

A study on the assessment of the Block using SWOT Analysis

Kenneth AJ G. Quilantang, Alphonsus Joseph Nicollo R. Magpantay

Gabriel Angelo B. Dela Cruz, Grace Lorraine Intal

School of Information Technology Student

Mapúa University

Makati City, Philippines

kagquilantang@mymail.mapua.edu.ph, ajnrmagpantay@mymail.mapua.edu.ph

gabdelacruz@mymail.mapua.edu.ph, gldintal@mapua.edu.ph

Abstract

Photography has been part of the human's way of expressing their emotions, feelings, opinions, messages and passion to other people as a form of communication. It is a form of art that needed audience for it to be acknowledge and it is often exhibited on venues such as museums, exhibits, and public displays for a long time. With the existence of internet and social media platforms in the modern era, people have found a way of expressing their ideas and work, which includes photography to online platforms. This study is conducted to determine the feasibility of a web-based photography website to its setting and to know its needs, approach, benefits and competition. In addition to this, this study uses survey questionnaire as the method to determine the strategic approach needed to build the suitable marketing strategies for The Block. The researchers used SWOT Analysis and TOWS Analysis with the support of the questionnaires classified via 6 thinking hats in order to determine and formulate the strategic approach needed by the platform. This study successfully formulated its possible approach in order to improve The Block's competitiveness with its competitors. The researchers found out that they have to deploy some professional photographers initially on the website and improve its UI/UX design of its website to attract more users and be more known to the public.

Keywords

Photography, Web application, 6 Thinking Hats, SWOT Analysis, TOWS Analysis

1. Introduction

As a means of visual communication and expression, photography has discrete aesthetic abilities. So as to achieve understanding them, you must first understand the component of the way itself. According to Gernsheim H. et al. (2020) the most essential elements of the image are usually seen instantly when time of exposure. It is a unique characteristic of photography because it stabilizes it separately from the other photo making method. We have countless photographs that are being produced every day. Imagine having a 1% of the world population would be taking pictures and upload it online there will be a 70 million pictures that will be produced. It cannot handle by a few large websites or application if every day we had to experience it.

According to Pogrebin (2020) in the year of 2017 many have realized how much business gone through online previews before art fairs. Many museums are closed; art fairs are cancelled due to the pandemic situation. "If galleries are closed, how can we sell art? The online platform is something we have envisioned as an important part of what we do." Mr. Zwirner said. This kind of virtual experience would be a huge growth especially for the art and photography system. Most of the galleries today are web-based works and curated online exhibitions.

A proposed system, "The Block" one of the web-based application that enables users to upload photographs to be displayed in public. It allows artists or photographers to reach more people using this website. This website allows users to upload and view photographs or images in a timeline manner.

Sample screenshots of The Block

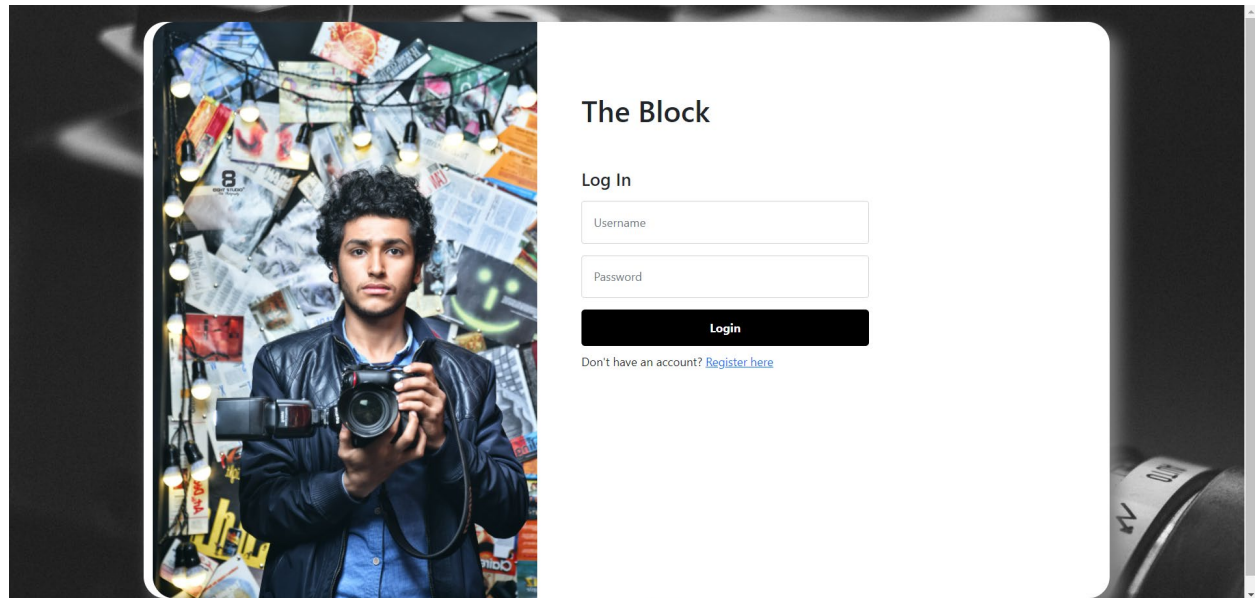


Figure 1. Login page

Figure 1 shows the login page of the platform – The Block. This is where the users land on the page wherein they can sign in their accounts or sign up for a new one.

