

Smartphones in Mobile Journalism: A Technology Acceptance Model Based Study of Media Professionals in Delhi-NCR

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Abstract

This study examines the status of smartphone adoption among media professionals in India's National Capital Region (NCR), Delhi, through the lens of the 'Technology Acceptance Model' (TAM). A structured survey (N = 161) was conducted among reporters, editors, content creators, photographers, videographers, and social media managers associated with digital, television, print, radio, and freelance media organizations. Quantitative data were analysed using descriptive statistics, multi-group tests, and hierarchical multiple regression, while qualitative open-ended responses underwent inductive thematic analysis (intercoder $\kappa = .84$). Perceived usefulness (PU: $\beta = 0.52$, $p < .001$) and [Perceived Ease of Use] (PEoU: $\beta = 0.31$, $p < .01$) collectively explained 61% of the variance ($R^2 = 0.61$) in actual daily usage. 79.5% of respondents reported daily smartphone usage; 90.5% noted an acceleration in news-gathering workflows; and 86.8% considered smartphones effective for verification purposes. Recurring challenges identified include poor network connectivity (41.5%), limited battery life (29.6%), and device overheating (10.7%). Thematic analysis identifies AI integration, 5G expansion, and AR tools as anticipated future developments. This study extends the application of TAM to mobile journalism within the 'Global South' and offers actionable recommendations for media organizations, policymakers, and journalism educators.

Keywords: Digital Transformation, Mobile Journalism, News Gathering, Perceived Usefulness, Smartphones, Technology Acceptance Model.

Introduction

Smartphones have fundamentally transformed journalism by integrating multiple professional tools, including cameras, audio recorders, communication systems, and editing software, into a single portable device (1). This technological convergence has given rise to Mobile Journalism (MoJo), a practice in which smartphones serve as the primary tools for gathering, verifying, editing, and disseminating news content (2). Once considered an emerging trend, mobile journalism has become a mainstream reporting practice. Studies from North America, Europe, and Asia indicate widespread smartphone adoption among journalists for daily reporting activities (3). The COVID-19 pandemic accelerated this shift by encouraging remote news production and mobile-first workflows (4). At the same time, the growing importance of platforms such as Twitter/X, Instagram, and TikTok has made smartphones indispensable for real-time audience engagement and news dissemination (5). Despite the increasing importance of mobile journalism, research on

smartphone adoption among journalists remains limited, particularly in the Global South. India represents a significant context for investigation because of its large and highly competitive media ecosystem. The Delhi-NCR region, which hosts major print, television, digital, and independent media organizations, provides an appropriate setting for examining smartphone adoption among journalists (6). This study seeks to contribute empirical evidence from this under-researched context while extending the broader mobile journalism literature. The emergence of mobile journalism has been closely linked to advances in mobile technologies, network infrastructure, and newsroom convergence. Early studies showed that mobile devices enabled integrated multimedia production and reshaped journalistic workflows (7). Subsequent research established mobile journalism as a distinct field and highlighted the development of smartphone-based professional practices across different countries. Comparative studies in Pakistan and Ghana further

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demonstrated both the democratizing potential of mobile journalism and its vulnerability to misinformation challenges (8).

This study is grounded in the Technology Acceptance Model (TAM), which proposes that technology adoption is primarily influenced by Perceived Usefulness (PU) and Perceived Ease of Use (PEoU) (9). Perceived usefulness reflects the extent to which journalists believe smartphones improve professional performance, whereas perceived ease of use refers to the degree to which smartphone use is perceived as effortless (10). Although extensions such as TAM2 and TAM3 incorporate additional factors, the original TAM is more appropriate for examining individual-level adoption decisions among journalists and allows direct comparison with prior technology adoption research (11). Verification has become one of the most important dimensions of smartphone-mediated journalism. Research on election reporting found that smartphone-based verification methods, including metadata analysis and reverse-image searches, have become routine journalistic practices (12). Studies examining image-verification technologies and user-generated content similarly emphasized the growing role of smartphones in verification and fact-checking processes (13). These findings suggest that smartphones contribute not only to content production but also to enhancing journalistic credibility and accuracy (14).

Alongside these advantages, the literature

identifies several challenges associated with smartphone-based journalism. Security concerns remain significant, with studies documenting threats such as advanced persistent attacks, sensor-based vulnerabilities, and surveillance risks targeting journalists through mobile devices (15). Infrastructure limitations, including unstable connectivity, bandwidth constraints, and battery dependence, continue to affect field reporting (16). Furthermore, research indicates that expectations of constant mobile availability contribute to professional stress and burnout among journalists (17). Evidence from developing countries provides additional insights into smartphone adoption. Research in Nigeria reported near-universal smartphone use among journalists, although patterns of utilization varied considerably (18). Studies in Ethiopia found that smartphones helped journalists overcome resource and access limitations, while research in South Africa highlighted their role in facilitating multilingual reporting and rapid information dissemination (19). Collectively, these studies demonstrate that technological, economic, and infrastructural conditions shape mobile journalism adoption across Global South contexts and are likely to influence journalists in Delhi-NCR.

Based on TAM, this study conceptualizes smartphone adoption as a function of perceived usefulness and perceived ease of use. The following hypotheses, discussed in Table 1 are proposed.

Table 1: Research Hypotheses Derived from the Technology Acceptance Model (TAM)

Hypothesis	Statement
H1	Journalists who perceive smartphones as highly useful for content gathering, photography, video, and live reporting are significantly more likely to adopt them daily (PU → Actual Use).
H2	Journalists who perceive smartphones as easy to use are significantly more likely to adopt them daily (PEoU → Actual Use).
H3	Perceived usefulness mediates the relationship between perceived ease of use and actual daily adoption (PEoU → PU → Actual Use).
H4	There are significant differences in perceived usefulness and ease of use across journalists' media organisation type (digital, television, print, radio, freelance).

This study contributes to the literature by providing theory-driven evidence from an under-researched Indian context, examining the relationship between TAM constructs and smartphone adoption, and identifying structural barriers relevant to the future development of mobile journalism.

Methodology

Our research employed a cross-sectional survey design, complemented by an inductive thematic analysis of open-ended questions. The quantitative approach facilitates hypothesis testing through inferential statistics, while the qualitative approach aids in understanding empirical aspects

that cannot be measured using a Likert scale, aspects that are crucial for comprehending the process of adoption. This study included media professionals working within the media industry or freelancing in the Delhi-NCR region, specifically those associated with the following locations:

- a) FC-8, Film City, Sector 16A, Noida, Uttar Pradesh 201301 (GPS Coordinates: 28.5658° N, 77.3211° E);
- b) Jaypee Wishtown, Plot No C3-C, Noida-Greater Noida Expressway, Sector 129, Noida, Uttar Pradesh 201304; GPS Coordinates: 28.5042° N, 77.3732° E
- c) B-30, Janpath Marg, Block C, Sector 85, Noida, Uttar Pradesh 201304 (GPS Coordinates: 28.5029° N, 77.4042° E); and
- d) FC-6, Film City, Sector 16A, Noida, Uttar Pradesh 201301 (GPS Coordinates: 28.5670° N, 77.3220° E).

