

The Use of Social Media as Journalistic Sources by Legacy and Online Newspapers in Malaysia

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Abstract: Traditional journalism practices are changing due to the advancement in information and communication technologies contributed by social media. Today, social media play an important role as journalistic sources as they offer a convenient, inexpensive and effective way to gather information. Social media also provides journalists easy access to a wide range of sources, while empowering both elites and the general public to express their opinions. The journalist-source relationship is one of the fundamental concerns in journalism research. Journalist's online sourcing approach deserves special attention because it is related to the democratising effect of the Internet, as well as the changing nature of news and the role of the journalist. Furthermore, news sources have the power to interpret and define reality, while playing an important function in agenda-setting and framing. The current study aimed to examine the use of social media as journalistic sources by Malaysian legacy and online newspapers. This study employed content analysis as the research method and diffusion of innovation theory as the theoretical framework. The study found that the legacy newspaper *The Star* cited social media news sources fivefold more than the online newspaper *Malaysiakini*. Twitter and Facebook were most commonly adopted as news sources by both newspapers. *The Star* tended to quote only social media sources in its news reports, while *Malaysiakini* was found to mostly publish the social media posts in screenshot or verbatim format. In addition, both the newspapers mostly quoted the social media posts to provide more context to the stories. *The Star* and *Malaysiakini* mostly quoted politicians from Facebook and Twitter posts, while reporting celebrities' or artists' voices from Instagram posts. Majority of the news stories in *The Star* that quoted social media were international news while most of the stories in *Malaysiakini* were national news. The topics for which social media were most commonly sourced by *The Star* and *Malaysiakini* included politics, crime, media, technology, arts, culture, lifestyle and entertainment. This study contributes to the ongoing effort in documenting the impact of social media on journalists as individual media workers, as well as for journalism as an institution.

Keywords: social media sourcing, diffusion of innovation, news sources, journalist-source relations, online journalism

INTRODUCTION

Malaysia has a population of 32.7 million, and the penetration rate of fixed- and mobile-broadband in the country were recorded at 41.9% and 124.1% respectively in 2022 (Malaysian Communications and Multimedia Commission, 2022). In addition, the top three social networking applications used by Malaysians were Facebook (88.7%), Twitter (79.3%) and Instagram (53.8%) (AsiaPac, 2022).

The wealth of information offered by social media is unparalleled in terms of volume, variety and velocity (Delmastro & Splendore, 2021; Saud et al., 2020). Notably, the immediacy, engagement and promotional potential of social media have been valued in news production, distribution as well as consumption (Pan et al., 2020). According to Vazquez-Herrero et al. (2022), social media today are playing a more important role as a news source than ever before. Social media offer a convenient, inexpensive and effective way to gather information. They also provide journalists easy access to a wide range of sources (Deavours et al., 2022; Zhang & Zhu, 2022), while empowering both elites and the general public to express their opinions (Von Nordheim et al., 2018). Zhang and Li (2020) added that social media are also considered a conduit for journalists to dig through the privacy of newsworthy celebrities, politicians and sports stars. Additionally, the quoted messages from informants' social media posts could also enrich news stories. Significantly, due to the current economic situation of journalism as well as the speeding-up of the news cycle, it is important to rationalise newsgathering. Therefore, under the constraints of limited resources and time to write stories, journalists tend to check information or investigate stories through the Internet (Grygiel & Lysak, 2021).

Traditional journalism practices are changing due to the advancement in information and communication technologies contributed by social media (Oelrichs, 2023). Journalists increasingly turn to social media for researching topics, curating information and analysing stories. Furthermore, journalists use social media to share their experiences, their thoughts and opinions, and to engage in dialogue with their readers (Zhang & Li, 2020). Social media may also be used for online identification of sources and for interviewing eyewitnesses (Pan et al., 2020). The journalist-source relationship is one of the fundamental concerns in journalism research (Johansson & Odén, 2018). This is because news sources have the power to interpret and define reality, while playing an important function in agenda-setting and framing (Lewis & Molyneux, 2018). Significantly, Humayun and Ferrucci (2022) stressed that research about journalist's online sourcing approach deserve special attention because it is related to the democratising effect of the Internet, as well as the changing nature of news and the role of the journalist. Moreover, the authors stated that a change in sourcing practice could have an impact on the quality of news reporting. Nonetheless, Von Nordheim et al. (2018) also addressed that there has been scarce research on journalist's social media sourcing practice that allow for a deeper examination of the mechanisms of innovation diffusion. Moreover, the authors stated that comparative studies of different social platforms in different media systems are also lacking.

