

# AN EVALUATION OF THE USE OF DRONE TECHNOLOGY IN NEWS GATHERING AND REPORTING: PROSPECTS AND CHALLENGES

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## Abstract

The advent of new technologies has revolutionized the media space. One of these technologies that have assisted journalists in carrying out their tasks is a drone. It is in light of this that this study evaluates the use of drone technology in news gathering and reporting in Nigeria. This study is anchored on the Technology Acceptance Model (TAM); an information systems theory that models how users come to accept and use technology. Findings from the study show that the impact of drone technology in news reportage in Nigeria includes; the use of drones has aided investigative journalism; the use of drones has aided immediate coverage of events; the use of drones has enhanced the coverage of unforeseen and unscheduled events and the use of drones has assisted in obtaining footage or photographs in dangerous situations. This study recommends that to lessen the risks connected with the modern era of journalism, media organizations should take every possible step to use drone technology for newsgathering and reporting. Also, the military, the media, the Federal Aviation Authority (FAA), and the legislators should work together to develop a suitable policy for the use of UAVs or drones in Nigerian journalism.

**KEYWORDS:** Drone, Drone Journalism, Technology, Unmanned Ariel Vehicle

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## 1. INTRODUCTION

Courageous reporters and photographers flew on hot air balloons to cover the American Civil War and other important events in the 19<sup>th</sup> century. Media organizations started employing fixed-wing aircraft and then helicopters to cover wars, fires, protests, and a variety of other dangerous jobs in the middle of the 20<sup>th</sup> century.

Drones are new tools for newsgathering used by citizen journalists and established media organisations. The birth of the digital age brought with it a rapidly evolving news-gathering and distribution process. Drone Journalism refers to the utilisation of drones to gather news in a wide range of journalism and mass communication services. Several studies revealed that there had been a tremendous increase in the use of drone technology over the years. Thus, drone journalism has been established to represent news

gathered using this tool. Whitaker (2016); and Ntalakas et al. (2017) provided a simple definition by Matt Waite, who leads the Drone Journalism Lab, where he described drone journalism as 'using a small crew-less aircraft to gather photo, video, and data for journalism'.

According to Goldberg (2021), drones as an emerging technology in the news media industry is fast changing the narrative of journalism practice in the 21<sup>st</sup> century, particularly the newsgathering process in restive or hazardous environments via drone use or Unmanned Aerial Vehicles (UAVs). An Unmanned Aerial Vehicle (UAV), as the name implies, is an aircraft without a human pilot aboard. The aircraft is not the typical one as it is much smaller and manipulated from outside with remote control. Often described as a small aerial acrobat, this gadget comes in different forms are popularly known as drones; they are equipped with

different state-of-the-art technology such as infrared cameras, Global Positioning Systems (GPS), GPS-guided missiles, sensors, etc. It is used mainly for surveillance, monitoring and mapping data.

The capability to fly cameras and capture the world from a bird's eye view using drones has ignited the interest of news outlets that have seen tremendous opportunities for journalism through this miniature aircraft. This remarkable advancement in technology is quickly changing how news agencies and the media operate, and like other fields, have put drone technology to good use. For instance, Cable News Networks (CNN) use drones to augment traditional television coverage and improve vantage points. The news network has also launched a team to fly and operate drones as a part of expanded news coverage to provide the benefits of planes and helicopters for a fraction of the cost.

As Oyekola (2021) supports the notion that drone as an enhanced technology is relevant to newsgathering. For more effective coverage of events and activities, declared that drones should be deployed in six (6) primary areas of the country to get news information from areas that are difficult to penetrate, like a crowd, or demonstration, including peaceful or violent protest. Drones can get there to cover and get the story. The rise of the reliance on drones by the media worldwide has become a subject of research by professionals.

Drones have been used for multidisciplinary tasks since they may carry a variety of data-gathering tools, such as sensors to detect radiation levels, wind speeds, thermal pictures, or geographic information systems to track the spread of wildfires. A brand-new style of reporting is possible because of the ability to collect this kind of data, giving UAS operators a completely new way to find, look into, and follow a story.

