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Master's Thesis
Academic Year 2015

EVAP : Subjective Evaluation Platform for
Amateur Promotion Video Producers

Graduate School of Media Design,
Keio University

Chun Liu

A Master's Thesis
submitted to Graduate School of Media Design, Keio University
in partial fulfillment of the requirements for the degree of
MASTER of Media Design

Chun Liu

Thesis Committee:

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Abstract of Master's Thesis of Academic Year 2015

EVAP : Subjective Evaluation Platform for Amateur Promotion Video Producers

Category: Design

Summary

With the development of modern media and high-speed networks, large amounts of contents are generated and uploaded online in the last few years, allowing users to share and comment on the go, but it has also generated many distribution problems and led into an unfair environment for amateur producers. This thesis works on utilize plenty comments, cooperate comments with subjective evaluation outcome histogram, to provide feedback for amateur motion picture producers by EVAP platform. With this platform, amateur promotion video producers can get practical histogram feedback tagged with comments on every bar. It will generate more specific evaluation results for amateurs easy to understand. This research includes the questionnaire information about viewers' and producers' reference evaluation factors toward promotion video as well as planning experiments of two developed prototypes by two different types promotion video. The evaluation and conclusion demonstrate that this platform has the potential of success, however more testings have to be done before it can be confirmed that this platform provides contributing specific feedback for amateurs. Meditating on their contents by these feedback, amateur promotion video producers will obtain more practical experiences. Circulate with this process, amateur producers could produce better contents, then improve quality of the whole contents society.

Keywords:

Subjective Evaluation, Promotion Video, Amateur Producer, Feedback, Comment with Histogram

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Chapter 1

Introduction

1.1 Background

With the development of Internet technology, we are coming upon the stage of heavily reliant Internet society. The Internet society works to foster growth and access to online by bringing information, contents, and partnerships to people and communities across the global world. Under this environment, an “Internet User” is defined as an individual who can access the internet, via computer or mobile device [20]. Until July 1st , 2014, numbers of Internet users reached 2.9 billion, and now it has over 3 billion. That means around 40 % of the world population has a Internet connection now.

A world-wide network can be accessed via a computer, PDA (Personal Digital Assistant), game device, etc. And now more and more users prefer use mobile telephone to access to the Internet, It is predicted that the number of smart phone users worldwide will surpass 2 billion in 2016 and over half of mobile phone users globally will have smart phones in 2018 [12] . Inexpensive smart phones are opening new opportunities for both users and Internet developing. These smart phones are quickly shifting the paradigm for consumer media usage and impressing the need for media developers to become more mobile-centric.

1.1.1 Online Video Development

Videos have always generated great enchantment, as them can be use to express a strong emotional information much more than a lonely image, relate to every viewers . This is also can explain why it has developed so rapidly in last few years and now turns to one main component of social network. More and more people accept this video streaming culture. Due to users’ needs, lots of online video platforms are created and provide different services. YouTube, Netflix, Vimeo, Yahoo!Screen and DailyMotion are considered as top five most popular

video websites [10]. Beside these general online video platforms, there are also many specialized online video platforms for various specific fields, for example TED or Stream2Watch. Since there are a large amount of channels viewers can choose online, which enriched their lives, viewers could get physical relax and mental comfortable by watch these sources on mobile devices instead of be a couch potato. The Internet can make television interactive: give it a million channels, which means carrying television on the Internet, in packets, using Internet packet [38]. Compare the traditional ways of waiting for contents, online video platforms provide ability for users to search or create their own preference channel.

1.1.2 Uploaders and Contents Growth

The new generation of video sharing sites, most platform have overcome the problems of upload and share contents to a social application. These generation sites are also known as user generated content (UGC) sites, in which the users are participatory and creative [7]. The communication process is changing from being unidirectional to multi-directional as generators are becoming active participants by creating, seeking, and sharing information using a variety of channels and devices. Everyday, more and more individuals use the Internet to access, and most of them are changing from simple behaviors like just inputting text message or reading an article, to sharing daily life or original productions, for example, short contents even a full length film can be allowed generated by a normal user.