Like their counterparts around the world, legacy newspapers in Malaysia are also experimenting with ways to stay afloat in the digital age (Nain, 2022). According to Reuters Institute Digital News Report 2022, consumption of digital media and digital news has continued to rise over the past year in Malaysia, and 89% of Malaysians used online sources for news. Operating in a purely market-based environment, Malaysia's online-only newspapers were established to provide alternative news coverage, and they have played pivotal roles in many of Malaysia's social and political events. The online-only newspapers also enjoy relatively good returns in terms of readership (Ramli, 2019). In spite of the growth in online news sources and in online news audiences, a review of literature shows that there has not been much research on online journalistic sourcing in Malaysia. Significantly, Humayun and Ferrucci (2022) also pointed out that social media and journalism research are evolving in tandem with social, political, economic and technological dynamics that can vary widely around the world. However, the authors addressed that the study of social media and journalism has been limited to the Western perspective (e.g. Deavours et al., 2022; Degen & Olgemoller, 2021; Hernandez-Fuentes & Monnier, 2022) and fail to include adequate diversity on matters of geography, culture and language as well as race, class, and gender. Therefore, the current study aimed to examine the use of social media as a journalistic source by both Malaysian legacy and online newspapers, in an attempt to address the geographical aspect of social media and journalism research.

Research Objectives and Research Questions

This study aimed to examine the use of social media as journalistic sources by legacy and online newspapers in Malaysia. Legacy newspapers refer to those that first started as print newspapers but offered online news at a later stage alongside their printed copies. Meanwhile, online newspapers refer to those online-only news sites. Specifically, this study asked the following questions:

- RQ1: What was the extent of social media sourcing adapted by the Malaysian legacy and online newspapers?
- RQ2: Who were the sources mentioned in the articles in which social media were quoted as news sources by the Malaysian legacy and online newspapers?
- RQ3: What was the geographic focus of the articles in which social media were quoted as news sources by the Malaysian legacy and online newspapers?
- RQ4: What was the topic of the articles in which social media were quoted as news sources by the Malaysian legacy and online newspapers?

LITERATURE REVIEW

This study employed diffusion of innovation (DOI) as the theoretical framework as the phenomenon examined was the adoption of social media as an innovative news source by journalists. Everett M. Rogers is the foremost leader in diffusion of innovations and technology transfer research. The diffusion of innovation theory focuses on how people make decisions to adopt a new innovation by finding their adoption patterns and understanding its structure. Diffusion is defined as the "process by which an innovation is communicated through certain channels over time among the members of a social system" (Rogers, 2010, p. 205). In addition, an innovation is an idea, product, technology, process or service that is new to its adopters (Sartipi, 2020).

The DOI theory has been applied in various fields of study, including sociology, anthropology, communications, business and management, economics, psychology, education, hospitality and tourism, sustainable development, environmental construction, medical sociology, policy studies, political behaviors and even terrorist social networks (Dearing & Cox, 2018; Dilletta & Ponting, 2020; Goh & Sigala, 2020; Sartipi, 2020). Furthermore, the application of DOI has been tested in different countries and cultures, both at micro and macro levels, concerning tangible and intangible innovation (Dibra, 2015).

Synthesizing previous theoretical and empirical findings on DOI as well as innovative journalistic practices, this section discusses the related literature according to the following headings: 1) Innovation attributes, 2) Time, 3) Communication channels, 4) Social system, 5) Diffusion outcome and 6) Criticism of the theory.

Innovation Attributes

Characteristics of innovation help to explain different levels of the adoption. They include: 1) relative advantage, 2) compatibility, 3) complexity, 4) trialability, and 5) observability.

Relative advantage refers to “the degree to which an innovation is perceived as being better than the idea it supersedes” (Rogers 2010, p. 212). Social media are very useful for journalists as a supplement to their traditional research and presentation techniques (Lewis & Molyneux, 2018). Recognizing the broad and diverse range of sources available in social media, scholars (e.g. Feezell, 2018; Jiao et al., 2020; Kim & Dennis, 2019) regarded them as readily available information and knowledge. McGregor (2019) also recognized that social media are used by journalists to represent public opinion, and the presence of journalists and media organisations on social media is advantageous for the traffic to the online news sites.

Rogers (2010) defined compatibility as a “degree to which an innovation is perceived as consistent with existing values, past experiences and needs of potential adopters” (p. 224). Notably, Twitter is regarded as highly compatible with journalistic practice in breaking news situations (Hermida & Mellado, 2020). Significantly, Hermida (2010, p. 301) coined the term “ambient journalism” to describe Twitter as a communication platform that enables users to maintain an awareness system of news around them.

Complexity refers to the “degree to which an innovation is perceived as being difficult to understand and use” (Rogers, 2010, p. 242). Humayun and Ferrucci (2022) found that the most important criteria journalists used when assessing social media sources were factually accurate and reliable information, documented expertise of the writer(s) and/or organization and evidence of objectivity. It was also reported that Twitter, Facebook and LinkedIn were among journalists’ most trusted and credible social media sources.

In addition, Saud et al. (2020) addressed that the velocity at which information is circulated in social media demands significant effort of verification by journalists. According to Min et al. (2019), digital and social media not only have transformed journalistic routines and practices but also challenged journalist’s authority and news monopoly. In response to the innovation and convergence, a number of news organisations have issued some social media guidelines to address how to approach personal opinions, when one may or may not retweet other users’ messages, and whether or when one may publish scoops.

