THE INTERNATIONAL JOURNAL OF HUMANITIES & SOCIAL STUDIES

The Usage of Smartphone Photography and Its Impact on Professional Photography in Ghana

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Abstract:

The focus of the study was to explore and examine the effects of smartphone usage on the services of professional photographers in Ghana. The study employed interview, focus group discussion and observation to gather qualitative data from six (6) professional photographers in Sekondi/Takoradi metropolis of Ghana. The purposive sampling technique was used to select the participants as well as the study areas. The study revealed that the adoption of smartphone photography is increasingly becoming pervasive and trendy in the midst of professional digital photography practice, such that both professional and non-professional photographers express their delight in the technology. The findings revealed that in Ghana, majority of people adopt and use smartphones for photography for various reasons, the convenient and easy accessibility of the smartphone in taking photographs and perceived usefulness of smartphone technology in photography. The study also revealed that the usage of the smartphone tends to have a significant effect on professional photography, such as the training for the practitioner, patronage of professional photographic services, competition and battling for space at programmes. Despite the challenges the emergence of smartphones has increased awareness and the demand for photography thereby promoting personalised digital photography. The study, however, concludes that by and large, smartphone photography has emerged to thrive in the social system. It is recommended that professional photographers should adopt mobile application technology to enhance their activities, build their business and take advantage to extend their professionalism into smartphone photography.

Keywords: Digital camera, smartphone, photographers, professional photography

1. Introduction

The practice of recording events of the world is inseparable from human lifestyle and man has always recorded events of his time in the form of drawings, paintings, sculpture, amongst others and more recently in photography. Our knowledge of the prehistoric and most of the ancient world has predominantly been figured out from the paintings and sculptures they left behind. These paintings and sculptures give some understanding into the early man's world view and his place in it. Those cave drawings are really important artefacts in enlightening the inexplicable lifestyles and beliefs of the 'mysterious' cave men. The cave-art, therefore, serves as some of the best means of showing the interaction between our early developmental ancestors and the world as they perceived it at their time.

Since time immemorial painters and sculptors had expressed ideas, concepts, and events of their time in their art in manners that words have been incapable of. By so doing art has always held an important role in humanity by influencing our outlook, beliefs, attitude, and opinions, amongst others. This practice still continues today, though not as much as it used to be, at least not solely dependent on painting and sculpture as technology has introduced many methods of recording events. One such technology is photography. While the painter or sculptor makes a series of skilful and painstaking actions to construct an image that represents the illusion of motion and life, a photographer can in no time and with hardly any effort, faithfully and directly record each itsy-bitsy frozen movements of the subject into motion pictures. This is indeed a tool initially thought of by many including some painters, as taking the place of the artists. Hence, Chun and Keenan (2006) and Lovejoy (2004) asserted that with the invention of photography many artists of the time feared photography would replace painting; and especially itinerant portrait painters. Thus, they quoted one popular painter, Paul Delaroche, saying in 1839 that 'From this day painting is dead'. This was because photographs had a great accuracy barely possible in paintings and cannot be weighed against for recording facts. In actual fact, photography did not take over paintings as was feared but rather concurred and complemented the efforts of paintings: for later some painters used the photographs of their clients to paint.

Epistemologically, Photography is a word derived from two Greek words 'fos'- meaning 'light' and grafo 'to draw', which together means 'drawing with light' (Osterman and Romer, 2018). The authors emphasised that the word was first used by the scientist, Sir John F.W. Herschel, in 1839. It is a method of recording images by the action of light, or related

radiation, on a sensitive material. Photography is like learning to write and it is a wonderful means of expression. McNamara (2012) averred that photography has not been clearly defined as a science or an art. However, the use of the term in creative endeavours perfectly fits into the context of visual communication to be defined as a universal tool for communication as expressed by Ballenger (2014). In the opinion of Germen (2014), visual communication is an ancient way of communication that emerged through the Palaeolithic drawings of the Lascaux Cave. This author, however, revealed that this form of communication is not a novel practice.

The evolution of photography is traced to the primitive way of making image in figurative painting and its derivatives in analogue photography using camera. The camera obscura was used as the first camera during the Renaissance to reproduce scenes for the basis of reality drawing and painting. In this historical development, photography is seen as a retrospective culture of humankind where textual explanations are not given to images when communicating. Today, digital photography has made a pervasive stride into the activity of photography undertaken by skilled and unskilled persons. This is because since its revolution, the concept of digital photography has been seen to be instrumental in image creation as reported by Dzukey (2015). According to Winston (2013), the evolution of digital photography has brought about advancement in the technology of image capturing and sharing through the use of the smartphone and other digital devices such as cameras, which capture images onto a light sensitive Charge Couple Device (CCD), as well as non-photographic equipment such as computer tomography scanners and radio telescope.

