Evaluation of Technological Determinism of Mobile Journalism: Case Study of Television Journalists in Indonesia

Firmansyah^{1,a)}, Aryana Catur Rangga¹, Septiawan Santana Kurnia¹, Siti Suriani Othman², Ahmad Fadhli¹

¹Universitas Islam Bandung, Indonesia

² University Sains Islam Malaysia, Malaysia

^{a)} Corresponding author, e-mail: firmansyah.ivan@unisba.ac.id

DOI: https://doi.org/10.18196/jkm.24145

Article Info

ABSTRACT

Article history: Received 21 Sep 2024 Revised 6 Oct 2024 Accepted 29 Oct 2024 The evolution of smartphone technology has instigated significant shifts in journalistic culture. Both consciously and subconsciously, a multitude of television journalists have embraced mobile journalism (MoJo), especially for correspondents or journalists in the regions. This study aims to elucidate the impact of technological determinism on television journalists and how it fosters a distinctive MoJo work culture. Using a case study methodology, the research integrates observations and interviews with 35 television journalists who have engaged in mobile journalism. Data analysis focuses on four primary areas: technological determinism within journalists in the realms of reductionism, monism, neutralization, and technological imperatives. The research findings suggest that the adoption of MoJo does not obliterate the existing journalistic culture but serves as an alternative avenue for generating diverse and creative news content. The use of technology is inherently tied to the user, highlighting the need for enhanced moral considerations in its application. While the ease of technology facilitates reporting, journalists continue to uphold the content of their reports and maintain their professionalism. The evaluation of the MoJo concept in Indonesia should be supported by product regulations and standardization to ensure it does not become conflated with content creator practices.

.....

Keywords: Technological Determination, Mobile Journalism, Journalist

ABSTRAK

Perkembangan teknologi smartphone telah memicu perubahan signifikan dalam budaya jurnalistik. Baik secara sadar maupun tidak sadar, banyak jurnalis televisi telah merangkul jurnalisme seluler (MoJo) khususnya untuk koresponden atau jurnalis di daerah. Studi ini berupaya menjelaskan dampak determinisme teknologi pada jurnalis televisi, dan bagaimana hal itu menimbulkan budaya kerja MoJo yang khas. Dengan menggunakan metodologi studi kasus, penelitian ini mengintegrasikan observasi dan wawancara terhadap 35 jurnalis televisi yang telah menjalankan konsep MoJo. Analisis data mencakup empat titik fokus utama, khususnya determinasi teknologi dalam jurnalis dalam ranah reductionistic, monistic, neutralizing, dan technological imperative. Temuan penelitian menunjukkan bahwa adopsi MoJo tidak menghapus budaya jurnalistik yang ada tetapi berfungsi sebagai jalan alternatif untuk menghasilkan konten berita yang beragam dan kreatif. Pemanfaatan teknologi secara inheren terkait dengan pengguna, yang menekankan perlunya pertimbangan moral yang lebih baik dalam penerapannya. Meski kemudahan penggunaan teknologi memanjakan wartawan dalam peliputan, jurnalis televisi tetap menjaga produk berita dan profesionalitasnya. Evaluasi konsep MoJo di Indonesia perlu ditopang dalam regulasi dan standarisasi produk agar tidak bercampur dengan konsep content creator.

Kata Kunci: Determinasi Teknologi, Jurnalisme Seluler, Jurnalis

INTRODUCTION

The evolution of communication technology and the widespread dissemination of information are poised to exert a profound impact on various professions, notably influencing news culture and shaping the performance of journalists within television newsrooms (Zangana, 2017). Changes in the use of technology in journalistic performance have resulted in several new concepts in journalists' duties in producing news (Saltzis & Dickinson, 2008) (Wilding et al., 2018) (Galily, 2018). In Indonesia, the rapid development of communication and information technology, particularly since the onset of the Covid-19 pandemic, has spurred the emergence of novel concepts in news production activities (Furqan et al., 2022). This rapid technological development has given rise to new cultures in the digital era, including the emergence of the term MoJo (Mobile Journalism).

MoJo represents a journalistic approach wherein reporters are equipped with highly portable multimedia news gathering tools, encompassing both consumer and professional-grade devices (Cameron, 2011). Journalists of various types of media are now required to be able to apply MoJo in their work processes (Y. M. Lee, 2022), especially for television reporters (Abuhasirah et al., 2023). However, the mobile journalism concept doesn't consistently enhance journalists' performance. In certain situations, the utilization of small non-professional cameras or technology not explicitly designed for broadcasting functions can adversely affect the quality of journalism (Karhunen, 2017). In Indonesia, several mainstream media outlets have adopted the MoJo concept and applied it to their journalists (Prestianta, 2022) (Irwansyah, 2022). For professional journalists, the cultural adaptation of MoJo practices among journalists in the area of coverage and newsroom policy provides an opportunity for journalists to develop mobile journalism practices (Sukmono & Junaedi, 2021). Smartphone facilitates immediate interviews with sources using freshly acquired data, allowing journalists to elicit prompt reactions that can be transcribed into quotes (Canavilhas, 2021).

The term MoJo is gaining prominence as an increasingly popular practice in the realm of journalism (Salzmann et al., 2021) (Masawi, 2023). This surge in popularity is attributed to the pivotal role played by mobile devices in the creation of digital news content, as well as their widespread usage among the public for news consumption (Oktavianti et al., 2024). However, mobile journalism has not attained full recognition in the field of journalism and necessitates further research for comprehensive understanding and acknowledgment (Rodrigues et al., 2021).

Journalists perceive a significant role played by the audience in the incorporation of mobile journalism skills, as the utilization of mobile tools often aligns with audience requests (G. Perreault & Stanfield, 2019). Issues such as automation, artificial intelligence, algorithms, programming, platforms, datafication, code, and digital design have emerged as crucial domains for scientific development and investigation within the context of journalism and news (Westlund, 2023). Television media needs to change the way it produces and broadcasts its programs by expanding to social media platforms (Nielsen et al., 2016) (Yoedtadi et al., 2021).