Trialability refers to the “degree to which the innovation can be experimented with before adoption” (Rogers, 2010, p. 243). Oelrichs (2023) explained that Twitter has become popular among journalists due to the spike of its active users. As more politicians, celebrities and influential people are using Twitter to post information, share opinions, market themselves and relate to others, Twitter has become a beat for reporters.

Observability is the “degree to which the results of an innovation can be observed by target members” (Rogers, 2010, p. 244). Due to the observability of social media, they have been increasingly used by journalists for news sourcing, idea generation, information verification, news presentation, content distribution, promotion, branding, as well as audience engagement. Discussing social media references in newspapers, Paulussen and Harder (2014, p. 542) pointed out that social media platforms have become part of the journalists’ “technological infrastructure” through which they monitor and imitate both each other and each other’s sources.

Time

The element of time refers to three components: 1) innovation decision process, 2) adopter categories and 3) the rate of adoption (Rogers, 2010). Hashem and Tann (2007) proposed a five-stage innovation decision process comprising

awareness/knowledge, attitude formation, evaluation, adoption, and continued use/rejection. This model is considered most relevant and appropriate for the purpose of the current study.

Some individuals adopt a new idea much more readily than others. Rogers (2010) described this quality as innovativeness, or earliness in relation to others in adopting an innovation. The level of adoption is usually measurable on the basis of the number of the members who adopt the innovation system in a given period, and who are classified in different categories: innovators, early adopters, early majority, late majority and the laggards (see Figure 1).

Innovators consist of the first 2.5% who adopt an innovation and are seen as risk takers who are comfortable with uncertainty and are willing to accept any setbacks when a new innovation proves unsuccessful. The second group is known as early adopters who consist of the next 13.5% of the population. This segment of adopters are opinion leaders because they are highly respected by their peers, who will often ask the opinion leaders for advice and information about an innovation.

The third group of adopters is known as the early majority and they consist of the next 34% of the population. They are thoughtful and careful but accept change more quickly than the average.

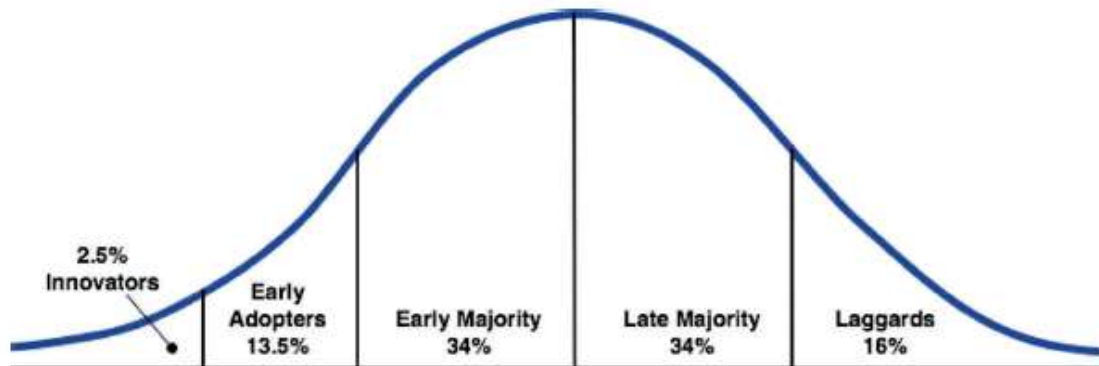
While the late majority also consist of the next 34% of the population, they have relatively limited resources and their uncertainties about any new ideas must be addressed before they are willing to adopt the new idea. This group of adopters is highly motivated by peer pressure to adopt new innovations.

The last group of adopters is the laggards who consist of the last 16% of the population. They tend to be skeptical of new ideas and resist change. The time taken to embrace an innovation is rather long because their personal resources are scarce, and they want to be absolute certain that the adopted innovation will benefit them before taking any action.

Figure 1

Different Categories of Adopters

Source: Rogers (2003)



The rate of adoption provides a measure of the cumulative number of adopters in a social system. When plotting the cumulative number over time, the resulting distribution reflects an S-shaped curve. A steeper S-curve represents a more rapid diffusion process (Scott & McGuire, 2017).

In their study about the changing uses of social media among journalists across time, Al-Rawi (2020) indicated that the spread of social media differed between groups of journalists and that social media usage was related to the journalist's age, gender, type of work and workplace. Furthermore, scholars also found that journalists working for print newspapers have a lower estimation of the importance of social media than online or broadcast journalists, and they are more concerned about possible disadvantages (Zhang & Li, 2020).

Reich (2013) suggested that there are two schools of thought on the adoption of new technologies in news reporting, namely transformationism and adaptationism. On one hand, the transformationalists call for adaptation of new technologies by journalists. On another hand, the adaptationists are not as quick to embrace new technology, and they do not think that new innovation could replace older technologies in news production.

