Online Information Media To Educate Farmers With The Go-Online Farmers Program Using The Participatory Rural Appraisal (PRA) Method

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Abstract

The Jakarta-Indonesia Ministry of Communication and Information Technology created the Digital-Based Community Economy program, which was named "The Go-Online Farmers Program" which aims to expand market access and improve the class of farmers. The Go-Online Farmers Program itself is a collaboration program of the Ministry of Communication and Information with a number of digital Business Starters (Startups) that create various mobile-based applications that aim to increase productivity in agriculture and improve the living standards of farmers and open up opportunities to improve their economies. The problem is that since the launch of The Go-Online Farmers Program, the delivery of information is only in the form of presentation slides and there are still many farmers who are not familiar with The Go-Online Farmers Program. In this study the methods used are: The Participatory Rural Appraisal (PRA) Method and the Media Production Concept (MPC) which includes Pre Production, Production and Post Production. The results of this study are an Online Information Media to educate farmers with The Go-Online Farmers Program using the PRA method in the form of Motion Graphic-based Video Socialization so that it attracts the attention and helps farmers in buying and selling online. The conclusion of this research is the need for a strategy to disseminate The Go-Online Farmers Program to farmers and the strategy of using the results of this study which has been uploaded to the YouTube channel so that information can be spread, easily accepted and disseminated to villages in Indonesia.

Keywords: Online Information Media, The Go-Online Farmers Program, The Participatory Rural Appraisal (PRA) Method.

1. Introduction

Technology [1] will be of positive value if it can be used according to its function and will also be of negative value if it is deviated past its rules and functions. The development of Media [2] Information [3] is proven by the large number of communication and telecommunications pioneers who are competing to create information media both through print media, television, radio and even the Internet [4] which has been very easily reached by anyone without limits. Basically Online information media [5] is an intermediary form of human communication in developing themselves to be able to face various obstacles and challenges in the future, because currently the use of technology as information media on official sites [6] or information on Social Media [7], its spread has spread to the joints of people's lives. The influence of social media activities on public / community determinants [8] is huge. The existence of this Go-Online Farmers program is an effort to educate Farmers [9][10] to find out the ins and outs of agriculture and its online sales, as well as to understand the impact of determinants in receiving learning [11] about agriculture for farmers by using computer technology. In this introduction the Ministry of Communication and Information [12] overview and the Go-Online overview Farmer program will be explained, both of which are influential in this study.

1.1 Ministry of Communication and Information Overview

In accordance with Law Number 39 of 2008 concerning State Ministries, the Ministry of Communication and Information Technology is a tool of the Government of the Republic of Indonesia in charge of the scope of Information and Communication [13]. Therefore, the Ministry of Communication and Information has the task of organizing government affairs in the field of communication and informatics to assist the President [14] in organizing state government. The Ministry of Communication and Information is led by a Minister from 23 October 2019 held by Mr. Johnny Gerard Plate. The Ministry of Communication and Information is a government agency responsible and under the auspices of the President who holds leadership, is competent and who provides work motivation [15] to farmers and regulates all matters in the field of communication and informatics and contributes in building the TV Broadcast Digitalization sector [16], telecommunications and internet governance. One of the important tasks of the Ministry of Communication and Information related to information is the dissemination of national information by creating open access to information by developing and developing Telecommunications Infrastructure [17] for the benefit of all Indonesian citizens. The new communication policy paradigm places information as part of people's daily needs. The information function was developed in Economic Value Added [18], not just an explanation, but rather in support of Strategic Communication [19] to build national integration well. The dynamics of information technology and the development of the digital economy have made the Ministry of Communication and Information Technology focus on accelerating the distribution of digital infrastructure in the form of telecommunications and internet network access and exploring the moderating effects of technological readiness and user intentions in the context of using cellular-based internet networks [20]. Other duties and functions of the Ministry of Communication and Information are formulating National Policies [21], implementation policies and technical policies in the field of communication and information technology which include post, telecommunications, broadcasting, information and communication technology as well as multimedia services and Information Dissemination [22].