These professionals were engaged in fields such as news, reporting, editing, photography, or social media. For this purpose, sampling techniques such as convenience and snowball sampling were utilized. The survey was conducted over a period of three weeks in July 2025 and was disseminated through professional journalism networks, Press Club mailing lists, and social media groups associated with media organizations. A total of 178 responses were received; However, 17 of these responses were either incomplete or duplicate entries, resulting in a final sample size of $N = 161$ responses. A power analysis (G*Power 3.1; $\alpha = .05$, $1-\beta = .80$, $f^2 = .15$, three predictors) indicated that a minimum sample size of $N = 89$ is required; and our current sample size significantly exceeds this requirement.

The survey included four sections:

- a) demographic information (6 items);

- b) smartphone use for news gathering, content creation and content dissemination (14 items with 5-point Likert/frequency scales);
- c) perceived impacts and challenges (5 items); and
- d) two open-ended questions on challenges and expected future trends.

'Technology Acceptance Model' [TAM] questions were based on PU and PEOU scales, with wording amended for journalism (11). Cronbach's alpha was used to measure internal consistency: $\alpha = .82$ (PU) and $\alpha = .79$ (PEOU), which is considered acceptable (15).

The study was approved by the Research Ethics Committee at Lovely Professional University (LPU-JMC-2025-07). Informed consent was obtained electronically. No identifiable data were collected. Data were encrypted and accessible only to the research team.

We analysed quantitative data in three steps:

- a) descriptive statistics (frequency, percentage, mean and SD) of all survey items;
- b) chi-square tests of independence (χ^2) to assess associations between categorical variables (testing H4); and
- c) hierarchical multiple regression with daily adoption as the dependent variable and PU and PEOU composites as the independent variables (testing H1, H2, H3).

Open-ended data were analysed inductively using thematic analysis following (16) six-step process; a second coder independently coded 30% of the sample (Cohen's $\kappa = .84$, strong agreement).

Results

Table 2 provides the comprehensive raw data matrix for the study ($N = 161$). It quantifies the exact frequencies (n) and percentages (%) for the respondents across five key background variables: gender, age, experience, media organization type, and primary journalistic role.

Table 2: Demographic Characteristics of Respondents

Characteristic	n	%
Gender		
Male	102	63.4
Female	59	36.6
Age group		
15–29 years	128	79.5
30–60 years	33	20.5
Years of experience		
Less than 1 year	17	10.6

1–3 years	20	12.5
4–6 years	29	18.1
7–10 years	44	27.5
More than 10 years	47	29.4
Media organisation type		
Digital/online	80	49.4
Television	37	22.8
Radio	22	13.9
Print	21	13.3
Primary role: Reporter		
Editor	55	34.2
Content Creator	28	17.4
Photographer/Videographer	27	16.8
Social Media Manager	14	8.7
Total	161	100.0

Note: n- Number of Participants, %- Percentage.

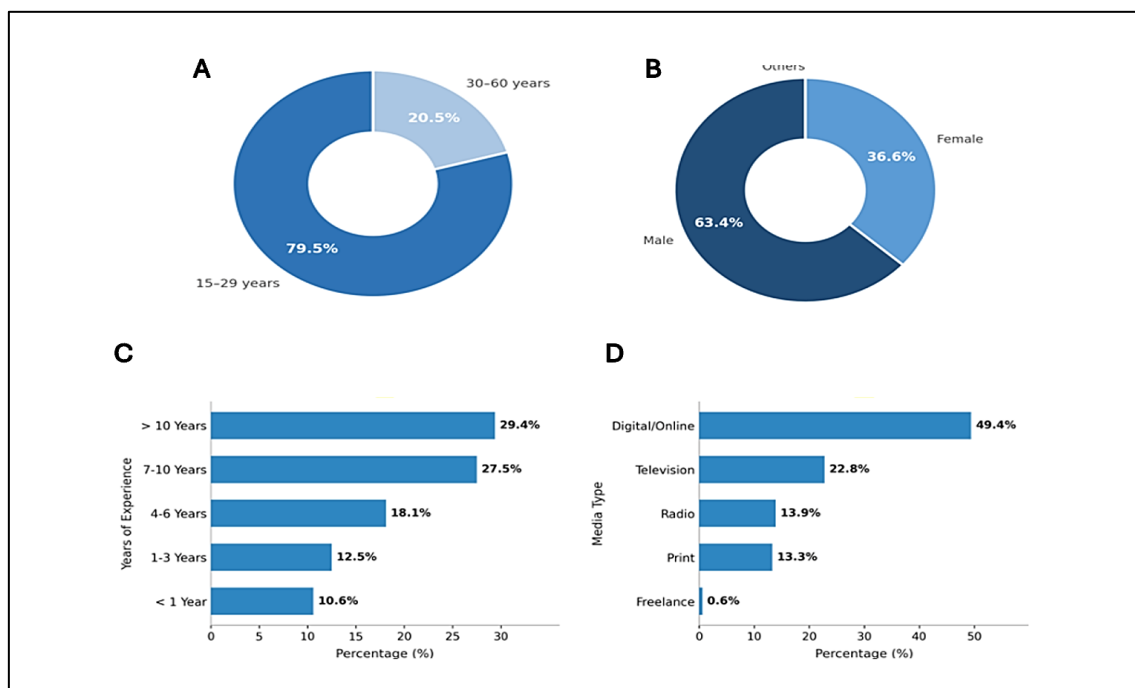


Figure 1: Demographic Profile of Respondents. (A) Age Distribution, (B) Gender Distribution, (C) Years of Experience, (D) Media Organization Type (N = 161)

Figure 1 illustrates the core demographic and professional background of the respondents across four dimensions. It demonstrates a predominantly young (79.5% aged 15–29) and male-majority (63.4%) workforce that, despite its youth, possesses significant industry tenure, with over half reporting seven or more years of experience. Furthermore, the data highlights a definitive industry shift toward digital ecosystems, showing that nearly half of the respondents (49.4%) operate within digital or online media,

significantly outpacing those in traditional television, radio, and print platforms.

Figure 2 isolates the functional roles within the newsroom. It demonstrates that while traditional news-gathering remains central, led by Reporters (34.2%) and Editors (17.4%), emerging digital-first roles like Content Creators (16.8%) and Social Media Managers (8.7%) now constitute a substantial operational segment in converged media environments.

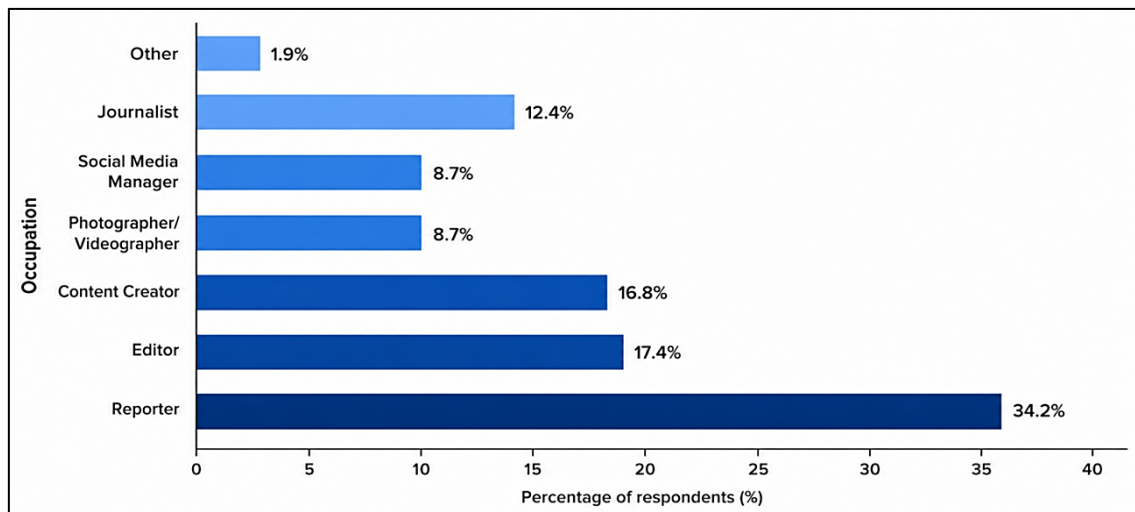


Figure 2: Primary Role Distribution Among Respondents (N = 161)