In addition, Von Nordheim et al. (2018, p. 810) outlined three waves of innovation adoption in journalism:

The first wave was marked by an adoption of new tools to fit existing practices instead of transforming them. The second wave led to a reformulation of the relationship between journalists and their communities, whereby readers are also critics and partners in content creation. The third wave involved a reconfiguration of professional culture and structural changes within a newsroom. In addition, the authors also pointed out that recent studies on the correlation between journalism and social media mostly focused on the propagation of journalistic content via social media. They observed that news media are becoming dependent upon increasingly powerful digital intermediaries, whereby journalists have to construct their content with algorithmic and data-centric intermediaries in mind.

Communication Channels

Different methods of communication are effective at different times in the adoption process. Mass media strongly affect adoption when an innovation is in its early stages of diffusion because mass media are most effectively used to increase general knowledge and broad awareness of the innovation. Empirical studies confirm that early adopters of an innovation tend to be heavy mass media users (Balas & Chapman, 2018).

Interpersonal communication channels involve face-to-face communication with two or more individuals. Previous research showed that interpersonal communication is more persuasive in encouraging individual adopters to embrace the innovation. They include technical assistance structures, professional conferences, workshops, classes, and etc. (Balas & Chapman, 2018). Diffusion studies also indicate that members who are most alike in terms of age, gender, health, intelligence, education, personal beliefs, socioeconomic status, etc. (near peers) are the most effective communication channels in promoting adoption of an innovation (Pan et al., 2020).

Social System

The social system may be made up of individuals, informal groups, subgroups or professional organisations. Communication structures often reveal that near peers and opinion leaders are influential in promoting the adoption of an innovation within a social system. Significantly, change agents who actively work to promote an innovation within a system often capitalise on the influence of opinion leaders (Deavours, 2022).

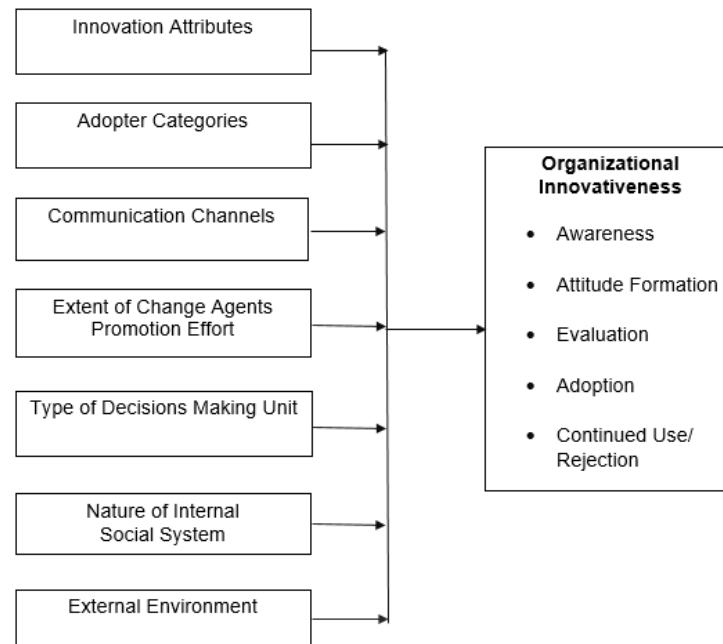
The initial DOI theory developed by Rogers was meant to explain and predict the adoption of innovation by individuals. Subsequently, Rogers (1995) noted that much DOI research carried out before the 1970s was applied by other researchers to the study of organisations, however, often without careful consideration about the differences between the micro- and macro-level of the system. Therefore, Rogers (1995) developed an organisational innovations model, which focuses on organisational characteristics that influence the decision to adopt innovation.

The characteristics of the social system in an organisation include centralization, organisational complexity, levels of formality, interconnections within an organisation, and the size (Dillette & Ponting, 2020). The innovation decision making unit in an organisation can be divided to: 1) optional decision, whereby the person has free choice in its selection; 2) collective decision, in which the organisation works together to make the adoption decision, and 3) authority decision, in which a decision is made top-down.

Centralization refers to the amount of power that resides with a small number of people – which is most often negatively correlated with innovativeness. Organisational complexity considers the knowledge levels and expertise of organisation members, which is positively correlated with innovativeness. Furthermore, levels of formality refer to the degree to which an organisation follows specific rules, which is negatively correlated with innovativeness. Interconnectedness refers to the level at which organisations are connected to its wider network and social system, and it is positively correlated with innovativeness. Finally, the larger an organisation, the more innovative it tends to be.

Through synthesising previous DOI literature, this paper suggests a model of organisational innovativeness as illustrated in Figure 2:

Figure 2
Model of Organizational Innovativeness



Diffusion and its Outcomes

Das (2020) elucidated that the outcomes of innovation diffusion could be functional or dysfunctional, and it depends upon the adopters and the time of adoption of the innovation. Moreover, the adoption of an innovation might be beneficial to certain sections of society but might create very different implications for society as a whole. The early adopters derive windfall profit, while laggards are influenced through economic pressure and hence forced to adopt. The adoption of any innovation might not necessarily have any direct impact upon adopters but might have indirect consequences.