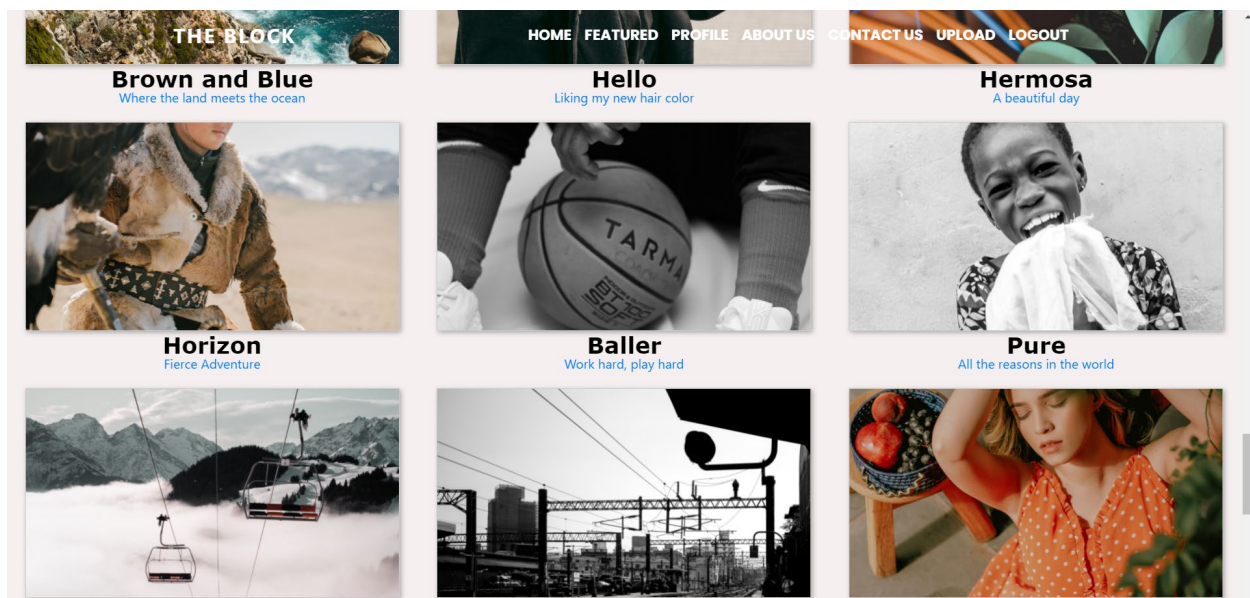


Figure 2. Gallery page

Figure 2 shows the gallery page of The Block. This is where the photos are supposed to be showcased to its users for them to see. It is displayed in a 3x3 grid view and shown at a timeline manner.

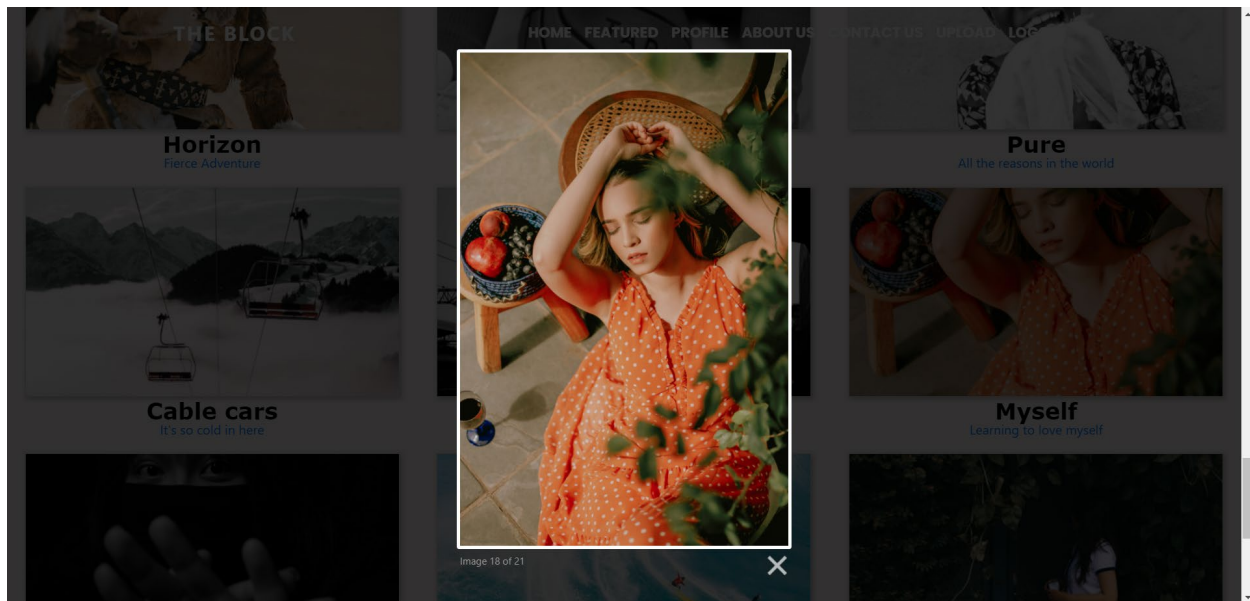


Figure 3. Image lightbox view

Figure 3 illustrates the view of an image in the gallery page when clicked by the user. The single image clicked is presented in a lightbox view to see the image whole and clearly.

