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# MOBILE TECHNOLOGY ADOPTION AND ITS DIRECTION TOWARD A FUTURE CAREER IN BROADCASTING AND JOURNALISM AS A SOLO BROADCAST JOURNALIST

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#### Abstract:

This paper aims to delve into the adoption of mobile technology among the university's young generation majoring in broadcasting and journalism. Further discussion will translate the mobile adoption and its direction toward the future of solo broadcasting journalism in Malaysia, respectively among them. During the pandemic covid 19, people have adapted to tremendous changes in their everyday lives. Since then, the Internet of Things and digitalisation have become new norms since they must access everything from home. In other words, technology has become essential to everyone despite their age, gender, or location. Almost everyone can broadcast and become a journalist, as long as they know and have skills in using various technologies ranging from email to web blogs to digital videos to mobile technologies to social media. In line with this modernisation, the solo broadcast journalist has also been identified as an active mobile device user to fulfil their job preference. Solo broadcasting journalism has become essential in the world of broadcast and journalism. A person who wants to work in this convergence field must have the ability and knowledge to handle all mobile technology devices alone when they have to do fieldwork. However, ability and knowledge are not the main points; other factors can motivate a person to learn and become a solo journalist. Therefore, this research explores the factors influencing the desire to use mobile devices among 200 broadcasting and journalism students at Universiti Utara Malaysia, Sintok Kedah. The present study indicates that perceived ease of use, perceived usefulness, and experience positively correlated with using mobile technologies. The study mainly contributes to mobile technologies and social media adoption among the university's young generation majoring in broadcasting and journalism to prepare for their future broadcasting and journalism careers.

#### **Keywords:**

Digital Technology; Media Convergence; Mobile Devices Usage; Mobile Journalism; And Solo Broadcast Journalist

#### Introduction

During the pandemic Covid 19, we have adapted to tremendous changes in our everyday lives. The Internet of Things (IoT) and digitalisation have become new norms since we must access everything from home. In other words, technology has taken centre stage and has become essential to everyone despite their age, gender, or location. Almost everyone can broadcast and become a journalist, as long as they know and have skills in using various technologies ranging from email to web blogs to digital videos to mobile technologies to social media. Notably, 70% of Malaysians use social media (Koh, 2020).

Technology and the Internet have evolved, and everything is available at our fingertips. As a result, the usage of technology has become broad and global. Technology is a concept that refers to the use and knowledge of tools. Technology also identifies how the use affects adapting to any situation. Hardt (1990) has noted that technology use can deskill human resources and play their role in social and economic. Digital technologies such as video games change our perception of learning (Collins & Halverson, 2010). At the same time, ease of communication is highly demanded by the latest electronic devices with various features such as chatting, web browsing, editing, and translation (Nalliveettil & Alenazi, 2016). The digital approach can develop quality and competence based on prior studies because digital technology has better accuracy than traditional methods. Other than that, technology also has convergence changes in media. Previous researchers always describe convergence as a "melting together" of telecommunications, media technologies, and information systems.

#### Literature Review

# Technology Revolution and Media Industry

During the early Industrial Revolution, industries enormously impacted the economy by introducing the division of labour, leading to increased productivity. Many factories adopt this working method, and the management division can identify and differentiate between skilled and unskilled workers.

The first industrial revolution started in 1760 with the invention of the steam engine (Xu et al., 2018). At this point, the transition from farming and feudal society to the new manufacturing process has evolved and drastically changed the mobility of human and industrial commodities. The changes gradually increased in the second and third industrial revolutions in 1900 and 1960, when people saw rapid industrialisation using oil, electricity, electronics, and information technology to automate production (Xu et al., 2018). However, the emergence of the Industrial Revolution era and the mass media industry did not happen concurrently. The print media emerged much earlier than the first industrial revolution when Johannes Gutenberg invented the printing press in 1440. The technology became a milestone because it created far more copies of a particular book (Turow, 2020). Although Gutenberg's printing press made it possible for newspapers to be produced, having the technical means to do so did not immediately result in an explosion of newspaper publishing because of the feudal society's



influence. Only in 1665 did Britain publish the first newspaper called the Oxford Gazetteer. The impact of the first industrial revolution was significant in 1814 when Frederick Koenig invented the steam-powered printing press in Germany. It was used for the first time by *The Times* of London. The invention has further stimulated the newspaper and magazine journalism industry (Turow, 2020).

In the second and third industrial revolutions eras, electronic media emerged tremendously. The first radio transmission was succeeded by Guglielmo Marconi, who sent wireless messages over long distances using Morse code in 1895 (Turow, 2020). In 1896, Marconi then patented the first radio transmitter. Radio use for broadcasting purposes happened accidentally during the sinking of the Titanic in 1912 (Gross & Fink, 2006). At that time, David Sarnoff (who later became the President of Radio Corporation of America) was working at his radio station. He later said he heard the Titanic's distress call. He and other radio operators relayed information about the rescue efforts to anxious friends and relatives and the newspaper. His works brought wireless communication to the general public's attention; for the first time in history, people knew of a distant tragedy as it was happening (Gross & Fink, 2006). Even though television emerged as a mass medium in 1948, television networks had existed as offshoots of radio networks much earlier than that. Television technology allows news reporting to be presented using both audio and visuals to make the stories more impactful to the viewers.

