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Exploring Journalists' Intentions Towards Digital Mobile Technologies: Extending the Technology Acceptance Model (TAM) in the Context of Ghana

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Research Article

Abstract

In recent years, the use of digital mobile technologies for journalistic practice has gained much popularity among Ghanaian journalists. In this study, we explored three original Technology Acceptance Model (TAM) variables (perceived ease of use, perceived usefulness, and social influence) and two additional variables, (the cost of smartphones, and the cost of mobile data) to predict the relationship between the five variables, and journalists' intention to use Digital Mobile Technologies (DMTs). A structured questionnaire was used to solicit data from 281 Ghanaian frontline journalists through an online survey. The respondents were selected by purposive sampling. Structural Equation Modelling analysis of the data showed that, as the cost of smartphones, and the cost of mobile data increases, journalists' intention to use technology decreases in Ghana. Thus, mobile data and the cost of smartphones had a negative relationship with journalists' intention to use DMTs. The testing of perceived ease of use, perceived usefulness, and social influence, however, reported a positive relationship with the use intention. The findings from this study have implications for policy change on the reduction of the prices of both mobile data and smartphones to enhance the use of DMTs among journalists in Ghana. Also, the findings from this study could be considered a template for the proper regulation of the use of DMTs for enhanced practice of journalism in Ghana and other developing countries.

Keywords : Digital mobile technologies, Journalists, Technology acceptance model, Intention, Ghana

1. Introduction

The power of science and communication has led to massive innovations, which include Digital Mobile Technologies (DMTs), adopted for communication globally (Budd et al.,2020). The application of DMTs has over the past decade improved journalism practice and increased their ability to create innovative content for their audience. It is, therefore, not surprising that journalists show a willingness to even upgrade to expensive mobile gadgets that are compatible with digital news-making (Farman 2015; Newman 2019). Getting or making news can now be done just by clicking a button on a digital device (Wilding et al., 2020). DMTs have also helped journalists to communicate efficiently and make or receive news and other information, that helps in bringing basic challenges of their respective communities to the attention of duty bearers.

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A recent study by Wilding et al. (2020) revealed that the number of journalists who have used Digital Technologies in news-making has increased by 40% between 2018 and 2020. A survey conducted in 2019 by Newman (2019); and Westlund (2013) on the most prominent technology and applications most preferred by journalists are for their journalistic work and most audio, image, and video technologies that are used to capture or share news items through a mobile interface or devices. DMTs' are now widely produced, which enables journalists to acquire them for the performance of multiple journalist tasks with ease. Almost all the studies carried out in the past decades on the adoption of technology, used the Technology Acceptance Model (TAM) as the theoretical (Pink et al.2018; Westlund 2013; 2018) basis. Most of these studies conducted in recent years cantered on how variables such as social influence, perceived ease of use, perceived usefulness, trust, and privacy, among others, have all influenced users' intentions or behavior toward the use of new digital technologies (Davis 1989; Westlund 2013, 2018). Despite the great acceptance of the TAM, researchers continue to contribute to the modification of the Model. In that regard, a lot of scholars have included external variables different from the original constructs introduced by (Davis 1989; Westlund 2013; 2018).

Given the above, there is an interesting trend for developing countries like Ghana toward the massive adoption of mobile digital technologies across various sectors (Ayakwah et al. 2021; Demuyakor 2021). However, there is still an academic deficit in the exploration of mobile journalism, especially when contextualized within the scope of technology acceptance by the news media industries. Considering the potential of DMTs in aiding news reportage among journalists as noted by Pavlik (2010), the cost of smartphones and internet data are regarded as some of the factors that might have a certain influence on journalists' work and therefore merit further investigations. Again, some scholars hold the view that variables like the cost of smartphones and internet data do have great effects on the use of technology in the media (Warwick 2021). Thus, the researchers intend to use empirical findings from this study to position Ghanaian journalists within the context of accepting mobile technology usage in their line of duty to help test the extent of the variables presented above.

According to a 2020 report from Statista on the Internet and mobile media penetration in Africa, indicated that (the price of smartphones and the Internet are very expensive (Statista 2020). The report showed that the average price of smartphones costs between $250 to $500 and the high cost of internet data in developing countries, such as Ghana Journalists, and other users still opt for such DMTs. With the high-cost mobile data of these DMTs, one wonders how journalists and media outlets decide on whether or not to continue using DMTs in newsmaking (Statista 2020).

