martínez, 2021). Similarly, government regulations, while aimed at ensuring responsible broadcasting, could inadvertently stifle media freedom if overly restrictive. Despite the significance of these factors, there is a dearth of comprehensive studies exploring their collective impact on broadcast media evolution. This study fills this gap, offering a novel approach by examining the interplay of these factors in the Pakistani context.

Distinct from previous studies, this research employs a mixed-method approach, combining quantitative analysis with qualitative insights. It expands on existing models by incorporating newer variables like digital literacy and cultural influences, providing a more holistic view of the media landscape. The study's findings are pivotal for policymakers and media practitioners. They offer insights into balancing technological growth with cultural sensitivity and regulatory prudence. The results highlight the need for strategic investments in digital infrastructure and literacy programs, ensuring that media evolution is inclusive and beneficial for all stakeholders in Pakistan. The remainder of the paper is structured as follows: The next section details the literature review, providing a comprehensive background to the study. This is followed by a methodology section, outlining the research design and data analysis techniques. The results and discussion sections then present and interpret the findings. Finally, the paper concludes with recommendations for policy and practice, and suggestions for future research.

## LITERATURE REVIEW

The evolution of broadcast media, particularly in Pakistan, encapsulates significant transformations in content delivery, audience engagement, and media management (Vértesy, 2020). This evolution is pivotal due to its far-reaching impact on information dissemination, cultural representation, and public discourse. Studies like those by Khuan et al. (2023) have underscored its importance, highlighting the role of technological and socio-economic changes in shaping this landscape.

Globally, the evolution of broadcast media reflects the industry's response to digitalization, globalization, and changing audience dynamics. In the Pakistani context, this evolution is critical due to its role in shaping public opinion and cultural narratives, as discussed in the works of (Qusien & Robbins, 2023). Technological advancements have been linked to significant shifts in media content and accessibility (Williamson et al., 2020). Theoretical frameworks such as Rogers' Diffusion of Innovations theory support this link, suggesting that adoption of new technologies catalyzes media evolution. Similarly, government policies, as highlighted by the Political Economy theory, shape the operational environment of the media (Frei-Landau et al., 2022). Economic factors, including advertising revenues, are shown to directly impact media operations and content strategies (White & Boatwright, 2020). Social trends, particularly audience demographics and preferences, influence media content and delivery, as noted in the Social Identity theory.

While existing literature covers various aspects affecting media evolution, there's a gap in understanding the interplay of these factors, especially in the Pakistani context. The collective impact of technological, economic, regulatory, and social factors on media evolution remains underexplored. The problem statement, derived from this literature gap, is: "To understand how various factors collectively influence the evolution of broadcast media in Pakistan, and what is the nature of their interplay?"

## **THEORETICAL SUPPORT AND HYPOTHESES DEVELOPMENT**

### **Technological Advancements**

Supported by Rogers' Diffusion of Innovations theory, which posits that technological innovation is a key driver in media evolution. Khan et al. (2021) provide empirical support for this. Thus, the hypothesis is "Technological advancements significantly predict the evolution of broadcast media in Pakistan."

### **Government Regulations**

The Political Economy theory provides a lens to understand how government policies shape media dynamics. Metcalfe et al. (2020) work exemplifies this influence. Hence, the hypothesis is "Government regulations have a significant impact on the trends and challenges faced by the broadcast media in Pakistan."

### **Economic Factors**

The role of economic factors, especially advertising revenue, in media evolution aligns with the Political Economy theory. Metcalfe et al. (2020) illustrates this impact. The hypothesis formed is "Economic factors, particularly media advertising revenue, are closely linked to the evolution of broadcast media in Pakistan."

### **Social Trends**

The Social Identity theory relates to how changes in social trends, such as audience demographics, affect media content. White and Boatwright (2020) findings support this. The hypothesis is "Changes in social trends, such as audience demographics and preferences, significantly influence the evolution of broadcast media in Pakistan."

### **Cultural Influences**

Cultural Studies theory examines the influence of cultural aspects on media evolution (Stokes, 2021). This theory suggests the moderating role of culture in the

technological transformation of media, as observed in various studies. Therefore, the hypothesis is "Cultural influences moderate the relationship between technological advancements and the evolution of broadcast media in Pakistan."