1.2 Go-Online Farmer Program Overview

The Ministry of Communication and Informatics created a Digital-Based Community Economy program: The Go-Online Farmers Program which is expected to provide solutions to problems in agriculture by utilizing information technology. The Go-Online Farmers Program aims to expand market access and improve Farmer class. This program was created as a strategy to increase the knowledge of farmers as one of the project management of the Ministry of Communication and Information Technology [23]. The Go-Online Farmers Program itself is a collaboration program of the Ministry of Communication and Information with a number of Startups (Business Actors) that creates a variety of cellular-based applications that aim to increase productivity in agriculture and improve the standard of living of Farmers to open up opportunities to improve their economies. In addition to understanding the intention of using mobile application behavior [24] in Agriculture [25] where farmers can sell directly to consumers without going through middlemen who usually provide prices that are not in accordance with farmers' efforts. So in principle, farmers can buy and sell by e-Commerce [26]. In addition, the general public who are not farmers can participate with The Go-Online Farmers Program to find out information about the world of agriculture and get everything needed in agriculture such as information about plants, diseases that attack crops, buy seeds, seed selection, characteristics good fertilizer, etc. The Go-Online Farmers Program was created by the Ministry of Communication and Information as an effort to Educate Farmers [27] using computer technology.

1.3 Common Problems

A common problem that has occurred since the launch of The Go-Online Farmers Program is the delivery of information to farmers, even though using a computer, but only using information media in the form of Slide Presentations that are static so that many farmers are unfamiliar with this and make them reluctant to use The Go-Online Farmers Program online, on the other hand there are still many

farmers who are not familiar with computer technology, especially for farmers who are in remote villages in Indonesia.

2. Research Method

2.1 Participatory Rural Appraisal (PRA)

The Participatory Rural Appraisal (PRA) Method [28] is a method or approach that enables the community to jointly analyze life problems in order to formulate real plans and policies. Participatory Rural Appraisal (PRA) was created, among others, motivated by the criticism of activist development and community empowerment of the previous research that focused the community only as the object of research. The Participatory Rural Appraisal (PRA) method is a development from the previous methods, including the Rapid Rural Appraisal (RRA) technique that is lacking in inviting stakeholders to participate in programs or policies. Thus, Participatory Rural Appraisal (PRA) is a technique that allows communities to participate in making concrete actions to plan, monitor and evaluate policies that affect their lives. In this way the Participatory Rural Appraisal (PRA) can be called the educational system framework for the community or farmers in Indonesia by using technology [29] and collaboration with the community. In the Participatory Rural Appraisal (PRA) method there is an educational framework design (educating farmers/community), management and knowledge development [30] of farmers in agriculture because the Participatory Rural Appraisal (PRA) method does not only consist of research, but rather consists of research also planning (participatory), monitoring and evaluation. Because with the involvement of the community in the process of a program, the program will be more in line with the needs of the community and automatically the level of Community Concern [31] in carrying out the program/policy will be higher. Public awareness is evidence of the implementation of information dissemination and strategies for the use of technology [32]that is effective. The following is a picture of the Participatory Rural Appraisal method:
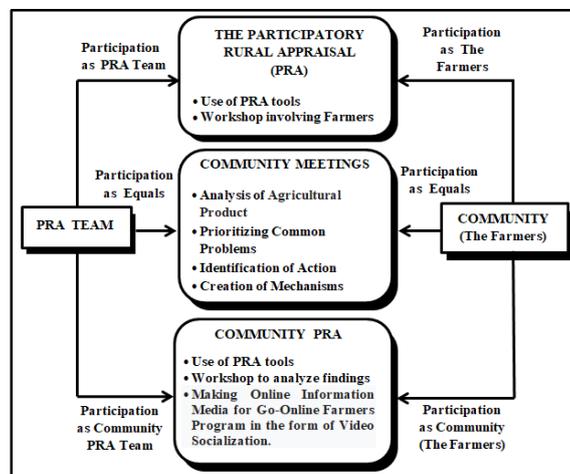

Figure 1. PRA Method with The Farmers Community

The synthesis of this study of the PRA method involving farmers, namely: The PRA method is a method that is applied by involving the community/farmers who work together, have a community and communicate common problems that occur and formulate solutions to these problems using PRA tools, which starts from the workshop and ends with a creation involving information technology and media that can be socialized and implemented equally.