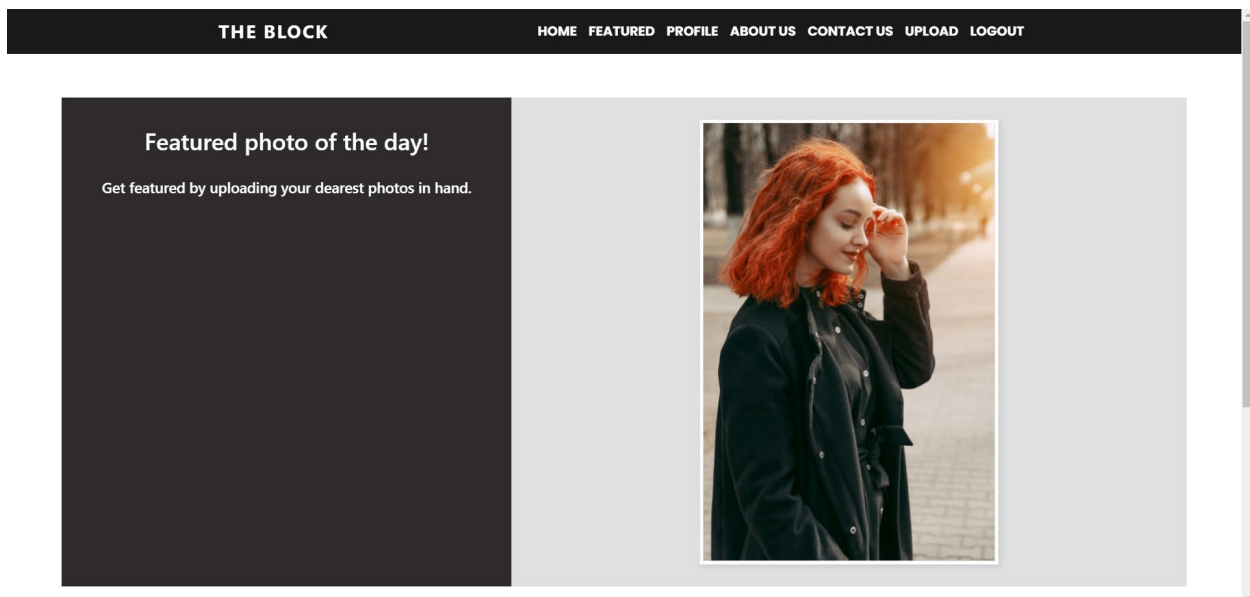


Figure 4. Featured photo page

Figure 4 shows the page wherein photos are supposed to be featured on a time basis. This page showcase a single photo to be seen by everyone in The Block by having it featured on a dedicated page.

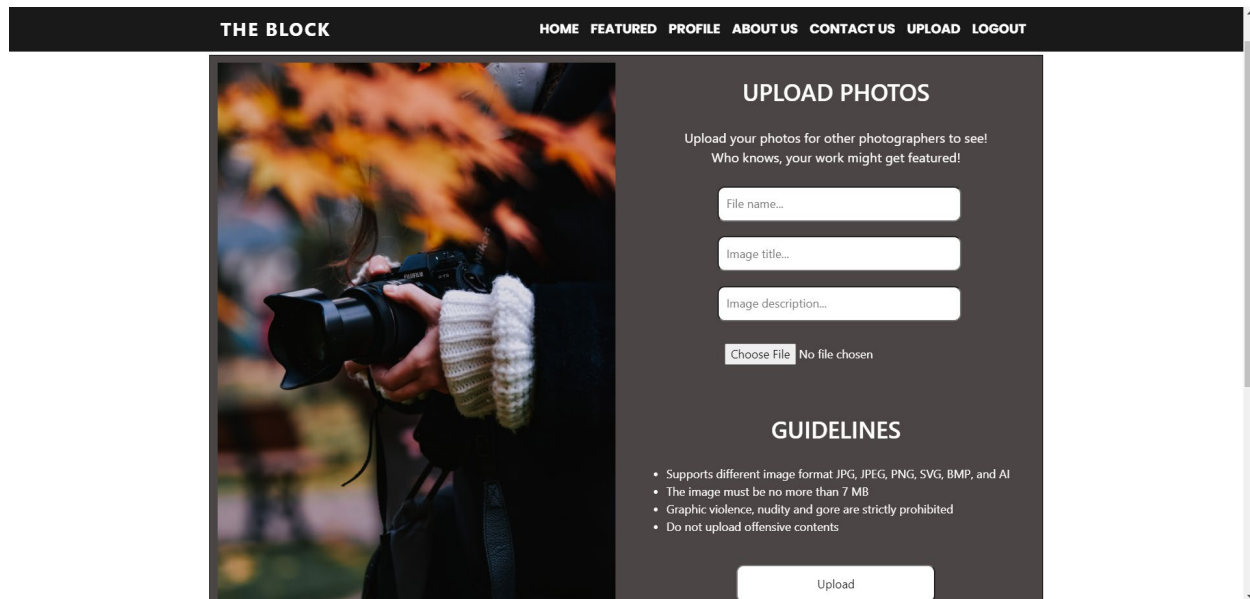


Figure 5. Upload page

Figure 5 shows the upload page of The Block. For a user to upload a photo, they have to specify a file name, title of the image, and a description before it gets uploaded in the platform. There are also some guidelines that they need to adhere for the image upload process.