Addressing the impact of social media on sports journalism, Nölleke et al. (2017) outlined three facets of the relationship: competitive, integrative and complementary. The authors mentioned that journalism and social media compete with one another if both fulfil identical functions. First, a competitive relation would exist if actors on social media platforms provided the same kind of information as journalists do. Second, the relation could be called competitive if audiences seek to be and actually feel informed via (non-journalistic) content on social media platforms. With regard to the integration relation, Hong et al. (2020) explained that media outlets can use social media platforms as another channel to distribute news and that way integrate social media into their work. Moreover, the complementarity dynamic happens when social media communication and mainstream media use each other as sources.

Sacco and Bossio (2017) summarised that previous research has highlighted four dominant impacts of social media on journalism: (1) effects on the traditional professional identities of journalists, (2) changes in norms and practices reflecting audience interaction, (3) the blurring line between “private” and “professional”, and (4) the notion of a news “brand” at both individual and organisational level.

METHOD

This study employed content analysis as the research method, the newspapers chosen were *The Star* and *Malaysiakini*. *The Star* is the oldest legacy English-language newspaper in Malaysia. It also enjoys the largest circulation among the legacy English-language dailies in the country, recording 50.2 million monthly page views in 2022 (*The Star*, 2023). According to the Reuters Institute Digital News Report 2022, *Malaysiakini* is the top online news choice in Malaysia for the sixth consecutive year. It reaches over 12 million monthly page views on personal computers and 77 million monthly page views on mobile media.

The time frame of the study was 1 January 2020 to 31 December 2020, which was the most recent one full year at the time of the study. The data collection started in January 2021, spanning across a period of three weeks. The 6700 articles were collected via database search, which were pulled from the respective newspaper's online archive by using "Facebook", "Twitter" and "Instagram" as the keywords. These three social media were chosen as they represent the most popular social networking sites in Malaysia. The study employed the census sample of articles collected within the one-year period of the time frame.

Coding Procedure

In this study, the extent of social media sourcing was examined from five aspects:

- 1) How many articles were adapted from social media as the news source(s)?
- 2) What types of social media were adapted as news source(s)?
- 3) Was social media the only news source(s) quoted in the news articles?
- 4) Was the quotation done verbatim or paraphrase?
- 5) Was the social media post itself reported as a news article or was it used to provide more context to the story?

In addition, seven categories were created for the coding of actors mentioned in the articles: 1) politicians; 2) government officials; 3) business or corporate representatives; 4) experts/ academics/ researchers/ professionals; 5) activists/ NGOs; 6) celebrities or artists; 7) athletes; 8) royal families; 9) ordinary citizens; and 10) others.

The geographic focus of the articles was divided into: 1) national and 3) international. Furthermore, the topics of the articles were categorized into: 1) politics/ government/ public administration; 2) economy; 3) health; 4) crime/justice; 5) disaster/ accident; 6) technology, science; 7) education; 8) sports; 9) media/ culture/ entertainment/ lifestyle/ human interest; and 8) others.

Data Analysis

The 6700 articles collected from the two newspapers were analysed using Excel. Descriptive statistics such as frequencies and percentages were used to summarise the data.

Inter-coder Reliability

To ensure the reliability of this study, a communication graduate was chosen as the second coder. During the training session, the writer (who was also the first coder) and the second coder coded 50 articles that were chosen randomly from the sample of this study. Disagreements were analysed and some additional explanations were included in the coding instruction in the codebook. The inter-coder reliability for this study was established by randomly selecting 100 news articles. By using Cohen's kappa, the inter-coder reliability was 1.00 (extent of social media sourcing), 0.87 (sources mentioned in the articles), 1.00 (geographic focus), and 0.86 (topics).

FINDINGS

Extent of Social Media Sourcing

This study collected 6700 articles in total, whereby 84.69% (5674 articles) were contributed by *The Star*, and 15.31% (1026 articles) by *Malaysiakini*. Table 1 shows that *The Star* had 4648 more articles than *Malaysiakini* that quoted social media as news sources. In addition, *The Star* quoted Twitter the most (70.64%) while *Malaysiakini* relied predominantly on Facebook (49.12%) and Twitter (45.61%).

TABLE 1: NUMBER OF ARTICLES QUOTING SOCIAL MEDIA AS NEWS SOURCES

Social Media	<i>The Star</i> (n = 5674) %	<i>Malaysiakini</i> (n = 1026) %
Facebook	19.21	49.12
Twitter	70.64	45.61
Instagram	10.15	5.26

As recorded in Table 2, 55.88% of news articles in *The Star* did not contain other news sources besides social media. In contrast, 77.10% of *Malaysiakini* articles carried other sources besides social media posts.

TABLE 2: TYPES OF SOCIAL MEDIA SOURCES

		Yes %	No %
<i>The Star</i> (n = 5674)	Facebook	45.69	54.31
	Twitter	61.68	38.32
	Instagram	25.00	75.00
	Mean	44.12	55.88
<i>Malaysiakini</i> (n = 1026)	Facebook	76.19	23.81
	Twitter	88.46	11.54
	Instagram	66.67	33.33
	Mean	77.10	22.89

Both *The Star* and *Malaysiakini* quoted social media either in verbatim or screenshot format (Table 3). Nonetheless, *Malaysiakini* had a higher mean percentage (70.30%) than *The Star* (58.41%) for verbatim or screenshot quotation.