During the pandemic, journalists' work was helped by the emergence of technologies to carry out long-distance reporting (M. F. Perreault & Perreault, 2021). Technological advancements during the pandemic, exemplified by widely used transcription services like Zoom. The pandemic has spurred improvements in technology, particularly in enhancing capabilities for remote work (Guevara, 2022). Foreign news correspondents, have also utilized technology and brought mobile journalism techniques into their reporting work (Rangga, 2023).

In the era of digital news, one of the challenges most frequently expressed is the demand for journalists in Indonesia to be able to operate various digital platforms (Sanusi, 2018) (Lestari, 2020). Proficiency in navigating digital platforms is crucial, as journalists are tasked not only with sourcing information but also with effectively disseminating it to the public, driven by considerations of news values (Ashari, 2019). Digital journalism requires a faster work culture, because the characteristic of digital media is speed (Deuze, 2017) (Farid, 2023). Digital journalism holds an advantage in terms of speed, allowing for the rapid dissemination of information to the audience as swiftly as possible. (Salaverría, 2019) (G. P. Perreault & Ferrucci, 2020). However, the speed factor can also be a weakness if the information that is immediately published is not supported by data accuracy (Fauzi et al., 2023). The relentless pursuit of speed can lead to pitfalls, as information is sometimes transmitted without proper verification (Marhamah, 2021).

Technology symbolizes the continuity of change in work culture, and in this sense can also be interpreted as determinist (Hallström, 2022). The significance of technological determination in journalism hinges on the proactive utilization of technology, leaning towards technological determinism. Understanding its importance is crucial when engaging with the latest technological advancements. (Appelgren, 2023). Understanding technological determinism is pivotal in endeavors to construct resilient, innovative, and sustainable societies (Jose, 2020), including in terms of improving the quality of the press. Technology has changed journalism by enabling audiences to engage with news through new configurations of time and space, including the use of data journalism (de-Lima-Santos & Mesquita, 2021). Smartphones and news apps are changing news consumption patterns during short commutes and allowing individuals to broadcast archived live broadcasts to show different points of view (Zamith & Braun, 2019). Technological determination in journalists will become increasingly visible in the future along with technological developments (García-Orosa et al., 2020). Not only in the process of searching for information, reporting, delivering news, but even in the digitization of news presentation with technology such as artificial intelligence (Newman, 2023).

Mobile journalism is increasingly being applied with various techniques for content creation or news activities in digital media (Quinn, 2020). Could the MoJo culture change the entire work pattern of television journalists in the future? The determination of technology in smartphones needs to be questioned by television journalists as part of the changes due to technological developments in smartphone applications (Zaman, 2022). This research endeavors to elucidate the impact of broadcasting technology advancements on the effectiveness of television correspondents in news reporting. It also aims to explore the development of mobile journalism, or mojo techniques, relying on smartphones for journalistic activities.

METHODS

This research aims to describe smartphone usage by television journalists in Indonesia. It not only seeks to understand the process of implementing the MoJo (Mobile Journalism) culture but also evaluates how technological determinism in smartphones is applied by television journalists in news production activities. To achieve this, a qualitative approach with a case study method is employed to answer research questions about how smartphones are used in television journalistic activities and how MoJo work patterns are integrated into the routines of television journalists.

This research uses a case study approach relying on data sources to describe and explain comprehensively various aspects of an individual, group, program, organization, or event systematically (Leavy, 2017). The research was conducted to understand a unique phenomenon or problem, namely discussing the determination of technology in the practice of Mobile Journalism. Case studies can be used for a case or several unique cases that cannot be generalized (Creswell, 2013). The subjects in this research were television journalists who were practicing Mobile Journalist in Indonesia. Data collection in case study research was carried out by means of observation and interviews (Yin, 2018). Observations and interviews were conducted with 35 television journalists who have used smartphones to support journalistic activities, starting from searching for information, reporting, and also reporting news. Interviews were conducted using a semi-structured system based on the dimensions of technological determination.

At the research stage, observations were made with several informants, including foreign television correspondents in Indonesia and national television contributors from regional areas. Informants were selected based on their experience with the MoJo concept in news production activities. Data collection was completed with semi-structured interviews and a Focus Group Discussion (FGD) with the 35 informants regarding their experiences with the MoJo concept and the use of smartphones in journalism.

The interpretive analysis delved into the journalists' experience of technological determination, providing insights into the formation of mobile journalism (MoJo) work patterns for each informant. Within the case study design, the process was rooted in epistemological assumptions, encompassing the researcher's role in uncovering scientific and accurate theories. Data analysis includes four main focuses, namely technological determination in the scope of (1) reductionistic, (2) monistic, (3) neutralizing, and (4) technological imperative (Kroker, 1984) (Meisyanti, 2020) (Mawalia, 2020).

From the perspective of technological determinism, it is the environment that shapes the behavior and personality of individuals or groups, or the culture formed in the mind that influences individual actions and decisions (Aydin, 2021). Within this framework, the data were analyzed through a combination of observations and interviews. Case studies are used to identify the distinctive characteristics of a specific phenomenon through a thorough examination of one or more instances (Harlow, 2011). The outcomes of the analysis are systematically categorized to yield research findings concerning the technological determination evident in journalists, stemming from advancements in communication and information technology on smartphones.

RESULT AND DISCUSSION

This research reveals how the use of smartphones as MoJo practices in journalistic activities is evaluated through the process of determining technology in television journalists, from information searches, coverage, to news reporting. Journalists are workers who need technology to carry out their activities (Varzandeh, 2020) or even journalistic performance today depends on the technology it uses (Gelgel, 2020). Advancements in journalistic tools play a pivotal role in various activities, such as retrieving information, processing data, and delivering news to the public. Modern broadcasting equipment, with its renewable technology, enhances the speed and accuracy of information acquisition and news reporting.