The fourth industrial revolution began in 2000 and is still developing today. The fourth industrial revolution was a term coined by Klaus Schwab, the founder and executive chairman of the World Economic Forum, to describe a world where individuals move between digital domains and offline reality with the use of connected technology to enable and manage their lives (Xu et al., 2018). Technology is a concept of the use and knowledge of tools. Technology also identifies how the use affects the ability to adapt to any situation.

Technology changes people's way of working and playing. In the media industry, the current technologies also have convergence changes. Previous researchers always describe convergence as a "melting together" of telecommunications, media technologies, and information systems. Media convergence is showing growth, especially in the news industry. Technological, organisational, and media convergence changed how news is made (Ivar, 2017). The medium of radio and television has converged in production processes and other mediums, such as mobile devices (Ivar, 2017).

People can use mobile devices to access learning materials, connect with others, or create content. According to Jokela (2009), mobile devices can recover many devices needed today, such as a camera for taking photos, a voice recorder to record the audio of the interviews, and a laptop for writing news and others. These devices allow information and communication through audio, text, animation, and graphics (Westlund, 2008). Mobile devices have more benefits than laptops and smartphones, which are lighter in weight, and the flexibility of the orientation makes them better for digital reading. Next, fast smartphone switching among applications grants the process less lag, and the touchscreen interface allows for high usage quality. Besides, smartphones are more accessible than laptops; for example, students can quickly bring their smartphones without reopening the screen and use smartphones for mobile platforms and their low-cost apps suitable for learning. Last but not least, smartphones have long battery lives, making them more practical to use in daily life (Goundar, 2011).



In conclusion, although each industrial revolution is often considered a separate event, it can be better understood as a series of events building upon innovations of the previous revolution and leading to more advanced forms of production, including media content productions. Media landscapes and formats indeed changed in conjunction with the changes in industrial revolutions. Today, people are mobile. They seek information, entertainment, and news on the go. Media practitioners must meet the needs of a new audience among millennials by creating better content. Therefore, media practitioners must adapt and adopt mobile technologies, especially in the news industry. They should also understand that the recently emerging technologies in Industrial Revolution 4.0 (IR 4) have significantly changed workplace structure. Only trained workers who can handle various technologies to complete their work tasks are required by many companies.

# Technology Acceptance Model and Technology Adoption in the Broadcasting and Journalism Industry

Back in 1989, Davis pioneered research about technology adoption. His theory (the Technology Acceptance Model, TAM) noted that perceived ease of use and usefulness could lead to intention toward technology adoption. Since then, many studies have investigated technology adoption using the same attribute (Teo et al., 2008; Gangwar et al., 2015). In other words, the Technology Acceptance Model (TAM) has been used widely in other broadcast research. Some recent research by Wu and Chen (2017) directly applied this model to study the extension intention to use Massive Open Online Courses (MOOCs) in China. Ho and Yang's (2015) study uses live-streaming video platforms like Ustream in Taiwan. The TAM was also applied in a study by Manis and Choi (2019) to investigate LinkedIn users' virtual reality hardware acceptance model (VR-HAM). Hence, we used TAM to identify mobile device usage among broadcast journalism students.

In Malaysia, the broadcasting and journalism industry, like any other country, is undergoing significant changes and will continue to face the challenges of today's technological world. Skills are essential elements that a journalist must have. According to Chamil Wariya (2012), the widespread use of the Internet makes the industry need to be competitive and act faster than other social media that also spread the news. The emergence of new social media, such as Facebook, Twitter, Instagram, and Blogs, in various forms of videos, pictures, and so on, causes people to prefer those sources to get information. This situation causes various information to be accessed directly using various technologies such as laptops, tablets, mobile phones, etc. Awan, Rizalawati, Norizah, and Norhafezah (2015) also agreed that journalists should be skilled in using various technologies and keep up with technological changes and media news. Therefore, skills and values of professionalism need to be instilled in a journalist from the undergraduate level. Mozli (2017), in her research, said that Higher Education Institutions in Malaysia offered many journalism skill elements in most media and journalism courses. In each course, students are encouraged to use technology and apply it in the writing news process.

Hence, researchers should prioritise the factors related to behaviour and other factors influencing adoption to determine technology adoption. Determining the factors influencing journalism students to use mobile devices will also be essential. This research is expected to overcome the limited studies examining solo broadcast journalist behaviour towards using mobile devices in Malaysia, as mentioned by Steensen (2018).

As mentioned before, people must learn to adopt and adapt technologies, especially mobile technologies, to encourage technology usage in their daily lives. However, it was challenging for solo broadcast journalists to keep learning new technologies to develop their interests and strengthen future work options (Salzmann et al., 2020). Therefore, Salzmann et al. (2020) suggested another factor: the experience, in addition to the perceived ease of use and perceived usefulness, to measure the relationship to mobile technology adoption. While in Kim's (2008) and Xia's (2018) study about technology adoption, the researchers also found that experience was one of the predictor elements that can influence an individual's behaviour in adoption decisions.