2.1.1 PRA Tools

The Participatory Rural Appraisal (PRA) method has many tools that are divided into 4 (four), namely: 1) Diagramming consisting of Transect Walk, Seasonal Calendar/Seasonality Analysis, Time/Trend Analysis, Venn Diagramming, Daily Routine Charts, Flow Diagrams and Mapping. 2)

Interviewing consisting of Structured and Semi-Structured. 3) Preference Ranking consisting of Matrix Scoring Ranking, Proportional Piling and Poverty Ranking. 4) Mapping and Modeling consisting of Social Maps, Resource Maps, Topical Maps, Hazard Maps. However, in this study not all tools are used, the image below is the tools used in this study, namely Transect Walk, Matrix Scoring Ranking, Venn Diagramming, Seasonality Analysis, Time/Trend Analysis, Social Mapping, Wealth Ranking, Resource Mapping.
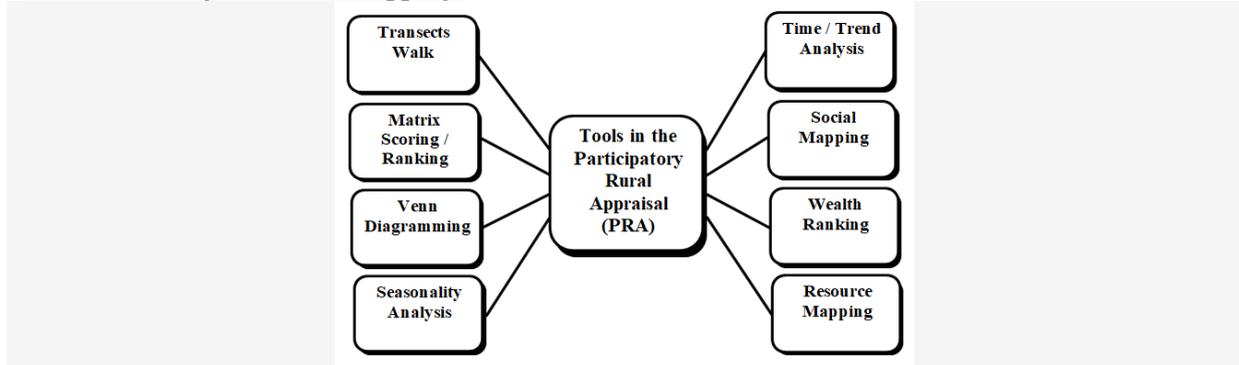

Figure 2. PRA Tools used.

The synthesis of PRA Tools used in this study is that the use of tools is needed to support the PRA method that involves the community / farmers, because they build an active role from them, express the problems faced and together look for solutions by utilizing these tools to achieve goals.

2.1.2 PRA Principles

The Participatory Rural Appraisal (PRA) method has important principles which are the advantages of the PRA itself compared to the previous methods. The principles of PRA include: 1) The community is seen as a subject not an object. 2) Outsiders as facilitators and the community as Actors. 3) Researchers position themselves as Insider not outsider. 4) Focus on the main topic of the problem. 5) Empowerment and community participation in determining social indicators (participatory evaluation indicators). The capacity of the community is improved through the process of assessing the situation, making decisions, determining policies, evaluating and correcting the activities carried out. 6) Involvement of all group members and respect for differences. 7) The concept of Triangulation [33], namely the concept of being able to obtain reliable depth information. The concept of Triangulation is a concept in the form of an examination (check) and re-examination (recheck). 8) Optimization of results. 9) Flexible in the participation process. The following is a picture of one of the PRA principles namely the Triangulation Concept used in this study:
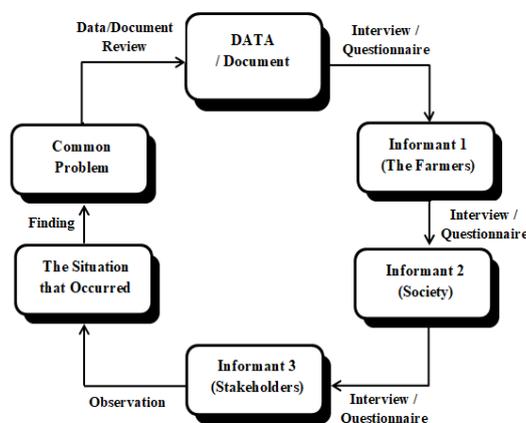

Figure 3. Triangulation Design Concept

Synthesis of Triangulation design concepts in this study: Data / documents obtained through interviews / questionnaires from various informants, such as informant 1 namely farmers, informant 2

namely the community, both of whom want to know about The Go-Online Farmers Program and informant 3 namely stakeholders who are stakeholders stakeholders in The Go-Online Farmers Program, after observations were made to see the situation that occurred in the field, then there are findings that become a common problem in obstructing the delivery of information about The Go-Online Farmers Program which then becomes a data / document review to look for the solution.