Considering the recently increased teste of journalists in using DMTs to aid journalistic practice in developing countries, this study investigates some of the factors that might be influencing the intention of journalists in Ghana to adopt DMTs for their journalism work. This study intends to introduce two new variables, the Cost of Smartphones (CoSP) and the Cost of the Mobile (CoMD), to three original variables of TAM thus, "social influences" "perceived ease of use" and "perceived usefulness" of DMTs among frontline journalists in Ghana. To contribute to theory, and to reach an extended model, this study tests the introduced variables to assess their effects on journalist intentions to use DMTs. Eventually, the testing of these variables is envisaged to help future studies build upon emergent theoretical implications of these DMTs, especially that of a developing country like Ghana.

2. Literature Review and Hypotheses Development

2.1.Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) is one of the best media theories for investigating users' behavior and intentions toward technology use or acceptance. According to Davis (1989), over the last two decades, journalists had a tough time determining the actual conditions influencing their desires and intentions to use DMTs. The TAM introduced by (Davis 1989) has been adopted by many scholars and researchers. The TAM is recommended by researchers to have a meaningful basis to explain why users

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adopt the technology. It is widely accepted among researchers that, for a deeper comprehension of the impact of technology on users' intentions, three of the key variables of the TAM, are "perceived usefulness", "perceived ease of use" and "social influence", are central reasons why users opt to use particular technology (Venkatesh et al. 2003). The application of little effort in using a particular technology is what Davis (1989) described as perceived ease of use, while the enhancement of benefits that using technology or system brings to the user in terms of technology satisfaction is what (Davis 1989) again described as perceived usefulness, whiles the demands and pressure from society have a great influence on users' intentions of using any form of technology is described as social influence. DMTs are designed for various reasons and varying levels of impact on journalism and newsmaking. Hence, users' (journalists) desire to use any of the DMTs might be greatly attached to the direct benefits that DMTs offer as well as the degree of either simplicity or difficulty in using such technologies. In understanding the tendency of users' (journalists) intentions to continue using DMTs, the three considerations put forward by TAM could help us justify users' (journalists) intentions.

Studies on using the TAM as the central theoretical foundation for the study of DMTs are still limited, and a few scholars have confirmed how valid the TAM is applied for DMTs, in terms of how perceived ease of use and perceived usefulness, the social influence might influence the actual use of DMTs and users' (journalists) intentions to continue using DMTs in journalism practice (Umair 2016). Besides the traditional variables of the TAM, thus perceived ease of use, perceived usefulness, and social influence the researchers intend to contribute to the theory by extending TAM through the introduction of three additional and two new variables, thus Cost of Mobile Data and, Cost of Smart Phone to the three original variables indicated in this study, in attempt to understand how those three new variables might influence users' (journalists) intentions to use DMTs.

2.2. Perceived Ease of Use (PEoU)

According to Davis (1989), the important determinants of technology use and acceptance are the "perceived ease of use" and "perceived usefulness", the former may at times have the potential to influence the latter. Many studies since 1989 have affirmed these findings, for instance, (Abdullah et al., 2016; Calisir & Calisir, 2004; Karahanna & Straub, 1999). The influence of ease of use is highly dependent on the trust and knowledge the users have assigned to the technology (Venkatesh et al.2003). For Davis, the little effort that users might apply in using any technology makes the ease of use of the variable of the TAM very important. This fast-tracks work done and users become very productive in applying technology in the fields of endeavors. For DMTs in journalism practice, users' appreciation of the connections between constructs has practical implications for users' perceptions of the usability of DMTs in the field of newsmaking.

From a developing country perspective, Quinn (2009) contextualized the benefits of journalists' adoption of mobile devices for news reporting in Singapore, granting that mobile journalism (mojo) has been regarded as first-level reporting. Furthermore, Quinn based the argument on the premise that mobile devices could not feature in a normal newsroom rather than being used as a field reporting tool. Even though the study widely covered multiple aspects of the usage of these devices such as live streaming, sharing text-based breaking news beats, and issues related to the cost of data in transmission, there has been a significant discrepancy with other studies such as Jamil & Appiah-Adjei (2019), that compared the extent of fake news generation between Ghana and Pakistan using MDTs. Quinn's perspective dwelled much on the usage of MDTs specifically for news websites, while Jamil and Appiah-Adjei (2019) focused more on the full adoption of MDT usage in large-scale news production. That being the case, Jamil and Appiah-Adjei's theoretical findings, which were heavily based on media convergence and social responsibility rather than technology acceptance, revealed that indeed newsrooms had fully benefited from MDTs, contrary to Quinn's argument brought forth earlier. However, looking at the difference in the two study periods and

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their setups, it can be accepted that the dynamics might have changed over the years. As it is currently, countries in the global south have seen growing academic attention on journalists' interests in the MDTs. Regardless, the development of new models and/or modifications to existing theories such as the TAM is still underresearched, hence the need to undertake this study.