Drones have the potential to completely transform the media, much like the internet did to traditional media. The media revolution can be attributed to the fact that drones are relatively inexpensive and can be deployed to humanly inaccessible areas with minimal risk and exposure to danger- new site for construction, forest survey, and the war zone. Goldberg, Corcoran & Picard (2013) asserted that drone journalism has a big potential to capture footage in regions where sending reporters would be risky or where journalists would not want to be noticed. Reporters could acquire images with some assurances for their safety, according to Goldberg, Corcoran, and Picard (2013), since they wouldn't have to take a chance on being caught in unforeseen circumstances like the lingering insecurity issues in

Nigeria and the Lekki Tollgate killings during the EndSARS protests in 2020.

In addition, the quality of videos and images obtained from drones has continually endeared them to media organisations. According to Roug (2014), some drone recordings have a more authentic, eyewitness-like feel than images taken by cameramen concealed behind yellow police tape. Therefore, it is against this backdrop that this study evaluates the impact of drone technology in news reportage in Nigeria.

## **2. STATEMENT OF THE PROBLEM**

Before now, journalists lost their lives in the line of duty while covering civic demonstrations, protests and wars. Drones have been attributed with the power to modify the way we look at things. The act of gathering news utilizing drone technology is known as drone journalism. Unmanned Aerial Vehicles (UAVs), often known as drones, became mainstream and have brought a revolutionary experience into the world of journalism and news reporting. It is an innovative technology that will bring a magnificent difference to journalism and signal new value networks. Nevertheless, there has been a gap in the scholarly exploration of how a drone can be used particularly in journalism for newsgathering in Nigerian television broadcasting.

There is a tremendous increase in the use of this tool over the years. In Nigeria, the utilisation of drones by local television stations in newsgathering is not a popular practice; the Nigerian Civil Aviation Authority initially banned drones because they invaded privacy and the possibility of it-drone being used for spying. If government agencies, organisations, and individuals are discouraged from using and experimenting with drone technology, it is most likely because the government did not know its importance from the onset.

The fight against terrorism in the country's North East and North West and the attendant humanitarian crises has not received adequate media attention due to the challenges to human and resources posed by the security threats of sending reporters to those places for investigative journalism, a problem that can be easily resolved with the use of a drone to gather on-site information. In most cases, they have had to rely on government-sanctioned footage and reports which may not necessarily convey an actual state of the war. Therefore, this paper explores the impact, the use of drones on newsgathering by broadcast stations will have on the quality of journalism and how drone technology increases professional journalism practices by broadcast

stations in Nigeria.

### **3. OBJECTIVES OF THE STUDY**

The objectives of this study are as follows;

- i. To evaluate the impact of drone technology in news reportage in Nigeria.
- ii. To examine the opportunities and challenges in the use of drones for television broadcasts and how they can improve professionalism.
- iii. To find out the security dangers of using drones for newsgathering in television broadcasting.

### **4. RESEARCH QUESTIONS**

- i. What is the impact of drone technology on news reportage in Nigeria?
- ii. What are the opportunities and challenges in the use of drones for television broadcasts and how it can improve professionalism?
- iii. What are the security dangers of using drones for newsgathering in television broadcasting?

### **5. LITERATURE REVIEW**

#### **Concept of Drone**

A drone is considered a military technology that has, however, found applications in none military fields including journalism. Unlike the military drones that are equipped with weapons and used in attacking enemies, drones used for journalistic operations are not equipped with weapons or bombs, but with high-resolution cameras and sensors that are aimed at shooting aerial photos and videos of areas, people, and actions from angles formerly unknown, while remotely piloted by people on the ground (Gynnild, 2014). Although drones have found applications in diverse fields and are increasingly being used for none military purposes, the term, nevertheless, still conjures a dreadful mental picture of a military aircraft loaded with lethal weapons, inflicting both physical and psychological miseries on enemies in foreign countries.