As Maslow's hierarchy of needs figured out that there are usually available various cultural paths to the same goal. Therefore conscious, specific, local-cultural desires are not as fundamental in motivation theory as the more basic, unconscious goals [35]. When users generate the content, the motivation they would like to upload online and share are satisfy themselves, meet the needs of social, needs of respect and needs of define owns value, show aspirations to the world. On the other hand, lower price and easier controlling devices' arrival provide a great opportunity for amateur users, things become uncomplicated.

1.1.3 Problems

It is not easy to gauge and communicate what a content or short video has meant to the online platform or the content society. Although many great advances have happened in online video field, not everything has being positive. Numbers of

online video platforms are growing incredible, such as YouTube, Vimeo, Vine, in other words, there has been an incredible increase on online contents. This means there are a large amount of videos to watch. Moreover, only few contents can be popular or known to the public. Rest of these contents are sleeping online. Currently, to judge an online video good or not, existed platform recommended mostly on three criteria, the first is numbers of views. This allows users to check how many viewers were attracted to watch this video, it shows user how popularity this content is. Another evaluation criterion is numbers of like or dislike. Among these existed platforms, most only allow users to give positive evaluation. The third evaluation criterion is setting of comment section, which allows users to leave their own impression and comment, works as feedback for producers.

But this existed environment is not equal to amateur video producers. As content is collected through time and various spaces, many factors can reflect back on changes and progress in the community through screenings, where all are brought together to reflect and discuss. Numbers of views can only show how many times the video has been played but cannot show how many people watched it entirely. Numbers of like shows how many people enjoyed the video, but this enjoy means an impression of the whole video. On the other hand, numbers of dislike shows how many people do not like this video, but nobody tells the reason why they gave negative evaluate result, there are many reasons that someone may dislike producers video. First, they really disliked it for the content or something that may have happened in the video. Second, that person dislikes the video because of someone who is in the video or the actual video creator. Third, there are some viewers who just decide to go ahead a click that button without any reason. In this case, this is completely an unfair environment, why are there people who like to put other people down on their creations. Those users clearly don't realize how much work, time, and effort goes into producing even a short video. For some producers it maybe hours, for amateur producers it may be days and even months. Last but not the least, for the comment section, not enough practical comments can be picked out, and one of the biggest problem for amateur producers to check comment online is they cannot catch the comment figures which part of the content. It's unfair to judge a production negative or positive entirely.

1.2 Research Proposal

In order to contribute an equal environment for amateur producers to tackle the problems existing now, by a well designed user interface evaluation platform to provide visible histogram feedback tagged with comments. User study and demand analyze are necessary.

The key of designing an online video evaluation function is not to enforcing viewers to do, only under the model of follower-followee [47], but construct an interactive environment that facilitate users want to try by themselves. That means platform should learn about users' needs, activities and other information as an input source. The research project will therefore seek to explore and investigate the followings:

- To study about users mental psychology and demands for giving evaluation of an online video.
- Compare the difference between existed functions and histogram designed function; analyze the advantage and disadvantage of two video evaluation environments.
- Construct EVAP system and user interface design.
- Implementation, evaluation and reformation based system's performance and users' feedback.
- Finally, summarize the whole research; find out the advantage and insufficient part.

To review, EVAP has 3 properties:

1. Amateur users based interface design.
2. Provide real-time histogram by every ten second time unit.
3. Tag comments on every bar of histogram result.

1.3 Aims and Goals

This thesis aims to solve the problem based on amateur users study and answer them "Does a well designed user interface online video evaluation platform that generate results by visualized histograms tagged with comments can provide amateur promotion video producers practical, meaningful and easy understandable feedback?". To answer this question, this thesis aims to do the followings:

- Interview and user study. Study the way of amateur promotion video

producers producing product. Interview methods that amateurs prefer to evaluate their productions.