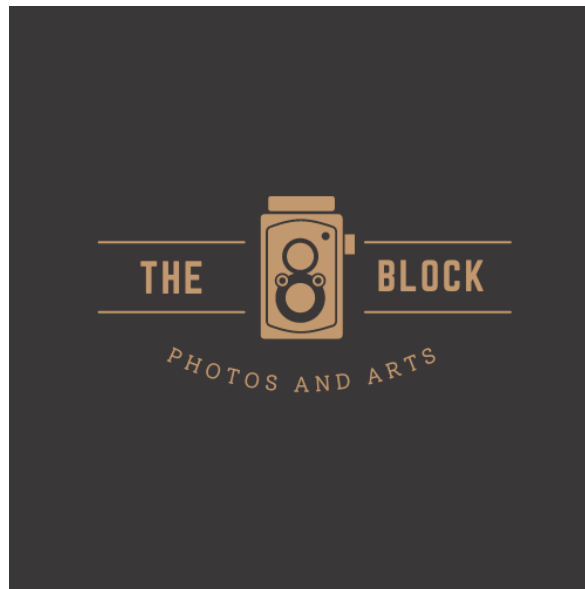


Figure 6. Business Logo

Figure 6 shows the business logo of The Block designed by the researchers for the platform's own identity and business emblem. The logo is to be used for its promotion and usage on the platform's activities.

1.1 Objectives

The researchers formulated the following objectives for this study:

1. To determine the strengths, weaknesses, opportunities, and threats of The Block
2. To establish the strategies necessary for The Block using TOWS analysis

3. To determine which features must be improved on the platform of The Block

2. Literature Review

2.1 Content-based Synchronization

A study conducted by Broilo, Boato, and De Natale is all about a content-based synchronization wherein the process of getting an accurate timestamp from the for the old and modern digital cameras. There are various application or tools that are available to organize and share of all your photo galleries. Since timestamps is one of the most valuable data to sort and order photos, this becomes the most particularly problem of every individual user. It is quite common especially in a large scale of occasions, where associated communities share their own contents to create a unique chronologic storyboard of a joint event. Wrong setting from the camera can affect the timestamp stored in pictures so de-synchronization always occurs. Manual recovery of the synchronization is a time-consuming work, and the results may be inaccurate if no significant triggering instants can be found. So, this study proposed an algorithm where the maximum possible number of pairs of similar pictures among different galleries will be obtain, thus it will allow a reliable synchronization of multiple photo collections of the same event or occasion. Photo pairings will be filtered and for the final process there will be a delay for estimating those photo pairs.

2.2 SWOT Analysis for Global Software Development

In a study by Kumar, Sinha, and Shameem entitled: “SWOT: Strength, Weaknesses, Opportunities, and Threats for Scaling Agile Methods in Global Software Development,” it stated there are different agile software development approaches that has been developed and mostly commonly used. Software organizations implementing agile methods in the distributed environment to obtain numerous benefits. One of the objectives of this study is to propose a framework based on the aspects for effective scaling of agile programs. There are two stages to be considered. The first stage is Systematic Literature Review (SLR) that is a protocol utilized to examine the factors. Next, the second stage is SWOT analytical framework that classify the factors in four types: the strengths, weaknesses, opportunities, and threats. This SW or strength and weakness represent the internal aspects and the OT or opportunities, and threats signify the external aspects. This SWOT framework will assist the agile readers to have a successful scale agile development. Distinct phases of every stage will be helpful to those who will follow those techniques. The researchers also conclude that this agile software development is beneficial in today’s global software development scenario.

2.3 Application of de Bono’s Six Thinking Hats

Albregts, J. (2017) aims to apply the de Bono’s Six Thinking Hats that he learned during a creative thinking training. Having a task to organize a strategic planning meeting and after successfully finished the training the researcher has been convinced to recognize the opportunities and applied those skills he has obtained. Utilization of the de Bono’s Six Thinking Hats was a great idea for their presentation. It concludes that using creative tools like this has a huge positive effect. All innovation is being prioritized and evaluated based on “do-ability versus impact.” The session about reasoning offered the insight necessary to move initiatives toward high impact / low cost. It also shown that another presenter is impressed with the Six Thinking Hats they used. Various companies use the de Bono’s Six Thinking Hats including Compaq Computer and newly introduce to the Hewlett-Packard or HP. The accomplishment of the using de Bono as a tool for the quality program has spread to numerous divisions and segments of the new Hewlett-Packard/Compaq conglomerate.