Another emerging issue from literature within the scope of DMTs based on TAM looks beyond just gathering news, but also, the resulting outcomes of using such technologies for various communication activities. According to Ohme (2014), there is an imbalance in theorizing the dimensions of user perceptions toward PEoU, arguing that it should be interlinked with the perceived risks that emerge during the exercise of adopting MDTs. Although Ohme's argument is rightly placed central to DMTs and TAM, it heavily associates the (perceived) risks with first-time users of DMTs, especially on the usage of DMTs in service production from a governmental perspective, which paves the way for this study to look beyond remits of governmental operation, but towards non-governmental assignments such as news reporting. With this study, we did not solely focus on first-timers regarding the usage of DMTs, we rather posit their knowledge of use and experience as determinants of the journalists' intentions to consistently use these devices in their scope or work. Based on the critical review of findings from related studies warrant the inclusion of the following hypothesis(H_1).

H_1: *The perceived ease of using DMTs positively influenced journalist intentions.*

2.3. Perceived Usefulness (PU)

The perceived usefulness of a particular technology is widely associated with the levels of awareness of users of that technology. The awareness levels of users are believed to be a big contributory factor to users' intentions to adopt technology in their work (Venkatesh & Davis 1996). The demands of society which are often referred to as social expectations also greatly influence users' (journalists) intention to apply or use technology. The principles of social expectations are believed to be propelled by the proponents of the Social Information Processing Theory [SIPT] (Westlund 2013; 2018). The proponents of (SIPT) hold a strong view that our immediate environment provides the basic measure to which users construct events around them, including the context of this study, thus making choices on which DMTs to use. Notwithstanding the established interrelationships between social expectations and the perceived usefulness of any technology, there are still gaps between the former on the latter. To fill the gaps identified, this study investigates how perceived usefulness influences journalists' intention to use DMTs in their line of work by testing the following hypothesis(H_2).

H_2: *The perceived usefulness positively influences users' (journalists) intentions to use DMTs.*

2.4. Social Influence (SI)

The role of the community, especially pressure from immediate families and friends has been one of the greatest factors that influence users' (journalists) intentions to possess any technology. Social influence is described as the degree to which an individual sees other important [users (journalists)] believe they should use the new system (Venkatesh and Davis, 1996). Various studies on individual behavior or intentions have designated SI as an important predictor (Venkatesh & Davis 1996). A study by Chao (2019) concluded that SI is central and plays a significant role in explaining what is essential precedent for users' intentions (Chao 2019). Hypothesis(H3) is advanced for SI and users' (journalists) intentions:

H_3: *Social Influence is positively related to the users' (journalists) intentions to use DMTs.*

2.5. Cost of Mobile Data (CoMD) (Extension of TAM)

The cost of mobile data is the monetary value that is spent on an internet bundle. For users to access the World Wide Web, an internet bundle or data is required. For a journalist to use DMTs, then it is required they are connected online to produce news content. In developing countries, internet data is generally expensive and has affected a lot of people's intentions to use the internet (Warwick 2021). The cost of 1-

gigabit broadband internet data in Ghana is around $5, which is relatively expensive for a frontline journalist to bear (Statista 2020). To investigate how CoID influences journalists' intentions to use DMTs, the following hypothesis(H_4) is proposed by the researchers:
H_4: *CoMD is positively related to the journalist's intentions to use DMTs.*

2.6. Cost of the Smartphone (CoSP) (Extension of TAM)
The smartphone market in Ghana is one of the most developed in Africa. Notwithstanding this, due to low monthly wages, a good number of low-income people including journalists in Ghana have the challenge of acquiring smartphones (Warwick 2021). This study is therefore intended to investigate how the cost of smartphones may affect front-line journalists' intentions to use digital technologies. The following hypothesis ($H_{5)}$ is proposed;
H_5: *CoSP is positively related to users' intentions to use DMTs.*