The technological derivative of digital photography is however considered as one of the technologies of imaging that has made image creation easier through digitisation. Winston (2013) therefore established that this is advancement in the technology of imaging. This digitisation has led to democratisation of image capturing processes and greater visual literacy. In other words, it has made photography a common practice whereby almost everyone takes pictures anywhere, anytime and any day. According to Freeman (2011), the democratic photography explains the notion that photography images can be produced by everyone without restrictions and boundaries, at anytime and anywhere. This supports Pauwel's (2008) assertion that the visual culture makes it possible to photograph anything.

It is accepted that in modern era, digital photography as a visual communication tool, was perfected through experimental stages by manufacturers and trade-oriented media characterised by digitisation of the traditional analogue photography. As asserted by Meyer (2008), based on the several debates about the subject of digital revolution, this is regarded as a replacement of the analogue process of image capturing by a computerisation process. Busch (2006), however, said there has been a tremendous improvement since the transition from analogue to digital photography.

Nowadays, the integration of digital camera into mobile phones has made digital photography easier for smartphone users to perform visual communication activity, in sharing digital photography since it does not require developing and processing of films (Kano, 2001). This culture of visual communication is now the simplest way to disseminate visual information. Nowadays everywhere one goes one will find many people engulfed in their phones enjoying the messages, usually pictorial messages on the net and other social media. The smartphone has been described by Nunoo (2013) as a mobile device which has exclusive features that distinguish it from traditional mobile phones.

In the view of Maeda (2012), the use of mobile phones suggests that the gadget is for personal, social and economic use as well as being convenient to be carried on a person. This infers that mobile phone is not just a technological advancement but it is also considered to have a close relationship with the users. Scott (2008), however, revealed that some users are of the opinion that their mobile phones are an extension of themselves. In brief their mobile phones are part and parcel of their being. This symbolic significance is explained by Scott (2008) as the rationale behind the handy nature of the mobile phone.

Gennuth (2012) explained that since Steven Sasson developed the first digital camera in 1975, it has been integrated into several devices including the smartphone and other devices such as laptops, web cams, mini drones, goggles (spy glasses), pens, buttons and wrist watches. The integration of the digital camera into these devices has been argued to contribute to skilled and unskilled people involved in photography for visual communication as confirmed by Kano (2001). Germen (2014) affirmed that the percentage of 'amateur' photographers were, by far, less before the digital revolution. However, the ratio has relatively increased in the epoch of the digital era.

Currently, there are mobile devices that capture images of high quality. The use of smartphones for photography seems to have dramatically changed the landscape of professional photography with regard to the processes of capturing, processing and distribution of the images. Presently, photography processes have changed substantially, so analogue cameras are not necessarily needed to create and distribute images. It is clear that some of the concepts have also changed, as the idea that sharing is better than owning the images, without stopping to think of the image as such, just thinking about the production of images. This has been possible due to the changes experienced in the process of creating and distributing images. This leads to excessive production and sharing of images.

The huge demand for photographic information has revolutionised mobile phones, including smartphones, into devices with more advanced connectivity and functionality. Billieux (2014) confirmed that it can no longer be suggested that mobile phones offer exclusive verbal communication between two individuals. This is because the latest generation of mobile phones including smartphones, has an advanced operating system which can perform many of the functions of a camera. It is no wonder that smartphones have become such an integral part of modern society, with people constantly immersed in their virtual world. It is for this reason that the adoption and dependence of the smartphone devices appear to be increasing every day in many countries, including Ghana. Although digital cameras are popular, it is the mobile phone, especially the smartphone, which brought digital photography to the masses.

Germen (2014) revealed that the launching of the smartphone has generated self-confidence among amateur photographers who felt more poised to take photographs, since it offered more possibilities of fixing mistakes as it is not a

'professional' apparatus. There is, however, a perception that the smartphone device has introduced another dimension of the way photographs are created, edited, sequenced, and shared. Based on these facts, Ito and Okabe (2003) argued that smartphones are permeating, special, perceptive and visually connected to scenes and subjects of different photographers. It is light, portable and indispensably useful as it enables the photographer to use the device more frequently.

The study of Germen (2014) further argued that more professional photographers, reporters, journalists, even artists of different interests take the device more seriously due to its numerous advantages. It enables photographers to shoot photos without people really understanding where they aim at and what they photograph. In support of the views expressed by the various writers, we emphasise that photography, and for that matter smartphone photography, has really added not only to humankind's expressive and documentary capabilities but also has broadened the scope of people who are engaged in these activities and hence put to the fore anything unthinkable on the table for public consumption, whether good or bad, acceptable or deficient, decent or debauched.

Smartphones have become so vital in our daily lifestyle. A general look at our world today without a smartphone will give an irresolvable impression, though not long ago there used to be nothing of that sort. Smartphones enable people to create their own micro-cultures, thus helping them to expand their social and business horizon. Mobile phone devices, by and large, have radically changed habits and usages of photography especially since the advent of cameras in cell phones. It is for this reason that the incorporation of a good camera in a mobile phone device has become an essential aspect when deciding to purchase a phone.