The term "drone" has been the subject of discussion, and some people disapprove of it because of, among other things, its negative connotation. According to Carroll (2015), the word "drone" evokes images of cold-blooded military attacks. Postema (2015) asserts that some disapprove of the term drone because it reminds too much of military drones. Postema (2015) further noted that people disapprove of the name drone because it does not accurately

describe the device in scientific terms. These disapprovals and negative connotations of the term drones, however, led to the proliferation of new and alternative names. According to Carroll (2015), the proliferation of alternative names developed by drone operators and their organizations may be due to the negative connotations associated with the name "drone." Carroll (2015) stated that whether alternative names are used or not, the linguistic war has already been won.

The aerial device is also known by different names in different fields. Ntalakas (2017) referred to aerial technology with the following names; "unmanned aircraft (UA), unmanned aircraft systems (UAS), unmanned aerial systems (another UAS), remotely piloted aircraft (RPAs), remotely piloted vehicles (RPVs), unmanned aerial vehicles (UAVs), uninhabited aircraft, drone aircraft, and drones" while Postema (2015) referred to the aerial device as pilotless aircraft, robot aircraft and Zenanas (Arabic slang for a nagging wife - resembling the drone's buzz). Gynnild (2014) on the other hand referred to drones as 'robot eyewitnesses.' The terms aerial device or an 'eye in the sky' have also been used to describe the technology. For this paper, however, the term aerial device or UAV will be used interchangeably with the term drones.

There is no consensus on the definition of the term drone and since the technology has found applications in diverse fields, one would expect several definitions. The following definitions, however, suffice for this study. The U.S. Federal Aviation Administration (2010) as cited in Gibb (2011) defines a drone as a flying machine with no pilot on board that is used or intended for use in flight. This covers all categories of aircraft, such as helicopters, airships, and translational lift aircraft, which do not have a pilot on board. Traditional balloons and unpowered gliders are not considered unmanned aircraft since they cannot be controlled in three dimensions.

Postema (2015) buttresses the above when he posits that a drone is an autonomous or remotely piloted powered aircraft capable of flying without an onboard operator or passengers. He added that this generally excludes balloons, gliders and kites. While Jarvis (2014) opines that drones do not have pilots sitting in front of a screen to fly them to their destination. The aerial technology comes in a wide variety of shapes and sizes. It can range from the size of an insect to that of a commercial airliner. The largest available drones are mostly used for military purposes such as the Predator drone.

#### **Relevance of the Use of Drones in Journalism**

According to Barrerro (2018), the use of drones

in journalism includes covering protests, demonstrations, and rallies because they allow for the measurement of crowd size and the estimation of participant numbers, adding visual value to the news context.

Drones may be used autonomously to cover sporting events, making them equally helpful in journalism. Drone technology makes it feasible to provide in-depth coverage of athletes competing in long-distance sports. According to Postema (2015), in the not-too-distant future, activities like sports coverage could be more thorough, preventing viewers from missing important moments of action due to a lack of a camera covering the appropriate viewpoint. This is supported by a number of studies that show how a point-of-view shot significantly affects the visual experience of sports broadcasts. Since the technology can provide immediate coverage and live, real-time broadcasting, drones are also important in journalism. The technology's great mobility and quick deployment can also improve the coverage of unplanned or unforeseen occurrences.

The value of whistleblowing must be added to the technology's relevance in investigative journalism, notably for documenting unlawful actions. As a refutation, drones are also relevant in investigative journalism, particularly when monitoring and examining government operations. Additionally, using drone journalism as a source of information for images and videos has several benefits (for news stories, reports, documentaries, etc.). The technique can be used to capture images or videos of locations that are challenging to access because of their physical characteristics (such as caves, forests, oceans, or deserts) or as a result of natural or man-made disasters (such as forest fires, spills, or dumping).