2.7. Study Model
Based on the hypotheses, the researchers came out with the research model in Figure 1 for this study;

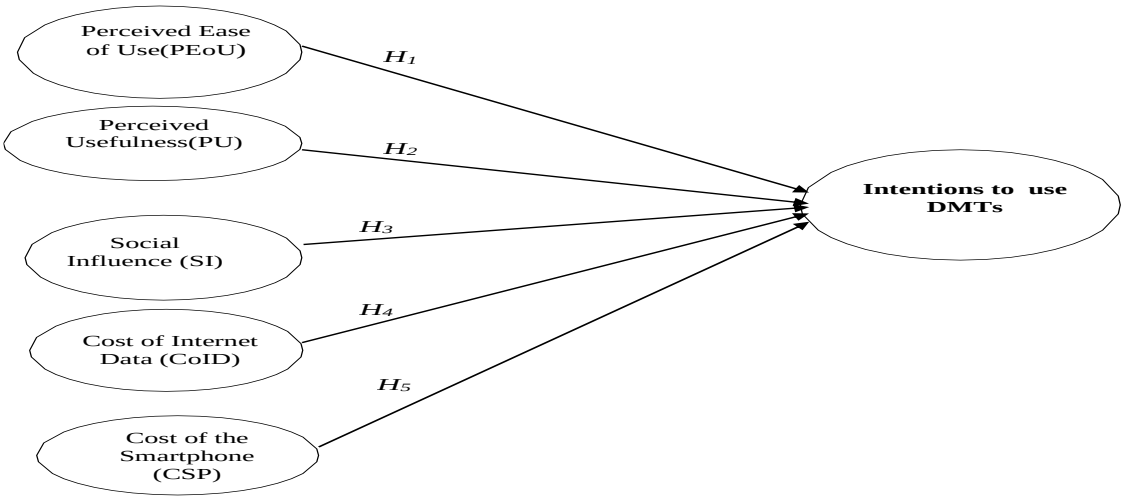

Fig. 1: Study Model

3. Materials and Methods
3.1. Research design
The data for this study were solicited from frontline Journalists in Ghana. After seeking informed consent from the members of the association an online questionnaire survey was shared via the WhatsApp group platforms of the Association. According to Goodrich et al. (2023), soliciting data from participants via online surveys such as social media platforms reduces cost, and offers authors real-time opportunity to get access to data. Out of 324 responses received 281 were valid, which translates to 86.7% of the target sample. The remaining invalid 13.3% were those respondents who indicated they do not use or have no intention to use DMTs in their Journalist work. Purposive sampling was more suitable for this study owing to the need for respondents who had basic experience in the use of digital technologies to help answer specific questions in the survey (Humphreys et al., 2013). The respondents were also asked to tick the DMTs they use or have intentions to use and the analysis of data for this study reported that the most used DMTs are Android or Smart Phones with a 12Mp+ camera (38.1%), laptops (23.1%), digital cameras (20.2%), and camera, sound,

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and video editing apps (18.6%). The study had 54% male and 46% female, and the respondents were aged 18 to 50 years.

3.2. Data Analyses

To test the proposed hypothesis and the research model of this study, the researchers applied the structural equation model (SEM) and used it in AMOS 24.0 as proposed by Kline (2016); Maruyama (1998); McQuitty, and Wolf (2013). According to Stephenson, Holbert, & Zimmerman (2006), the application of SEM for analysis enables researchers in media and communication to test relationships simultaneously. To measure the first-order, thus the reliability and validity of all the scales, the researchers first conducted a confirmatory factor analysis (CFA) was carried out. For the assessment of second-order, thus the user's (journalists) intentions to use DMTs, the confirmatory model was used. For the model on Intentions to use DMTs (IN_DMTs), described as the second-order factor, the researchers measured, Perceive Ease of Use, Perceived Usefulness, Social Influence, Cost of Mobile Data, and Cost of Smart Phone which positively corrected with user's (journalists) intentions to use DMTs. The aggregate results of the full CFA model produced a good model fit, thus *CMIN/DF=2.41, CFI=.93, RMSEA=.05, SRMR=.05(X_2 =1595.41, df=667, p< .001).*