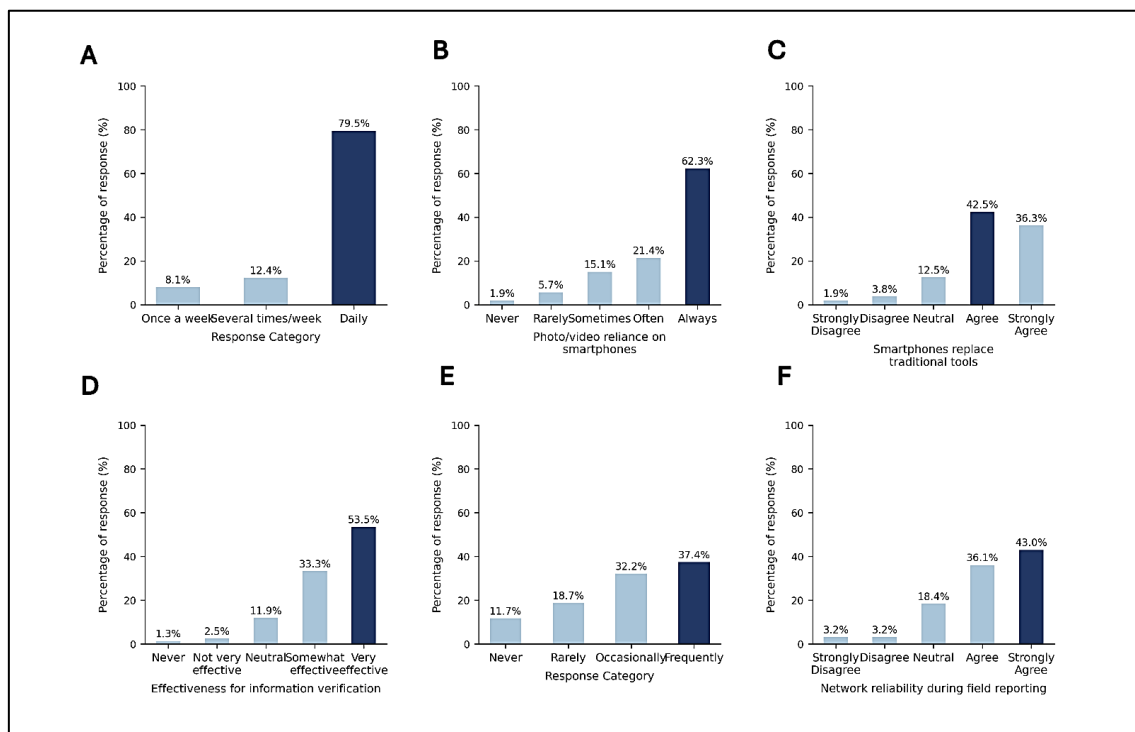


Figure 3: News Gathering Smartphone Usage Patterns. (A) Frequency of Use, (B) Photo/Video Reliance, (C) Replacement of Traditional Tools, (D) Effectiveness for Verification, (E) Live Reporting Usage, (F) Network Reliability (N ≈ 158–161)

Figure 3 (A–F) show the percentage distribution of respondents across different response categories. Daily smartphone use (79.5%), always relying on smartphones for photo/video capture (62.3%), agreement that smartphones replace traditional tools (42.5%), perception of smartphones as very effective for information verification (53.5%),

frequent responses in Figure 3E (37.4%), and strong agreement regarding network reliability during field reporting (43.0%) represent the highest percentages in their respective figures. The explanations are based solely on the values presented in the figures.

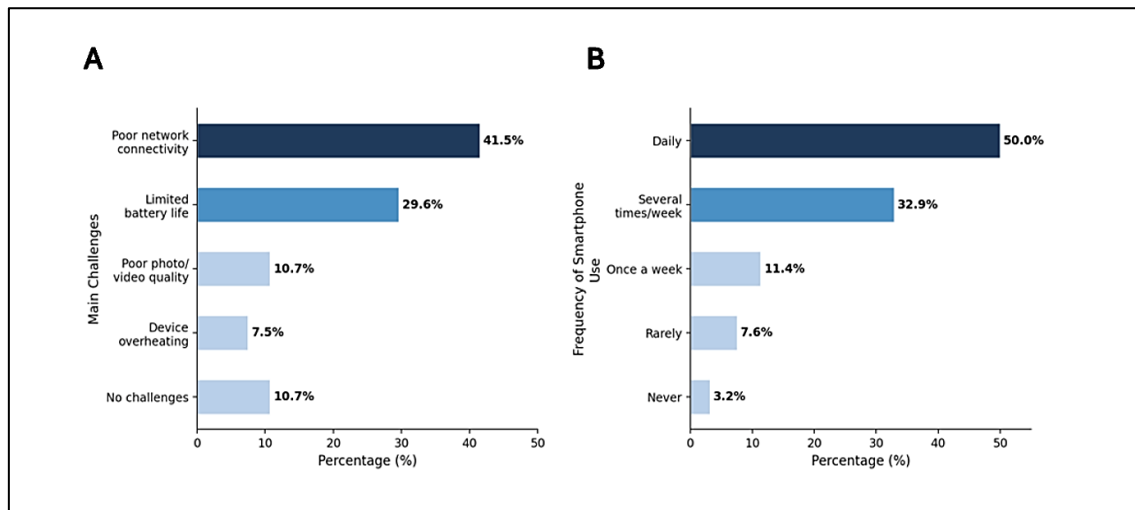


Figure 4: (A) Main Challenges in Smartphone-Based News Gathering, (B) Frequency of Smartphone Use for Fact-Checking and Database Access (N ≈ 158–161)

Figure 4A presents the challenges associated with smartphone use. Poor network connectivity was the most frequently reported challenge (41.5%), followed by limited battery life (29.6%). Poor photo/video quality was reported by (10.7%) of respondents, while (7.5%) cited device overheating. Additionally, (10.7%) reported experiencing no challenges while using smartphones. Figure 4B shows the frequency of smartphone use for fact-checking and information verification. Half of the respondents (50.0%) reported using smartphones for fact-checking on a daily basis, while (32.9%) did so several times a week. Further, (11.4%) used smartphones once a week, whereas (7.6%) used them rarely and (3.2%) never used them for fact-checking purposes. Overall, the findings indicate that despite challenges related to network connectivity and battery life, smartphones are widely used for fact-checking and information verification, with the majority of respondents relying on them daily or several times a week.