2.4 Business Opportunity for Wedding Photography in Bandung City using Porter’s Five Forces Analysis: Case Study of The Lunar Story

The study attempts to determine and analyze the factors regarding the competitive advantages that exists between the companies in the wedding photography industry in Bandung City, and how it is used to be the strategy against one another. The researchers used a qualitative research method in this study, and they also used Porter’s Five Forces Analysis Model for the statistic analysis together with SWOT, Strengths, Weaknesses, Opportunities and Threats Analysis for data comparison. The business used the Lunar Story as the core value of their love storytelling photographers, in which it has a good relationship with supplier vendors so it became the strength of the business. For weakness, The Lunar Story is a weak entrant thus it has low brand awareness. For the opportunity, it was stated that the wedding photography industry in Bandung City is very high thus it can be a reliable advantage for them, even though having competitors like Nesnumoto and Polar Photography used the same concept. In conclusion, the researcher determined that the photography industry is applicable and promising due to new entrants and low initial

investment value. The only challenge that they have to face is to maintain and make the business more sustainable in the future.

2.5 Rebranding Photography Business

This research, a bachelor's thesis in Business Information Technology, by Jouni Hietanen is all about finding the suitable business marketing plan for their new startup photography business. It comes down to formulating the perfect branding from creating logos, renovating their website, and discovering what are the exact products and services will be offered. The methodology that they used in their research are survey and innovation. Other solutions are also utilized alongside the used of questionnaires to determine the profile of the respondents of the study. Their general objective to accomplish their end goal is to become a well-known brand of photography business not just locally or domestically but in the worldwide market. Another objective of this research is to make photography become a full day source of income for workers outside the summer season in Finland wherein photography businesses are in demand. This research has come out of strategies in order to succeed with their objectives, some of them are utilizing the Facebook business site in order to get more audiences and clients in their business. Other social media websites used are promoting platforms are YouTube, Instagram, Snapchat, and Twitter. 6 thinking hats can also come to play in analyzing the value of employing online social media to gain the interest and attention of potential customers into play. In conclusion the innovation, survey and questionnaires used are proven to be effective as the outcomes relative to their objectives are perfect. Also, the utilization of Facebook live feed proved to be effective as the reach of their page multiplied by using it.

3. Methods

The researchers used online survey as the research methods for this study. The research instrument helped the researchers to determine the quantitative and qualitative data needed to analyze the needs for the design and improvement of the proposed system using the 6 thinking hats question.

The questions are based on the 6 Thinking Hats to measure different perspectives of the 50 respondents and by the help of this process. By using these questions, the team will benefit by knowing their perspectives to visualize the appropriate design and features of this website. Different opinions were also taken into consideration when constructing the survey, since we have 2 type of respondents the photographers and the enthusiasts. The results of the survey would be the basis for the main design, features, and other contents of the website before launching the "The Block" website.

4. Data Collection

In this study, the researchers created a survey to know what the reactions and expectations of a professional photographer and some enthusiasts regarding The Block would be. The tools used to conduct this survey is Google forms that was sent to 50 respondents consisting of professional photographers and some enthusiasts. The survey consists of 18 questions that would analyze the views and opinions of the 50 respondents in terms of having an online gallery like The Block. The responses are analyze using qualitative methods, a process in which significant distinctions and knowledge are derived and provided to scholarly community, with the help of SWOT and TOWS analysis. The results of the questions answered by the 50 respondents would be a huge factor in the proposed system.

5. Results and Discussion

5.1 Survey Results

1. Have you used a photo/image sharing website application?

50 responses

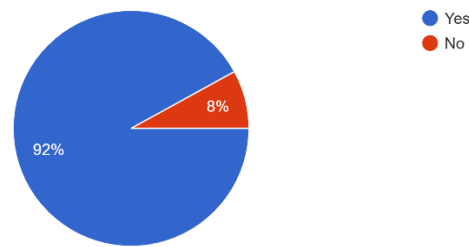


Figure 7. Have you used a photo/image sharing website application

Figure 7 shows the respondents who have already used a photo/image sharing website application with relevance to the product being proposed in this activity. Most of the respondents, 46(92%) in total stated that they have already used a photo sharing website app before while only 4 said they have not used a single one before.

2. If you answered yes in question 1, kindly choose photo sharing website application that you have used before, or name it. (Skip if you answered NO in question 1)

50 responses

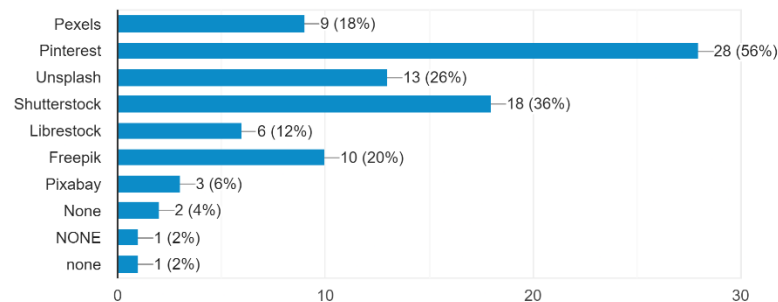


Figure 8. Photo sharing website app that you have used before

Figure 8 shows the respondent's answer distribution on the second question of the survey proper when they are asked to choose the photo sharing application they have used before. 9(18%) of the response are on Pexels, 28(56%) are for Pinterest, 13(26%) responses for Unsplash, 18(36%) for Shutterstock, 6(12%) for Librestock, 10(20%) for Freepik, 3(6%) for Pixabay, while the remaining 4 responses are for those who 4 who answered no in the first question.