Based on this preceding, we decided to use those variables in this research to explain the adoption of mobile technologies among solo broadcast journalists. Our study will better understand solo broadcast journalists' intention to use mobile devices. Hence, our research investigates the relationship between perceived ease of use, perceived usefulness, experience, and the intention to use mobile devices among broadcasting and journalism students.

#### **Research Objectives**

As mentioned, there are restricted studies regarding journalists' behaviour on mobile devices, resulting in a lack of information. Besides, many researchers from different countries have conducted various research studies with different scopes and theories. So, this study will understand other solo broadcast journalists and show their intention regarding using mobile devices. Hence, this research investigates the relationship between perceived ease of use, perceived usefulness, experience, and the intention to use mobile devices among journalism students. Further discussion will directed to the mobile technology adoption and its direction toward a future career in broadcasting and journalism as a solo broadcast journalist.

#### Methodology

Using a quantitative research design, we researched the adoption of mobile devices among broadcasting and journalism students at Universiti Utara Malaysia (UUM). The population in this research involves Media Technology students majoring in Broadcasting and Journalism at Universiti Utara Malaysia (UUM), consisting of 420 students. Using Krejcie and Morgan's table to determine the sample size, we have gathered 200 students as our respondents. Questionnaires were employed for data collection in this study. The questionnaire's measurement items were adapted from previous studies (Table 1). All the questions were measured using the Five-point Likert Scales ranging from 1 to 5, indicating strongly disagree to strongly agree. The reliability and validity result (Table 1) shows that Cronbach's Alpha was highly reliable for all variables. Therefore, the correlation analysis has been examined to determine the relationship between the determinant factors and the intention to use mobile devices among broadcasting and journalism students at UUM.

Table 1: Source of Questionnaire's Measurement Items and Reliability Analysis

Variables	Sources	Item	Cronbach's Alpha
Perceived Ease of Use	Fred (1996) Henderson (2003)	7	0.753
Perceived Usefulness	Fred (1996) Henderson (2003)	7	0.890
Experience	Xia (2018)	4	0.869
Intention to Use	Xia (2018)	5	0.916

#### The Variables

# Perceived Ease of Use

Perceived ease of use (PEOU) refers to people's belief that a specific system would be free from hard work (Davis, 1989). Suppose people start thinking technology is easy to use, meaning it has positive behaviour (Fred, 1996). However, it will be the opposite if the technology itself is complicated and not convenient to use. Perceived ease of use can also influence an individual perspective toward technology (Rauniar et al., 2013). Based on research conducted by Seliaman and Al-Turki (2012) about smartphone usage among undergraduate students in Saudi Arabia, there was a significant relationship between PEOU and smartphone usage. The research finding shows that the students are familiar with and know how to deal with mobile phones. Mugo, Njagi, Chemwei, and Motanya (2017) also stated that skills and knowledge could predict technology usage. Hence, we hypothesised as follows:

H1: There is a positive relationship between perceived ease of use and intention to use mobile devices.

### Perceived Usefulness

Perceived usefulness (PU) refers to people's belief that using a specific system would advance their achievement (Davis, 1989). In other words, it means someone will use technology to adapt to themselves if the technology is helpful for them. Perceived usefulness can be interpreted as the level that affects an individual's accomplishment by applying a convinced system (Rauniar et al., 2013). Raza, Umer, and Shah's (2017) research about mobile banking usage in Pakistan showed how users' intention to use mobile transactions was affected. According to Awa, Eze, Urieto, and Inyang (2011), perceived usefulness displays those predictors that affect usage and the purpose of enduring using technology. Thus, we hypothesised the following:

H2: There is a positive relationship between perceived usefulness and intention to use mobile devices.

#### **Experience**

Schwarz, J., Krotov, and Chin (2004) defined experience in two ways. They described the experience as user behaviour and skills. The researcher also explained the experience as usage behaviour because they believe the access to the user does not give any insight into the usage procedure. According to Fred (1996), experience is a hands-on system. Meanwhile, Dishaw and Strong (1998) stated experience as a two-type predictor: experience with tool and task. The research explained a significant relationship between mobile devices and the rule of speaking and listening to the French language. Mobile devices have been used extensively in education to develop vocabulary, idioms, and grammar (Thornton & Houser, 2005). Hence, we hypothesised the following:

H3: There is a positive relationship between experience and intention to use mobile devices.

#### Intention to Use

According to Davis (1989), intention to use refers to the strength of one's intention to accomplish a stated behaviour to see the actual behaviour's relationship. The research conducted by Ho and Yang (2015) identifies the consumer intention to use mobile service

among mobile service users in Taiwan. Mobile service provides good values which are not available in the traditional way.

Figure 1 explains the theoretical framework for this research. The research framework involved four independent variables and one dependent variable based on the hypothesis as follows:

- H1: There is a positive relationship between perceived ease of use and intention to use mobile devices.
- H2: There is a positive relationship between perceived usefulness and intention to use mobile devices.
- H3: There is a positive relationship between experience and intention to use mobile devices.