Notably, mobile journalism techniques are not limited to professional journalists. Many stories demonstrate how journalists use smartphone-captured photos and videos to produce news, exemplifying mobile journalism (Karhunen, 2017). The execution of mobile journalism varies significantly across diverse countries, including Norway, Uganda, and Bangladesh. The insights from journalists in these three nations indicate that not everyone possesses the skills to craft and edit stories using mobile applications on cellphones. Additionally, journalists emphasize that this process is time-consuming and not yet completely mastered by those accustomed to conventional journalistic practices (Lydersen, 2020).

In Indonesia, not many television media provide freedom for their reporters to become mobile journalists (Sukmono & Junaedi, 2021) (Sukmono et al., 2022). Unlike foreign news agency reporters, journalists have applied this mojo concept to reporting, and are even encouraged to apply it in their reporting activities (Rangga, 2023). In certain events, television journalists in Indonesia have applied the concept of mobile journalism, especially in disaster events that require speed in conveying information to be able to immediately encourage disaster management (Kurnia et al., 2022). Through this research, we can elucidate the comprehension of the mobile journalism (MoJo) concept by television journalists, viewing it as a technological determination that, over time, may evolve into a culture adopted by television journalists for news production.

Reductionistic

In the reductionistic scope, one thing that underlies technological change is the existence of a barrier that creates a distance between technology itself and culture. As a result, the existence of technology is gradually eliminating some of the cultural values that have existed in society (Bee, 2018). Within the work culture of television journalists, the imperative use of professional cameras and broadcasting equipment is entrenched. The quality of audio-visual news production significantly hinges on the devices employed. Nevertheless, a shift in journalistic culture is evident, with a contemporary emphasis on prioritizing speed over the traditional benchmarks of news quality and accuracy. This shift is attributed to the competitive nature of the media business and ongoing technological developments (A. M. Lee, 2014).

Informant 1 reflected on the evolution of broadcasting technology, noting that in the past, cameras were notably large. Video storage formats relied on substantial devices like video cassettes. The recorded video was stored on cassettes, necessitating a subsequent transfer into digital form. Once all the material was compiled, the editing process ensued. However, contemporary digital

culture has transformed this workflow, allowing all audio-visual material to be directly recorded in digital form.

Within the MoJo culture at television journalists in Indonesia are required to meticulously plan the desired output before commencing with their reporting. The design of the output dictates whether a correspondent should opt for a professional broadcasting camera or utilize a smartphone for video capture. According to informant, considerations for work effectiveness and efficiency play a crucial role in determining the coverage methods aligned with the theme and broadcast output.

... first look at what you want to cover, whether you need a professional DSLR type camera or a handycam. If the storyline is simple, you can use a smartphone camera provided by the office. But if, for example, the team already knows that news products are better represented with quality images and resolution, of course the reporting team will use professional cameras..."

Male, 37, Tv Journalist, 2023

Another informant gave an example, if on YouTube, the coverage team would prefer to use a professional camera because the quality of the video they get is definitely better. The quality of the image transfer, for example for zooming in and zooming out, will be neater and smoother, then the audio will also be clearer if you use a camera compared to using a smartphone.

Other Journalists expressed differing perspectives. They noted that the reporting team is equipped with office smartphones. Informant 4 mentioned the installation of a specialized application on smartphones, facilitating video streaming through various devices like FTP and live streaming. He revealed that the office provides reporters with smartphones and laptops to maintain news quality through standardized devices. The company places a premium on the speed and accuracy of information dissemination, ensuring information is sourced from reliable channels before broadcast, even if it lengthens the news distribution process. Despite being equipped with office smartphones, reporters continue to use professional broadcast equipment whenever possible to attain broadcast quality of a high standard.

Informant 5 highlighted that smartphones are selectively employed for reporting purposes. He emphasized that, despite the company utilization of social media for news dissemination, maintaining quality remains the foremost priority in journalistic endeavors. Correspondents leverage technology to streamline reporting processes, the Mobile Journalism concept doesn't obliterate the entrenched culture within journalism. Instead, it enriches and complements existing practices. The ubiquity of the internet and the advancement of smartphones contribute to diversified, higher-quality, and more creative journalistic outputs. Dwiki emphasized that Mobile Journalism presents an additional alternative in the technical aspects of news coverage, allowing journalists the flexibility to choose between professional reporting equipment and lightweight alternatives suited for on-field conditions.

In contrast to their counterparts in foreign media, the concept of Mobile Journalism has not been fully integrated into the practices of the central reporting team for national television journalists in Indonesia. However, among regional reporting teams, such as contributors, this concept is not novel and is frequently employed in the activities of information retrieval, coverage, and news processing. Informant 7 who covering the Purwakarta area, exemplified this approach by sharing that he personally prepared technological devices like smartphones and drones to meet coverage needs. Recognizing that adequate technological tools enhance the speed of news dissemination, this culture has taken root among contributors who prioritize efficiency. Informant 8 who covering in the Ciamis region, similarly emphasized the use of privately-owned smartphones for reporting, driven by an awareness of technological advancements and the significance of smartphones, particularly in information retrieval. Although not universally understood by all contributors in Indonesia, the

concept of Mobile Journalism (MoJo) has undeniably influenced the reporting culture of television journalists in the regions.

Monistic

The MoJo concept of using a smartphone as the main device is a technological simplification factor that makes complex coverage seem easier. This monistic aspect leads to technological developments in making coverage more concise. In the technical aspect, through smartphones, a journalist can record or broadcast live events from their mobile phone.

Some informant emphasized that the convenience afforded by broadcasting technology plays a crucial role in supporting Mobile Journalism (MoJo) practices in journalism. Equipped with a smartphone and laptop, there is a set standard for audio-visual quality expected from a news agency. However, some informants pointed out that the provision of equipment by the office raises the bar, demanding a more meticulous approach rather than a casual one. Despite being a journalist, some informants noted that there are no particular consequences if technical errors occur during shooting. Nevertheless, guided by the embedded morality in their work culture, every reporter strives to give their best even in the face of technical challenges with broadcasting equipment.

According to some informants, the continual improvement in electronic-related technological developments fundamentally contributes to making journalistic products and reporting more accessible and straightforward. The reporting process no longer necessitates the use of large cameras and other extensive reporting equipment. Independently conducting tasks such as searching, processing, and producing news can now be accomplished without the involvement of a large reporting team. This, in turn, aids media companies in disseminating information more creatively and rapidly without compromising on accuracy.