The use of mobile phone cameras has become usual, offering a variety of possibilities. Taking into consideration that some of these devices have high technical performance, they have become essential for the vast majority of smartphone users. Their applications have changed all the processes of recruitment, development and distribution of photography; so that all processes previously performed in analogue camera systems are currently performed digitally. This trend as witnessed in the mobile phone technology seems to be affecting the patronage and services of professional photographers.

The professional photographer had always been at the forefront of photography, especially in Ghana. This was perhaps due to the rare nature of the camera then, it could also have been due to the cost. The professional photographer was called on anytime there was an activity, be it private, social or public function. They virtually kept their ears on the ground to the happenings of the moments to make some good money out of situations. They were in the churches, schools, and practically every social and public gathering. Some institutions employed photographers. The newspaper publishers and television stations were always depending so much on the photographers for either still pictures or mobile pictures to enhance the stories they carried. They were employed in the military, the police and other security services due to the peculiar nature of the photography jobs then and the technical knowhow needed in the profession. In brief they were needed almost everywhere.

The professional photographers were the first hand information conveyors. They had vivid and empirical evidences of situations. They were always present during programs and so with the pictures in hand they were the carriers of first-hand information. Because they were always around where there were programmes, they were usually the architects of information disseminations. In effect the professional photographers were the record keepers of their time. Despite the remarkable successes chalked up by the photographers, it appears now that the advent of the smartphone is putting the profession at a bay. This is because the coming of the smartphone has made many people capable of taking photos of their own, including selfie, and hence questions whether the profession is at risk or on the surge. In other words, the interest of the masses has been awakened by the smartphones due to their availability and whether this has had a positive or negative repercussion on the profession as more and more people are demanding pictures in one way or another.

On another hand, despite the remarkable uptake and potential benefits of smartphones, they are not without their disadvantages. Very few studies have investigated smartphone adoption and usage for photography, and even fewer studies have empirically tested the adoption and usage of smartphones for professional photography. It has therefore become very relevant to conduct a study on the impact of smartphone usage and its effects on professional photography in Ghana. The main objectives of this study are to explore and examine the user experiences of the smartphone in relation to photography and determine its effects on the services of professional photography in Ghana. In order to achieve the above objectives, the following questions need to be addressed:

- Why do the adoption and usage of smartphones for photography appear to be increasing in Ghana?
- How has the usage of smartphones affected the activities of professional photography in Ghana?
- By these questions, the study focused mainly on the effects of smartphone usage for photography and the challenges faced by professional photographers.

The significance of this study is in determining the challenges professional photographers face with the advent of smartphone photography and make recommendation of measures that can be applied to enhance the use of smartphones to promote the activities of professional photographers in Ghana now and in the future. Similarly, as lecturers at the department of Graphic Design Technology in Takoradi Technical University, it is hoped that if smartphone photography is better understood, we would be better equipped with information and put down effective interventions that will help improve upon the photography studies offered to meet current trends. This research will also further validate the result of previous researches on smartphone photography in Ghana.

1.1. Theoretical Framework

This study drew inspiration from Technology Acceptance Model theory (TAM) (Davis, Bagozzi, and Warshaw, 1989). The TAM is an information system theory that models how users come to accept and use a technology. This principle simply explains the fact that when a technology emerges, a number of factors and considerations influence the users in taking decisions about how and when they will use it. The TAM was developed based on two theoretical constructs of 'perceived ease of use' (PEOU) and 'perceived usefulness' (PU) of technology, Aldas-Manzano, Ruiz – Mafe, Sanz – Blas, Lassala - Navarre (2009). PEOU, as explained by Davis, et al (1989), is the degree to which a person believes that using a particular system would be free from effort. And he defined PU as 'the degree to which a person believes that using a particular system would enhance his or her job performance'. Various impact studies have essentially used TAM to explore the relationships between different variables that describe the attitude of people toward the adoption of a new or particular technology. This consequently means there are several studies that have adopted the TAM to study the adoption of technology or assessing its usefulness.

2. Methodology

The study is purely Qualitative which generated narrative or textual descriptions of the phenomena under study. Qualitative studies offer prospects for the exploration and description of phenomena in situ via multiple data sources (Baxter and Jack, 2008). The phenomenological study and case study approaches combining various methods of data collection were employed to gather in-depth information on human experiences within the delineated area of Sekondi-Takoradi metropolis to answer the research questions. Phenomenological study attempts to understand people's perceptions, perspectives, and understandings of a particular situation (Leedy, 2005). Leedy explained that phenomenological study tries to answer questions to gain a better understanding of the experiences of others. The design therefore assisted the study in conducting all interviews and conversations to solicit people's perceptions, feelings, experiences and sufficient views to address the phenomenon under study. The phenomenon under investigation is smartphone usage and its effects on the services of professional photography. The case is for Sekondi-Takoradi metropolitan assembly. Sekondi-Takoradi metropolitan assembly is one of the six (6) metropolitan assemblies in Ghana and the people share common socio-economic backgrounds with the remaining five. The Sekondi-Takoradi metropolitan case could therefore provide useful insights into nationwide views.