3. How often do you use a photo sharing website application?

50 responses

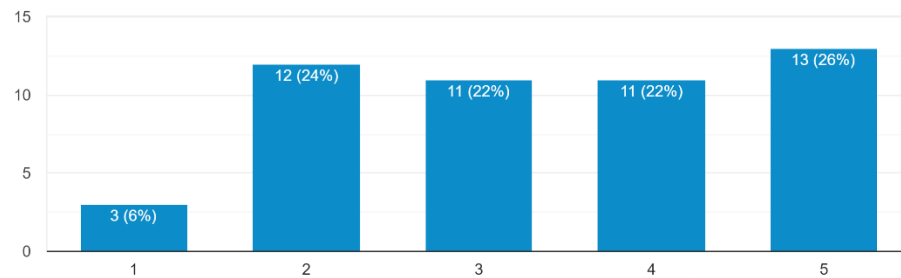


Figure 9. How often do you use a photo sharing website application

Figure 9 shows the respondent's answer on their frequency of use of photo sharing website application. 13(26%) said that they always use a photo sharing website app, 11(22%) said they often use one, 11(22%) also said they sometimes use one, 12(24%) said they rarely use one and only 3(6%) said they never use one.

4. Would you prefer more to sell or buy photos in a photo sharing website app?

50 responses

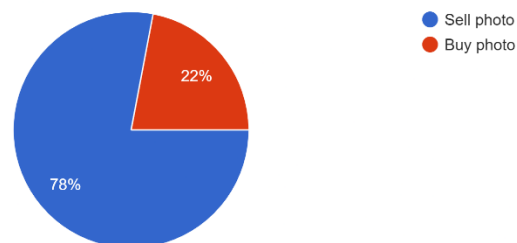


Figure 10. Would you prefer more to sell or buy photos in a photo sharing website app?

Figure 10 shows the respondents' answer regarding the question asking them if they prefer more to be the buyer or seller of photos in a photo sharing website app. 39(78%) said they would prefer more to sell photos, while 11(22%) prefer more to buy photos in a photo sharing website.

5. Do you think a dedicated photo sharing website app would help reach more audiences than traditional methods of sharing photos in popular social media apps (Facebook, Instagram etc.)

50 responses

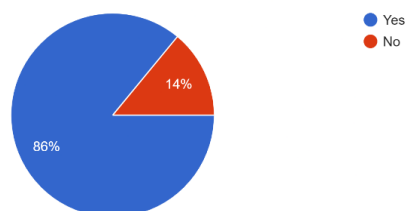


Figure 11. Do you think a dedicated photo sharing website app would help reach more audiences than traditional methods of sharing photos in popular social media apps?

Figure 11 illustrates the respondent's answer on the fifth question of the survey proper regarding the question of having a dedicated photo sharing website app being able to help reach more audiences compared to traditional methods of photo sharing in popular social media application like Facebook. 43(86%) of the respondents agreed that a photo sharing website app would help on the matter while 7(14%) said otherwise.

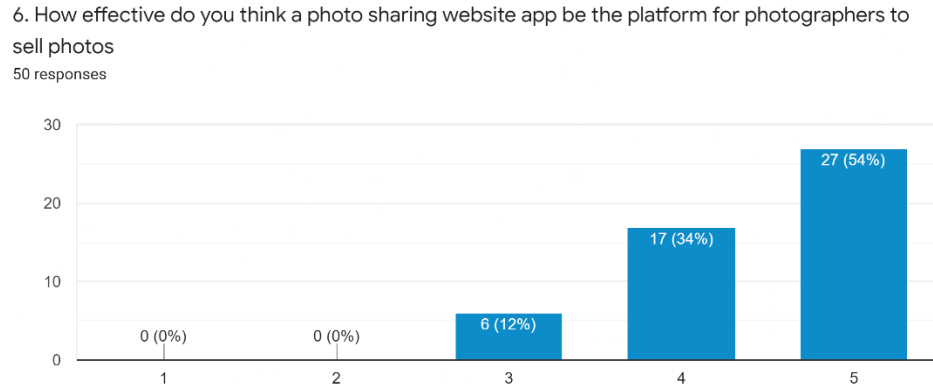


Figure 12. How effective do you think a photo sharing website app be the platform for photographers to sell photos

Figure 12 shows the respondent's answer on the question "How effective do you think a photo sharing website app be the platform for photographers to sell photos" in the survey. 27(54%) of the respondents said that a photo sharing website app would be a very effective platform to sell photos, 17(34%) of the respondents said it would be effective, and 6(12%) stood neutral on the matter.