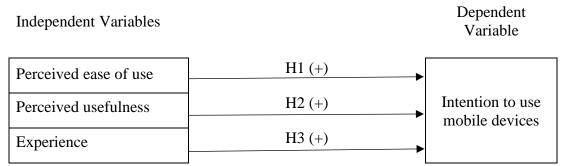


Figure 1: Research Theoretical Framework

# **Research Findings**

# Respondent Demographic Characteristics

In this research (Table 2), the gender composition shows that 64.0% are female respondents, while 36.0% are male respondents. The composition of the highest age group is from 21 to 24 years, 88.0%, while the lowest ranges from 18 to 20 years, only 1%. The Malays are ranked as the highest respondents at 61.5%, followed by Chinese at 26% and Indians at 12.5%. The majority of respondents use smartphones (76%), followed by laptops (21%) and tablets (3%). As for the duration of use of mobile technologies, most of them use it between five and eight hours a day.

**Table 2: Respondent Demographic Characteristics (n=200)** 

Item		Frequency	Percentage
Gender			
	Male	72	36.0
	Female	128	64.0
Age			
	18-20	2	1.0
	21-24	176	88.0
	Above 24	22	11.0
Race			
	Malay	123	61.5
	Chinese	52	26.0
	Indian	25	12.5
	Others	0	0

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Types of		
mobile devices		
used		
Smartphone	152	76.0
Tablet	6	3.0
Laptop	42	21.0
How often do		
you use		
mobile		
devices?		
Less than 1 hour	0	0
1 hour- 5 hours	56	28.0
5  hours - 8  hours	131	65.5
Above 8 hours	13	6.5

#### Correlation Analysis

The rule of thumb (shown in Table 3) was used in this research to explain the relationship between the researched variables.

**Table 3: Rule of Thumb for Pearson Correlation** 

Size of Correlation	Interpretation
0.90 to 1.00	A very high positive correlation
0.70 to 0.90	High positive correlation
0.50 to 0.70	Moderate positive correlation
0.30 to 0.50	Low positive correlation
0.00 to 0.30	Negligible correlation

Source: Mukaka, 2012

As mentioned, a correlation analysis was conducted to determine the relationship between the determinant factors and the intention to use mobile devices among broadcasting and journalism students at UUM. The result (shown in Table 4) indicates that all independent variables (perceived usefulness, perceived ease of use, and experience) were positively and highly correlated to the use of mobile device technology. This finding indicates that most students believe that the skill and the adoption of mobile technologies were helpful in their current tasks as a student and their future careers as a journalist. The majority of the students agreed that using mobile devices improves their job performance, improves the quality of the tasks they do, the technology makes it easier to do their tasks, and saves their time. In addition, most students also agreed that mobile devices allow them to accomplish more tasks than would otherwise be possible. They also mentioned that it would be difficult for me to perform without mobile devices. Overall, they also find mobile devices useful in completing their task.

**Table 4: Pearson Correlation Analysis (n=200)** 

Variables	Intention to use		Hypotheses
Variables	r	р	Decision
Perceived ease of use	0.501**	0.000	Supported
Perceived usefulness	0.810**	0.000	Supported
Experience	0.730**	0.000	Supported

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

Based on Table 5, the results show that all hypotheses were supported, including a significant positive relationship between perceived ease of use, perceived usefulness, and experience of using mobile technologies among journalism students.

**Table 5: Hypotheses Analysis** 

Table 5. Hypotheses Marysis		
Hypotheses	Support/ Not Support	
H1: There is a positive relationship between perceived ease of use and intention to use mobile devices.	Supported	
H2: There is a positive relationship between perceived usefulness and intention to use mobile devices.	Supported	
H3: There is a positive relationship between experience and intention to use mobile devices.	Supported	

From the research findings, we have concluded that most respondents are keenly adapted and have adopted the technology for their work tasks. They fully understand the importance of technology for their future career, especially in broadcasting and journalism. However, our ongoing conversation discusses how technological adoption can affect a future career as a solo broadcast journalist in journalism and broadcasting. These arguments will be based on previous studies on the importance of technology acceptance among journalists who work independently to seek and publish news. In conclusion, most students use all mobile technology required to work as a journalist. They understand the fundamental know-how and ability required to adopt such important technologies in journalism.

# **Discussion**

#### Embracing Technology in the Broadcasting and Journalism Industry

Journalism is often between print and broadcast journalism, including news output in magazines, newspapers, radio, and television. However, the broad usage of mobile technologies that enable users to do their blogging, micro-blogging ('tweeting'), and video and audio podcasting has created a new form of journalism format via online and web. Almost everyone can broadcast and become a journalist, as long as they know and have skills in using various technologies ranging from email to web blogs to digital videos to mobile technologies to social media. Many current activities, information, and problems can be done using digital technologies such as mobile devices at the users' fingertips. Many people have used mobile devices such as iPads, smartphones, laptops, and others for many purposes. There has been a convergence of the communication and technology field and gauge since 2007, as numerous companies, such as Google and Microsoft, entered the mobile media industry, such as Samsung and Apple (Westlund, 2013). Media convergence is showing growth, especially in the news industry. In the past year, the media industry used the traditional way that only needed one person to do one task, such as one reporter, videographer, editor, and others (Blankenship & Riffe, 2019).