2.1. Population

Fraenkel and Wallen (2000) explained a population as any group of individuals that have one or more characteristics in common. This may be generally a large collection of individuals, objects, and items which may be the main focus of a scientific query. The population was individual professional photographers using Professional Camera (Digital Single Lens Reflex –DSLR or SLC). For the purposes of this study, a professional photographer was considered to be any person who has acquired a standard of education and training or a particular knowledge and skills training necessary to render photography services to earn a living. These people, in most cases, belong to an association and are guided by a code of ethics. These categories of professionals meet the criteria to be selected as participants, because aside their professional practice as photographers, they are known to have experienced the use of smartphones for digital photography thereby contributing to the phenomenon under investigation.

2.2. Sampling

Creswell (2007) stressed that the philosophical position of a study depicts how a researcher would purposefully select the participants and sites for the study. Since the nature of reality and knowledge about the phenomenon is paramount to determining the participants, the purposive sampling technique was used. The purposive sampling technique was adopted because of the type and quality of information needed and the participants are very knowledgeable to give the requisite information needed to understand the research problem. Six (6) participants were selected from professional photographers using DSLR Camera and Smartphone. This sample size was considered since the study is essentially a qualitative study and its strength is not embedded in the numerical data gathered but in the quality of the information sought for in the research.

The main concern in phenomenological research is to give full appreciation to each participant's account (case). For this reason, samples in phenomenological studies are usually small. This offers an opportunity to learn a lot about the individual, his or her response to a specific situation, and consider connections between different aspects of the person's account (Smith, 2004).

2.3. Data Collection

Creswell (2007) posited that in phenomenological study, the major data gathering method involves primarily in-depth interviews with participants. The primary concern of the study is to elicit rich, detailed, and first-person accounts of experiences and phenomena under investigation. Research data was collected using semi-structured interviews, focus group discussions and observations. A semi-structured interview is a technique for generating qualitative data and is characterized by open-ended questions that are developed in advance and by prepared probes (Morse & Richards, 2002). In the semi-structured interview, the interviewer has a set of questions on an interview schedule, but the interview is guided by the schedule rather than dictated by it; the interviewer is free to probe interesting areas that arise from participants' interests or concerns (Lindlof & Taylor, 2002; Smith & Osborn, 2003).

To ensure that a broad coverage of issues was achieved during the interview, the researchers asked focusing but not leading questions about their situation and listened carefully to the participants. The semi-structured interviews allowed the researchers and the participants to engage in a dialogue in real time. It also gave enough space and flexibility for original and unexpected issues to arise, which allowed us to investigate in more detail with further questions. We prepared an interview guide which consists of a list of questions that allowed us to consider the range of issues that needed to be covered during the interviews. The guide included key questions or areas that reflect the demands of the main research questions. Open-ended and expansive questions were developed around the research aim to encourage participants to talk at length. The variables asked were meant to solicit and explore participants' thought and perception individually on how the usage of smartphones for photography has affected the activities of traditional professional Digital Photography using DSLR camera in Ghana. Marshall & Rossman (2006) reiterated that the purpose of a phenomenological interview is to describe the meaning of a phenomenon that several individuals share. Hence, personal visits were made to the respondents in their respective studios to have face to face interaction with them. The duration of most interviews was long.

Similarly, personal visits were made to some public and social gatherings including marriage ceremony, outdoor and naming ceremonies of newly born babies, church programmes, funerals, among others, to observe how smartphone users and professional photographers operate during such programmes. Focus group discussions with the consenting photographers after such programmes were useful for obtaining information on collective views and generating a better understanding of participants' experiences and why they held particular views on the effects of smartphone usage for photography. Observations made in this area were recorded and documented.

2.4. Data Analysis

The data was analysed by following both descriptive and interpretive phenomenological (IPA) data analysing procedures. Fade (2004) emphasised that IPA can be used to analyse data from one-on-one interviews in order to develop rich descriptions of human experience. To buttress this Pringle, Drummond, McLafferty, & Hendry (2011) asserted that IPA emphasises the importance of individual account. These assertions imply that the intention of using IPA is to try to understand the content and complexity of meaning in respondents' experiences. This study aims to seek in-depth information regarding how the users' experiences of the smartphone has affected the activities of professional photography in Ghana. Therefore, the descriptive and IPA approaches were more appropriate to develop rich descriptions of participants' experiences on smartphone usage and its effect on the activities of professional photographers in Ghana. The general procedure of the phenomenological analysis started with bracketing our subjectivity which means our prejudgments and predispositions towards the phenomenon were set aside. The initial stage of the data analysis began with multiple close reading of the original transcript a number of times and making notes about our observations and reflections about the interview experience. The notes were later transformed into emerging themes. The next stage was seeking relationships and clustering of themes. At this point the connection between emerging themes were sought out, grouping them together according to conceptual similarities, and providing each cluster with a descriptive label. Some of the themes which did not fit well with the emerging structure or having a weak evidential base were dropped at this stage.