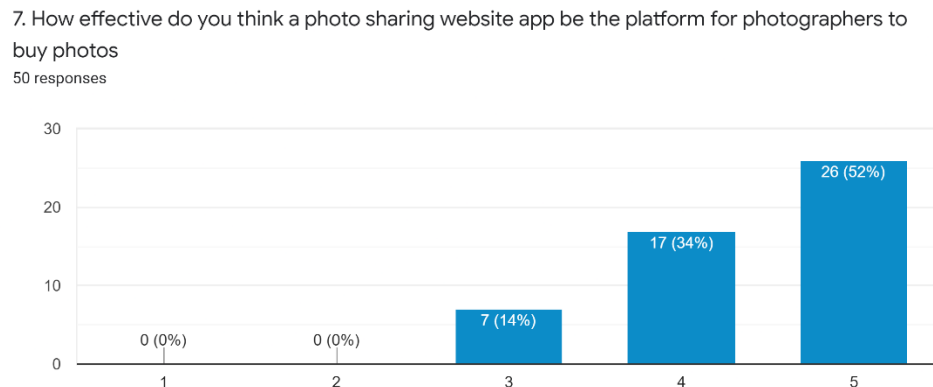


Figure 13. How effective do you think a photo sharing website app be the platform for photographers to buy photos

Figure 13 shows the respondent's answer on the question "How effective do you think a photo sharing website app be the platform for photographers to buy photos". 26(52%) of the respondents said that it would be very effective to buy photos in a photo sharing website app, 17(34%) of the respondents said that it would be effective and 7(14%) respondents are neutral on their answer on this question.

5.2 SWOT Analysis

Table 1. SWOT Analysis

STRENGTHS	WEAKNESSES
<ul style="list-style-type: none"> • More efficient way to attend photo contests through the platform • Emphasizes and gives awareness to art especially to people who love photography • Gives photographers and enthusiasts a sense of inclusivity • Allows photographers to showcase their talent while earning money with less physical effort • The creators of the website are knowledgeable in IT 	<ul style="list-style-type: none"> • The website does not fully conform to its mobile responsiveness • The UI/UX of the website can still be improved • User interaction modules can still be included to add more dynamic features within the website
OPPORTUNITIES	THREATS
<ul style="list-style-type: none"> • Opportunity to notice their work quickly without going into the process of placing their work in a museum • Job opportunities for photographers who got their work affected in the pandemic • A good online platform to get known by different professionals in the industry 	<ul style="list-style-type: none"> • Presence of existing related website competitors • Data privacy and security • Intellectual property issues

Table 1 illustrates the SWOT analysis from the survey questionnaires conducted in this study. The SWOT analysis helped identify the strengths, weaknesses, opportunities and threats of The Block. This became possible as the survey questionnaires are classified from 6 thinking hats. Strengths represents the unique factors and traits that The Block possess that the other competitors may not have or do not possess significantly in terms of quality. The weaknesses of The Block represent the low points of The Block that may need improvement for it to gain more user engagements and edge to the market. Opportunities are also listed to represent the window that The Block may want to capitalize in order to convert it to strengths or make The Block better.

Lastly, the threats served as the pointers of The Block for the existing factors that can provide harm if there are not any *strategies* implemented for it to be solved. The threats can also be converted to potential opportunities if the strategies managed to solve the issues that these threats possessed.

Table 2. TOWS Analysis

EXTERNAL FACTORS			
INTERNAL FACTORS	STRENGTHS	OPPORTUNITIES	THREATS
		STRENGTHS/OPPORTUNITIES	STRENGTHS/THREATS
		<ul style="list-style-type: none"> • Make photo contests consistent through the platform and establish significant rewards to the winners • Encourage photographers who will be potential loyal patrons through various advertisements 	<ul style="list-style-type: none"> • Implement website security designs for transaction and data issues • Provide a comprehensive documentation for users' data privacy concerns • Validate the users' work for intellectual property issues
	WEAKNESSES	WEAKNESS/OPPORTUNITIES	WEAKNESS/THREATS

		<ul style="list-style-type: none"> • Invest on enhancing the website's UI/UX experience for the user's overall satisfaction • Include features like reactions, comments, chat and related interaction modules to attract more customers • Partner with professional photographers and create a dedicated page for them for more website view traction 	<ul style="list-style-type: none"> • Create a signature themed UI and UX design for unique branding and marketing of The Block • Enhance the competitors existing interaction modules for the users to use • Develop a dedicated mobile app version of The Block
--	--	--	---

Table 2 shows the TOWS Analysis formulated in this study derived from the SWOT analysis presented previously. TOWS Analysis aided the researchers in producing the strategies needed to address the weaknesses and threats using the strengths and opportunities available to The Block. The strategies that the researchers come up with are the following:

Strengths and opportunities – Administering photo submission contests within the platform consistently through the platform would attract professional photographers in using The Block regularly.

Strengths and threats – Educating the users about the platform's data privacy and intellectual property management through a documentation which is always available.

Weakness and opportunities – Adding interaction modules with like, reaction, comment features for the users to prolong their usage of the platform.