2.1.3 PRA Techniques

In addition to the principles of PRA, there are also some main techniques in conducting PRA, which are divided into 7 (seven) main types of techniques that can be performed, including: 1) Secondary Data Review (SDR) [34] which is a way to collect sources sources of information that have been published or that have not been distributed. The aim is to find out which data already exists so that it no longer needs to be collected. 2) Direct Observation, which is a direct observation activity on the object of the community or community. The aim is to cross-check answers answered by the community. 3) Semi-Structured Interviewing (SSI) [35][36], which is an interview that uses a systematic question guide that is still possible to develop during the interview, because the question is to provide feedback for respondents to provide more detailed answers. SSI can be done for several types of respondents who are considered to represent information, for example: women, men, children, youth, farmers, and local officials. 4) Social Mapping. This technique is a way to make a picture of the socio-economic conditions of the community. The results of this illustration are general maps of a location that describe the state of the community and the physical environment. 5) Recording of Historical Flow. This historical flow recording technique is a technique used to find out events from a past time to the present situation with the perception of the local community/community. The purpose of this technique is to obtain an overview of important topics in the community which can later be poured into the program. 6) Venn Diagram. This diagram is made to find out the institutional relationship with the community. The aim is to find out the influence of each institution in the life of the community and to find out what expectations of society against these institutions. 7) Focus Group Discussion (FGD), a technique in the form of discussion between several people to discuss specific things in depth. The goal is to obtain a picture of a problem from a particular program in more detail and evaluate the program.

Figure 4. Go-Online Farmer Venn Diagram

Synthesis of The Go-Online Farmers Program Venn Diagram in this study: In a community led by the PRA Team (Ministry of Communication and Information Technology), farmers are the main focus in the acceptance of The Go-Online Farmers Program, however this does not rule out the possibility that the general public will being an outsider can participate in this program, just like Stakeholders (in which there are Business Starters/Startups) who are outsiders who have an interest and influence in this The Go-Online Farmers Program.

2.1.4 Stage of PRA Implementation in Policy / Program Evaluation

The stages in conducting PRA in general can be divided into several activities as follows: 1) Establish an agreement to evaluate together. In detail in this stage there are several things that must be done, including: Determination of background (what will be evaluated); aim; cost; time The purpose of the evaluation; and Facilitator selection. 2) Establish Terms of Reference, including: Selection of techniques and selection of representatives of group representatives (Stakeholders). 3) Collecting and analyzing data, including: Mapping areas and activities that are closely related to program impact assessments; Identify the problem along with the potential problem solving.

2.2 Media Production Concept (MPC)

Media Production (MPC) consists of: 1) Pre Production; Is a step where planning and preparation of production concepts such as data collection, finding ideas, observations, data analysis, storyboards, time schedules, breakdown sheet scripts, budget, equipment used and determination of talent and crew. 2) Production; It is a cooperative relationship between the crew and the cast to manifest the form of storyboards, synopsis and precisely the time schedule that has been made. 3) Post Production; Is the completion of the work into a complete video so that it reaches the story to the audience.
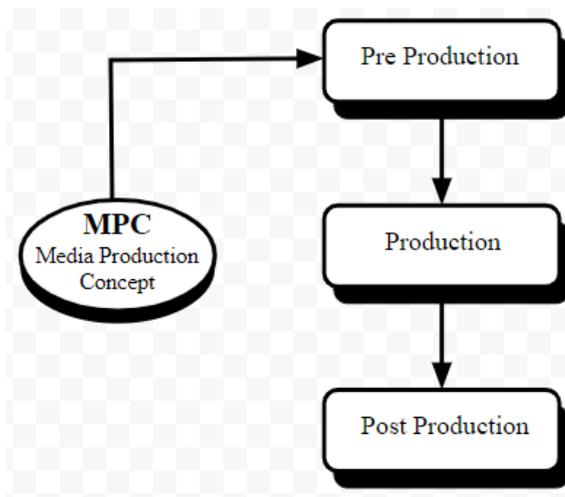

Figure 5. Media Production Concept (MPC)

2.3 Media Design Analysis

Online information media used to educate farmers with The Go-Online Farmers Program in the form of motion graphic and video-based video socialization needed by the Ministry of Communication and Information will be produced using computer graphics program applications including: Adobe Illustrator CS6, Adobe Photoshop CS6, Adobe After Effect CS6, Adobe Premiere CS6 and Adobe Audition CS6.