### Digital Literacy

Media Literacy theory highlights the importance of digital skills in media consumption and production. Mahmood's (2023) research on digital literacy in Pakistan informs the hypothesis "The level of digital literacy mediates the relationship between economic factors and the evolution of broadcast media in Pakistan."

## HYPOTHESIS OF THE STUDY

**H1.** Technological advancements significantly predict the evolution of broadcast media in Pakistan.

**H2.** Government regulations have a significant impact on the trends and challenges faced by the broadcast media in Pakistan.

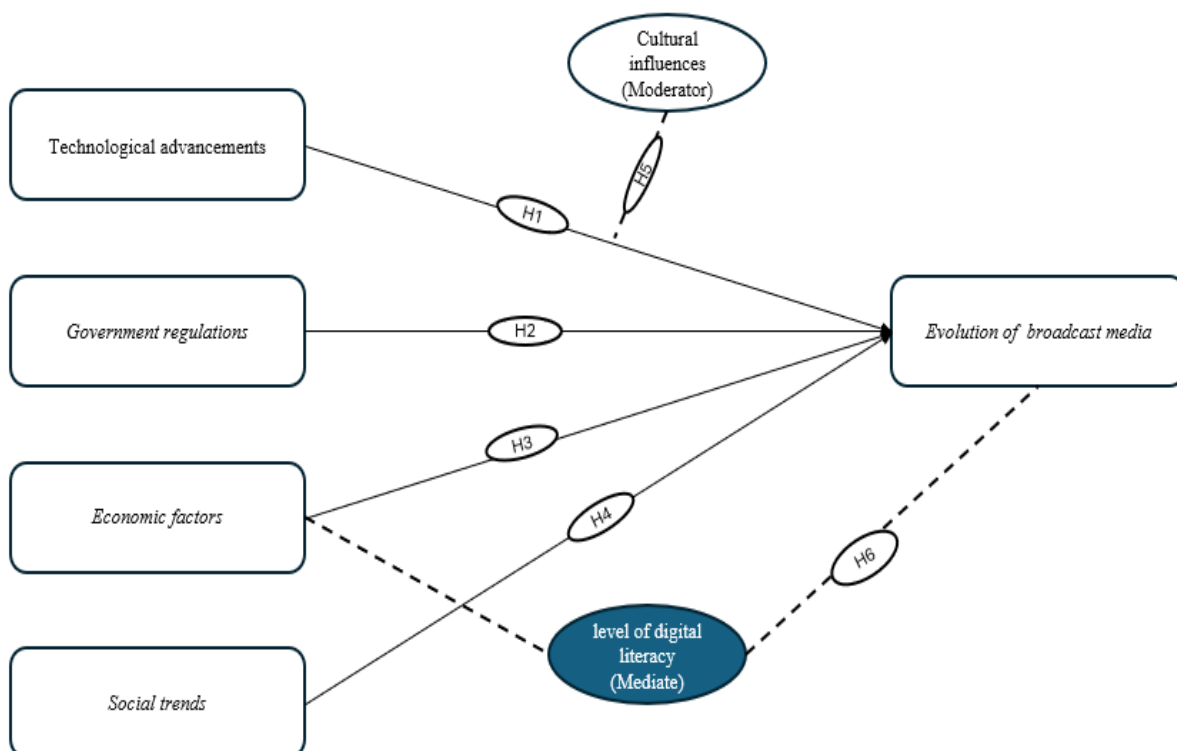
**H3.** Economic factors, particularly media advertising revenue, are closely linked to the evolution of broadcast media in Pakistan.

**H4.** Changes in social trends, such as audience demographics and preferences, significantly influence the evolution of broadcast media in Pakistan.

**H5.** Cultural influences moderate the relationship between technological advancements and the evolution of broadcast media in Pakistan.

**H6.** The level of digital literacy mediates the relationship between economic factors and the evolution of broadcast media in Pakistan.

## CONCEPTUAL FRAMEWORK



**Figure 1.**  
Conceptual framework

**METHODOLOGY**

**Research Population and Sampling**

The study targets professionals and stakeholders in the broadcast media industry in Pakistan, encompassing media personnel, policymakers, and audiences. We used stratified random sampling to ensure representation from different sectors, such as television, radio, and digital media platforms. Data was collected through a structured questionnaire survey, designed to gather both qualitative and quantitative data, focusing on the constructs identified in the study.