TABLE 3: TYPES OF SOCIAL MEDIA SOURCE QUOTATIONS

		Verbatim/ Screenshot %	Paraphrase %
<i>The Star</i> (n = 5674)	Facebook	67.49	32.51
	Twitter	64.88	35.12
	Instagram	42.86	57.14
	Mean	58.41	41.59
<i>Malaysiakini</i> (n = 1026)	Facebook	75.00	25.00
	Twitter	69.23	30.77
	Instagram	66.67	33.33
	Mean	70.30	29.70

Table 4 shows that most of the social media quotations in both *The Star* (52.24%) and *Malaysiakini* (65.45%) were used to provide context to the news stories reported.

TABLE 4: FUNCTIONS OF THE SOCIAL MEDIA POSTS

	News %	Provide Context %

<i>The Star</i> (n = 5674)	Facebook	57.34	42.66
	Twitter	35.93	64.07
	Instagram	50.00	50.00
Mean		47.76	52.24
<i>Malaysiakini</i> (n = 1026)	Facebook	52.38	47.62
	Twitter	17.95	82.05
	Instagram	33.33	66.67
Mean		34.55	65.45

According to Table 5, majority of the news stories in *The Star* were international news (68.36%), while *Malaysiakini* had 59.16% national news. Nonetheless, when *The Star* quoted Facebook, 65.14% of the stories reported on national news.

TABLE 5: GEOGRAPHIC FOCUS OF THE SOCIAL MEDIA SOURCING NEWS STORIES

		National %	International %
<i>The Star</i> (n = 5674)	Facebook	65.14	34.86
	Twitter	4.79	95.21
	Instagram	25.00	75.00
Mean		31.64	68.36
<i>Malaysiakini</i> (n = 1026)	Facebook	76.19	23.81
	Twitter	34.62	65.38
	Instagram	66.67	33.33
Mean		59.16	40.84

Sources in Social Media Posts

The Star and *Malaysiakini* mostly quoted politicians from Facebook and Twitter posts, while reporting celebrities' or artists' voices from Instagram posts (Table 6 and 7). Nonetheless, ordinary citizens' voices were also among the predominant sources in *The Star* and *Malaysiakini* when Facebook or Twitter was quoted.

TABLE 6: SOURCES IN SOCIAL MEDIA POSTS QUOTED BY THE STAR

Sources	Facebook (n = 1090) %	Twitter (n = 4587) %	Instagram (n = 576) %
Politicians	47.53	50.23	0
Government officials	14.82	13.15	0
Business or corporate representatives	3.76	4.71	0
Experts/ academics/ researchers/ professionals	2.35	3.14	0
Activists/ NGOs	2.82	2.62	0
Celebrities/ artists	2.67	3.14	87.5
Athletes	1.80	8.37	12.5
Royal families	3.22	0	0
Ordinary citizens	20.08	11.51	0
Others	0.94	3.14	0

TABLE 7: SOURCES IN SOCIAL MEDIA POSTS QUOTED BY MALAYSIAKINI

Sources	Facebook (n = 504) %	Twitter (n = 468) %	Instagram (n = 54) %
Politicians	54.35	35.19	8.33
Government officials	15.22	16.67	0
Business or corporate representatives	2.17	3.7	6.94
Experts/ academics/ researchers/ professionals	3.26	5.56	0
Activists/ NGOs	3.26	14.81	0
Celebrities/ artists	5.43	1.85	66.67
Athletes	2.17	1.85	8.33
Royal families	1.09	0	0
Ordinary citizens	11.96	11.11	9.72
Others	1.09	9.26	0

As shown in Table 8, when Facebook and Twitter were quoted by *The Star*, the news topics were mostly about politics/ government/ public administration, which was 37.16% and 43.40% respectively. The second leading news topic in *The Star*'s Facebook and Twitter sourcing was health (31.19% and 21.23% respectively). Meanwhile, media/ culture/ entertainment/ lifestyle/ human interest was mostly reported when Instagram was quoted by *The Star* as the source, followed by disaster/accident (12.5%) and sports (12.5%).

TABLE 8: TOPICS OF NEWS QUOTING SOCIAL MEDIA AS SOURCES IN THE STAR

Topics of News	Facebook (n = 1090) %	Twitter (n = 4587) %	Instagram (n = 576) %
Politics/ government/ public administration	37.16	43.40	0
Economy	5.50	3.30	0
Health	31.19	21.23	0
Crime/ justice	6.42	4.25	0
Disaster/ accident	3.03	13.68	12.50
Technology and science	0.18	0.94	0
Education	2.20	0.47	0
Sports	2.11	5.19	12.50
Media/ culture/ entertainment/ lifestyle/ human interest	10.18	6.60	75.00
Others	2.02	0.94	0

For *Malaysiakini*, politics/ government/ public administration was also the main topic when Facebook and Twitter was quoted (47.52% and 53.93% respectively). While health (20.79%) was the second leading news topic for Facebook sourcing in *Malaysiakini*, disaster/ accident was the second leading topic for *Malaysiakini* Twitter sourcing. Similar to *The Star*, when Instagram posts were quoted by *Malaysiakini*, the news topics were mainly about media/ culture/ entertainment/ lifestyle/ human interest (50%), followed by sports (30%) and disaster/accident (20%).