The use of drones allows for the acquisition of images or video in risky circumstances, such as armed confrontations, without endangering the lives of reporters and their teams and hiding their presence in the region. Drone technology is relevant to investigative journalism as well; therefore, by eliminating the reporter's presence, it opens up a wide range of opportunities for investigative journalism and for gathering information on illegal activities, though drones are currently only occasionally used for this purpose. News credibility directly benefits from the high documentary-value information that drone technology produces. The technology can be used to report on breaking news. Drones can be carried and put to use quickly because of their size, which is a very negative sign of immediateness. In actuality, hiring a helicopter takes a lot longer. However, the legal requirements for flying drones conflict with the

technical agility that distinguishes these gadgets from other aerial cinematography equipment. The technique is perfect for tracking and getting panoramic views, giving viewers eye-catching visual information (demonstrations, protests, etc.). Multiple drones can be used to collect these photographs from various vantage points, angles, and heights; this could be advantageous for sports coverage. As can be observed from the review, the suggestion is that drones are pertinent in investigative journalism.

Numerous studies confirm that the drone journalism boom has already begun and cannot be stopped. As a result, fewer people are anticipated to be needed in a normal news-collecting team. It is unlikely that the journalistic practice will change drastically, as it did with the development of journalism throughout the social media period. The human element will still play a significant part in editorial decisions, storytelling techniques, and general mass communication practices. In a similar vein, it is not anticipated that drones would completely replace news helicopters. However, there are many situations (such as traffic/jam monitoring, protests, etc.) where the quick and inexpensive deployment of UAVs is favoured. Drones are anticipated to provide journalists with an additional instrument for news gathering, in the long run, complementing all current modern media tools (Jarvis, 2014). This expectation is echoed in the collaborative model that has been suggested as well as in the associated SWOT assessments, which highlight the strengths, weaknesses, opportunities, and commonalities. Evidently, drone journalism's strengths include the majority of the benefits that have been mentioned thus far.

The fact that news-collecting UAV technology is still in its infancy and is evolving quickly is also crucial. On the other hand, there are some drawbacks brought on by socioeconomic and technological constraints. For instance, while stronger gas-operated motors will be adopted, they will introduce new issues while battery-operated drones have short-duration autonomy (i.e. cost increase, noise and annoyance to the surrounding areas, increased risk of accident and safety compromises, etc.). The most significant flaw is unquestionably the absence of a legislative framework that will provide drone journalists with the desired flexibility while resolving all legal and operational issues without jeopardizing ethical, privacy, safety, or overall security consequences. The linked Threads also have a list of these most recent worries (Chapa, 2013).

The numerous issues we face in the near future will be the most significant benefits of drone journalism. For the approaching decades, it is thought that environmental concerns and improved

management of the earth's resources are particularly important. It is the responsibility of journalists and the news media to enlighten the public so that awareness of the situation will result in the best possible remedies. Long-term environmental monitoring is made possible by UAV surveillance, which may be very helpful in the aforementioned directions. It would be possible to regularly monitor unseen changes thanks to new technologies (such as multispectral imaging) (due to the low cost of the flight). Although multispectral imaging equipment is currently pricy (and not fully compatible with drones or UAVs, yet), it is more than likely that such monitoring tools will be widely accessible in the not-too-distant future (Dorroh 2015; Whitaker, 2016). In the same context, media professionals were polled to determine the best uses for drones in journalism based on anticipated technological advancements. The majority of them concurred with the following top opportunities: expanded storytelling options, affordability, cost-effectiveness, data collection, integration with cutting-edge technologies, and operator and journalist safety.

### **Prospects of Drone in Journalism**

When drones first made their entry into the military field, which the technology is still synonymous with, they came in designs that required high technical ability to operate, sizes so huge and at a very high cost that discouraged their deployment into other fields including journalism. With advanced research in the past decade on the technology, a lot has, however, changed in terms of their designs, operational complexity, and sizes, including their cost, thus, paving their deployment into non-military fields. Barrero (2018) noted that miniaturization, lower costs, and improved usability have created a thriving industry whose versatility has been used in a wide range of professional fields, including aerospace research, police surveillance, traffic control, rescue operations, organic farming, transporting and distributing light loads (food, the post, books, medicines, etc.), controlling fires in the forest, conducting archaeological and cartographic research, and HD photography and filming.

In journalism, drones now serve as a supplementary tool for newsgathering and are currently changing the face of the profession globally. The technology is changing the face of journalism in the manner in which the IT revolution is reengineering how businesses operate. This is partially because many drones are inexpensive and fairly easy to operate. Notably, too, drones give journalists a wide view of events from aerial perspectives and the data gathered are used to present more accurate and

complete reporting.