Secondly, for the hybrid structural model to be tested, and established the corrections of the latent variables were removed and the paths introduced between the variables of the study. For each of the hypothesized relationships to be tested, the structural model was estimated. A minor re-specification was added for the initial model fit. For each of the variables on journalist intentions towards DMTs, the model initially added a direct path. The confirmatory before the research, Liang et al. (2020); Xia & Yang (2019) proposed that to ensure possible hierarchical structure between IN_DMTs and after estimating modifications indexes, the study introduces additional paths. The paths leading to perceived usefulness, ease of use, social influence, Cost of Mobile Data, and cost of smartphones and user intentions were related. To ensure all model trimming conforms with procedures, and premises before research assumptions, as well as grounded on user intentions towards technology, and media effects theories (e.g. Xia and Yang 2019), the proposed model was tested. As illustrated in Figure 2, the results of the proposed and re-specified model reported a good measure of fit, thus *CMIN/DF=2.29; CFI=94; RMSEA=.05; SRMR=.08(X2=1533.22; df=671; p <.001).*

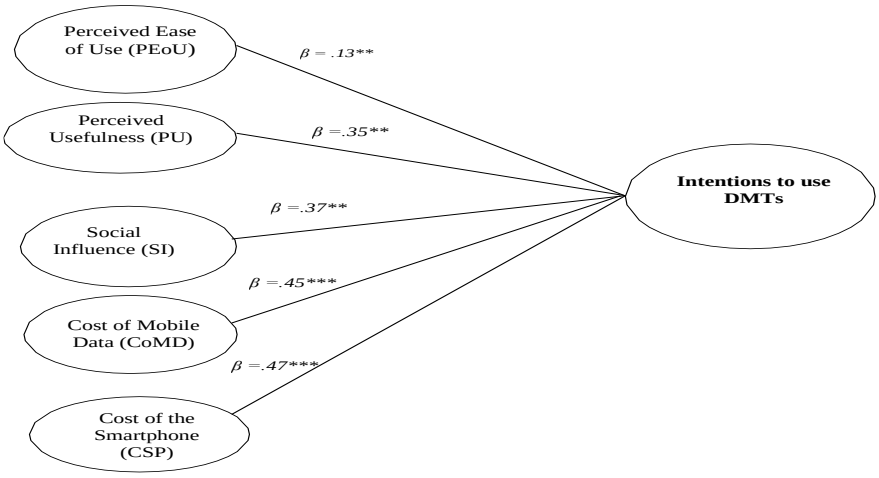

Fig. 2. The structural equation model

*Note: Results of re-specified model. CFI=.94, CMIN/DF=2.29, RMSEA=.05, SRMR = .08. *** p < .001, ** p < .01, *p <.05*

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4. Results

H_1 is to predict how the perceived ease of using DMTs positively influenced journalist intentions. Analysis from the structural equation model reported a relationship between ease of using DMTs (α= .13, p < .001) and journalist intentions to use DMTs, hence significant. Therefore, H_1 is supported.

H_2 was to establish if the perceived usefulness positively influences journalist's intentions to use DMTs. The results of the structural equation model showed a significant relationship (α = 35, p <.001), which meant that H_2 was supported.

For H_3, the researchers wanted to find out if there are any positive correlations between social influence and journalists' intentions to use DMTS. The results from the structural equation model showed a positive relationship (α=.37, p <.001). Hence, H_3 was therefore supported.

H_4 and H_5 were also tested to establish their relationship between the Cost of Mobile Data, the Cost of Smartphones, and journalists' intentions to use DMTs. The Structural Equation Model results showed a negative relationship (α =.45); (α=.47) between the Cost of Mobile Data, the Cost of Smart Phones, and journalists' intentions to use DMTs. Thus, for instance, as the Cost of Mobile Data and the Cost of Smart Phones increases, journalists' intention to use DMTs decreases. Hence H_4 and H_5 were not supported. Table 1 illustrates the Inter-Correlations, Mean Scores, and Standard Deviation Values of the study variables, while Table 2 depicts the Standard path coefficients and the level of significance.