TABLE 9: TOPICS OF NEWS QUOTING SOCIAL MEDIA AS SOURCES IN MALAYSIKINI

Topic of News	Facebook (n = 504) %	Twitter (n = 468) %	Instagram (n = 54) %
Politics/ government/ public administration	47.52	53.93	0
Economy	2.97	3.37	0
Health	20.79	8.99	0
Crime/ justice	2.97	6.74	0
Disaster/ accident	4.95	12.36	20.00
Technology and science	2.97	2.25	0
Education	3.96	4.49	0
Sports	4.95	3.37	30.00
Media/ culture/ entertainment/ lifestyle/ human interest	7.92	2.25	50.00
Others	0.99	2.25	0

DISCUSSION

The level of adoption for social media sourcing is significant when considered in relation to the short length of time that social media have existed (Deavours & Broussard, 2022). This study found that social media play a role in journalism's workflow, namely news sourcing, and suggesting that social media have embedded themselves as a crucial part of the journalist's contemporary toolkit. The current finding of social media adoption as a journalistic source also reflects a process of normalisation, where journalists adapted social media to fit professional practices and norms.

This study found that *The Star* had 81.92% more news articles than *Malaysiakini* that quoted social media as news sources. This finding was different from the previous studies, whereby researchers found that journalists working for print newspapers have a lower estimation of the importance of social media than online or broadcast journalists, and they are more concerned about possible disadvantages (Oppenhaffen & Scheerlinck, 2014; Zhang & Li, 2020). Furthermore, more than half of the articles in *The Star* quoted only social media as news sources, while *Malaysiakini* had relied on other non-social media news sources. This finding was also different from the literature, which took the point that online sources will not replace offline sources, but that they are additions to journalistic sourcing routines (Lecheler & Kruike-meier, 2016).

Relying only on social media as news sources is cheaper and faster but could also compromise the quality of news reporting (Meng & Zhang, 2022). The fact that more than half of the articles in *The Star* quoted only social media as news sources is related to the armchair journalism phenomenon (*Malaysiakini*, 2019). Armchair journalism refers to news reports obtained by journalists from the newsroom without going out to the field to interview the sources or conducting any investigation (Fletcher et al., 2020). In some cases, the journalists might conduct interviews by phone, text or email (Bouvier, 2019). According to Fletcher et al. (2020), armchair journalism is usually due to tight deadlines and competitive pressure facing the journalists. In addition, there is also the financial constraint in which some newsrooms are attempting to save on the costs of travelling to cover stories. It is also noteworthy that *The Star* had a higher percentage than *Malaysiakini* in reporting social media posts as news rather than using them to provide context to the story. This again, is another indication of armchair journalism.

By including other non-social media news sources besides the social media sources, *Malaysiakini* not only reflected a different news-gathering routine compared to *The Star* but also greater media diversity. Media diversity refers to the presence of different types of social actors, voices and points of view in journalistic discourse (Mellado & Scherman, 2021). Beckers and Moy (2021) asserted that portraying different viewpoints in society remains an important goal of media in democracies. Therefore, journalists should reflect a breadth and diversity of viewpoints in their coverage. This study recorded the commitment of *Malaysiakini* to quality journalism, and the finding is also in line with previous studies that held *Malaysiakini* in high regard (e.g. Lai & Muthaly, 2019, Ong & Ihediwa, 2020; Yang, 2022).

In addition, *The Star* quoted Twitter the most while *Malaysiakini* relied predominantly on Facebook and Twitter. According to Ross (2022), the general increase in sourcing Twitter is primarily due to an increase in elite sources. Twitter has become established as a social medium for professional communicators, such as politicians and celebrities. In addition, Ashfaq et al. (2022) also found that Twitter is a much more important source of coverage than Facebook across almost all topics and all newspapers reviewed – although Facebook is the more important source of news for users in all countries. This led the authors to conclude that Twitter, despite its much smaller community, offers compatibility advantages for journalists compared to its competitor Facebook.

According to Kim and Lee (2020), the asymmetrical nature of Twitter serves better politics than symmetrical media like Facebook. While the latter is better for closed communication (private chats), the former facilitates diffusion of information (news). In addition, the authors highlighted that not only Twitter is more commonly utilised as a news source than Facebook, but also information can spread faster on Twitter than Facebook-like platforms. This means that Twitter is useful for politicians to timely make their policy positions known to a wide range of voters and thus plays a critical role as a political tool.

Significantly, Degen (2021) addressed that Twitter is becoming increasingly elitist, at least in the mirror of journalism. This, in turn, makes it more attractive to elites and thus even more popular as an elite source. Significantly, in their analysis of the use of social media as journalistic sources, Von Nordheim et al. (2018) found that in Facebook source articles, elite and non-elite voices were balanced across all newspapers. The authors also remarked that Facebook is the "citizens social medium" compared to "elitist Twitter" (p. 810).