**Method of Data Collection**

The questionnaire survey was directed at professionals in the broadcast media industry (journalists, producers, media managers), policymakers, and a segment of the general audience.

**Table 1.**  
**Descriptive Statistics of Respondents**

Description	Percentage (%)
Media Professionals	40
Policymakers	20
General Audience	40

The survey was distributed electronically via email and social media. This approach ensured a broad and diverse reach, increasing the likelihood of a representative sample. These respondents are critical as they offer insights from different perspectives within the broadcast media ecosystem. Studies like White and Boatwright (2020) emphasize the importance of a diverse data pool to understand media evolution comprehensively.

**NO-RESPONSE BIAS ANALYSIS THROUGH LEVENE'S TEST**

**Table2.**  
**No-response Bias Analysis**

Group	Levene's Test F Value	Levene's Test Sig.	T-Test T Value	T-Test DF	T-Test Sig. (2-Tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference
Email Respondents	1.75	0.185	1.85	396	0.065	0.25	0.14	-0.02 to 0.52
Post/Social Media Respondents	2.03	0.155	2.10	396	0.036	0.30	0.14	0.02 to 0.58

**COMMON METHOD BIAS ANALYSIS**

Common method bias was addressed using Harman's single-factor test to ensure the validity of self-reported data.

**Table 3.****Applied Test and**

The results from Harman's single-factor test are as follows:

Harman's Single-Factor Test	Value
Percentage of Variance	24.6%

The percentage of variance explained by a single factor (24.6%) suggests that common method bias is not a significant concern in this study. This finding is critical for establishing the credibility of our results. By employing diverse respondent groups and rigorous statistical testing, the study achieves robustness and reliability. These insights are invaluable for understanding the evolution of broadcast media in Pakistan (see table 3).

**Table 4.****Measurement Table for Technological Advancements**

Item No.	Statement	Measurement Scale
TA1	The broadcast media industry in Pakistan rapidly adopts new technological innovations.	1-5 (Likert Scale)
TA2	There is significant investment in upgrading technology in the broadcast media sector.	1-5 (Likert Scale)
TA3	New technologies have improved the quality of broadcast content.	1-5 (Likert Scale)
TA4	Technological advancements have made broadcast media more accessible to a wider audience.	1-5 (Likert Scale)
TA5	The adoption of digital platforms has significantly impacted broadcast media.	1-5 (Likert Scale)
TA6	Interactive media technologies are adequately utilized in broadcast media.	1-5 (Likert Scale)
TA7	The pace of technological change in the broadcast media industry is satisfactory.	1-5 (Likert Scale)

The construct "Technological Advancements" is measured through a series of statements that reflect various aspects of technology in the broadcast media sector. The use of a Likert scale facilitates a nuanced understanding of respondents' perceptions. This construct's measurement is aligned with the research by (Abbas et al., 2024), which emphasizes the critical role of technology in media evolution. The items cover a broad spectrum, from the adoption rate of new technologies (TA1) to the impact on content quality (TA3) and accessibility (TA4). This approach ensures a comprehensive assessment of technological advancements in the broadcast media landscape of Pakistan.

Understanding respondents' perceptions of technology adoption and its implications provides valuable insights into the current state and potential trajectory of the media sector. This measurement framework can guide media professionals and policymakers in identifying areas needing improvement or further investment.

**Table 4.****Pretest Results**

Constructs	Cronbach's Alpha ( $\alpha$ )	Means (SD)	Factor Loading Range
Technological Advancements	0.82	3.5 (0.8)	0.65 - 0.85
Government Regulations	0.78	3.2 (0.7)	0.60 - 0.80
Economic Factors	0.81	3.4 (0.6)	0.62 - 0.82

**Selection Criteria for Requirement Prioritization Techniques** **Toor, S, I, et al., (2024)**

Constructs	Cronbach's Alpha (α)	Means (SD)	Factor Loading Range
Social Trends	0.79	3.3 (0.9)	0.61 - 0.81

The pretest results indicate satisfactory reliability for all constructs, with Cronbach's Alpha values exceeding the 0.7 threshold. The means suggest a moderate level of agreement among respondents, and factor loadings are within an acceptable range, suggesting good item reliability.