Table 1. Correlations, means, and standard deviations

Constructs	*M*	*SD*	1	2	3	4	5	6
1. IN_DMTs	4.93	1.47						
2 PEoU	3.70	1 .54	.53** [1]					
3. PU	4.84	1 .41	.63**	[1]				
4. SI	4.61	1.96	.51***	.43**	[1]	[1]		
5. CoMD	2.74	1.51	1.17**	.11*	1.14**	-. 12**	[1]	[1]
6. CoSP	3.38	1.63	.22**	.15**	-.14**	.22**	-. 50**	.78**

*Note: **p < .001; *p <.05; IN_DMTs= Intentions to Use DMTs; PEoU=Perceive Ease of Use; PU=Perceived Usefulness; SI=Social Influence; CoMD=Cost of Mobile Data; CoSP=Cost of SmartPhone*

Table 2. Standard path coefficients and the level of significance

Dependent variable	**Independent variables**	**β/sig.**
Intention to use DMTs		
	Perceived ease of use	03*
	Perceived usefulness	.05*
	Social influence	.04*
	Cost internet data	.45
	Cost of smartphones	.47

*Note: *p <.05.; Unstandardized beta weights reported. PEoU=Perceive Ease of Use, PU=Perceived Usefulness, SI=Social Influence,CoMD=Cost of Mobile Data, CoSP=Cost of Smart Phone, and positive IN_DMTs= Intentions to Use DMTs.*

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5. Discussion

The role of DMTs in the 21st century can never be over-emphasized. Previous studies by Çatal (2017), and Zelizer (2019), have demonstrated that the technology employed to facilitate the work of a journalist in electronic media has increased considerably over the past decade, especially in developed economies. In the developing world, however, a study by (Mare 2013) has suggested that a good number of journalists still apply traditional analog techniques in reporting news. In this study, the researchers investigated the factors that influence frontline journalists' intentions to use DMTs in their journalistic work from the context of TAM. For this study to be extended theoretically, the researchers introduced two key variables CoID, and CoSP matched with the initial variables of TAM, proposed by Davis (1989), thus SI, PEoU, and PU, to understand how those variables might influence journalist's intentions to use DMTs.

The analysis of 281 responses from the journalist in Ghana, showed that the variables CoMD, and CoSP, have a negative relationship with journalists' intentions to use DMTs. For instance, as the Cost of smartphones, and mobile data increases, journalists' intention to use technology decreases in Ghana, wages are generally low coupled with the high mobile data cost and expensive smartphones might have attributed to these findings. The high cost of mobile data in Ghana prevents most journalists from applying DMTs in their journalism work. Respondents indicated the average cost of monthly mobile internet to be Ghc 200.00 or $32.68 which is relatively too expensive for the ordinary journalist to afford. A study by Wolf and Schnauber (2015), on journalist use of technology, and concluded has indicated that sometimes the difficulties encountered in operating complex smartphones deter or discourage journalists from using them. Recent studies by Warwick (2021), and Statista (2020) reported that internet perpetration is very low in Africa, and these phenomena have resulted in the high cost of internet bundles or data. To operate or use most of the DMTs one requires the internet, and when the price of this internet is expensive it might discourage journalists from using or having the intention to use DMTs in their line of work. These observations might partly point out why the hypothesis on the influence of the cost of the internet and the cost of smartphones did not positively influence journalists' intentions to use DMTs.

Journalists' intentions to adopt any technology, as well as the usefulness of using technology greatly predicate the knowledge levels of users in terms of ease of use. The ease of use and perceived usefulness constructs of the study test the knowledge variables of the TAM. The testing of three other variables of the TAM introduced by Davis (1989) thus, SI, PEoU, and PU was statistically significant. These findings on the influence of the three variables, thus SI, PEoU, and PU on the acceptance and use of DMTs are in line with previous studies by (Westlund, 2013, 2018). According to earlier studies by Westlund (2013; 2018); Venkatesh Davis (1996); Venkatesh et al. (2003), perceived usefulness is one of the key variables of TAM that greatly influence DMTs adoption than other variables like perceived ease of use and social influence.

As indicated in earlier studies, the desire journalists to use DMTs, sometimes not only for professional reasons but to also engage in other uses for gratification and social exchanges such as socialization with families and friends (Al-Emran & Shaalan 2021; Quan-Haase & Young 2010; Westlund 2013; 2018; Venkatesh et al. 2003).

The implications of gratification gained from using DMTs might defeat the challenge of affordability for both internet data and smartphones. This present study is unique as it focuses on the basic reasons and intentions that journalists may hold or opt for DMTs from the lens of the cost of mobile data, and the cost of smartphones. As argued by Davis (1989), the user's intentions to apply any technology might also be dependent on other motivations. This observation could mean that journalists' intentions to use technology could be related to other variables than those examined in this study. Again, this study confirms the findings of Westlund (2013;2018) on the use of mobile phones for news and suggests that social influence is one of the variables in the TAM that is found to have effects on journalists' intentions to apply technology for news reportage. The researchers could also speculate that the levels of awareness of DMTs might be very high among journalists in Ghana, and that might be the reason why society's demands were so severe on journalists to use DMTs.