Weakness and threats – Building the platform's unique branding through themed UI and UX design so that it will stand out to its fellow competitors in the market. A dedicated mobile app version of The Block can also give a competitive edge from its competitors.

5.3 Proposed Improvements

The researchers recommended to increase the participants of the survey to gather more opinions with regards to the implementation of the platform. It is also beneficial to have user-acceptance testing when the system is fully developed to improve the system's functionality, usability, reliability, maintainability, efficiency and portability.

6. Conclusion

The methodology used in the span of the conduct of this study helped identify the needed marketing strategies, techniques, approaches, and possible solutions for the implementation of The Block. The initial survey assisted the researchers determine the feasibility of The Block's concept and vision to the possible target market and users available within the region. From the initial survey conducted, the researchers managed to come up with the N.A.B.C Analysis of the project. The researchers determine the need of the people for a platform that allow photographers to showcase their work and photo enthusiasts to have a place wherein they can appreciate photos without exerting physical efforts in an online environment. Also, the researchers list down the benefits that the platform will provide to its users while comparing it to what the existing competitors offer to the market and users.

Having the initial survey completed its analysis, the researchers proceeded to the conduct of the survey questionnaires needed to know the future approach of The Block and to know its marketing strategy. The researchers discovered that they need to focus in encouraging professional photographers to be pillars of the website for The Block to attract customers. In order to do that, The Block should improve its website UI/UX design to enhance its user-friendliness. Enhancing the interaction modules of The Block are also needed for the platform and internal events such as consistent photography contests would also be beneficial both for the platform and its users. Lastly, in order to gain competitive advantage from its competitors, The Block should look forward in building its own branding with a dedicated mobile app, logo design, unique theme and design presentation.

References

- Aspers, P. and Corte, U., What is Qualitative in Qualitative Research, *Qualitative Sociology*, vol. 42, no. 2, pp. 139-160, 2019.
- Fadhilillah, R. and Zpalanzani, A., Business Opportunity for Wedding Photography in Bandung City using Porter's Five Forces Analysis: Case Study of The Lunar Story. *Proceedings of the International Conference on Business and Management Research (ICBMR 2020)*, vol 160, pp.247-252, 2020
- Gernsheim, H. Erich Robert, Grundberg, Andy, Rosenblum, Naomi and Newhall, Beaumont. History of photography. Encyclopedia Britannica. <https://www.britannica.com/technology/photography>, 2020
- Hietanen, J., Rebranding Photography Business. Laurea University of Applied Sciences. 2016
- M. Broilo, G. Boato and F. G. B. De Natale, Content-based synchronization for multiple photos galleries, *2012 19th IEEE International Conference on Image Processing*, pp. 1945-1948, 2012
- Pogrebin, R., Art Galleries Respond to Virus Outbreak With Online Viewing Rooms. Available: https://www.nytimes.com/2020/03/16/arts/design/art-galleries-online-viewing-coronavirus.html?fbclid=IwAR3RR1OvdzrnVc0NMdRPMju-_IhHxSl8ii6P70E7LlxkoGlt_Ho60_H00. 2020
- Sinha, R., Shameem, M., and Kumar, C., SWOT: Strength, Weaknesses, Opportunities, and Threats for Scaling Agile Methods in Global Software Development. *Proceedings of the 13th Innovations in Software Engineering Conference on Formerly known as India Software Engineering Conference*. February 27–29, 2020
- Satia, F. and Wahab, D., Marketing Services in the Field of Photography and Videography Using Information Technology. *IOP Conference Series: Materials Science and Engineering*, vol. 662, no. 3, pp .32-62. 2019.
- Leeward Team, Available: <http://leewardteam.com/wp-content/uploads/2017/09/case-study-hp.pdf>, Accessed on February 2022.
- Unsplash, Available: <https://unsplash.com/about>, Accessed on February 4, 2022.

Biographies

Kenneth AJ G. Quilantang is a graduate of bachelor's degree in Information Technology in Mapua University in 2022 with specialization in Cybersecurity. Back in high school he was a campus journalist and a representative of his school, Baliuag University, to compete in *Schools Pressconference* in sports writing category. He also became the editor-in-chief of his school on the last year of his junior high school. With the help of his specialization, he published his first academic paper entitled *Exploiting Windows 7 Vulnerabilities using Penetration Testing Tools: A Case Study about Windows 7 Vulnerabilities*, back in July 2021 at The 2021 9th International Conference on Computer and Communications Management.

Alphonsus Joseph Nicollo R. Magpantay studied in Mapua University and finished his degree at BS Information Technology in 2021.

Gabriel Angelo B. Dela Cruz also attended Mapua University and finished his bachelor's degree at BS Information Technology.

Grace Lorraine Intal is a full-time faculty member in Mapua University. She is teaching Information Systems core courses in the School of Information Technology and Information Systems course in the School of Industrial Engineering. She obtained a BS degree in Management and Industrial Engineering from Mapua University, master's in business administration from Pamantasan ng Lungsod ng Maynila and Master in Information Systems from Asia Pacific College respectively. At present, she is pursuing a Doctorate degree in Information Technology at the University of the Cordilleras. She is also an independent Management Consultant