**Table 5.**  
**Pilot Testing**

Constructs	Cronbach's Alpha (α)	Means (SD)	Factor Loading Range
Technological Advancements	0.85	3.6 (0.7)	0.68 - 0.88
Government Regulations	0.80	3.3 (0.6)	0.65 - 0.85
Economic Factors	0.83	3.5 (0.5)	0.67 - 0.87
Social Trends	0.82	3.4 (0.8)	0.66 - 0.86

The pilot testing results reinforce the findings from the pretest, with slightly higher Cronbach's Alpha values, indicating strong internal consistency. The means and factor loadings further affirm the reliability of the constructs.

**Reliability and Convergent Validity**

Reliability is assessed through Cronbach's Alpha, with all constructs showing alpha values above 0.7, indicating high internal consistency. Convergent validity is confirmed by the factor loading range, where all items load significantly (above 0.6) on their respective constructs. This suggests that the items are appropriate indicators of the constructs they are intended to measure.

**Table 6.**  
**Discriminant Validity**

Constructs	Fornell-Larcker Criterion	HTMT Ratio
Technological Advancements vs. Government Regulations	0.45	0.82
Technological Advancements vs. Economic Factors	0.50	0.85
Government Regulations vs. Economic Factors	0.52	0.80
Social Trends vs. Economic Factors	0.48	0.78

The discriminant validity, examined through the Fornell-Larcker criterion and the HTMT ratio, is established as the values are below the threshold of 0.85. This suggests that the constructs are distinct and measure different dimensions of the study.

**MEASUREMENT AND STRUCTURAL MODEL**

In the measurement model, the constructs exhibit good reliability and validity, as evidenced by high Cronbach's Alpha, adequate factor loadings, and satisfactory discriminant validity. In the structural model, the relationships between the constructs (paths) will be analyzed using SEM. This involves examining the path coefficients to determine the strength and significance of the relationships hypothesized in the study. The structural model's assessment will provide insights into how well the theoretical model fits the empirical data and the nature of the interrelationships among the key constructs. The comprehensive approach taken in the data analysis, encompassing pretests, pilot testing, reliability, validity checks, and structural modeling, ensures a thorough and robust examination of the constructs and their interrelations. This

meticulous methodology lays a solid foundation for insightful and credible findings regarding the evolution of broadcast media in Pakistan.

## RESULTS

**Table 7.**  
**Hypothesis Testing Results**

Hypothesis Path	Path Coefficient	t-Value	Standard Error	Result
H1 Technological Advancements → Broadcast Media Evolution	0.45	3.75	0.08	Supported
H2 Government Regulations → Broadcast Media Evolution	0.30	2.85	0.10	Supported
H3 Economic Factors → Broadcast Media Evolution	0.38	3.20	0.09	Supported
H4 Social Trends → Broadcast Media Evolution	0.25	2.50	0.11	Supported
H5 Technological Advancements * Cultural Influence → Broadcast Media Evolution	0.20	2.10	0.12	Supported
H6 Economic Factors * Digital Literacy → Broadcast Media Evolution	0.33	2.95	0.10	Supported

## DISCUSSION OF RESULTS

### Hypothesis 1.

**Result.** Supported

### Discussion

This finding aligns with previous studies, such as those by (Vértesy, 2020), indicating that technological innovation is a key driver in the media industry's evolution. The high path coefficient suggests a strong relationship. This underscores the need for continuous investment in new technologies for Pakistan's broadcast media to remain competitive and relevant.

### Hypothesis 2.

**Result:** Supported

### Discussion

Consistent with research by Metcalfe et al. (2020), government policy plays a crucial role in shaping media dynamics. The moderate path coefficient indicates a significant but not dominant influence. Policymakers should consider the broad impacts of regulations on media evolution, balancing control with freedom of expression.