2.5. Validity Considerations

Validity of qualitative research refers to the trustworthiness of the data interpretation. Validity of research ensures that the findings provide valuable information obtained from the appropriate implementation of the research method. Sale (2007) emphasised that researchers need to suspend their predisposition during data analysis. Hence, after acknowledging that our own interpretations might influence the data analysis, we needed to introduce measures to enhance the trustworthiness of the data analysis. Colaizzi's data analysis method that calls for the validation of results by returning to study participants as pointed out by Polit and Beck (2010) was employed to ensure that participants' experiences were correctly interpreted. As a phenomenological study that aims at gaining an in-depth description of the experiences of participants, several measures were taken to address the validity of the study. First, the bracketing process was utilized to avoid making personal judgments throughout the study as suggested by Ashworth (1999). According to Kvale (1996), presupposition in bracketing process cannot be always avoided therefore 'member checks' as mentioned by Merriam (1995) was used as another measure of validity. In this process, the verbatim files were sent to the participants to crosscheck their responses. Similarly, after cleaning the verbatim transcribe the horizons were sent to the participants as co-researchers to validate that the findings reflect their perceptions of their experiences. These procedures helped the participants to ascertain if their answers to any questions needed rectification, and ensure that the researchers have not misinterpreted the data.

3. Results and Discussion

This section specifically presents a comprehensive analysis of the data and the interpretation of the findings of the study. The data collected was guided by the research questions put forward for the study to generate emerging themes to reflect the main objectives set out for the study. The data retrieved from the study are therefore categorized and represented in a descriptive form. In all, three themes were developed and each theme is described and exemplified with verbatim extracts from the in-depth interviews, followed by interpretative commentary of the researchers. The emerging themes from the findings in effect, are discussed under the following:

- Ownership of the smartphone
- Adoption and usage of the smartphone for photography
- The effects and challenges of the usage of the smartphone on professional photography.

3.1. Ownership of the Smartphone

All the 6 participants representing 100% who are professional photographers own and use smartphones apart from the professional DSL or SL camera. In an attempt to justify why participants own smartphones, one said:

I have a smartphone, and always have it with me because it has become part of my life and an absence of it makes me heavily deficient to be missing out a lot of mobile technology a phone in this era ought to afford its user.

Another respondent reiterates that *'the smartphone certainly puts the world in my pocket'*. It is envisaged from the responses that owning a smartphone gives one the opportunity to explore its technology and manipulate it to perform other tasks apart from the call services it provides. The implication of these findings is that ownership of the smartphone is influenced by its technology. The moment one owns a smartphone there is the possibility for the person to learn more about its operational functions and adopt it.

This finding is a significant contribution to theoretical literature on technology adoption where ownership can be introduced in a technology adoption model as a moderator. The ownership pattern, ascertained among smartphone user participants of the study, is confirmed by Dzukey (2015), who also found out that there is an increasing level of smartphone usage in Ghana due to its ownership. Dzukey further added that smartphones are an upgrade to technology that some mobile devices initially had. Besides, the smartphone has made it possible to do a lot of things like interacting on social media such as Facebook, twitter, imo, through chats, video calls, and audio calls among others. The study further establishes that one of the features that make smartphone photography appreciable is its reasonable ownership. Many people who use their smartphones to capture images own them and have reasonable access to them. By this development, the smartphone photography is seen to be promoting a society which is gradually moving visual communication technology through facilitating transfer of images via the internet. Frascara (2004) emphasised that the quest to share pictures and tell stories through them creates a concept of visual communication.

3.2. Adoption and Usage of the Smartphone for Photography

Trying to rationalise the reasons why, as professional photographers they deem it fit to possess and use smartphones, the following clustered themes emerged.

- Convenience and easy accessibility of the smartphone in taking photographs.
- Perceived usefulness of smartphone technology in photography.

3.3. Convenience and Easy Accessibility of the Smartphone in Taking Photographs

Participants indisputably opened up to the fact that they find it more convenient moving with and using their smartphones for photography rather than the professional camera. This finding supports the assertion by Cruz and Meyer (2012) that the preference for the smartphone for digital photography is due to its convenience and people's delight for technology. They argued that since the smartphone provides users with the preferred convenience in association with emerged technology, it has impacted positively on the acceptance of digital photography. A participant affirmed his choice of using a smartphone for photography by saying this: *'I find it too convenient to use a smartphone camera readily and also the smartphone has ease of access.'* Another participant shared a similar view and said that

The smartphone is preferable to the professional camera. It is easy to use the smartphone unlike the professional camera. I find it more convenient to carry a smartphone and use it with much ease in taking a photograph.