In modern journalism practice, drones offer the immediacy of eyewitness accounts of events and have become an increasingly significant focus in the media. With this technology, journalists are now portraying and telling stories from aerial perspectives and at the same time, helping to fulfil audience expectations of objectivity of content. Besides fulfilling the audience's expectations of objectivity of content, the use of UAVs, according to Zelizer (2007) as cited in Lauk (2016) also adds credibility and authority to the reports of journalists. Gynnild (2014) asserted that the use of drone technologies for journalistic purposes further speaks to ideals of unbiased reporting through the seeming absence of human subjectivity in favour of authentic, automated recordings. He adds that drone methods of data gathering are compatible with established principles of journalism in the sense that they potentially provide a better quality of news information through visual documentation.

Correspondingly, the journalistic use of drones is in agreement with the surveillance function of the media as postulated by Lasswell cited in Baran (2009) who posited that the media is expected to monitor the environment and report to the public about happenings, particularly on important topics that impact society. With regards to Lasswell's assertion, the application of drones in journalistic operations has proven to be very useful, particularly for information gathering in previously impossible locations or environments. Gynnild (2014) stated that the extended options for surveillance by participants (reporters) from within an activity, rather than from governmental or other authorities, speak to journalistic ideals of being spokesmen for the man in the street. Therefore, leveraging the capabilities and prospects of drones as a supplementary tool for newsgathering, journalists are now using the device to capture images and footage of events from aerial perspectives to provide novel and rich contents that lend credibility and reliability to their news stories. Beyond the ability of drones to provide immediate aerial coverage of events, they also have the ability to provide live streaming, of both unexpected and scheduled events and occurrences (Gynnild, 2014).

Another potential of the application of drones for journalistic operations is that it allows journalists in a floundering industry to not only gather news but also guarantee their safety and minimize their risk of being caught in unpredictable situations (Gynnild, 2014). Similarly, with the use of drone technology, journalists now have a new tool that can improve their safety while working. In a world where journalists are

annually and continually being killed in the line of duty, with the 2018 global figure put at 53; with 34 of them being targeted for murder in reprisal for their work and for covering conflicts or civil unrest; the deployment of drones cannot be overlooked in the modern news media industry, particularly for their safety advantages such as being used to immediately provide footage or to assess the coverage possibilities and safety of a certain place, (Barrero, 2019).

Another advantage of the deployment of drones for newsroom routines is in the area of cost. According to Ntalakas (2017), the cost of obtaining and deploying drones plays a very significant role in the practical adoption of the technology. The use of helicopters for newsgathering is a very expensive venture and due to the cost of purchase or hire, they are practically unavailable in Nigeria newsroom routines.

### **Challenges of the Use of Drones in Journalism**

There are several reports on the deployment of drones in military operations against insurgence in the northeastern (Runsewe, 2016) and their use in capturing aerial photographs of archaeological sites in Ile Ife and Ilara in the southwestern region parts of Nigeria. However, for journalistic operations, there seems to be a dearth of literature on the use of the aerial device and this is not unconnected with the cumbersome processes of obtaining a permit; triggered by existing safety, privacy, ethical and legal concerns that have continued to pose challenges in the use of the technology in the Nigerian media landscape.

Drones, like every other new technology, are not devoid of abuse by their users thus posing concerns and challenges including in Nigeria. Kreimer as cited in Gibbs (2011) asserts that drones are a great technology that can be easily abused in unfathomable ways. While these aerial devices are being explored to achieve positive ends in some quarters; in others it is, being used to cause mischief and their misapplications have continued to raise concerns in and outside the news media industry (Carroll, 2015). Some of the concerns and challenges surrounding the use of drones in diverse fields including in newsroom routines include safety, privacy, ethical and legal.