3. Result And Discussion

3.1 Media Design

Information through The Go-Online Farmers Program delivered by the Ministry of Communication and Information so far has only been in the form of less effective, monotonous and static presentation slides without more innovative information delivery making it easy to make the audience feel bored. Therefore, to facilitate the community, especially farmers, get to know and understand this The Go-Online Farmers Program, an online media information format in the form of Motion Graphic-based Socialization Video was made as a complement to The Go-Online Farmers Program for the Ministry of Communication and Information Jakarta. So that through this interesting packed social media video, it can facilitate the delivery of information about The Go-Online Farmers Program and is

expected to provide maximum information when providing education or outreach to Farmers. This is done to understand how this interesting motion graphic based video socialization can influence behavior in education [37] especially educating farmers.

3.2 Product Information

Product Information from this research is in the form of online information media in the form of Motion Graphic-based Video Socialization for the Ministry of Communication and Information Jakarta. Is one of the forms of audio visual communication media which is a tool to educate and socialize The Go-Online Farmers Program. Decorated with interesting 2-dimensional animation elements and easy to understand by anyone, especially farmers. This video presents information on understanding The Go-Online Farmers Program, the aims, objectives and objectives of The Go-Online Farmers Program, stakeholders who work with the Ministry of Communication and Information related to the program, displays digital startups or business people, workflow of The Go-Online Farmers Program consisting of sections pre-production, production, post-production, to the marketing section of The Go-Online Farmers Program so that the Farmers can understand and implement them. Below is described about The Go-Online Farmers Program workflow:
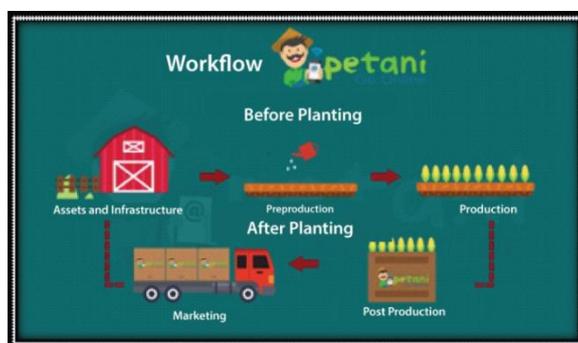

Figure 6. The Go-Online Farmers Program Workflow

3.3 Pre Production

Pre Production is a step where planning and preparation of production concepts are compiled such as collecting data, finding ideas and ideas, making synopsis or stories, making narratives, then channeling ideas through storyboards, making script writing, rundown, composing crew, making time schedules, calculating expenses budget or prepare the equipment to be used. Here are the pictures of Pre Production The Go-Online Farmers Program:

Figure 7. Pre Production

3.4 Production

It is a collaboration between the cast and crew to realize in real form the synopsis, storyboard and precisely the time schedule that has been designed. The form of visualization in visual planning will

produce works in the form of videos. Visual planning is used to display information to be conveyed. A good visual planning is usually first made a visual goal with a mature concept. Visual aims to show the relationship between one thing and another to attract the attention of the audience. In order to achieve visual goals, visual strategies are needed as a motion to achieve visual goals. The visual strategy that is presented consists of various techniques that will be used later in the video socialization of the motion graphics-based The Go-online Farmers Program and for the visual program that is part of realizing visual planning is the production of visual programs. Following is The Go-Online Farmers Program Production process:

Figure 8. Production

Visual program in this production process which will be inserted in the design of special effects created using supporting applications. Helped with a storyboard that is converted into animatrix which is a kind of slide show and then added to the dialog. In addition, in the Production process there are: Audio programs, Visual Strategies, Visual Programs, Broadcasting Planning, Broadcasting Goals, Broadcasting Strategies and Broadcasting Programs which will be explained below.

3.4.1 Audio Program

The audio program plays a very important role in designing an online information media in the form of video socialization, through audio the information conveyed can be received clearly by the audience, in this case the Farmers. The audio used in this socialization video has been adjusted to the flow of the image that has been made. The audio used is in the form of Pacific Sun music instruments in mp3 format and also added with a human voice source (dubbing). Dubbing is a technique to fill in sound on a video that is done by someone who is commonly called Dubber. Taking an audio must be appropriate so that the editing process of the video cutter can be adjusted to the placement of the image to be displayed.

3.4.2 Visual Strategy

The visual strategy is by using the effects produced in this socialization video with several different visualizations in each of its scenes, which create a special attraction in each section such as Opening, Dubber and Visual video images.

3.4.3 Visual Programs

Visual programs are designed using visual effects produced from Adobe software applications, namely Adobe Illustrator CS6, Adobe Photoshop CS6, Adobe After Effects CS6, Adobe Premiere CS6 and Adobe Audition CS6. Storyboard is a reference that was changed to Animatrix, coupled with dubbing

that has been made, and using a backsound from the instrument, all of this will produce an interesting visual program.