- Analyze common ways that amateur promotion video producers do evaluation and get feedback. Interview their feelings and genuine demands.
- Arrange amateur promotion video producers to test the prototype result and compare with amateurs got from other platforms.
- Evaluate the advantages and disadvantages of the EVAP platform.

1.4 Thesis Overview

The whole structure of this thesis is composed of five chapters including the following topics:

Chapter 1 : Introduction

In this chapter, sufficient background information relate to the project proposed in this thesis directly, including online video development, numbers of uploaders and contents growth, and problems generated under this environment. This chapter also covers research proposal and a statement of the goal of this paper. Finally, take an overview of the whole structure of this thesis.

Chapter 2 : Related Work

Study of the literature review and previous work. Discuss about promotion video and promote psychology. Analyze related works and the evaluation function service of existed platforms come along with concepts that supplied inspiration for this research. Clear the focus of this research.

Chapter 3 : Design of EVAP

Give instruction of EVAP's conception, introduce target audience and study of target audience. EVAP focuses in the value of specifically evaluation. It gives a limitless possibility to amateur promotion video producers of providing them practical feedback by a histogram with comment tags, allowing producers to inspect the histogram by ten seconds time unit, and able to check the comments on every bar, obtain more specific feedback and reexamine of their products. Then describe

the prototype development and discussion or tests that changed to improve them. Questionnaire study and experiments are also included.

Chapter 4 : Evaluation

Setting of user study, test methodologies and interview results are discussed in this chapter.

Chapter 5 : Conclusion and Future Work

Evaluation result and testers feedback of the prototype implementation, short-ages found during this process, how to keep user incentive, composing of future implementations and summary of this thesis.

Chapter 2

Related Work

2.1 Background

Before the Internet came to the world and before it easily accessible, widely spread contents were mostly professional created for television station or cinema. However, nowadays a new kind of contents, user generated contents are becoming more and more popular, with the recent evolution of the Internet millions of users have become self-publishing consumers [6]. “YouTube, at least in its original content, is a representation of what online video is; short and easily accessible” [23]. The online video access also indicates the social behaviors of the corresponding social group [60]. With the contents number growth, how to judge these content good or bad and search for the reason why those are good or not becoming an urgent need.

Generally, when defining a content good or not, two main aspect should be considered, subjective experiences and objective measurement. “There are many objective and subjective methods used for the video quality measuring and evaluating. For the practice it is very important that the objective methods correlate well with subjective methods” [49]. For objective evaluation, “Peak Signal-to-Noise Ratio (PSNR) has been the most well-known full reference quality metric since a long time. Improving on PSNR, several other pixel-based quality metrics have been developed, namely Structural SIMilarity (SSIM), Multi Scale-SSIM (MS-SSIM), and Video Quality Metric (VQM)” [51], it is also figured that “The goal of these objective video quality metrics is to replace time-consuming and expensive subjective quality assessment experiments” [51]. Compare with objective evaluation, things are more complicated on subjective evaluation because subjective experiences are quite different from one to another and intently concerned with viewer’s age, career, education background, culture and personal experiences. The subjective evaluations regarding “the general technical quality, perceived distortion, fleetness of the video, and loading speed are studied and the

influence of the transmission protocol and video resolution on these evaluations is analyzed” [8]. Basically, when evaluating a content based on subjective factors, absolute category rating (ACR) [26], absolute category rating with hidden reference (ACR-HR) [27], degradation category rating (DCR) [28], pair comparison (PC) [29], double stimulus continuous quality scale (DSCQS) [30], single stimulus continuous quality evaluation (SSCQE) [31], and Subjective Assessment Methodology for Video Quality (SAMVIQ) [32] to evaluate every frame that can be used. However, “many unstable factors in subjective experiments will bring abnormal values to experiment results” [59]. Especially for those contents which were not generated by professional but generated by normal users.