Most informants evaluates smartphone technology as the central device in the Mobile Journalism (MoJo) concept, highlighting its significance in terms of effectiveness, speed of news coverage, and prompt delivery. However, he notes that, in terms of video quality, smartphones still fall short of the standards achieved by professional broadcast cameras. According to informants, in specific scenarios, such as during a disaster, a smartphone can be the optimal choice due to its agility, allowing journalists to remain alert and take immediate action without the need to wait for specialized equipment, facilitating a swift response.

... but in terms of quality it's really far away. In the past, we only took pictures using smartphones for interviews or door stops. Stockshooting is more difficult. Even though many are sophisticated, the level of satisfaction is lacking. But if it's for efficiency, complementarity, that's enough...

Male, 38, Tv Corresponden, 2023

For regional television contributors, the utility of smartphones proves invaluable in facilitating regional coverage. Beyond their ease of use and swift functionality, smartphones are also cost-effective, allowing for affordable purchases or upgrades in quality and additional equipment. According to informant from regional, benefit significantly from the convenience of smartphone applications, aiding in information retrieval, reporting, news dissemination, and live reporting. The abundance of search and social media applications on smartphones proves highly advantageous for journalists, as technology simplifies the process of locating news sources. Meanwhile, another informant, highlighted that smartphones, with their capabilities for video capture, editing, and script creation, inadvertently foster a Mobile Journalism (MoJo) work culture that is independently initiated.

Neutralizing

In the fundamental aspects outlined by Chandler, technology is deemed neutral, with its positive or negative impact contingent upon the user. According to the informant, in the Mojo concept, it is asserted that the concept leans more towards the positive spectrum than the negative. Essentially, Mojo is expected to resonate more with and feel closer to the younger generation, potentially posing challenges for senior journalists who may not be as adept with the Mojo concept as their younger counterparts. While reporting with the Mojo concept entails both advantages and disadvantages, one informant as Indonesia correspondent noted that results obtained using a smartphone might not match the quality achieved with a professional camera.

"...(using a smartphone) in some shoots, but the majority use professional cameras. So, you will think about it during the pre-production process, what is needed. During production, you can see the difference. When to use a professional camera and when to use a smartphone. Then the pre-production stage, everything is the same, just the editing stage, we just need to move it. Now there is a culture of reporting like that, considering using a professional camera, or simply using a smartphone with a mobile journalism style..." Male, 37, Tv Journalist, 2023

Some informants realize that the significant utility of smartphones in information retrieval, citing instances like WhatsApp group coverage facilitated by the office's smartphones. For example, informants 21 recounts an incident reporting to the DPR where, lacking a cameraman, he opted for a handycam over a smartphone due to superior image quality. According to the informants, this has become an entrenched operational standard in a work culture that is challenging to relinquish. However, for information retrieval, he cautions against relying solely on smartphones. While coverage scripts and drafts can be efficiently managed on a smartphone, informants suggest prioritizing the use of laptops and other broadcast equipment when available. The use of smartphones, in his perspective, should be incidental and reserved for urgent events.

Most of informants contends that changes in technology usage have both positive and negative dimensions. On the positive side, incorporating smartphones in reporting facilitates information retrieval, aiding in idea generation when determining coverage themes and perspectives. However, on the negative side, if journalists solely depend on smartphones as their primary data source, the resulting news value frequently deviates from established journalistic rules.

The drawback in the Mobile Journalism (MoJo) concept or the use of smartphones for journalistic activities centers on issues of quality and credibility. This concern is acknowledged even by regional television contributors, like informant as contributors in Banjar, who still opt for broadcasting devices, including handycams and laptops. Their preference stems from reservations about relying on smartphones, which may be susceptible to weaknesses in quality or network issues. Describing their approach, the contributor mentioned that around 70 percent of their coverage is derived from source messages sent via social media, with the remaining 30 percent involving direct interaction.

Technological Imperative

Technology embodies several fundamental characteristics, with one being its unstoppable evolution. Technological development seamlessly aligns with the changes in time and culture. Most informants, emphasizing that everything in this world undergoes continuous development and adapts to technological advancements. The clear objective is to simplify tasks for individuals. In his perspective, smartphone technology proves exceptionally beneficial, particularly when broadcasting content for social media audiences. According to informants, for an audience from social media, it is more practical to capture and edit images directly on a smartphone. This streamlined approach renders

the pre-production, production, and post-production processes for news content more straightforward and time-efficient.

In recounting some reporting experiences, an informant provided an illustrative example. When covering Transjakarta buses specifically designated for women, he highlighted that a smartphone suffices, eliminating the need for a professional camera. This choice stems from reporters' awareness of their coverage product's intended output for social media, where the image quality meets the standard for social media broadcasting. The journalist explained that when the target product is a concise one-minute video, the reporting team strategically opts for uncomplicated images, focusing on wide shots, zooms, and interviews.

Informant 9 observes the increasing sophistication of smartphones, noting a growing trend of individuals using smartphones for reporting in comparison to professional broadcasting devices in the field. He envisions a future where the Mobile Journalism (MoJo) concept becomes viable as technological devices within smartphones continue to advance. However, he acknowledges that the company has been slower to embrace the MoJo concept, maintaining a more conservative coverage pattern with traditional broadcasting equipment. Despite this, they emphasizes the importance for journalists to exhibit maximum journalistic quality whenever feasible, advocating for optimal broadcasting devices over relying solely on smartphones, as promoted by the MoJo concept.

Within the Mobile Journalism (MoJo) concept, smartphones play a pivotal role in enhancing the quality of reporting and information dissemination, particularly on social media platforms. This evolution is considered standard as media companies have adeptly adapted, establishing specialized divisions to manage digital platforms and social media. However, Some company, according informants, firmly rejects the notion that MoJo will replace conventional reporting methods. According to informants, MoJo serves as an alternative choice for journalists seeking speed and convenience in their duties, with professional equipment still delivering superior audio and video results. Despite this, most informants emphasizes the significance of journalists embracing the MoJo concept while maintaining a professional attitude in the field, adhering to journalistic ethics to ensure the trust of sources.