Mean composite scores were: PU $M = 4.21$ ($SD = 0.62$) and PEoU $M = 3.89$ ($SD = 0.71$), both in the upper range of the scale. Hierarchical multiple

regression results are presented in Table 3. In Model 1, PEoU alone significantly predicted actual use ($\beta = 0.58$, $t = 7.82$, $p < .001$, $R^2 = 0.33$). Adding PU in Model 2 substantially increased explained variance ($\Delta R^2 = 0.28$, $\Delta F(1,158) = 87.3$, $p < .001$); the full model explained 61% of variance in actual use ($R^2 = 0.61$, $F(2,158) = 91.4$, $p < .001$). PU emerged as the stronger predictor ($\beta = 0.52$, $t = 8.91$, $p < .001$) compared to PEoU ($\beta = 0.31$, $t = 5.34$, $p < .01$). VIF values (< 2.0) confirmed absence of multicollinearity. Regression assumptions were systematically tested:

- residuals were normally distributed (Shapiro-Wilk $W = 0.98$, $p = .21$);
- homoscedasticity was confirmed via Breusch-Pagan test ($BP = 3.12$, $p = .21$);
- independence of residuals was confirmed (Durbin-Watson = 1.94); and
- no influential outliers were detected (Cook's $D < 0.10$ for all cases).

Tolerance values for PU (.72) and PEoU (.72) were well above the 0.10 threshold. H1, H2, and H3 are all supported. TAM construct alignment with key adoption indicators.

Table 3: Hierarchical multiple regression- TAM predictors of actual smartphone adoption

Predictor	B	SE B	β	t	R^2	p
Model 1					0.33	
PEoU	0.61	0.08	0.58	7.82		< .001
Model 2					0.61	
PU	0.54	0.06	0.52	8.91		< .001
PEoU	0.33	0.06	0.31	5.34		< .01

Note: PU = Perceived Usefulness; PEoU = Perceived Ease of Use. ΔR^2 (Model 2) = .28, $\Delta F(1,158) = 87.3$, $p < .001$.

To test H4 (organisational type differences), chi-square analysis showed significant relations between media type and PU ratings ($2(16) = 26.4$, $p = .049$, Cramer $V = .20$), and network reliability perceptions ($2(12) = 22.1$, $p = .036$, Cramer $V = .21$),

which is in support of Digital/online journalists had a higher PU means ($M = 4.38$) than their print counterparts ($M = 3.87$). The greatest levels of connection challenges (65% of network challenge mentions) were reported by reporters.

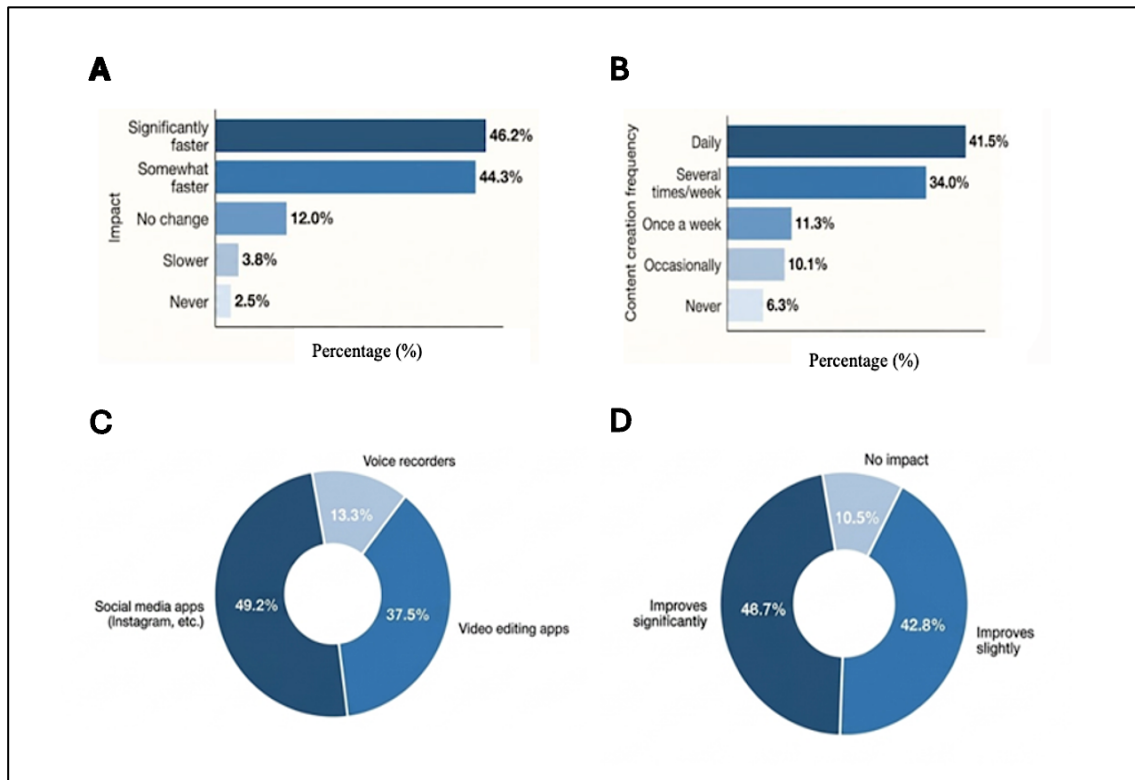


Figure 5: Content Creation Using Smartphones. (A) Impact on News Gathering Speed, (B) Content Creation Frequency, (C) Tools and Apps Used, (D) Quality Impact ($N \approx 159-161$)

Figure 5A shows the perceived impact of smartphones on the speed of content creation. Nearly half of the respondents (46.2%) reported that smartphones make content creation significantly faster, while (44.3%) believed they make it somewhat faster. In contrast, (12.0%) observed no change, (3.8%) felt that content creation became slower, and (2.5%) reported no impact. Figure 5B presents the frequency of smartphone use for content creation. The largest proportion of respondents (41.5%) reported creating content daily using smartphones, followed by (34.0%) who did so several times a week. Additionally, (11.3%) used smartphones for content creation once a week, (10.1%) occasionally, and (6.3%) never used them for this purpose. Figure 5C illustrates the smartphone

applications most used for content creation. Social media applications were the most frequently used tools (49.2%), followed by video editing applications (37.5%) and voice recorders (13.3%). Figure 5D shows respondents' perceptions of the impact of smartphones on content quality. Nearly half of the respondents (46.7%) believed that smartphones significantly improve content quality, while (42.8%) reported a slight improvement. Only (10.5%) indicated that smartphones have no impact on content quality. Overall, the findings suggest that smartphones are widely used for content creation, are perceived to increase production speed, and contribute positively to content quality, with social media and video editing applications being the most used tools.