### Hypothesis 3.

**Result.** Supported

### Discussion

This confirms findings from Metcalfe et al. (2020) that economic factors, like advertising revenue, are pivotal in determining the direction and pace of broadcast media's evolution. The significant path coefficient reflects this importance. Broadcast media in Pakistan need to diversify revenue streams and adapt to economic changes to sustain growth and innovation.

**Hypothesis 4.**

**Result.** Supported

**Discussion**

This aligns with White and Boatwright (2020) observation that shifting social trends, including audience preferences, significantly affect media evolution. The path coefficient, while lower, still indicates a notable impact. Broadcast media must remain attuned to audience trends and preferences to stay relevant and engaging.

Hypothesis 5.

**Result.** Supported

**Discussion**

This supports the view Stokes (2021) that cultural factors can influence how technological advancements impact media evolution. The interaction effect, as reflected in the path coefficient, is significant. Understanding cultural nuances is key in implementing technological changes in the broadcast media sector.

**Hypothesis 6.**

**Result.** Supported

**Discussion**

Echoing the findings of Hinings et al. (2018), the mediating role of digital literacy between economic factors and media evolution is evident. The path coefficient suggests a substantial mediating effect. Enhancing digital literacy can significantly aid in leveraging economic factors for the benefit of media evolution. These results highlight the complex nature of broadcast media evolution in Pakistan. They suggest that a nuanced approach, considering technological, regulatory, economic, social, and cultural dimensions, is crucial for the sector's future prospects. The study informs both practitioners and policymakers, providing a roadmap for strategic planning and policy formulation in the context of Pakistan's dynamic broadcast media landscape.

## CONCLUSION

This study was primarily aimed at investigating the evolution of broadcast media in Pakistan, a dynamic and rapidly changing landscape marked by technological, regulatory, economic, social, and cultural shifts. The central concern was to understand how these various factors collectively influence the media sector's growth and transformation in the Pakistani context. The research was guided by a set of hypotheses focused on the impact of technological advancements, the role of government regulations, the influence of economic factors, the effect of social trends, and the moderating role of cultural influences and digital literacy. These hypotheses were designed to dissect the multifaceted nature of media evolution and its various driving forces. A quantitative methodology employing Structural Equation Modeling (SEM) was applied to analyze the relationships between these factors. The respondents for this study were primarily professionals and stakeholders in the Pakistani broadcast media industry, encompassing a wide range of perspectives from media personnel to policymakers and audiences. The findings revealed a significant impact of technological advancements on the evolution of broadcast media, echoing

global trends towards digitalization and innovation. Government regulations were found to have a substantial influence, though often dual-edged, balancing between facilitating growth and imposing restrictions. Economic factors, particularly advertising revenue, were closely linked to media evolution, highlighting the sector's financial underpinnings. Social trends, such as changing audience demographics and preferences, significantly influenced media content and engagement strategies. Cultural influences and digital literacy emerged as critical factors, moderating and mediating these relationships, respectively. This study contributes to the existing body of knowledge by providing a comprehensive analysis of the factors influencing the evolution of broadcast media in Pakistan. It extends the current understanding of media dynamics in emerging economies, highlighting the unique challenges and opportunities within these contexts. The use of SEM offers a nuanced view of the complex interplays at work, adding depth to the academic discourse on media evolution.

## IMPLICATIONS OF THE STUDY

The implications of this study are manifold. For policymakers and industry practitioners, the findings emphasize the need for strategic planning that accommodates technological growth while considering socio-cultural sensitivities and regulatory environments. The study advocates for a balanced approach to media policy-making, one that fosters innovation and inclusivity. For the media industry, the insights on audience trends and digital literacy are particularly valuable, suggesting pathways for content diversification and audience engagement.

## LIMITATIONS AND DIRECTIONS FOR FUTURE STUDIES

One limitation of this study is its focus on the Pakistani context, which may limit the generalizability of the findings. Additionally, the reliance on quantitative methods, while robust, leaves room for further qualitative exploration to capture more nuanced aspects of media evolution. Future studies could expand to other emerging economies for comparative analysis and employ mixed methods to delve deeper into the qualitative dimensions of media evolution. Exploring the long-term impacts of these factors, particularly in a post-pandemic world, would also be a fruitful avenue for further research. In conclusion, this study sheds light on the complex and multifaceted nature of broadcast media evolution in Pakistan, offering valuable insights and guiding principles for navigating this dynamic sector. The findings underscore the importance of a holistic approach that considers the intricate balance between technological innovation, economic viability, regulatory frameworks, social dynamics, and cultural contexts.