The history of solo broadcast journalism started with the term' backpack journalism,' where the solo journalists in charge were equipped with a laptop computer, digital camera, and satellite uplink, which enabled them to report across various forms of media from almost anywhere in

the world (Cameron, 2011). One of the earliest news corporations that started solo broadcast journalism were Reuters in 2007, the Washington Post in 2008, Norway's national broadcaster (NRK), the Philippine Daily Inquirer in 2009, and Fox News in 2010 (Cameron, 2011). However, during the Iraq War in 2003, the Madrid and London bombings in 2004 and 2005, and the 2004 Indian Ocean tsunami, some reporters used smartphone technologies to report essential news stories (Marrouch, 2014).

Marrouch (2014) also suggests that Mojo (short for mobile journalism) emerged from YouTube and live streaming from 2012 onwards. According to Podger (2019), Mojo is a process where journalists work autonomously, shooting, editing, and writing multimedia content using mobile devices. For other media academics, mobile journalism is not just defined by technological form but by the mobility and freedom that the technology facilitates (Duffy et al., 2020). To date, the solo broadcast journalist is also known as a mobile journalist (MoJo), video journalist (VJ), and multimedia journalist (Salzmann et al., 2020). Despite the varying definitions of solo broadcast journalism, the practices remain the same. Journalists must use mobile technologies to gather, compose, and distribute news worldwide. Most news companies worldwide have identified solo broadcast journalism as a crucial future career in the news media industry.

# Solo Broadcast Journalist

Nevertheless, nowadays, the media industry has changed, and a journalist responsible for completing a task on his own is called a solo broadcast journalist. Therefore, a solo broadcast journalist is a person who multitasks, searching for information, doing interviews, writing stories, recording the video, and editing independently (Blankenship, 2016; Blankenship et al., 2019). Blankenship (2016) also agreed that when Information and Technology (ICT) took off and developed quickly, solo journalism became significant and essential in the news industry. Mozli (2017), on the other hand, said that the development of ICT also encourages the development of citizen journalists. Citizen journalism is not a new phenomenon since it emerged in 1999 (Flew, 2014), but with the tremendous change in technology adoption among the people, anyone can become a journalist.

According to Mozli, the active emergence of citizen journalists in the digital media causes mainstream and professional journalists to compete to deliver news quickly to the public while maintaining journalism work ethics and professionalism. The even worse situation is when the mainstream journalists are not technology savvy and innovative compared to the citizen journalists. Nowadays, as someone not in the news industry, it is not so awkward when we find that the mainstream news media write back something that has become viral among the public that was published or broadcast by the citizen journalist. However, this might be the most significant issue for the mainstream journalist. Therefore, mainstream journalists in the news industry must move forward in gaining knowledge and skills, especially in adopting new technologies to search for information, do interviews, write stories, record videos, edit, and publish the stories at the fastest rate.

As has been agreed by Blakenship (2016), the implementation of solo journalism in news organisations is a sign of way forward-thinking pioneers that are beyond the traditional ways of doing news reporting and broadcasting. Furthermore, this is why, in recent years, media industries, specifically in the broadcast and journalism stream, have also been looking toward people who can work solo and independently. The solo journalist must know how to use technology to gather and gain information, write reports, record videos, and edit videos and

audio relevant to the subject before being published on the news portal or any other social platform.

In line with this evolution, the solo broadcast journalist has also been identified as an active mobile device user to fulfil their job preference. Solo broadcast journalism has become essential in the world of broadcast journalism. A person who wants to work in this convergence field must have the ability and knowledge to handle all mobile technology devices alone when they have to do fieldwork. Mobile devices can be mobile phones, smartphones, and tablets, which enable people to use mobile devices to access learning materials, connect with others, or create content. Mobile devices have a sound connection system in every developed country (Goundar, 2011).

Meanwhile, mobile devices can recover many devices needed today, such as a camera for taking photos, a voice recorder to record the audio of interviews, and a laptop for writing news (Jokela et al., 2009). These devices allow information and communication through audio, text, animation, and graphics (Westlund, 2008). Since video and photo capturing are the fundamental keys to mobile phone features driving current MoJo practice, most solo broadcast journalists use smartphones, a small tripod, a compact wireless keyboard, a solar battery charger, and an external microphone to complete the task.

#### Solo Broadcast Journalism Practises in Malaysia

In Malaysia, Sinar Harian is one of the earliest companies to embed technologies and train journalists to work solo and independently. According to Liza, Assistant Editor of Sinar Harian, the job scope of the journalist was mainly to gain and write information and do some photographs. Still, they must also know how to do the live interview, record videos, and edit (Norizah Aripin, 2020). Suhaimi (2021), in his keynote speech at the International Conference on Media Studies 2021 (ICMS'21), also agreed that it is time for news media to shift and implement solo broadcast journalism.