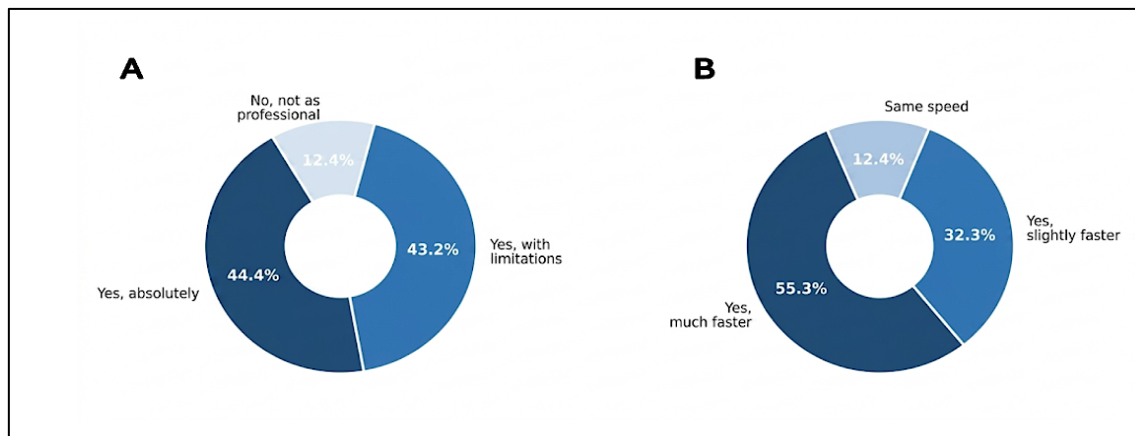


Figure 6: (A) Perceived Professional Quality of Smartphone Content, (B) Speed of Content Creation vs Traditional Tools (N = 161)

Figure 6A presents respondents' perceptions regarding the professionalism of smartphone-generated content. The largest proportion (44.4%) stated that smartphone-generated content is absolutely as professional as content produced using traditional equipment. Another (43.2%) agreed that it is professional with some limitations, while only (12.4%) believed that smartphone-generated content is not as professional. These findings indicate a generally positive perception of the professional quality of smartphone-based content. Figure 6B shows respondents' views on the speed of content dissemination through

smartphones. More than half of the respondents (55.3%) reported that smartphones make content dissemination much faster, while (32.3%) believed it is slightly faster. In contrast, (12.4%) felt that smartphones provide the same speed as other methods. The results suggest that smartphones are widely perceived as enhancing the speed of content dissemination. Overall, the findings indicate that respondents largely consider smartphone-generated content to be professional and believe that smartphones significantly improve the speed of content dissemination.

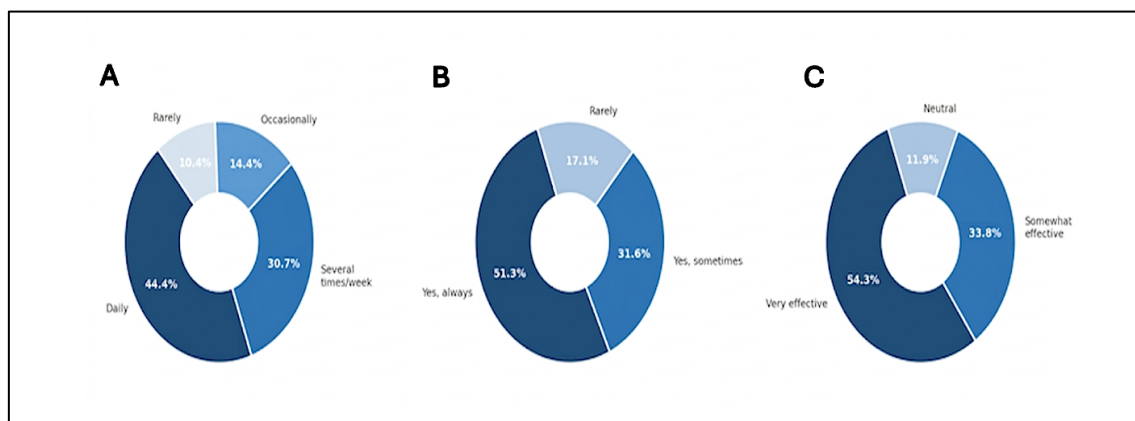


Figure 7: Content Dissemination Using Smartphones. (A) Publishing Frequency, (B) social media Reliance for Sharing, (C) Effectiveness for Audience Reach (N = 161)

Figure 7A presents the frequency of user engagement with the evaluated system or platform. High-frequency usage constitutes the vast majority of the sample, with (44.4%) of respondents interacting with the system daily and (30.7%) engaging several times per week. Conversely, low-frequency usage is minimal, as only (14.4%) report using it occasionally and (10.4%) report using it rarely. Figure 7B illustrates

the level of user reliance or behavioural adoption toward the platform. A distinct majority of participants (51.3%) demonstrate permanent adoption, responding "Yes, always" regarding their usage. (31.6%) of users exhibit intermittent adoption, responding Yes, sometimes. Only a small minority of the cohort (17.1%) report that they rarely utilize or rely on the system. Figure 7C quantifies the users' subjective evaluation of the

system's efficacy. Positive feedback dominates the metric, with (54.3%) of respondents rating the platform as "Very effective" and (33.8%) rating it as "Somewhat effective. The remaining (11.9%) of

participants maintain a neutral perspective, with zero respondents explicitly selecting a negative or ineffective rating.

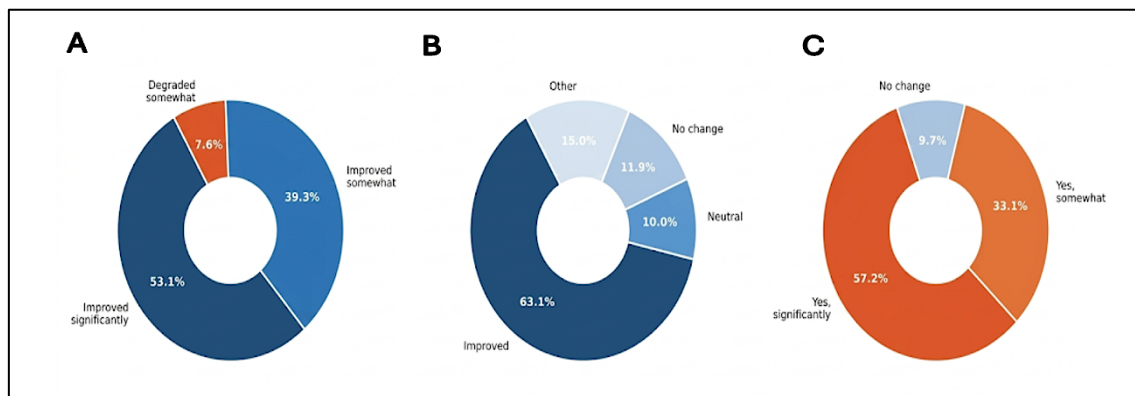


Figure 8: (A) Overall Journalism Quality Impact, (B) Work-Life Balance Influence, (C) Pressure to Produce Content Faster (N ≈ 158–161)

Figure 8 details user perceptions regarding changes or performance impacts following the intervention.

Positive Impact: In Figure 8A, significant majority of respondents reported positive outcomes, with (53.1%) indicating that conditions Improved significantly and (39.3%) reporting they Improved somewhat.

Negative Impact: Only a small minority (7.6%) observed a negative effect, categorizing the outcome as Degraded somewhat. Figure 8B illustrates the broader categorization of user feedback regarding overall changes.

Primary Improvement: The vast majority of participants (63.1%) definitively reported an improved outcome.

No Change and Neutrality: Figure 8A combined (21.9%) reported stable or non-committal experiences, split between No change (11.9%) and Neutral (10.0%).

Alternative Feedback: The remaining (15.0%) of responses fell under the "Other" category. Figure 8C quantifies the overall magnitude and validation of the observed changes among the cohort.