#### **a. Safety Concern**

Technology has its pros and cons, and drones are not an exception. Culver and Duncan (2017) opine that the uses of new technologies such as UAVs have the potential to improve reporting and serve the public interest. They also, however, have implications for journalism's relationships with citizens, including

matters of safety. Schroyer (2012) described the drone as a potentially harmful device both for aircraft in the airspace and people on the ground. For flight operators and aviation authorities, drones present certain challenges as their blades turn it into "a flying lawnmower" and a drone can potentially damage an aeroplane catastrophically.

The flying of drones in populated areas presents another safety concern. As Jarvis (2014) puts it, "the downside of using drones, especially in populated areas, is that they can come crashing down on the very citizens they were sent up to look down on". Despite the absence of drones crashing down on people or colliding with aircraft in Nigeria, there are other safety (security) concerns the use of the aerial device can pose to Nigerian society. With terrorism on the rise, drones could be used by terrorists, not necessarily to crash into densely populated areas or kill people, but for surveillance of military infrastructure before an attack. McKelvey et al., (2015) concerns were confirmed in Nigeria, in a military report in November 2018; after the Boko Haram attack in Metele that left a score of soldiers dead. The report stated that the dreaded sect (Boko Haram) used drones in the operation in Metele particularly for aerial surveillance to gather information prior to the deadly attack (Odunsi, 2018). Ekwealor (2017) asserts that considering the surge of terrorism and other crimes that can be committed with the aid of a drone, the safety concerns are legitimate and very understandable.

#### **b. Privacy Concerns**

The right to privacy is a civic right which applies to all citizens of the country. This individual's 'zone of immunity' is, however, becoming easily breached as technological innovations and advancement continue to emerge in society. According to Tremayne and Clark (2014), the right to privacy has been diminishing over the past 100 years due to issues such as the growth of government, the growth of the mass media and technological innovations that make it possible to see and hear things that would not have been possible even a few years ago.

Lyon (2001), as cited in Tremayne and Clark (2014) stated that people's privacy "are shrinking due to digital data mining and a proliferation of video cameras." Drone technology has the capability of being intrusive because of the sizes they are designed in the modern era. While drones offer limitless possibilities for the news media industry, their intrusive part infringes on people's privacy.

Carroll (2015) claimed that while the smallest

drones might not pose a threat to other aircraft other than being an annoyance, they could pose serious privacy risks. Because they are equipped with a tiny camera, these aerial devices could enter almost any private space and record the activities of private citizens, possibly even taking DNA samples. Similarly, Tremayne and Clark (2014) as cited in Barrero (2018) noted that the privacy of people and their private property has been compromised in the digital age, and there is no longer a clear distinction between what is public and what is private. Drones carrying video cameras have played a part in this erosion.

#### c. Ethical Concerns

Ethics is the soul of journalism and a poor ethical decision can greatly undermine the integrity of the profession. The application of technologies as supplementary tools in newsroom routines such as drones further brings to the fore the importance of journalistic ethics while the application of drone technology in the media landscape presents new perspectives and concerns.

There are events where the use of drones for coverage could be termed appropriate and raises no ethical issues; there are others that are not thus, raises serious concerns. Cavender (2012) as cited in Tremayne and Clark (2014) paints a vivid picture of the above when he asserts that, "covering a street demonstration may be one thing, but using a drone to record surreptitiously images in someone's backyard is something else entirely". Similarly, journalists, in their desire to not only meet up with deadline but also be the first to report a story, faces the temptation to use the technology (drone) recklessly, even invading citizens' privacy to get a story (Tremayne & Clark, 2014).

While ethics is less about the conflict between right and wrong than it is about the conflict between equally compelling (or equally unattractive) alternatives and the choices that must be made between them, journalists using drones for newsgathering operations are expected to make the same ethical decisions (Patterson & Wilkins, 2011).

#### d. Legal Concerns

The improper use of drones in society, notably due to privacy and safety issues, has led to ongoing legal cases across the globe. From a legal perspective, the preservation of people's privacy is one of the most concerning aspects of using an aerial device. The BBC warns that drones should not typically be used to identify people without their consent or capture close-up images of private areas like houses, gardens, or

offices without the owner's consent unless these areas can be seen from a public vantage point or there is a public interest in showing them. According to Barrero (2018), out of all the different potential risks associated with the use of drones, the BBC places the accent on the breach of privacy.