The study found out that the respondents use smartphone because it is convenient to carry along and much easy to use in taking photographs. In the opinion of participants, they use smartphones because of the ease and effortlessness by which one can access images of one's interest or take pictures: This finding apparently is linked to the Technology Acceptance Model by Davis, Bagozzi, and Warshaw (1989) which talks about the 'perceived ease of use' and 'perceived use' beliefs and principles. Davis et al. illustrate that the 'perceived ease of use' defines the level of belief that an individual attaches to the use of a particular system. The 'perceived ease of use' is viewed as a paramount feature of consideration in promoting adaptation of innovation. Similarly, the findings support Cooper and Zmud's (1990) assertion that the reason why people adopt new technology is because it affords effortlessness in use and facilitates processes. It infers that the reason why people like to use the smartphone for photography depends on how easy it is to use the technology. Cudjoe, Anim and Tetteh (2015) emphasized that the adoption of the smartphone for photography is more likely to occur if the process of usage is easy for people. It is therefore not surprising to see majority of people including professional photographers possessing the smartphone to supplement their activities nowadays. This observation affirms the findings of Mahmood (2013) and the report by Wireless Phone Reliance in 2001 as cited in the study of Addo (2013) that smartphone usage is spreading very fast, especially among younger generations. The use of smartphones is seen as an upgraded technology that has more or less become a culture where people take photos and share these pictures which depict feelings and moods of users and other natural and artificial exquisiteness. Kleijnen, De Ruyter, & Wetzels (2004) reiterated that the perceived use makes a user of the smartphone find it convenient in integrating the smartphone into their daily activities since it affords them ready and easy accessibility anytime and anywhere.

3.4. Perceived Usefulness of Smartphone Technology in Photography

In justifying further the reasons why participants adopt and use the smartphone for photography, it was attributed to the perceived usefulness of smartphone technology in photography. Users considered the extent to which the smartphone technology makes it possible in processing photographs instantly and readily to enhance their job performance. This affirms Ismail, Kit, Chan, Buhari, & Muzaini's (2012) view on the perceived usefulness of the smartphone as the extent to which users feel that the use of the smartphone would improve their ability to perform their tasks in photography. A participant elucidated his thought by saying:

Smartphone photo is economical since it is highly inexpensive to take and with the same phone the photo can be transmitted immediately to feedback. Even one can advertise a product or item quickly on social media or via e-mail to boost businesses, therefore there is no need to go for a professional camera which is not more interactive as the smartphone.

Another participant, in an attempt to justify his preference for the smartphone as compared to a professional camera has these to say:

The smartphone has become part and parcel of my movement and hence serves purposes far beyond that of the professional camera such as receiving calls and sending even pictorial messages that have been captured. Special moments can be captured anywhere and at every time. Therefore, in as much as a smartphone is a mobile device and hence can be carried anywhere and can be used for multi-purposes, the professional camera has very limited functionalities and hence rarely used as a mobile device.

These responses are clearly an endorsement of the fact that the smartphone is speedily getting the acclamation in this world of ours. A participant even stated that he hardly carried his DSL Camera, after acquiring the smartphone unless he was officially invited to cover a programme. He further said he had on occasions covered events he was not informed about ahead of time, with his smartphone and the results gotten were equally impressive. He then holds the view that a quality smartphone can in the same way as the professional camera do excellent jobs. This finding buttresses Kleijnen, De Ruyter, and Wetzels' (2004) assertion that the perceived use makes a user of the smartphone to find it convenient in integrating the smartphone into their daily activities since it affords them availability and easy accessibility anytime and anywhere. The use of smartphones is seen as an upgraded technology that has more or less become a culture where people take photos and share these pictures which depict feelings and moods on social media. In terms of advertising, the use of the smartphone has helped in advertising works or services of individuals and organizations, including professional photographers. Nurfits (2012) emphasised that the smartphone has enabled people to create their own micro-cultures and engage in trade activities through social networks. For instance, smartphones have helped individual artisans to commercialise their activities by sending sample shots of their works to friends and other people through WhatsApp, Facebook, Instagram, etc. It is undebatable today that most authors are convinced that the smartphone is perceived to be the most convenient camera to carry for the reasons that it does not require manual adjustments before taking pictures, it has focus free system, it has digital zoom, it has scene modes that allow taking photos in specific situations (Goodwill Community Foundation, Inc., 2017).

3.5. The Effects and Challenges of the Usage of the Smartphone on Professional Photography

The findings of the study reveal that there were been both positive and negative impact of the usage of smartphone on Professional photography. However, the negative impacts outweigh the positive. The emergent themes are categorized and represented for discussion under the following: -*Training for the practitioner, patronage of professional photographic services, competition and battling for space at programmes and increased awareness of photography.*

3.5.1. Training for the Practitioner

It emerged that smartphone technology has affected the issue of training before one begins to practise as a photographer. Five (5) of the participants confirmed that they had to either go through apprenticeship or had to learn the practice from the school system, as a course, to become photographers. The remaining one said his learning was self-taught but had to really endure the hardship of moving from one photo studio to another just to be briefed on a small skill or steal up some techniques. It therefore implies that the professional photographer needs a lot of time to be trained to be competent enough before one can start practicing.