High Significance: More than half of the respondents (57.2%) affirmed the impact strongly, responding with Yes, significantly.

Moderate Significance: One-third of the participants (33.1%) noticed a moderate impact, responding with Yes, somewhat.

Negligible Impact: Only (9.7%) of the sample experienced static conditions, reporting No change.

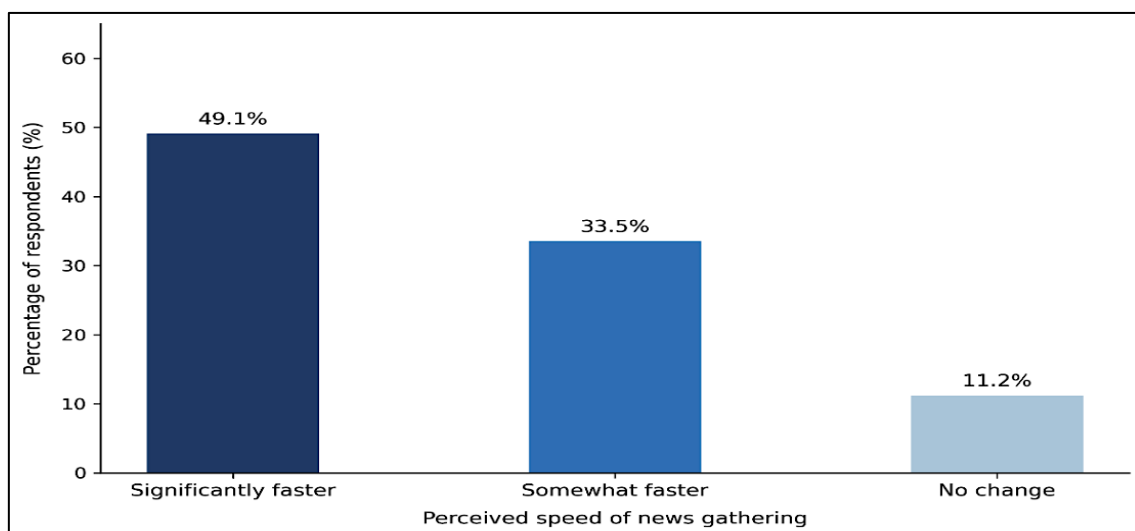


Figure 9: Impact of Smartphones on Speed of Content Dissemination (N = 161)

In Figure 9, The bar chart illustrates, the participants' perceptions regarding the speed of news gathering following the implementation of the studied intervention.

Major Acceleration: Nearly half of the surveyed cohort (49.1%) perceived the process to be significantly faster.

Moderate Acceleration: Approximately one-third of the respondents (33.5%) indicated that the process was somewhat faster.

No Impact: A small minority of the participants (11.2%) reported "No change" in the speed of news gathering.

Overall, a vast majority of the respondents (82.6%) reported an increase in news gathering velocity, demonstrating that the intervention substantially improves efficiency in the workflow.

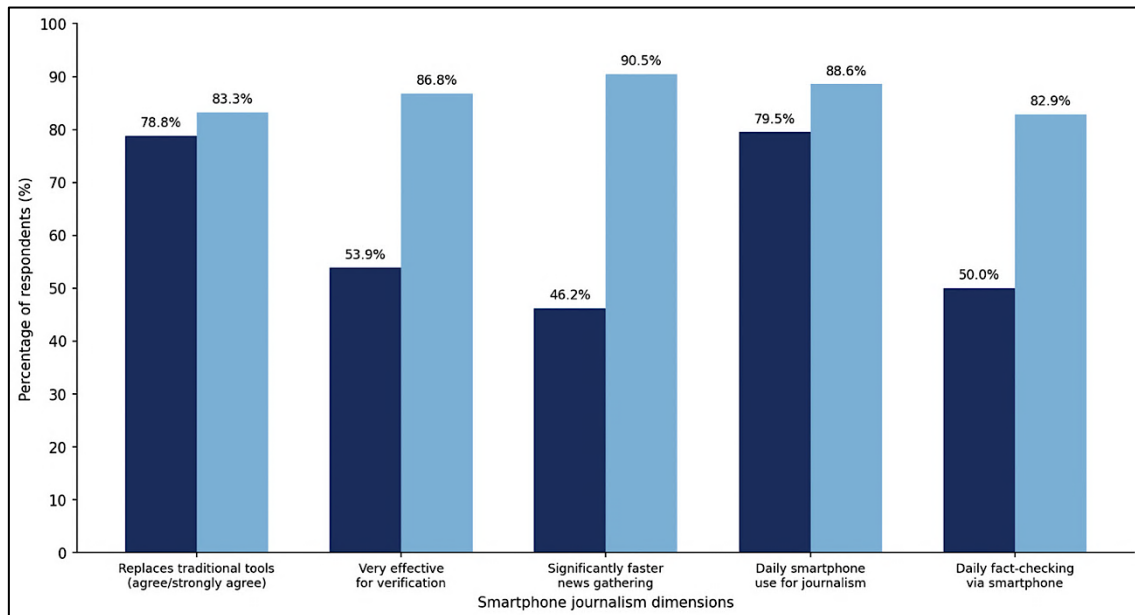


Figure 10: Comparison of Perceived Usefulness (PU) Indicator Ratings Against Overall Adoption Rates and Positive Response Frequencies Across Key Adoption Dimensions (N ≈ 158–161)

Figure 10 replaces Traditional Tools (Agree/Strongly Agree): (A) substantial majority of respondents agreed that smartphones replace traditional tools, yielding (78.8%) on the primary metric and rising slightly to (83.3%) on the comparative metric. Very Effective for Verification: While over half of the respondents (53.9%) initially rated smartphones as very effective for verification, the comparative metric shows a considerably higher agreement rate at (86.8%). Significantly Faster News Gathering: This dimension exhibits the largest variance; (46.2%) of respondents noted a significant increase in speed on the primary metric, compared to an overwhelming (90.5%) on the secondary metric. Daily Smartphone Use for Journalism: High daily usage is highly consistent across both metrics, recorded at (79.5%) and (88.6%) respectively. Daily Fact-Checking via Smartphone: Exactly half of the sample (50.0%) reported conducting daily

fact-checking via smartphone on the first metric, which expands to (82.9%) on the second metric.

Discussion

The hierarchical regression findings give strong evidence towards the predictive validity of 'Technology Acceptance Model' [TAM] in the mobile journalism setting (20). Having PU (= 0.52) and PEOU (= 0.31) both contributing to actual use variance, the model has markedly stronger explanatory ability than the meta-analytic mean R^2 of about (0.40) that is found in TAM studies in genera. The greater impact of PU as compared to PEOU repeats an established trend in TAM studies among expert users of those tools indicating that when journalists have established operational mastery of smartphones, task-performance advantages are the new driver of adoption (21). The finding that PEOU was mediated by PU (H3 supported) shows that the enhancement of app

usability produces a cascade of effects on perceived usefulness and adoption depth.