"...it can't be blamed because people's mindset is still associated with television journalists using tripods, big cameras and microphones. When there is a minimum crew or in certain situations, you can use a smartphone to take temporary videos, interviews or live broadcasts..."

Male, 40, Tv Corresponden, 2022

At times, utilizing a smartphone during reporting may convey an unprofessional impression, potentially impacting the credibility of the source. The application of the Mojo concept in close proximity to the internet raises concerns about potential misuse. Informant 10 underscored the substantial influence of the newsroom in safeguarding information to prevent adverse impacts. In the event of a journalist making an error in fulfilling their duties, the recourse lies in the Press Law at the Press Council, irrespective of its connection to technology. Given that it is not a conventional practice for journalists to work using smartphones, there is a risk of perceiving journalistic activities not as journalism but as content creation. However, from the interviewee's perspective, the use of smartphones as broadcasting devices is gradually becoming more familiar.

Technological determinism can wield significant influence within an organization, serving to uphold company policies, quell controversy, and portray organizational actions as unequivocal and inevitable outcomes of technological advancements. This can result in the formulation of one-sided policies without adequately considering how this technology is embraced by the workforce (Webster, 2018). From the standpoint of technological determination, McLuhan asserts that his approach to the

impact of technology on human thinking and work patterns is intersubjective rather than objectivist (De et al., 2014).

Table 1 shows that not all television journalists experience technological determination in the mobile journalism concept. Some journalists have limited personnel on their reporting teams, still prioritize a culture of journalistic practice that is in accordance with broadcasting standards and ignores the MoJo pattern. Evaluation of the application of the mobile journalism concept for television journalists, namely the excessive use of technology in journalistic activities that require speed. Meanwhile, the journalistic process is very different from content creators who need to carry out checks and confirm and verify data. The results show that not all processes in journalistic activities are determined by smartphone technology.

Based on the data collected from informants (as in Table 1), not all processes in journalistic activities experience technological determination. In searching for information, all indicators in technological determination by informants are acknowledged by informants as fulfilled because the use of smartphones is very useful in obtaining information, especially from social media where information often appears from citizen reports.

Meanwhile, in coverage activities, not all elements of technological determination are fulfilled. In terms of reductionistic and monistic, the use of smartphones is considered very helpful and can replace the old culture of reporting with simpler, more practical, and lighter devices, namely just a smartphone. However, in terms of neutralizing and technology imperative, most informants stated that not all television journalists, especially in the regions, have high-capacity smartphones. Not all television journalists are also able to use various applications that can help with reporting, especially during editing. Even journalists who have fairly sophisticated smartphones feel that smartphones cannot replace professional television journalist equipment, such as professional cameras, microphones, and other devices. Television journalistic products in the form of audio visuals prioritize quality compared to products from smartphones which are considered to be of lower quality.

Likewise with the coverage process, the use of smartphones by television journalists has indeed replaced the old way of journalistic activities, which is more practical, but in terms of news reporting it is often constrained because there must be a strong enough internet to send video files. And as in the reporting process, not everyone has a smartphone that is sophisticated enough, so the quality will vary. Even so, in the application of technology, informants agree that if there is a company policy, the use of smartphones in reporting events directly can be applied directly, even though the quality does not meet broadcasting standards.

Table 1. Technological Determination Comparison among Journanst work Trocess				
No.	Technological	Information	Coverage	News
	Determination	Search	Activities	Broadcasting
1	Reductionistic	V	V	v
2	Monistic	v	V	х
3	Neutralizing	v	х	Х
4	Technological Imperative	V	х	v

Table 1. Technological Determination Comparison among Journalist Work Process

Source: Author's Analysis

The mobile journalism concept has the potential to evolve into a culture within the television media industry in Indonesia, establishing a standardized work culture. Additionally, content creators on social media have embraced smartphones as their primary broadcasting device (Arriagada & Ibáñez, 2020) (Widaningsih et al., 2023). Journalists are increasingly seen as competitors to content creators in information dissemination. The rapid delivery of information by content creators on social media poses a threat to the quality of the information system because content creators differ from journalists. Content creators lack the moral responsibility and incentive to produce high-quality

content, and the accuracy of data and facts may be questionable (Celliers & Hattingh, 2020). Therefore, to cultivate a robust information ecosystem culture, journalists must strike a balance by delivering news swiftly while ensuring it remains grounded in data and facts (Banjac & Hanusch, 2022). This technological determination has resulted in television journalists needing to improve their abilities in using the concept of mobile journalism as a new work culture.

Television companies venturing into the digital realm should recognize that the MoJo concept presents an alternative for fostering a dynamic work culture within their organizations. As depicted in Figure 1, digital television companies can strategically instill technological determination to cultivate a MoJo practice culture among their journalists. This involves several key stages: in the reductionistic aspect, companies can facilitate socialization sessions to enhance understanding of the MoJo concept. Television companies now implemented the use of smartphone technology to support journalists, but have not fully supported them. The current determination of smartphone technology has not yet occurred in the entire process of television journalistic activities. In fact, companies can develop Mobile Journalism to gain profits from advertising impressions and social media.