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Again, the researchers can also speculate that most societies in Africa (Ghana) are very familiar with or aware of digital technologies in news broadcasting, hence the high influence of journalists to use new technologies (DMTs). Users' or peers' awareness levels are capable of instigating usefulness (Taherdoost 2018). From the perspectives of the researchers, Ghana is a relatively socially influenced environment and has a relatively socially constructed society, where societal demands and expectations are generally high, it is therefore difficult to understand why the social influence variable of this current study had a significant effect on journalists' intentions to used DMTs. The foregone explanations could be attributed to the reason why social influence was statistically insufficient on journalists' intentions to use DMTs for journalism practice.

6. Implications for Practice and Theory

The findings of this study have some theoretical implications. The researchers hold a stronger view that this study has made some outstanding contributions to the existing studies on TAM particularly for scholars and practicing journalists from developing countries like Ghana. This study contributes to research on TAM and DMTs for journalism practice in developing countries like Ghana (West Africa) by demonstrating how the original TAM variables and those introduced by the researchers serve as favorable conditions or impediments to the wide usage of DMT among journalists in Ghana.

The findings from this study support the emerging theories of TAM and are consistent with reports by (Safi et al. 2019) who suggested earlier theoretical models of technology acceptance established by Davis (1989) seemed to be inefficient. A 10-factor model is a move aimed at developing an integrative approach that unifies 10 aspects to determine user acceptance based on affordability, accessibility, usability, value, experience, emotion, confidence, experience, social support, and technical support features of innovations (Davis 1989). The approval and acceptance of new technologies may also significantly minimize errors-related costs and key impediments (factors) as crucial to ensuring the acceptance and adoption of new technologies.

7. Conclusion

Considering the limited research on DMT acceptance in the developing world, the current study extended the well-known and established TAM framework with the addition of two extra variables, thus the cost of the Smartphones, cost of internet data, to investigate the intentions of Journalists to use DMTs in Ghana. The study discovered that the cost of the smartphone and, the cost of mobile data (thus, an increase in the price of mobile data and the cost of smartphones) have a negative influence on journalists' intentions to accept and use DMTs in journalism practice. While perceived usefulness, perceived ease of use, and social influence were statistically significant, hence had a positive influence on frontline journalists' intentions to use DMTs. Despite these findings, the researchers speculate that the socio-cultural, and economic settings of Ghana might have contributed to this outcome of no positive relationship for DMT use by the journalist. These findings also provide insight for media practitioners, stakeholders, and policymakers to come out with strategies for successful adoption and use of technology for the frontline journalist. While the findings from this study might have indicated factors that influence Ghanaian Journalists' intentions to use DMTs, the important factor that must be taken into consideration is the impact of the cost of the smartphone and, the cost of mobile data on journalists' intentions to use DMTs. Research on TAM indicates that the users of technology in developed nations recognized perceived usefulness as a priority for their decisions on technology use (Chao, 2019). Finally, the inclusion of the cost of the smartphone and, the cost of internet data in the expanded Technology Acceptance Model has greatly contributed to the existing literature on TAM.

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8. Limitations of Study and Suggestions for Future Research

Though this present study gives very insightful findings on DMT usage in the media, this study cannot be excluded from a few limitations. One of the potential limitations of this study is that the data collection was from only 281 journalists in Ghana based on purposive sampling, which could result in bias The views of the respondents could not adequately represent the views of the entire population of journalists, and media outlets in Ghana, impacting the final findings and the generalization and conclusions made. Therefore, the researchers suggest that future studies could conduct similar studies on larger samples based on random sampling. Previous studies on TAM, also report that several variables such as age, education, gender, and experience play very influential roles in predicting users' intentions to use or accept technology (Phichitchaisopa & Naenna 2013). So future studies may consider these variables.

Authors' Contributions: Conception/Design of study John Demuyakor (JD); Data Acquisition (JD; Zillah Boye-Doe); Data Analysis/Interpretation (JD); Drafting Manuscript, and Critical Revision of Manuscript (JD; ZB-D); Final Approval and Accountability (JD; ZB-D).

Conflicts of Interest: The authors declare no conflict of interest.

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