Compared to *The Star*, *Malaysiakini* had a much higher percentage of news that quoted social media either in verbatim or screenshot format. Through this method, the online newspaper maintained the exact meaning of the original social media

post. This also reflects *Malaysiakini*'s attempt to be accurate and not misrepresent the people or the underlying motives of a story, while leaving it for the audiences to draw their own conclusion.

The Star and *Malaysiakini* mostly quoted politicians from Facebook and Twitter posts, while reporting celebrities' or artists' voices from Instagram posts. According to Zhang and Li (2020), politicians and celebrities are the typical news sources that use social media for self-promotion, which may serve as the content of quotes for news stories. Significantly, Mathisen (2023) also stated that both politicians and celebrities would leverage on the wide influence of social media by providing easily quotable utterances where they want to be quoted.

The findings of this study is similar to what was recorded by previous studies, in which researchers claimed that online sourcing has so far not changed much regarding the dominance of elite sources in news reporting (e.g. Barnoy & Reich, 2021; Christensen & Khalil, 2023; Johansson & Odén, 2018). Mathisen (2023) explained that journalists value the elites' information and opinions because they are able to control and change the course of events. Additionally, Johansson and Oden (2018) argued that social media reproduces the traditional hierarchy of credibility, whereby people with higher rank and status are deemed more credible than people with lower rank and status. Schapals and Harb (2021) also found that traditional journalistic sourcing practices persist even in the digital age. Journalists favoured traditional voices, despite the Internet's potential of providing raw, unedited audience material. However, journalists heavily quoted government officials or other institutionally affiliated spokespeople, meaning that the practices of journalists and the traditions of the coverage continue to ensure that traditional voices and sources are given the privilege to act as an opinion leader to define and construct the social reality.

The findings of this study showed that both *The Star* and *Malaysiakini* could further improve in offering multiperspectival news to their readers. Multiperspectival news is a practice in which journalists seek voices from various communities, belief systems and power statuses, with a particular focus on representing those who traditionally have not been heard (Deavours et al., 2022). This would allow the elected officials and society at large to better understand the country's diverse populations and decrease stereotypical representation and treatment of minority communities (Barnoy & Reich, 2021).

Majority of the news stories in *The Star* that quoted social media were international news while most of the stories in *Malaysiakini* were national news. Further study could investigate whether *The Star* had more international news than *Malaysiakini* in general that led to the above finding. Nevertheless, Vazquez-Herrero et al. (2022) mentioned that geographical proximity of news is a factor in international news coverage. Social media or international media could be quoted when the proximity of the location is far away from the local journalists. In addition, social media were predominantly used to provide background on an already visible foreign elite source (e.g. a tweet of a politician) or when access for foreign journalists was limited, as was the case during crisis (Christensen & Khalil, 2023; Vogler & Udris, 2021).

The topics for which social media were most commonly sourced by *The Star* and *Malaysiakini* were similar to those found by Von Nordheim et al. (2018), whereby the authors analysed social media sourcing in American, British and German newspapers and found that the topics covered included politics, crime, media, technology, arts and culture. Meanwhile, media/ culture/ entertainment/ lifestyle/ human interest was mostly reported when Instagram was quoted by the two newspapers. This finding is related to the earlier finding, whereby celebrities' or artists' voices dominated in both the newspapers' Instagram source.

CONCLUSION

The current study found that the legacy newspaper *The Star* cited social media news sources fivefold more than the online newspaper *Malaysiakini*. Twitter and Facebook were most commonly adopted as news sources by both newspapers. *The Star* tended to quote only social media sources in its news reports, while *Malaysiakini* was found to mostly publish the social media posts in screenshot or verbatim format. In addition, both the newspapers mostly quoted the social media posts to provide more context to the stories.

The Star and *Malaysiakini* mostly quoted politicians from Facebook and Twitter posts, while reporting celebrities' or artists' voices from Instagram posts. Majority of the news stories in *The Star* that quoted social media were international news while most of the stories in *Malaysiakini* were national news. The topics for which social media were most commonly sourced by *The Star* and *Malaysiakini* included politics, crime, media, technology, arts, culture, lifestyle and entertainment.

The findings of this study could provide some insights on social media sourcing practices within the Malaysian context. Significantly, this study contributes to the ongoing effort in documenting the impact of social media on journalists as individual media workers, as well as for journalism as an institution. It also provides insights into news organisational

innovation and business models to broader questions about how institutions and news coverage are constructing the infrastructures on which media discourse takes place.

Future research could examine whether adoption of social media sources have led to a change in news agenda, the perception of journalists towards social media sourcing, and the role conception of journalists when they adopt social media as news sources. Furthermore, future studies could also look into the social system or other factors that influence the adoption of social media as news sources by journalists. Additionally, future study could examine the effect of social media sourcing on the audience, especially whether the use of social media would affect readers' perceived liking, importance, relevance and credibility of the news story.

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