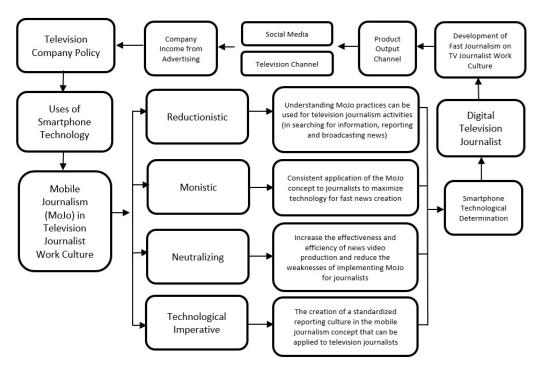


Figure 1. How Smartphone Technological Determinism Changing the Work Culture of Television Journalists Process Chart Source: Author's Analysis

With the role of television companies in developing MoJo culture in Indonesia, the spread of misinformation spread by content creators or the internet user community will be countered by the fast reporting of MoJo journalists. The term fact-checking journalism does not need to be carried out frequently by the Indonesia mainstream media (Nurlatifah & Irwansyah, 2019) (Rahmawan et al., 2022) (Soo et al., 2023), because journalists who apply the MoJo concept can also excel in terms of speed of delivering news. The theory of technological determination states that technology is a key force in organizing society, especially in communication (Adler et al., 2006) (Brousseau & Rallet, 1998). Amidst the transformation in work culture fueled by technology and the proliferation of social media, the landscape of competition has undergone a significant shift. Television companies in Indonesia, akin to foreign news agency bureaus, can leverage advancements in communication

technology and the MoJo concept to reshape the work culture of television journalists. This evolution aims to facilitate the swift and high-quality production of news, aligning with the progression of social media as a pivotal platform for broadcasting television news.

One notable drawback in the implementation of mobile journalism is the limited understanding of the reporting style among both journalists and the general public. Journalists utilizing the mojo reporting style are sometimes perceived not as traditional journalists but rather as content creators. This misperception diminishes public trust in journalists employing the mojo reporting style, categorizing them alongside content creators or influencers generating content on social media. The challenge lies not only in journalists comprehending the mojo concept but also in educating the public about it. In fact, the mojo concept has the potential to evolve from the idea of citizen journalists being trained to adopt mobile journalism practices.

Among the four fundamental aspects of technological determination, there exists a divergence in practices among foreign media correspondents in Indonesia. Specifically, the reductionistic aspect, creating a separation between technology and culture, is notable. Correspondents unanimously assert that technology does not compromise the cultural integrity of journalists' lives. Nevertheless, disparities emerge among correspondents from Indonesian Television Journalists regarding the technological imperative aspect. Some express concerns that the adoption of Mobile Journalism (MoJo) practices might compromise the quality of news and the credibility of journalists. Despite this, the majority of journalists believe that MoJo practices will gain traction as smartphone technology advances, achieving parity with professional broadcast equipment

The results of research showing television journalists' interpretations of the determination of smartphone technology in journalistic activities criticize the use of smartphones which are considered to be able to replace professional television broadcasting equipment as a new culture. Even Artificial Intelligence technology which is considered to be harmful to the journalist profession and journalistic work, can also be further dissected as a technological determination that may not occur in certain aspects. The next question regarding technological determination in renewable broadcasting technology will it change the work ethic of journalists? This can be further answered with more thorough research on aspects of technological determination among journalists who are required to compete in speed competitions.

CONCLUSION

The research reveals varied opinions on the evolution of technology within MoJo practice. From a digital technology perspective, the MoJo concept holds potential to supplant traditional coverage, streamlining a typically lengthy process. However, from a journalistic standpoint, MoJo is seen as complementary rather than a replacement, focusing primarily on expediting and simplifying news production. Technological determination in MoJo practices tends to manifest during critical moments and events demanding swift news delivery; otherwise, its influence is less pronounced. Furthermore, the implementation of MoJo in Indonesia exhibits regional disparities, with television journalists in outlying areas enjoying greater autonomy in utilizing smartphones for journalistic activities. In contrast, the news company benefit from institutional support for MoJo practices, including technological resources and standardized quality control for news products. Given these findings, it is imperative for television companies in Indonesia to foster a MoJo culture in their journalistic practices, striking a balance between speed and quality in news production. The results of the evaluation of smartphone technology determination on MoJo activities carried out by television journalists in Indonesia resulted in the finding that the MoJo concept in Indonesia has not been applied comprehensively to television journalists. Company policies also do not have standardization in the MoJo work process, although many companies have implemented and require their journalists to use smartphones to produce news products.