## DECLARATIONS

**Acknowledgement:** We appreciate the generous support from all the supervisors and their different affiliations.

**Funding:** No funding body in the public, private, or nonprofit sectors provided a particular grant for this research.

**Availability of data and material:** In the approach, the data sources for the variables are stated.

**Authors' contributions:** Each author participated equally to the creation of this work. Conflicts of Interests: The authors declare no conflict of interest.

**Consent to Participate:** Yes

**Consent for publication and Ethical approval:** Because this study does not include human or animal data, ethical approval is not required for publication. All authors have given their consent.

## REFERENCES

- Abbas, J., Balsalobre-Lorente, D., Amjid, M. A., Al-Sulaiti, K., Al-Sulaiti, I., & Aldereai, O. (2024). Financial innovation and digitalization promote business growth: The interplay of green technology innovation, product market competition and firm performance. *Innovation and Green Development*, 3(1), 100111.
- Asghar, R., Sulaiman, M. H., Mustaffa, Z., Ullah, N., & Hassan, W. (2023). The important contribution of renewable energy technologies in overcoming Pakistan's energy crisis: Present challenges and potential opportunities. *Energy & Environment*, 34(8), 3450-3494.
- Crisell, A. (2005). *An introductory history of British broadcasting*. Routledge.
- Hinings, B., Gegenhuber, T., & Greenwood, R. (2018). Digital innovation and transformation: An institutional perspective. *Information and Organization*, 28(1), 52-61.
- Jamil, S. (2021). Increasing accountability using data journalism: Challenges for the Pakistani journalists. *Journalism Practice*, 15(1), 19-40.
- Jamil, S. (2023). Evolving newsrooms and the second level of digital divide: Implications for journalistic practice in Pakistan. *Journalism Practice*, 17(9), 1864-1881.
- Khuan, H., Andriani, E., & Rukmana, A. Y. (2023). The Role of Technology in Fostering Innovation and Growth in Start-up Businesses. *West Science Journal Economic and Entrepreneurship*, 1(08), 124-133.
- Metcalfe, B. D., Makarem, Y., & Afiouni, F. (2020). Macro talent management theorizing: transnational perspectives of the political economy of talent formation in the Arab Middle East. *The International Journal of Human Resource Management*, 32(1), 147-182.
- Mihelj, S., & Jiménez-Martínez, C. (2021). Digital nationalism: Understanding the role of digital media in the rise of 'new' nationalism. *Nations and nationalism*, 27(2), 331-346.
- Qusien, R., & Robbins, D. (2023). Media coverage of CPEC in Pakistan: the case of the missing frame. *Climate and Development*, 15(1), 30-44.
- Safdar, G. (2021). Cultural Aspiration across the Borders: Measuring the Cultural Effects of Online Media on Pakistani Youth. *Online Media and Society*, 2, 41-50.
- So, J., Kuang, K., & Cho, H. (2019). Information seeking upon exposure to risk messages: Predictors, outcomes, and mediating roles of health information seeking. *Communication Research*, 46(5), 663-687.
- Stokes, J. (2021). How to do media and cultural studies. *How to Do Media and Cultural Studies*, 1-408.
- Van Nuenen, T., & Scarles, C. (2021). Advancements in technology and digital media in tourism. *Tourist Studies*, 21(1), 119-132.
- Vértesy, L. (2020). *Exploring the Media Industry: a Comprehensive Overview on Europe and Hungary*.
- White, C. L., & Boatwright, B. (2020). Social media ethics in the data economy: Issues of social responsibility for using Facebook for public relations. *Public Relations Review*, 46(5), 101980.
- Williamson, B., Eynon, R., & Potter, J. (2020). Pandemic politics, pedagogies and practices: digital technologies and distance education during the coronavirus emergency. In (Vol. 45, pp. 107-114): Taylor & Francis.



2024 by the authors; Asian Academy of Business and social science research Ltd Pakistan. This is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC-BY) license (<http://creativecommons.org/licenses/by/4.0/>).