2.2 Promotion Video

Going after the development of social media, promotion can be done by different ways, traditional ways which includes newspaper, magazines or radio. Modern ways include promotion video promotes by television also digital media which includes internet, social networking. Digital media is an interactive way of brands interacting with consumers as it releases news, information and advertising from the technological limits of print and broadcast infrastructures. Mass communication has led to modern marketing strategies to continue focusing on brand awareness, large distributions and heavy promotions [41].

As background introduction discussed in chapter one, high speed network contributing, low price but easy control devices supplying and needs of human to human, human to communities and communities to communities communicating, breed the demand for promotion videos.

2.2.1 Definition

Promotion video refers to raising customer awareness of a service, product, brand or generating sales, which is a common department of promotion activity. Fundamentally, there are three basic objectives of promotion [2].

- To present information to consumers and others.
- To increase demand.
- To differentiate a product.

Under these objectives, promotion videos include product or service introduction, service or company promotional information, training videos and also information contents.

Nowadays, promotion videos not only provide for a specific product [11], countries or states [16], regions [54], cities [25], governments [42], universities [50], companies [44], communities [39], and scenic spots [34] also made their own promotion video. Recently, human is also required to promote himself or herself by a promotion video when job hunting or presenting [18].

2.2.2 Promotion Video Psychology

Several previous studies have demonstrated that “there is impulse buying in the Internet environment” [33], and another studies have demonstrated that “online sales promotion is the most important influential source on consumers’ purchasing behavior” [22]. In such circumstances, promotion video has many benefits as a communication medium. One of the main benefits is that people are familiar with screening, and the vast majority of businesses and households have access to the technology to watch a promotion video programme, be it on a television screen, a digital video disc presentation or streamed from a website. On the other hand, promotion video will also deliver a consistent message, which is particularly important when delivering training or instructional information. Secondly, promotion video is also a dynamic medium, and can help create and enforce company or cooperation image. It is especially useful when companies or cooperations want to demonstrate products or events that are not easy to show to customers in normal circumstances, such as the operation of large plant or machinery, medical procedures, repetitive sales presentations, high-risk experiments or one-off situations. What’s more, promotion video is also very easy to update, and can be readily incorporated into interactive productions, live presentations and, more recently, as part of the company conception.

2.3 Related Work

This topic represented the basic structure and implementation approaches of various similar systems. As the base of this research, the current state of these information will help to find cues for directions of more possibilities. Such as the

important factors of users need, merits of existing systems, also the appropriate approaches to make innovations.

2.3.1 YouTube

YouTube is currently the most consumed Internet application, accounting for more than 30% of the overall Internet's traffic worldwide [5]. It is figured out that YouTube has more than 1 billion users, every day people watch hundreds of millions of hours on YouTube and generate billions of views, the number of hours people are watching on YouTube each month is up 50% year over year and 300 hours of video are uploaded to YouTube every minute [61]. Since YouTube has such large amounts of contents, sometimes the standard to identify a content quality good or not become to judge a content interesting or not, by total number of views. Even *TIME* has taken a look back at the site's 50 greatest hits in 2010 [48]. In fact beside video views, YouTube has set two more different parts allow viewer to leave their attitudes towards contents they are watching. One is setting of like or dislike button, the other is comment writing. By these three subjective evaluation factors, a general feedback could be provided to producers (See Figure 2.1).

On the other hand, the dislike button is turning to become a problem around YouTube communities. There are so many factors with this dislike button that someone just clicks. There are many reasons that someone may dislike producers video. First, they really disliked it for the content or something that may have happened in the video. Second, that person dislikes the video because of someone who is in the video or the actual video creator. Third, there are some viewers who just decide to go ahead a click that button without any reason. There are so many other reasons why people do it but one that has gotten out of hand is this whole revenge, a group of viewers disliking the producer's video going on. In this case, this is completely an unfair environment, why are there people who like to put other people down on their creations. Those people clearly don't realize how much work, time, and effort goes into producing even a short video. For some producers it maybe hours, for amateur producers it may be days and even months. It all takes time. Something that when a creator uploads a video and they want to see feedback on it, but instead when they upload it, a second later they see a dislike. Most creators want to know why people dislike their videos so they can change something to make it better [14]. Also with disliking of videos the



Figure 2.1: Evaluation Function Setting on YouTube

video creator doesn't know what they did wrong because the person who disliked it doesn't give them feedback. Feedback is something all YouTuber's want. They want to know what they should do with their videos and what not to do. It would be so much more helpful if producers, especially amateur producers could know why, but unfortunately YouTube hasn't really made a way for people to do that. There is the comment section but not everyone who disliked the video is going to write a comment saying why they did. In this case the dislike button doesn't really serve a legitimate purpose.