246 REFERENCES

- Abuhasirah, R., Oreqat, A., Al-Kiswani, H., & Al-Badri, H. (2023). Mobile Journalism Skills of Field Reporters of TV Channels. *Information Sciences Letters*, 12(5), 1629–1640. https://doi.org/10.18576/isl/120511
 - Adler, P. S., Adler, P. S., & Sage, J. R. B. (2006). Technological Determinism.
 - Appelgren, E. (2023). The No-Go Zone of Journalism Studies—Revisiting the Concept of Technological Determinism. *Digital Journalism*, 11(4), 672–690. https://doi.org/10.1080/21670811.2023.2188472
- Arriagada, A., & Ibáñez, F. (2020). Content Creators and Platform Evolution in the Social Media Ecology. *Social Media and Society*, 6(3). https://doi.org/10.1177/2056305120944624
- Ashari, M. (2019). Jurnalisme Digital: Dari Pengumpulan Informasi Sampai Penyebaran Pesan. Inter Komunika : Jurnal Komunikasi, 4(1), 1. https://doi.org/10.33376/ik.v4i1.286
- Aydin, C. (2021). Extimate Technology. In *Extimate Technology*. https://doi.org/10.4324/9781003139409
- Banjac, S., & Hanusch, F. (2022). A question of perspective: Exploring audiences' views of journalistic boundaries. New Media and Society, 24(3), 705–723. https://doi.org/10.1177/1461444820963795
- Bee, S. (2018). Technology vs. Reductionism. September.
- Brousseau, E., & Rallet, A. (1998). Beyond Technological or Organisational Determinism: A framework to understand the link between Information Technologies and Organisational changes. S.MacDonald, G. Madden (Eds), Telecommunications and Socio-Economic Development, North Holland, Elsevier Science, January 1998, 245–262.
- Cameron, D. (2011). Mobile journalism: a snapshot of current research and practice. *Technology, Education and Ethics Conference*, 63–72.
- Canavilhas, J. (2021). Epistemology of mobile journalism. A review. *Profesional de La Informacion*, 30(1), 1–20. https://doi.org/10.3145/epi.2021.ene.03
- Celliers, M., & Hattingh, M. (2020). A Systematic Review on Fake News Themes Reported in Literature. In Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics): Vol. 12067 LNCS. Springer International Publishing. https://doi.org/10.1007/978-3-030-45002-1 19
- Creswell, J. W. (2013). Qualitative Inquiry & Research Design: Choosing Among Five Approaches. Sage.
- de-Lima-Santos, M. F., & Mesquita, L. (2021). Data Journalism Beyond Technological Determinism. *Journalism Studies*, 22(11), 1416–1435. https://doi.org/10.1080/1461670X.2021.1944279
- De, F., Paragas, C., & Lin, T. T. C. (2014). Organizing and reframing technological determinism. https://doi.org/10.1177/1461444814562156
- Deuze, M. (2017). Considerando el futuro del periodismo digital. *Revista Mediterránea de Comunicación / Mediterranean Journal of Communication*, 8(1), 9–18.
- Farid, A. S. (2023). Changing the Paradigm of Traditional Journalism to Digital Journalism: Impact on Professionalism and Journalism Credibility. *Journal International Dakwah and Communication*, 3(1), 22–32. https://doi.org/10.55849/jidc.v3i1.374
- Fauzi, F., Marhamah, M., & Rahmani, S. U. (2023). Transformation and Challenges of Digital Journalism in Aceh. Komunikator, 15(1), 41–53. https://doi.org/10.18196/jkm.16614
- Furqan, R., Muhtar, S. M., & Arya, N. (2022). Application of User Generated Content by Television News' during Pandemic. Jurnal ASPIKOM, 7(1), 71. https://doi.org/10.24329/aspikom.v7i1.1069
- Galily, Y. (2018). Artificial intelligence and sports journalism: Is it a sweeping change? *Technology in Society*, *54*, 47–51. https://doi.org/10.1016/j.techsoc.2018.03.001
- García-Orosa, B., López-García, X., & Vázquez-Herrero, J. (2020). Journalism in digital native media: Beyond technological determinism. *Media and Communication*, 8(2), 5–15. https://doi.org/10.17645/mac.v8i2.2702
- Gelgel, N. M. R. A. (2020). Will technology take over journalism? *Informasi*, 50(2), v-x. https://doi.org/10.21831/informasi.v50i2.36379
- Guevara, S. B. (2022). A Qualitative Study On Television Journalists' Adaptation During The Coronavirus Pandemic Through The Lens Of Technological Determinism.

- Hallström, J. (2022). Embodying the past, designing the future: technological determinism reconsidered in technology education. *International Journal of Technology and Design Education*, 32(1), 17–31. https://doi.org/10.1007/s10798-020-09600-2
- Harlow, R. (2011). Qualitative Research in Technical Communication (Conklin, J. and Hayhoe, G.F., Eds.; 2011) [Book Review]. In *IEEE Transactions on Professional Communication* (Vol. 54, Issue 3). https://doi.org/10.1109/tpc.2011.2159641
- Irwansyah, A. (2022). Mobile Journalism on News Production in Kompastv. Jurnal Spektrum Komunikasi, 10(3), 206–214.
- Jose, J. M. M. (2020). Technological Determinism 's Enduring Relevance Today Technological Determinism 's Enduring Relevance Today. September.
- Karhunen, P. (2017). Closer to The Story: Accesbility and Moblie Journalism. July.
- Kroker, A. (1984). Technology and the Canadian Mind: Inis/McLuhan/Grant.
- Kurnia, S. S., Ahmadi, D., Satya Indra Karsa, Firmansyah, & Iskandar, D. (2022). Interpretation of Television Journalist Utilizing Smartphone Technology on Reporting Disaster (p. 534).
- Leavy, P. (2017). Research Design Quantitative, Qualitative, Mixed Methods, Art Based, and Community Based Participatory Research Approach. Guilfold Press.
- Lee, A. M. (2014). *How Fast is Too Fast? Examining the Impact of Speed-Driven Journalism on News Production and Audience Reception.* https://www.academia.edu/8460523/How_Fast_is_Too_Fast_Examining_the_Impact_of_Sp eed Driven Journalism on News Production and Audience Reception
- Lee, Y. M. (2022). Digital Skills of Mobile Journalists: Exploring Learning Needs and Learner Experiences of Just-in-Time Learning With Smartphones. *Journalism and Mass Communication Educator*, 77(1), 43–60. https://doi.org/10.1177/10776958211001692
- Lestari, R. D. (2020). Jurnalisme Digital dan Etika Jurnalisme Media Sosial:Studi pada Akun Instagram @tempodotco dan @tribunjogja. Jurnal Ilmu Pengetahuan Dan Teknologi Komunikasi, 22(2), 159–174. http://dx.doi.org/10.33164/iptekkom.22.2.2020.159-174
- Lydersen, A. B. (2020). *MOJO! Telling the story of mobile journalism, through a mobile phone, to a mobile audience. June.* https://www.duo.uio.no/handle/10852/79868
- Marhamah, F. (2021). JURNALISME DI ERA DIGITAL JOURNALISM IN DIGITAL ERA. JICOMS: Journal of Islamic Communication and Media Studies, 1(1), 16–37.
- Masawi, E. (2023). Examining the adoption of mobile journalism in Uganda 's newsrooms : a case of NBS TV and NTV.
- Mawalia, K. Al. (2020). The impact of the Mobile Legend game in creating virtual reality. *Indonesian Journal of Social Sciences*, 12(2), 49. https://doi.org/10.20473/ijss.v12i2.22908
- Meisyanti, W. H. K. (2020). Platform Digital Siaran Suara Berbasis on Demand (Studi Deskriptif Podcast Di Indonesia). Jurnal Komunikasi Dan Media, 4(2), 191–207.
- Newman, N. (2023). Journalism, Media, and Technology Trends and Predictions 2023.
- Nielsen, R. K., Cornia, A., & Kalogeropoulos, A. (2016). Challenges and opportunities for news media and journalism in an increasingly digital, mobile, and social media environment Council of Europe report.
- Nurlatifah, M., & Irwansyah, I. (2019). Fact-Checking Journalism sebagai Platform Kolaborasi Human and Machine pada Jurnalisme Digital. *Jurnal Komunikasi*, 13(2), 121–134. https://doi.org/10.20885/komunikasi.vol13.iss2.art1
- Oktavianti, R., Paramita, S., & Sukendro, G. G. (2024). Producing News Stories on the YouTube Platform by Mobile Journalists in Indonesia. *Jurnal Ilmu Komunikasi*, 22(1), 18. https://doi.org/10.31315/jik.v22i1.6907
- Perreault, G. P., & Ferrucci, P. (2020). What Is Digital Journalism? Defining the Practice and Role of the Digital Journalist. In *Digital Journalism* (Vol. 8, Issue 10). https://doi.org/10.1080/21670811.2020.1848442
- Perreault, G., & Stanfield, K. (2019). Mobile Journalism as Lifestyle Journalism?: Field Theory in the integration of mobile in the newsroom and mobile journalist role conception. *Journalism Practice*, *13*(3), 331–348. https://doi.org/10.1080/17512786.2018.1424021
- Perreault, M. F., & Perreault, G. P. (2021). Journalists on COVID-19 Journalism: Communication Ecology of Pandemic Reporting. American Behavioral Scientist, 65(7), 976–991. https://doi.org/10.1177/0002764221992813
- Prestianta, A. M. (2022). Mobile Journalism Practice in the Kompas.com Newsroom. *Komunikator*, 14(2), 137–147. https://doi.org/10.18196/jkm.15883