The results that 90.5% of the respondents indicated faster news-gathering processes are consistent with the international MoJo literature. Of particular interest is the verification finding: 86.8% of them rated smartphones as effective in fact-checking, and 50.0% are daily smartphone-mediated verifiers (22). This refutes the often expressed issue of mobile-first journalism being obsessed with speed at the cost of accuracy. Nevertheless, the fact that 86.4% indicate that they raise the pressure to deliver content more quickly indicates that there is a high risk of professional wellbeing in agreement with other study that document burnout caused by mobile. The implications of speed-driven journalism deserve extended discussion. When 90.5% of respondents report accelerated workflows and 86.4% report elevated production pressure, these findings together suggest a structural tension: the efficiency gains of smartphone journalism may come at the cost of deliberative editorial processes. Reduced time for verification, fact-checking, and source corroboration, despite the strong verification adoption rates in this sample—poses systemic risks to journalistic accuracy, particularly in breaking-news contexts where mobile-first workflows are most pronounced (23). Media organisations and journalism educators should recognise this tension and build in structural safeguards, such as mandatory verification checkpoints and editorial review protocols, that persist even in mobile-first production environments. An important practical question also emerges from the data regarding the complementarity versus replacement dimension of smartphone adoption. This study finds that (78.8%) of respondents either agreed or strongly agreed that smartphones replace traditional equipment; yet television broadcasters and photographers specifically reported quality challenges in adverse conditions, suggesting that replacement is partial and role-contingent. Smartphones appear to fully replace traditional tools for social media managers and digital journalists, while functioning as complementary tools for photographers and videographers in high-production-value contexts (24). This nuanced pattern has implications for how media organisations structure their equipment provisioning

and training policies across different professional roles.

The large chi-square relationships existing between the media organisation type and PU ($p = .049$) and network reliability ($p = .036$) demonstrate that the structural position in the industry determines smartphone adoption. Digital-native journalists have more perceived usefulness in part due to more optimised organisational cultures that are adapted to produce more on mobile-first. The hegemony of network connectivity issues (41.5%) in field reporters record an infrastructure gap that is specific to the Indian setting, where at busy events the local networks are often saturated. It cannot be solved by personal training of skills and needs to be coordinated infrastructural investment. These findings situate Delhi NCR within a broader pattern of technological inequity in the Global South, where smartphone adoption in journalism is simultaneously accelerated by the affordability of mobile-first workflows and constrained by infrastructural deficits (25). Unlike Western contexts where network infrastructure is relatively stable, Indian field journalists operate within a highly uneven connectivity landscape a structural constraint that TAM's individual-level constructs do not directly capture. This underscores the need to complement TAM with political economy perspectives when studying MoJo in resource-constrained environments.

The rate of adoption (79.5% per day) in Delhi NCR is like the similar urban Global South settings. Their security issues correspond to the list of surveillance risks that records in East Africa, although in India, there are different pressures. The observation that younger, early-career professionals get specific utility out of smartphones is reminiscent reporting of resource-constrained settings in Ethiopia, in which mobile devices were used as means of bypassing resource limitations in professional journalism practice. A profession-specific analysis of TAM constructs reveals notable subgroup differentiation. Reporters, who account for the largest network connectivity challenges (65% of all connectivity issue mentions), exhibited lower PU scores compared to digital-native roles such as content creators and social media managers. Photographers and videographers displayed the highest 'always' smartphone usage rate (84.6%)

for photo and video capture, reflecting the centrality of the device in their workflow, yet also reported more quality-related challenges in adverse lighting and weather conditions. Social media managers, by contrast, reported the highest content dissemination frequency and the strongest endorsement of smartphones for audience reach (26). These role-differentiated patterns suggest that future TAM applications in journalism should incorporate role type as a moderating variable, since profession-specific workflows produce meaningfully distinct adoption profiles. Furthermore, the multifunctional nature of smartphones in journalism; simultaneously serving as camera, editing suite, verification tool, newsroom communication device, and publishing platform—complicates single-construct measurement of 'actual use.' Future research should consider disaggregating usage into functional domains to more precisely map TAM constructs onto the heterogeneous tasks smartphones perform in journalistic work.

Limitations

There are a number of limitations that limit the generalisability and interpretability of these findings. To begin with, convenience and snowball sampling design imposes bias in the selection, which favors professionals working in the digital field. The non-probability sampling approach carries the risk of network bias: participants recruited through professional journalism associations and social media groups are disproportionately digitally active, potentially inflating adoption rates relative to the broader journalism population. Importantly, the sample may under-represent vernacular-language journalists, journalists at smaller regional outlets, and independent digital creators subgroups whose smartphone adoption patterns may differ markedly from those of mainstream Delhi NCR newsrooms. Consequently, findings should be interpreted as reflective of an urban, digitally-connected journalism cohort rather than the full diversity of the media ecosystem in Delhi NCR. Second, cross-sectional design eliminates causation; longitudinal information is necessary to determine that 'Technology Acceptance Model' TAM constructs predict alterations in actual use across time. Thirdly, the [TAM] scales used in the study were not undergone to full confirmatory factor analysis (CFA) because of constraints in the

sample size. Fourth, the entire data is self-reported, which exposes it to social desirability. Fifth, there is the restriction of geographic generalisability of the Delhi NCR focus to other contexts in India. Future research must utilise longitudinal designs, probability samples, gender stratified analysis, CFA validation of TAM scales, and objective data on behaviour should be added.

Conclusion

This paper represents the pioneering empirical investigation of the adoption of smartphones within the Indian journalism scenario that is founded on 'Technology Acceptance Model' (TAM) (N = 161, Delhi NCR). The 61 percent of variance in daily adoption was explained by perceived usefulness [0.52] and perceived ease of use [0.31], with PU in the dominant position that is compatible with 'Technology Acceptance Model' (TAM) theory. Smartphones clearly increase speed of news-gathering (90.5% faster), verification (86.8% faster), and content-generation efficiency (87.6% faster), and ongoing infrastructure issues such as network reliability [41.5] and battery capacity [29.6] limit fair and equal adoption. Media organisations: Invest into role-differentiated training of mobile journalists, portable battery solutions, mobile data allocations, and secure field journalist management of their devices. Journalism professors: Incorporate MoJo skills, multimedia creation, digital fact-checking, mobile security, trade-offs between speed and accuracy in ethical judgment, into journalism education. Network providers and policymakers: Fill the infrastructure divide by investing in high-capacity mobile networks with resilience in locations of mass events and taking into account the dedicated use of journalistic access networks. Future study: Longitudinal studies, stratified sampling inclusive of sufficient gender, CFA of TAM scales, and mixed methods studies that included objective machine activity data. The use of smartphones has become the structural support of the news-gathering practice in Indian journalism. The concerted efforts of industry, education, and policy are needed to help them to realise their full professional potential and reduce the risks of operation and ethics on the basis of solid empirical knowledge of the factors in which adoption takes place and succeeds.

Abbreviations

APT: Advanced Persistent Threat, AR: Augmented Reality, BI: Behavioural Intention, CFA: Confirmatory Factor Analysis, IQR: Interquartile Range, PEOU: Perceived Ease of Use, PU: Perceived Usefulness, TAM: Technology Acceptance Model, UTAUT: Unified Theory of Acceptance and Use of Technology, VIF: Variance Inflation Factor.

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Author Contributions

Abhishek Chaturvedi: Conceptualisation, Methodology, Data Collection, Formal Analysis, Writing - Original Draft, Sumit Kumar Pandey: Conceptualisation, Supervision, Writing - Review and Editing, Nadim Akhter: Supervision, Writing - Review, Editing, Resources.