3.4.4 Broadcasting Planning

Broadcasting planning aims to reach out to the public in order to make the distribution process effective and efficient. Through broadcasting planning like this, of course, can provide complete information relating to online information media in the form of video socialization in order to reach the target precisely on its target.

3.4.5 Purpose of Broadcasting

The purpose of broadcasting is used to reach a wide audience without comparing one another. At this stage, the purpose of broadcasting is as an online information media in the form of motion graphic-based video socialization which is expected to disseminate information that can be useful for related parties, especially the community and farmers to know more clearly about The Go-Online Farmers Program.

3.4.6 Broadcasting Strategies

The broadcasting strategy used in this study is to utilize existing facilities such as using the internet as a form of widespread online information dissemination. The media used is the Youtube channel which is currently favored by the public. With this broadcasting strategy, information needs become easily accessible, especially by farmers.

3.4.7 Broadcasting Program

The broadcasting program is conducted to show the public to be able to get information about The Go-Online Farmers Program. Screening of results from audio visual production also utilizes the internet as its medium. Details of the broadcasting program that will be distributed through the YouTube channel media is one means of conveying various kinds of information in the form of Video Streaming [38] and Live Streaming. By disseminating the information dissemination video uploaded to the YouTube channel [39], the information received by the public will become more accessible and efficient[40]. This Go-Online Farmer program socialization video can be accessed on a YouTube account with The Go-Online Farmers Program channel of the Ministry of Communication and Information[41].

3.5 Post Production

Post Production is the finishing stage of a work into a complete video in order to achieve a story to the audience or the Farmers. Here's an overview of the Post Production:

Figure 9. Post Production

In Post Production there are things as follows: 1) Digitizing: is a process of transferring printed images into digital form. At this digitizing stage, data in the form of images that have been made in a variant application from Adobe namely Adobe Illustrator CS6 which will be included in Adobe After Effect CS6. After being formed into an animation in Adobe After Effect CS6 then made into a video with Adobe Premiere CS6. 2) Editing: is a process of cutting activities to assemble animated videos that are tailored to the ideas of the storyboard and the script that has been made. In this Motion Goal-based The Go-Online Farmers Program, the editing process takes a long time because the image that was created in Adobe Illustrator CS6 must be moved to Adobe After Effect CS6 and then made a video with Adobe Premiere CS6. 3) Mixing: is the process of mixing the entire results of motion graphic video, dubbing, and sound effects into Adobe Premiere CS6 as a whole composition into an interesting socialization video. 4) Finishing: is the stage of completing a project that has passed the stages of selection, cutting, merging between text, images, audio to voice over into a video. 5) Exporting: is the final stage in the process of designing this video socialization media. Videos that have been made will be exported from Adobe Premiere CS6 to a predetermined video format. Then the results of the export video will be uploaded to the video player site, Youtube channel.

3.6 Market Segments

In the market segment stage, where at this stage it sets the target to be targeted in a fairly wide range of communities, namely farmers in the villages. Online information media in the form of a video socialization of The Go-Online Farmers Program can be accessed on a youtube account withThe Go-Online Farmers Program channel of the Ministry of Communication and Information. It is expected that through this video socialization can increase the target market by 44.45%, namely 450,000 Users of The Go-Online Farmers Program from the previous year with a total of 250,000 Users.

4. Conclusion

Based on the research that has been done, the following conclusions are drawn: 1) In making and producing online information media that can attract the attention of the audience is to use media in the form of motion graphic-based video socialization that can attract the attention of the community and farmers to get to know The Go-Online Farmers Program and understand its uses. 2) Information submitted in The Go-Online Farmers Program that explains the Goals, Goals and Objectives of The Go-Online Farmers Program and Stakeholders in collaboration with the Ministry of Communication and Information related to the program, business people and workflow of The Go-Online Farmers Program consisting of Pre production, Production, Post-production, to the Marketing department. 3) The socialization strategy in an effort to inform The Go-Online Farmers Program is to use the Youtube channel media so that information can be directly presented widely in an effort to educate farmers in an interesting and socialized way to all villages in Indonesia. However, further research is still needed so that the results of this study can be further developed because there are facilities and infrastructure factors from the government that have not been evenly distributed to villages scattered in remote areas in Indonesia that have not been examined in this study.

Acknowledgments

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