2.3.2 Vimeo

As of December 2013, Vimeo attracts over 100 million unique visitors per month and more than 22 million registered users. Fifteen percent of Vimeo's traffic comes from mobile devices. As of February 2013, Vimeo accounted for 0.11% of all

Internet bandwidth, following fellow video sharing sites YouTube and Facebook. On 21 July 2008, Vimeo announced that they would no longer allow gaming videos [56]. Vimeo cited a few reasons, including that the unusually long duration of gaming videos was holding back trans-coder wait times. Existing gaming videos were deleted on 1 September 2008 [58].

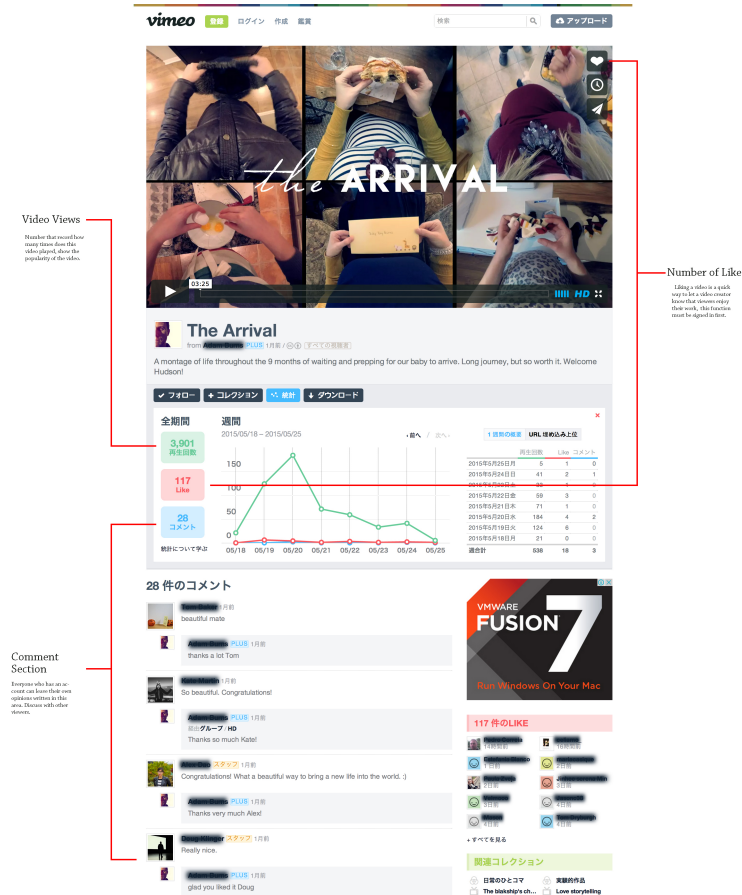


Figure 2.2: Evaluation Function Setting on Vimeo

To evaluate a content, Vimeo set video views, comment section, but different from YouTube, Vimeo only set one Like button for viewers, without dislike button. (See Figure2.2.) Liking a video is a simple way to let other Vimeans know that viewers enjoy their work. By liking a video, viewers are helping to promote content to viewers' followers, and also giving the creator of the video a warm fuzzy [52]. But undoubtedly, a warm fuzzy is not enough to be regarded as feedback for creators. If producers would like to check more specific analyze by big data operation, they