Despite that, from one interview with Zaki (2021), he, as an educator and practitioner in media production (mainly in scriptwriting, documentary, and camera productions), does not agree with solo broadcast journalism. He noted that not all media production could be done in a good quality manner unless it was done by a group of people who make up teamwork to complete specific media productions like shooting for drama, movies, documentaries, and studio production. This kind of argument is not new, in any case. In 2016, Blankenship reported that researchers like Stone (2002) had questioned news reporting and production quality. In another research, Penniman (2009) also argued about the difficulty and ability of a single person to do and master the news reporting process. To him, "it is difficult for one person to embody all that is necessary for solo journalism," which includes an eye for visual aesthetics, the ability to write and narrate a compelling story, and the meticulous attention to detail required of all news reporters. However, this argument was proven not to significantly impact social media news customers' acceptance. Marrouch (2014) said that news consumers do not mind if the video quality is poor on YouTube or social media.

Nevertheless, they expect high-quality products and aesthetics with good sound and image when they turn to mainstream media outlets. This perception directly indicates that there are times when media companies also need to prioritise the quality aspect of news publishing. Moreover, it all depends on different situations.



#### Conclusion and Suggestions for Future Study

A solo broadcast journalist seems suitable when the media are entirely operated for a 24/7 news cycle or working closely with the audiences on social media or the news portal since they need to provide up-to-the-minute news to their audiences. News companies like Utusan Malaysia were significant examples of media companies' failure when they ignored and failed to adopt technologies in their workplace operationally. They cannot sell printed products and compete with other media competitors (Firdaus, 2019).

With the growth of technology in Malaysia, people must adopt and adapt. People are learning new technologies, especially mobile technologies, to encourage technology usage in their daily lives (Collins & Halverson, 2010). However, it was challenging for solo broadcast journalists to keep learning new technologies to develop their interests and strengthen future work options (Salzmann et al., 2020). According to Steensen (2018), studies examining solo broadcast journalist behaviour towards using mobile devices in Malaysia are limited. So, to determine the solo broadcast journalist technology adoption, researchers should give the factors related to behaviour and other factors influencing adoption priority.

Results of a study by the Council of Heads of Communication Studies (COHECS) in identifying the direction of Communication and Media Studies in Malaysia (2010) showed that media employers were found, on average, to think that the field of media and communication is critical and vital for the development of the country. According to these media practitioners, many government policies must be communicated quickly and clearly so that the people's understanding and the government's aspirations are in the same direction. The mass media carry out efforts to generate and disseminate information to the people, and media and communication practitioners hold this role.

Mozli's (2017) study on solo journalism from the perspective of news editors was significantly in line with the findings from the COHECS (2010) research. In her study, Mozli also suggested that journalists must equip themselves with at least three vital skills to become solo journalists. The skills are writing skills, multimedia skills, and digital skills. In short, it can be concluded that the media landscape has changed tremendously in the Internet of Things (IoT) era. The Internet enables news delivery in the fastest way ever. The journalist must be able to deliver news in this format, which includes audio, videos, photos, and interactive design. Therefore, being a multi-skilled solo journalist in today's media landscape is essential.

Since media companies have significantly embedded mobile technology kits in the workplace, students must keenly embrace them as prospective workers. Media students must understand that they compete with other media students, and almost everyone is creative and skilled in using technologies to develop content and broadcast themselves. Failure to master technology, specifically for future jobs in broadcasting and journalism, will make the opportunity to compete in the industry increasingly tricky. However, it is noted that the changes evident in smartphone usage in recent years have also affected the media industry positively and negatively. Grieco's (2018) study shows that even though smartphone usage has become more prevalent in newsgathering and content delivery from 2012 onwards, U.S. newsroom employment declined by 23% (Grieco, 2018). The Pew Institute found that the only job growth occurred in the digital native sector, with reporters, videographers, photographers, and editors affected negatively by technological change and associated adaptations to business practice (Mohan, 2021).

In conclusion, media students must also learn all types of technology besides mobile technology simply because not all media fields use mobile media technology alone. In addition, media students must also embrace an excellent working attitude, as working solo with less supervision requires them to be more oriented, organised, and disciplined. However, the authors will conduct further studies to determine the issues or the significant behaviour toward technology acceptance among the respondents. This is essential since solo broadcast journalism is developing and becoming a widely accepted practice.