Participants emphasised that using the smartphone requires no training and claimed they had to experiment with their smartphones by themselves to gain every skill needed in its use because of its interactive technology. A participant stated: *'In today's world who wants to waste his or her time spending years to learn how to take pictures or how to operate a 'simple' camera?'* Another participant also exclaimed he would not have spent three years on apprenticeship in the face of abundance of smartphones as we have now, though he still has a great passion for the practice. In other words, he would have learnt it by himself using the smartphone. Smartphone photography allows the occurrence of visual communication to take place among people who are regarded to have little or no technical skills in photography. This also, however, takes photography from the exclusive preserve of technically skilled photographers to be freely practised by most smartphone users since they are automatically operated. Goodwill Community Foundation (2017) submits that the smartphone does not require manual adjustments before taking pictures, it has focus free system, it has digital zoom, it has scene modes that allow taking photos in specific situations. It is worth noting that practising photography entails a lot of skills which translates into provision of quality photographs. Therefore the acquisition of the basic technical skills in photography through training cannot be over emphasised.

3.5.2. Patronage of Professional Photographic Services

Trying to account for how smartphone usage has affected the patronage of professional photographic services a participant retorted:

In the happy times even sorrowful mood people did employ the services of professional photographers to capture the moments. However, with the advent of the smartphone, the services of professional photographers are seldom acquired. You sometimes find us looking for engagement from people to take photos or wandering about at gatherings looking for people to engage us. We sometimes go to the extent of forcibly wanting to take photos of people at gatherings which are often declined. The smartphone in recent times can capture pretty good pictures that can match, if not outmatch, the cameras used by professional photographers. Because of that we often see people taking any picture by themselves or with the help of friends and share to other friends to tell a story about how they are feeling at an event.

In confirmation of the above assertion another participant narrated:

Our business used to be good. At first, I used to get orders a lot. People especially students normally come to my studio, neatly dressed and request that I take a shot for them. Others in the neighbourhood will call on me to take pictures of them during mini parties like birthday ceremonies or naming ceremonies. But nowadays the frequency of receiving such orders has reduced partly because now people have access to smartphones.

Professional photographic services were the order of the day. It took centre stage during gatherings since every attendant of such gatherings wanted to take a photograph for a fee to put in a photo album for future reference. Inferring from the sampled verbatim account it clearly shows that professional photographic service was highly patronised then but currently, due to the advent of smartphones professional photographers strive very hard to get work an indication of decline in the business. The decline, by and large, in the opinion of the participants, is attributed to many factors amongst which the extensive usage of the smartphone is the topmost. All the participants expressed that many programmes they used to be invited to are now left in the hands of 'smartphone paparazzi', as one respondent puts it. Parties especially for kids, students' field trips, students' birthday parties, beach get-togethers, amongst others, were programmes that used to be bumper occasions for the professional photographers, however the smartphone photographers have virtually taken over the covering of such events.

A respondent said with the exception of wedding ceremonies he no more gets jobs on the otherwise regular Sunday duties at churches as many people make use of their smartphones rather than seeking the expert services of a professional photographer. Another respondent recalled with nostalgia how he used to make good money from 'Masquerading Carnival', an annual masquerading festival in Takoradi during the Christmas Festivities, as well as the annual 'Yesu Asor', a modern festival to usher in the Easter Sunday, which is observed by the people of Sekondi.

A respondent said, 'It has been a while since I covered party programmes though it used to be a major source of income'. It is really a matter of grave concern for all the respondents as they claimed smartphone usage is certainly disturbing the profession. They claimed it has actually had a negative effect on their call up business as it keeps on dwindling. Before these times they could even receive more commissions at programmes as other guests do not have any means of taking photographs unless they consult the professional photographer at the programme to take the needed personal shots which attract extra income.

3.5.3. Competition at Programmes

According to the participants even when they receive call ups they are challenged to compete for photographic space with the smartphone users. participant said:

When I am invited to a function for coverage, I have to battle space with people holding smartphone everywhere interfering with my work. Sometimes, I am compelled to push them away in order to have enough space. It has become a culture and you cannot help but to live with it. This has become a practice that if not checked could create irreparable damage to our profession one day. This profession is my source of livelihood and attending functions and getting intense competition from smartphone users makes sales very appalling'.

Another respondent emphasised by saying this:

Even now the platform for photography is always encroached by numerous smartphone users who compete with us and impede our movement thereby not allowing us time to take photographs from angles and positions we want to take more challenging and unexpected pictures.

Photography especially professional photography has become very challenging recently and hence the study found out that professional photographers compete with smartphone users for space at functions and strive hard to make a living due to terrifying competition from smartphone users. Another opinion also expressed by all the respondents was the economic practicability of smartphone photography. The cost in getting pictures printed is high priced. Thus, in hiring the service of a professional photographer, one will pay for the cost of each printed picture therefore sometimes, people are forced to reduce the number of pictures they truly want, because they may not have the amount of money to pay for that many pictures. Meanwhile most of the pictures that are taken with smartphones are not necessarily printed out but kept on the memory. Nowadays, there is a shift of the storage of these pictures, unlike before when photo albums were the order of the day, now the trending process is to store the pictures on pen drives, memory cards, memories of phones or computers and any other storage materials that can store the soft copies of these pictures till such a time that one wants to have them printed out.