have to pay extra money for Vimeo Plus or Vimeo Pro in order to get advanced statistics [53]. These statistics include numbers of like, numbers of views and these data based on every date, allow producers look at their weekly, monthly and yearly statistics. And also provide data with a slick geo-tracking interface that helps producer to discover the areas in the world, by this route, they can see their viewers come from which country. What's more, by Vimeo Pro, producers can see who likes, comments even who downloads their products, of course available to check by data and time. The ability to collect and analyze large amounts of data is a growing problem within the online content community. The growing gap between data and users calls for innovative tools that address the challenges faced by big data volume, velocity and variety [13]. While much of the big data activity in the market up to now has been experimenting and learning about big data technologies [19], these big data feedback play an important role in corporation promotion, product marketing analyze and security intelligence extension, but meaningless for user generated contents. Producers, especially amateur online producers care most about viewers like their contents or not and why they give positive or negative evaluation for it. These needs cannot exactly analyzed by record the IP address and operation time on a world map.

2.3.3 Vine

Vine is a short-form video sharing service. It was started from June 2012, allowing users record and edit up to six-second-long looping video clips and revine, or share others' posts with followers. The videos can then be published through Vine's social network and shared on other services such as Facebook and Twitter. Vine's application can also be used to browse through videos posted by other users, along with groups of videos by theme, and trending, or popular, videos. A BBC review described collections of Vine videos to be "mesmerizing", like "watching a bewildering carousel of six-second slices of ordinary life roll past [43]".

Since Vine has acquired by Twitter, the measurement of evaluation seems like Twitter style, for example show times of video revine. (See Figure 2.3.) By sharing it directly to a social website, producers can know that how many people revined their products, similar to retweeting. Numbers of like show how many viewers like this product on this platform, numbers of revine show that how popular it is on another platform, the linkage of two platforms are the main feature different from other platforms' evaluation function. About the comment section,

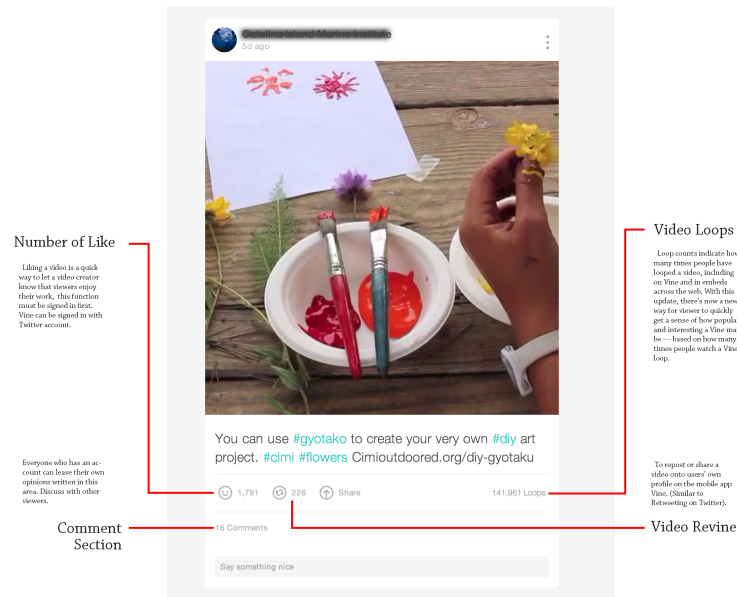


Figure 2.3: Evaluation Function Setting on Vine

Vine encourages viewers to write something nice, it is great to contribute a peace environment but this suggestion is too tendentious, non-objective for producers. Last but not the least is number of video loops. This figure may not offer the most accurate look at a video's popularity, it's safe to assume metrics like revines and Likes are a better indication of approval, but the loop count does offer a look at how widespread a video is [55]. However, that doesn't mean loop count is a perfect metric. Vines play automatically, and loop automatically, meaning a Vine loop does not necessarily mean it was actually watched. For example, a Vine embedded in a web article may loop for minutes while the web page is open, but that doesn't mean the video was watched by a human.