### **Theoretical Framework**

This work is hinged on the Technology Acceptance Model (TAM); an information systems theory that models how users come to accept and use technology. The model was developed by Davis in 1989 as a theoretical extension to the Theory of Reasoned Action (TRA) which is used to predict and explain user behaviour from different domains. The model focuses on the behavioural intention to accept the usage of information technology. TAM aims to clarify and explain user acceptance of technology in general and identifies user behaviours across a wide range of end-user technologies and user populations in particular.

Sabti and Chaichan (2014) posited that behavioural intention to use technology is determined by an attitude which is influenced by perceived usefulness (PU) and perceived ease of use (PEOU); two essential factors that motivate an individual to use technology. According to Olorede and Oyewole (2013), factors such as perceived usefulness (PU), which include relative advantage, attached prestige and cost-effectiveness, and perceived ease of use (PEOU), are significant in users' choice of acceptance of technology. Davis et al. (1989) as cited in Sabti and Chaichan (2014) define PU as the prospective user's subjectivity probability that using a specific application system will increase his/her job performance within an organisational context, whereas PEOU is the degree to which the prospective users expect that the target system to be free of effort.

The TAM is relevant to this study based on the fact that media outfits and journalists may decide to use drones as a supplementary tool for news gathering on the ground of their perceived usefulness as well as the perceived ease of use in their news routines, particularly when covering conflict or risky environment that can pose great danger to the lives of the journalists. The model also offers an optimistic outlook for drone journalism.

Drones, as Rogers (1985) as cited in Gynnild (2014) puts it helps news media to identify basic qualities of technological innovations, and to predict time rates, pros and cons of drone journalism, and what issues to look out for at a time when the constant adjusting to technological innovations within and outside of journalism has become an unspoken

premise of professional day-to-day working practice.

## 6. CONCLUSION

There are extensive reviews of the development of drones, their use, their difficulties, and all the advantages they provide. Recommendations are also made. For media firms or employees who are on a difficult or hazardous assignment, drone technology has many benefits. However, journalists should maintain their composure while utilizing this fantastic technology and all of its incredible advantages. The human element of a tale, which can only be obtained or realized in person, requires direct personal contact, information gathering, and evaluation of mood, context, and accuracy. However, drones continue to be the magic solution for news reporters' protection in dangerous situations. The transformational potential of drone technology is unlikely to have an impact on editorial choices or storytelling techniques. Drone technology would not usher in a brand-new or distinct media genre, but rather add to the various technological advancements in news gathering, processing, and reporting that have occurred in the modern period. Drone journalism is gradually taking room root in media outfits globally and their presence is slowly been seen in the Nigerian media landscape. The technology offers limitless possibilities to the journalism profession such as the ability to cover risky or hazardous environments thus guaranteeing journalists' safety. It also offers a cost advantage when compared with a helicopter. On the other hand, the existing safety, privacy, ethical and legal concerns that have warranted strict regulations and cumbersome process of obtaining a permit in Nigeria thus, slowing their incorporation in newsroom routines should not negate their positive role in the nation particularly for newsgathering purposes. When the aerial device is used ethically by journalists in a manner consistent with appropriate news practices, they will not only avert legal issues but also enjoy the enormous potential of the aerial device. Regulating drone technology to near death on the ground of safety, privacy, and legal concerns is tantamount to throwing out the baby with the bath water.

## 7. RECOMMENDATIONS

Based on the literature reviewed, the following recommendations were made;

- To lessen the risks connected with the modern era of journalism, media organizations should take every possible step to use drone technology for news gathering and reporting.
- The military, the media, the Federal Aviation

Authority (FAA), and the legislators should work together to develop a suitable policy for the use of UAVs or drones in Nigerian journalism.

- The media should take the initiative to train its journalists in the usage of drones or other unmanned aerial vehicles (UAVs) for efficient service delivery.
- More study needs to be done on this relatively new idea, especially in developing countries, to raise awareness of the various difficulties associated with deploying drones for news collection and reporting.

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