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#### References

- Awa, H. O., Eze, S. C., Urieto, J. E., & Inyang, B. J. (2011). Upper Echelon Theory (UET): A major determinant of information technology (I.T.) adoption by SMEs in Nigeria. *Journal of Systems and Information Technology*, 13(2), 144–162. https://doi.org/10.1108/13287261111135981
- Awan, I., Rizalawati, I, Norizah, A & Norhafezah, Y. (2015). Journalism education in Malaysia: Dancing with UNESCO's model curricula. *International Journal of Science Commerce and Humanities*, 3(3),1-12.
- Blankenship, J. C. (2016). Solo journalism and news routines: Using the hierarchical influences model to study solo journalism's organisational and individual influences in local television news. (Publication Number: 10145859) (Doctoral Dissertation, the University of North Carolina at Chapel Hill). ProQuest Dissertations and Theses Database.
- Blankenship, J. C., & Riffe, D. (2019). Follow the Leader? Optimism and efficacy on solo journalism of local television journalists and news directors. *Journalism Practice*, 17, 1–22. https://doi.org/10.1080/17512786.2019.1695535
- Cameron, D. (2011). Mobile journalism: A snapshot of current research and practice. *The end of journalism: News in the twenty-first century*. Peter Lang: Newcastle, Australia.
- Chamil Wariya. (2012). *Kewartawanan dan media era digital. Isu-isu semasa.* Kuala Lumpur: Malaysian Press Institute.
- Collins, A., & Halverson, R. (2010). The second educational revolution: Rethinking education in the age of technology. *Journal of Computer Assisted Learning*, 26(1), 18–27. https://doi.org/10.1111/j.1365-2729.2009.00339.x
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *Journal of Information System*, 13(3), 319–340.
- Dishaw, M. & Strong, D. M. (1998). Experience as a moderating variable in a Task-Technology Fit Model. *Americas Conference on Information Systems (AMCIS)*, 242, 722–724.
- Duffy, A., Ling, R., Kim, N., Tandoc, E., and Westlund, O. (2020). News: Mobiles, mobilities, and their meeting points. *Digital Journalism*, 8(10), 1-14.
- Firdaus Azli. (2019). Utusan tutup operasi hari ini. Dimuat turun daripada https://www.astroawani.com/berita-malaysia/utusan-tutup-operasi-hari-ini-219585

- Flew, T. (2014). New media. South Melbourne: Oxford University Press.
- Fred, D. (1996). A model of the antecedents of perceived ease of use: Development and test. *Decision Sciences*, 27(3), 451–481.
- Gangwar, H., Date, H., & Ramaswamy, R. (2015). Understanding determinants of cloud computing adoption using an integrated TAM-TOE model. *Journal of Enterprise Information Management*, 28(1), 107–130. https://doi.org/10.1108/JEIM-08-2013-0065
- Goundar, S. (2011). What is the Potential Impact of Using Mobile Devices in Education? *Journal of Information System*, 4(11), 1–30.
- Grieco, E. (2018). About a quarter of large U.S. newspapers laid off staff in 2018. Retrieved from:http://media.mediapost.com.s3.amazonaws.com/uploads/PewNewsIndustryLayo ffs.pdf
- Gross, L. S. & Fink, E. J. (2006). Telecommunication: An introduction to electronic media. 9<sup>th</sup> Ed. New York: McGraw-Hill.
- Hardt, H. (1990). Newsworkers, technology, and journalism history. *Critical Studies in Mass Communication*, 7(4), 346-365. https://doi.org/10.1080/15295039009360184
- Ho, C.-T., & Yang, C.-H. (2015). A study on behavior intention to use live streaming video platform based on TAM model. *The Asian Conference on Psychology and Behavioral Sciences* 2015, 5(2), 1–20.
- Ivar, J. E. (2017). Researching media convergence and cross-media news production. *Journal of Nordicom Review*, 28(2007), 51–61.
- Jokela, T., Vaataja, H. & Koponen, T. (2009). Mobile journalist toolkit: A field study on producing news articles with a mobile device. MindTrek '09: Proceedings of the 13th International MindTrek Conference: Everyday Life in the Ubiquitous Era, 45-52. https://doi.org/10.1145/1621841.1621851
- Kim, S. H. (2008). Information and management moderating effects of job relevance and experience on mobile wireless technology acceptance: Adoption of a smartphone by individuals. *Information and Management*, 45(6), 387–393. https://doi.org/10.1016/j.im.2008.05.002
- Koh, J. (2020). Only 2% of Malaysians Think Brands Should Pause Ad Campaigns During COVID-19 Pandemic Unruly. Retrieved 16 February 2021, from https://unruly.co/news/article/2020/05/26/only-2-of-malaysians-think-brands-should-pause-adcampaigns-during-covid-19-pandemic/
- Krejcie, R. V, & Morgan, D. (1970). Determining sample size for research activities. Educational and Psychological Measurement, 30(1), 607–610.
- Liza, H. (2019, November 24). Personal interview [Media Industry Engagement Workshop].
- Majlis Ketua-Ketua Pengajian Komunikasi (COHECS). (2010). *Hala Tuju Pengajian Komunikasi dan Media di Malaysia*. Bangi: Penerbit UKM.
- Manis, K. T., & Choi, D. (2019). The virtual reality hardware acceptance model (VR-HAM): Extending and individuating the technology acceptance model (TAM) for virtual reality hardware. *Journal of Business Research*, 100(8), 503–513. https://doi.org/10.1016/j.jbusres.2018.10.021
- Marrouch, R. (2014). How mobile phones are changing journalism practice in the 21<sup>st</sup> Century. Retrieved from https://reutersinstitute.politics.ox.ac.uk/risj-review/how-mobilephones-are-changing-journalism-practice-21st-century on the 10 April 2021.
- Mohan, J. (2021). The mojo revolution: A critical evaluation of mobile journalism practice and its impact on journalistic identity. Ph.D. Thesis (Not Published). The University of the West of Scotland, UK.