2.3.4 Audience Measurement

Audience measurement measures how many people are in an audience, usually in relation to radio listenership and television viewership, but also in relation to newspaper and magazine readership. The term is used as pertaining to practices which help broadcasters and advertisers determine who is listening rather than just how many people are listening. Without reliable audience data, many businesses will be reluctant to participate in the new platforms [1]. "In some parts of the

world, the resulting relative numbers are referred to as audience share, while in other places the broader term market share is used” [57]. This broader meaning is also called audience research or audience rating. (See Figure 2.4.)

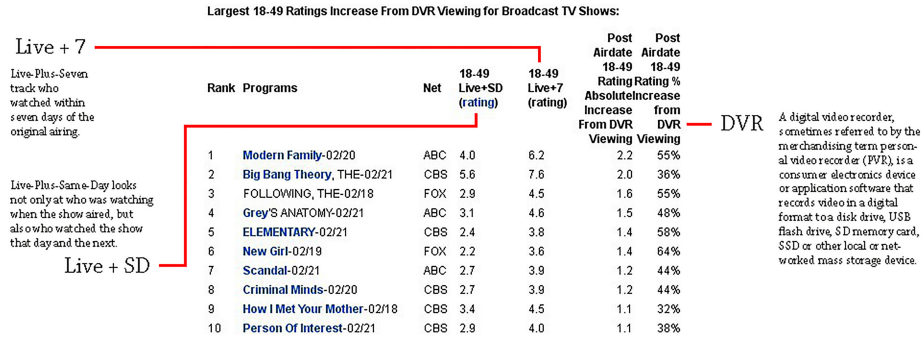


Figure 2.4: Sample of Audience Measurement Rating

Three different ways to collect and analyze these audience data, diaries, electronic and software. The diary was one of the first methods of recording information, it also included way of social survey and telephone recall. However, this is prone to mistakes and forgetfulness, as well as subjectivity. Electronic, also known as Nielsen ratings, the audience measurement of U.S. television has relied on sampling to obtain estimated audience sizes in which advertisers determine the value. The technology-based home unit system is meant to allow market researchers to study television viewing habits on a minute to minute basis, seeing the exact moment viewers change channels or turn off their television set. New digital technologies initially complicated in-home measurement systems. The DVR, for example, initially seemed incompatible with a Nielsen box, which was designed to register the frequency of the television signal in order to measure the channel being viewed [40]. Better understanding of audience reaction [15] can help providers plan infrastructure investments and help producer in managing multimedia content. The audience measurement also can provide television station visible feedback for their programs or shows, reflect on these feedback, resolve next step or version in order to revise broadcast plan for advertisement turnover. Technology development as well as technology maturity provide a wild platform for professionals to analyze market reaction and feedback. However, it is hard for normal users get in touch with audience measurement, especially for amateur producers, not available to use audience measurement methods to get the feedback they demand.

2.4 Focus of This Research

There are various platforms of online videos, which allow users to upload, watch, share and evaluate. Among these different platforms, most of them focus on the popularity, number of views most. The standard of judgment generated an unequal environment for amateur producers. This research focuses on the value of comment feedback, provide specific evaluation results for amateur promotion video producers. It gives a wide opportunity to amateur promotion video producers of obtaining practical feedback. (See Figure2.5). Different from existed platforms'