Conflict of Interest

The authors declare no conflict of interest.

Data Availability

The anonymised survey dataset is available from the corresponding author upon reasonable request, subject to ethics approval conditions.

Declaration of Artificial Intelligence (AI) Assistance

No generative AI or AI-assisted writing tools were used in the preparation of this manuscript. All analyses, interpretations, and writing are the original work of the authors.

Ethics Approval

The study was conducted in accordance with established ethical guidelines for research involving human participants. Prior to participation, all respondents were provided with detailed information regarding the purpose and nature of the study, and their voluntary informed consent was obtained electronically. Participation was entirely voluntary, and respondents were informed of their right to withdraw from the study at any stage without any consequences. To ensure confidentiality and privacy, no personally identifiable information was collected, stored, or disclosed. All research procedures adhered to the

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References

1. Salzmann A, Guribye F, Gynnild A. Adopting a mojo mindset: Training newspaper reporters in mobile journalism. *Journalism*. 2021 Feb 24;24(2):346–62. doi:10.1177/1464884921996284
2. Singh AR, Sehgal AD. Convergence in journalism: Perspectives and prospects. *Handbook of Digital Journalism*. 2024:55–65. doi:10.1007/978-981-99-6675-2_6
3. Umair S. Mobile Reporting and Journalism for Media Trends, News Transmission and its Authenticity. *Journal of Mass Communication and Journalism*. 2016;6(9): 1000323. doi:10.4172/2165-7912.1000323
4. Modgil S, Dwivedi YK, Rana NP, Gupta S, Kamble S. Has Covid-19 accelerated opportunities for digital entrepreneurship? An Indian perspective. *Technological Forecasting and Social Change*. 2022; 175:121415. doi:10.1016/j.techfore.2021.121415
5. Ausat AMA. The role of social media in shaping public opinion and its influence on economic decisions. *Technology and Society Perspectives (TACIT)*. 2023 Aug 31;1(1):35–44. doi:10.61100/tacit.v1i1.37
6. Erdal IJ. Convergence in/of Journalism. *Oxford Research Encyclopedia of Communication*. 2015 Dec 3. doi:10.1093/ACREFORE/9780190228613.013.793
7. Lugmayr A, Zotto CD. *Media Convergence Handbook - Vol. 1. Journalism, Broadcasting, and Social Media Aspects of Convergence*. 2016. doi:10.1007/978-3-642-54484-2
8. Jamil S, Appiah-Adjei G. Journalism in the era of mobile technology: The changing pattern of news production and the thriving culture of fake news in Pakistan and Ghana. *World of Media Journal of Russian Media and Journalism Studies*. 2019 Sep 1;1(3):42–64. doi:10.30547/worldofmedia.3.2019.2
9. Wu K, Zhao Y, Zhu Q, Tan X. A meta-analysis of the impact of trust on technology acceptance model: Investigation of moderating influence of subject and context type. *International Journal of Information Management [Internet]*. 2011;31(6):572–81. doi:10.1016/j.ijinfomgt.2011.03.004
10. Guo M. Predictors of Mobile News Consumption through News Applications (Apps): The Impacts of Audience Characteristics, Media Usage, and Motivations. *Journalism and Media*. 2024;5(3): 1071–84. doi:10.3390/journalmedia5030068
11. Schorr A. The Technology Acceptance Model (TAM) and its Importance for Digitalization Research: A Review. *SciendoeBooks*. 2023 Jun 16;55–65. doi:10.2478/9788366675896-005
12. Samuelsen RJ, Kalsnes B, Steensen S. The Relevance of Technology to Information Verification: Insights

- from Norwegian Journalism During a National Election. *Journalism Practice*. 2025;19(8):1683–702. doi:10.1080/17512786.2023.2280676
13. Khan SA, Sheikhi G, Opdahl AL, *et al.* Visual User-Generated Content Verification in Journalism: An Overview. *IEEE Access*. 2023;4:99. doi:10.1109/access.2023.3236993
 14. Shanna DSA. The Use of Mobile Journalism by Communicators and the Gratifications Achieve. *Smart Innovation, Systems and Technologies*. 2025; 387 SIST:513–31. doi:10.1007/978-3-031-87154-2_41
 15. Muhammad Z, Anwar Z, Javed AR, Saleem B, Abbas S, Gadekallu TR. Smartphone Security and Privacy: A survey on APTs, Sensor-Based Attacks, Side-Channel attacks, Google Play attacks, and defenses. *Technologies*. 2023 Jun 12;11(3):76. doi:10.3390/technologies11030076
 16. Punitha S, Subramaniam NP, Raj PADV. A comprehensive review of microgrid challenges in architectures, mitigation approaches, and future directions. *Journal of Electrical Systems and Information Technology*. 2024 Dec 17;11(60). doi:10.1186/s43067-024-00188-4
 17. James-Garrod C. Disconnection, distraction, and time deficits: how Australian journalists report smartphones affect their work-related duties. *Communication Research and Practice*. 2025;11(2): 205–20. doi:10.1080/22041451.2025.2491281
 18. Semujju B. Mobile phones influence on journalism practice in Africa. Semujju B. *Mobile Phones Influence on Journalism Practice in Africa*. *Encyclopedia of Mobile Phone Behavior*. 2015: 1089–102. doi:10.4018/978-1-4666-8239-9.ch089
 19. Mollel M, Quiroz LF, Varley C, *et al.* Digital technologies to accelerate the impact of climate smart agriculture by next-generation farmers in Africa. *Frontiers in Sustainable Food Systems*. 2025 Jul 9;9: 1462328. doi:10.3389/fsufs.2025.1462328
 20. Demuyakor J, Boye-Doe Z. Exploring journalists' intentions towards digital mobile technologies. *Society & Sustainability*. 2024;5(2):39–49. doi:10.38157/ss.v5i2.597
 21. Papakostas C, Troussas C, Krouska A, Sgouropoulou C. Exploring users' behavioral intention to adopt mobile augmented reality in education through an extended technology acceptance model. *International Journal of Human-Computer Interaction*. 2023;39(6):1294–302. doi:10.1080/10447318.2022.2062551
 22. López-Meri A, Doménech-Fabregat H, Marcos-García S. Digital competencies in verifying fake news: assessing the knowledge and abilities of journalism students. *Societies*. 2024;14(5):66. doi:10.3390/soc14050066
 23. Prestianta AM. Mobile journalism practice in the Kompas.com newsroom. *Komunikator*. 2022;14(2): 137–47. doi:10.18196/jkm.15883
 24. Bharti SK, Pathak NC, Kumar A. The era of smartphone journalism: a shift in media dynamics. *Indian Journal of Mass Communication and Journalism*. 2025 Jun 27;4(4):1–3. doi:10.54105/ijmcj.c1115.04040625
 25. Singh VB, Chauhan S. Mobile technology and digital equity: bridging the gaps in rural India's health, environment, and civic access. *International Journal of Systems Assurance Engineering and Management*. 2025;17:828–41. doi:10.1007/s13198-025-02995-y
 26. Bär S, Boyacıoğlu S, Kurscheidt M. On the edge of a digital event era: which innovative factors influence the willingness to pay for virtual concerts? *Journal of Innovation & Knowledge*. 2025 Aug 14;10(5): 100776. doi:10.1016/j.jik.2025.100776

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