- Quinn, S. (2020). Mobile journalism. *Knowledge Management in the Digital Newsroom*, 161–182. https://doi.org/10.4324/9780080495989-13
- Rahmawan, D., Hartanto, R., & Garnesia, I. (2022). Multi Case Analysis on The Development of Fact-Checking Organizations in Indonesia. *Jurnal Kajian Komunikasi*, 10(1), 14. https://doi.org/10.24198/jkk.v10i1.38752
- Rangga, A. C. (2023). Praktik Mobile Journalism dalam Peliputan Jurnalis Voice of America di Indonesia. Bandung Conference Series: Journalism, 7–13.
- Rodrigues, L. P. R., Baldi, V., & de Castro Oliveira Simões Gala, A. (2021). Mobile journalism: The emergence of a new field of journalism. *Brazilian Journalism Research*, 17(2), 280–305. https://doi.org/10.25200/BJR.V17N2.2021.1368
- Salaverría, R. (2019). Digital journalism: 25 years of research. Review article. *Profesional de La Informacion*, 28(1), 1–26. https://doi.org/10.3145/epi.2019.ene.01
- Saltzis, K., & Dickinson, R. (2008). Inside the changing newsroom: Journalists' responses to media convergence. Aslib Proceedings: New Information Perspectives, 60(3), 216–228. https://doi.org/10.1108/00012530810879097
- Salzmann, A., Guribye, F., & Gynnild, A. (2021). "We in the Mojo Community"–Exploring a Global Network of Mobile Journalists. *Journalism Practice*, 15(5), 620–637. https://doi.org/10.1080/17512786.2020.1742772
- Sanusi, H. (2018). Jurnalisme Data: Transformasi Dan Tantangan Era Digital. Jurnal Dakwah Tabligh, 19(1), 20–43. https://doi.org/10.24252/jdt.v19i1.5909
- Soo, N., Morani, M., Kyriakidou, M., & Cushion, S. (2023). Reflecting Party Agendas, Challenging Claims: An Analysis of Editorial Judgements and Fact-checking Journalism during the 2019 UK General Election Campaign. *Journalism Studies*, 24(4), 460–478. https://doi.org/10.1080/1461670X.2023.2169190
- Sukmono, F. G., Fadilla, Q. Y., Putri, A., & Kencana, S. (2022). MOJO IN TRIBUN JOGJA : A 21 ST CENTURY JOURNALISM Media and Cultural Studies , Universitas Gadjah Mada -Indonesia. 11(2), 158–166.
- Sukmono, F. G., & Junaedi, F. (2021). The development of mobile journalism in Indonesia during the covid-19 pandemic. *Advances in Social Science, Education and Humanities Research*, 596(Jcc), 131–133.
- Varzandeh, S. (2020). The Impact of Technology on Journalism. International Journal of Advance Engineering and Research Development, 6(December 2019), 270–276.
- Webster, M. D. (2018). Questioning Technological Determinism through Empirical Research. May 2017. https://doi.org/10.5840/symposion2017416
- Westlund, O. (2023). On the becoming of an academic home for research into the intersection of mobile devices and news. *Mobile Media and Communication*, 11(1), 125–131. https://doi.org/10.1177/20501579221134261
- Widaningsih, T. T., Kusumaningrat, M. M. W., & Marta, R. F. (2023). The Influence of TikTok Content Creator on Consumptive Behavior of Teenagers in Online Shopping. *Jurnal* ASPIKOM, 8(2), 213–224. https://doi.org/10.24329/aspikom.v8i2.1206
- Wilding, D., Fray, P., Molitorisz, S., & Mckewon, E. (2018). The Impact of Digital Platforms on News and Journalistic Content. *Centre for Media Transition*, 175. https://www.accc.gov.au/system/files/ACCC commissioned report - The impact of digital platforms on news and journalistic content%2C Centre for Media Transition %282%29.pdf
- Yin, R. K. (2018). Case Study Research and Applications Design and Methods Sixth Edition. SAGE Publication, Inc.
- Yoedtadi, M. G., Ronda, A. M., & Wahid, U. (2021). Television and Social Media Convergence (Convergence Continum and Journalistic Convergence Analysis at Indosiar). 14(3), 56–72. https://doi.org/10.9734/ARJASS/2021/v14i330241
- Zaman, B. (2022). Citizen Journalism : An Inquisitive Analysis of the Usage of Citizen Journalism : An Inquisitive Analysis of the Usage of Mobile Applications. March.
- Zamith, R., & Braun, J. A. (2019). *Technology and Journalism*. https://doi.org/10.1002/9781118841570.iejs0040
- Zangana, A. (2017). The Impact of New Technology on The News Production Process in the Newsroom. 1–14.