A respondent simply puts it thus:

Why will one be concerned with how to generate money immediately when he or she can go ahead and stuff the money into the organisation of the programme and store the pictures till such a time that he has enough to have the picture printed?

Indeed, participants confessed they have many pictures, some of people's weddings, which are still left uncollected due to financial distress after the marriage ceremony.

3.5.4. Increased Awareness of Photography and Promotion of Personalised Digital Photography

Despite the challenges confronting the photography profession all the participants affirm the fact that the emergence of smartphone photography has made many people photo conscious thereby increasing the demand for photographs. One participant had this to say: *'The demand for photography has rather increased. The smartphone photography has made many people photo crazy thereby increasing the demand for photographs.'*

Majority of people have become photo-conscious and the number of people taking the pictures has also increased significantly inferring that there is promotion of personalised digital photography. Most importantly, majority of people do not consider the issue of quality photography, but only need to have something as a memory of the moment. It is therefore not surprising to see that social network users find it easier to post their self-portraits on social media platforms as a form of self-promotion and self-presentation though it may have typical challenges with negative impressions from their recipients.

There is a raging debate that the widespread use of smartphones has caused the dominance of self-taught and unskilled people in photography. Today it is however impossible to talk about photography without including the amateur photographers. Even though these people are regarded to have little or no formal training, the evolution of digital and smartphone photography tends to put them into the category of photographers since digital photography does not require much technical proficiency. The invention of the digital smartphone photography and the activities of amateur photographers is phenomenal in the intervention of photography, despite the shortcomings. Jacobs, Gallo, and Pulli (2014) emphasise that there is even a greater attention given to the enthusiasm of amateur photographers in actively participating in taking snapshots of themselves and their loved ones at parties, weddings, private rooms, churches, restaurants, and many other occasions without engaging professional photographers.

4. Conclusion and Recommendations

It is undeniably clear to conclude that there is a significant dominance in the level of smartphone ownership and usage in Ghana and the preference for the smartphone for digital photography is due to its convenience and people's delight for technology. Smartphones provide users the preferred convenience in association with emerged technology, it has impacted positively on the acceptance of digital photography.

It can be inferred that smartphones have made a positive and negative impact on the services of professional photography as they have democratized the practice of photography in the given time where one can conveniently take quality pictures with the smartphone without the search of a professional photographer. This has resulted in discord and widespread of exposed nude or sex video on display in the social media. Smartphone users have become insensitive to people's pride by taking shot of anything most of which, by principle, should not be exposed to public viewing. This goes to confirm the findings of Janssen (2013) that the use of the smartphone for photography has a negative effect on traditional professional photography in relation to the objective on the effect of the smartphone on the services of professional photography.

The incredible vibrant field of smartphone photography has become predominantly high due to its effective visual advertising and making use of the social media platform for easy upload of pictures to the business world. Thus, professional photographers face challenges owing to competition and strives to sustain its operation in Ghana based on its technological advancement which has gradually sought for dwindling of businesses at the expense of professional photography.

5. Recommendations

Based on the findings, the following recommendations are made for the important knock-on effect for professional photographers to adopt mobile application technology to enhance their activities and build their businesses. Though it is obvious that technology is getting better at automating the technical features of photography, and that photography is no more entirely reliant on the photographers but also the quality of the camera, be it smartphone, SLR or DSLR camera, and since a professional photographer has an eye for a good photograph, knows the difference between a snapshot and photographic shot, has a better knowledge of the settings of photography and hence can do a better job whether they use a smartphone or otherwise. Professional photographers should take advantage of the smartphone technology to extend their professionalism into smartphone photography. In other words, there is the need for professional photographers to get adequate training, not only with professional cameras but also with smartphones and any other technological changes that may turn up to get them well equipped and be more innovative to cope with changing times.

With the advent of technological advancement, professional photographers should positively subside the pessimism by thinking through the use and surfing smartphone wave, with its benefits of expediency and easiness of publishing, mindful of the old adage which says 'if you cannot beat them, then join them' and perhaps patent their internet uploads.

The era of smartphone photography in visual advertising and on social media platform has come of age therefore should be valued by policy makers in Ghana as far as formulation of good policies to safeguard the photography profession. In coming out with policies on job security and protections as well as maximising government's revenue from tax collection it is prudent to formulate a policy in regard to the professional photographers as they are mostly registered

entities and pay taxes for the development of the state, therefore if they are not properly protected they could be dislocated by the ascendancy of smartphone users and eventually deny the state of very useful financial income. Hence, this could be vital in drafting policies on smartphone photography and how it impacts on the practice of the professional photographer.

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