- Mozli, N. H. F. (2017). Kewartawanan solo dari perspektif editor Malaysia. (Master Thesis, Universiti Utara Malaysia) (Universiti Utra Malaysia Repository)
- Mugo, D. G., Njagi, K., Chemwei, B., & Motanya, J. O. (2017). The technology acceptance model (TAM) and its application to the utilisation of mobile learning technologies. *British Journal of Mathematics and Computer Science*, 20(4), 1-8.
- Mukaka, M. M. (2012). Statistics Corner: A guide to the appropriate use of Correlation coefficient in medical research. *Malawi Medical Journal*, 24(9r), 69–71.
- Nalliveettil, G. M., & Alenazi, T. H. K. (2016). The Impact of Mobile Phones on English Language Learning: Perceptions of EFL Undergraduates. *Journal of Language Teaching and Research*, 7(2), 264. https://doi.org/10.17507/jltr.0702.04
- Podger, C. (2019). How to Mojo, integrating mobile learning in journalism education. Retrieved from https://jeraa.org.au/how-to-mojo-integrating-mobile-learning-in-journalismeducation/ on the 10 April 2021.
- Penniman, N. (2009). Video news reporting: New lessons in new media. *Nieman Reports*, 63, 25-27.
- Rauniar, R., Rawski, G., Yang, J., & Johnson, B. (2013). Technology Acceptance Model (TAM) and social media usage: An empirical study on Facebook. *Journal of Enterprise Information Management*, 27(1), 6–30. https://doi.org/10.1108/JEIM-04-2012-0011
- Raza, S. A., Umer, A., & Shah, N. (2017). New determinants of ease of use and perceived usefulness for mobile banking adoption. *International Journal of Electronic Customer Relationship Management*, 11(1), 44–65. https://doi.org/10.1504/IJECRM.2017.086751
- Salzmann, A., Guribye, F., & Gynnild, A. (2020). "We in the Mojo Community"—Exploring a Global Network of Mobile Journalists. *Journalism Practice*, 5, 1–18. https://doi.org/10.1080/17512786.2020.1742772
- Seliaman, M. E., & Al-Turki, M. S. (2012). Mobile learning adoption in Saudi Arabia. *World Academy of Science, Engineering, and Technology*, 69, 356-358.
- Schwarz, A., Junglas, I. A., Krotov, V., & Chin, W. W. (2004). Exploring the role of experience and compatibility in using mobile technologies. *Information Systems and E-Business Management*, 2007, 337–356.
- Steensen, S. (2018). What is the matter with newsroom culture? A socio-material analysis of professional knowledge creation in the newsroom. *Journalism*, 19(4), 464–480. https://doi.org/10.1177/1464884916657517
- Stone, M. (2002). The backpack journalist is a mush of mediocrity. *Online Journalism Review*. Retrieved from: https://convergenceconfab.blogspot.com/2006/01/backpack-journalism-is-mush-of.html
- Suhami, S. (2021). Keynote speech at the International Conference on Media Studies 2021. Unpublished.
- Teo, T., Luan, W. S., & Sing, C. C. (2008). A cross-cultural examination of the intention to use technology between Singaporean and Malaysian pre-service teachers: An application of the Technology Acceptance Model (TAM). *Educational Technology and Society*, 11(4), 265–280.
- Thornton, P., & Houser, C. (2005). Using mobile phones in English education in Japan. *Journal of Computer Assisted Learning*, 21(3), 217–228. https://doi.org/10.1111/j.1365-2729.2005.00129.x
- Turow, J. 2020. Media today: Mass media in converging world. 7th Ed. New York: Routledge.



- Wakefield, R. L., & Whitten, D. (2006). Mobile computing: A user study on hedonic/utilitarian mobile device usage. *European Journal of Information Systems*, 15(3), 292–300. https://doi.org/10.1057/palgrave.ejis.3000619
- Westlund, O. (2008). From mobile phone to mobile device: News Consumption on the Go. *Canadian Journal of Communication*, 33(3),443–463. https://doi.org/10.22230/cjc.2008v33n3a2004
- Westlund, O. (2013). Mobile news: A review and model of journalism in an age of mobile media. *Digital Journalism*, *1*(1), 6–26. https://doi.org/10.1080/21670811.2012.740273
- Xia, M. (2018). A TAM-based approach to explore the effect of online experience on destination image: A smartphone user's perspective. *Journal of Destination Marketing and Management*, 8(5), 259–270. https://doi.org/10.1016/j.jdmm.2017.05.002
- Xu, M., David, J.M., & Kim, S. H. 2018. The fourth industrial revolution: Opportunities and challenges. *International Journal of Financial Research*, 9(2), 90-95. https://doi.org/10.5430/ijfr.v9n2p90
- Zaki, A. R. (2021, August 17-19). Personal interview [Multi Camera Production Workshop]. Zikmund, W., Babin, Carr, & Griffin. (2011). Business Research Methods. United States: South-Western College Pub.