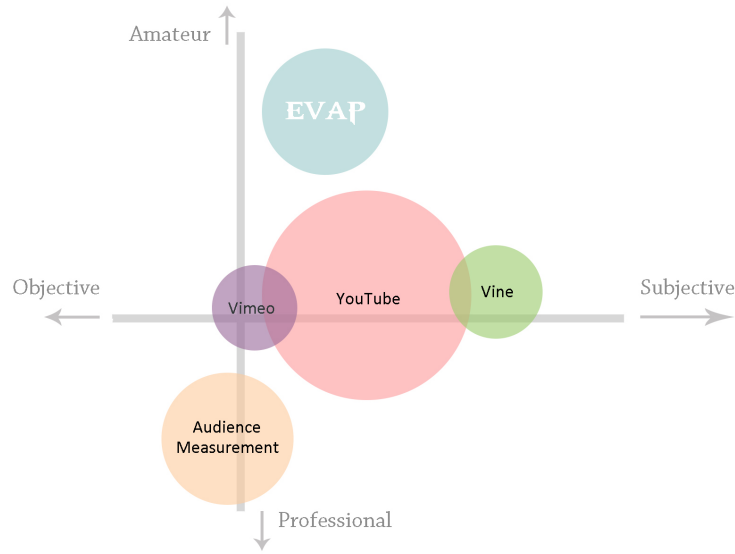


Figure 2.5: Focus of This Research

target audience, EVAP cares most about amateurs, aims to create an equal environment for them. Therefore, provide amateurs easy understandable subjective evaluation feedback is much more practical than provide them technical objective results.

Chapter 3

Design of EVAP

3.1 Concept

The name “EVAP” is the shortage of evaluation platform, which means, to give a positive or negative judgment about contents. This name was selected because it directly relates to the concept of creating an equal environment for amateur producers to evaluate their products based on subjective factors. According to the histogram result tagged with comments on every bar , amateur producers would have a clear perspective across the overall recognition.

The concept behind EVAP is to create a platform where amateur promotion video producers can get their products evaluated , get real-time feedback by a time slot histogram, with comments tagged on every bar. By this system, allow amateur producers get practical and easy understandable feedback instead of hollow critique. To achieve this there are four hinges that form the base of this research:

- Criterion of amateur promotion video evaluation.
- Well designed user interface for like and dislike button setting.
- An evaluation system to record users operation and generate a histogram result.
- Tag comments on histogram bar.

3.1.1 Target Audience

As an original motivation and concept, any person who generate contents and would like to get their contents evaluated can have access and use EVAP, but for the purpose of this thesis and measurement of the platform, the target users of EVAP will be defined as amateur promotion video producers, who are interested

in promotion contents generating but less experiences. Then after produce a promotion video, they are available to access online. Finally, the target users should be willing to get their contents evaluated and receive feedback.

3.1.2 Study of Promotion Video Producing Habits

In order to have a good effective, it is necessary to have a good understanding of target audience. Trying to approach target users thinking method, a discussion was held to obtain deeper know-how of their logical and structures. Two amateur promotion video producers were interviewed. Here summarize the discussion result of amateur promotion content producers habits.

- Strategic Planning : identify the whole image of the product, understand the product. Creative basic goals, script, storyboard, story line and environment, think over the budget, decide actor or actress, camera, shooting place, data and time.
- Planning : Technical preparations, camera work angles.
- Producing : Video shoot.
- Editing : Putting all footage together, cut and edit, turning in visual effects and back ground music.
- Sharing : The most common way is upload online.
- Evaluating : Turn to professors, teachers, parents or friends opinion. Check feedback online, numbers of played times, numbers of like, some comments below the video.

By interview two amateur promotion video producers about the meaning of evaluation to them, it is said that they hope to get affirmative comments or encouragements by evaluation, but things more important than this are they want to confirm how viewers experienced from their products and how to be a better producer.

Take a look at ways amateur promotion video producers usually do, it is figured out that sometimes comments from professors or teachers are fractionally hard to understand, cause commenters are professional, they used to give feedback from an overall angle, these comments are beneficial but sometime not reachable for amateurs. When taking advice from parents or friends around them, producers

feel that their parents or friends tend to spare their feelings too much, cannot get an objective feedback. This is why they care much about the online comments. As the questionnaire about users attitude towards comment section below contents interface shows that 88 % of online video users care about the comments below (See Figure 3.7).

One of the biggest problem for amateur producers to check comment online is they cannot catch the comment figures which part of the content. It's unfair to judge a production negative or positive entirely, especially for amateur promotion video producers, even a tiny highlight spot is necessary to encourage amateurs.

3.1.3 Uniqueness of EVAP

There are many video evaluation options in the market nowadays, but most of them focus on leave an impression entirely of a content. (See Figure3.1.) This

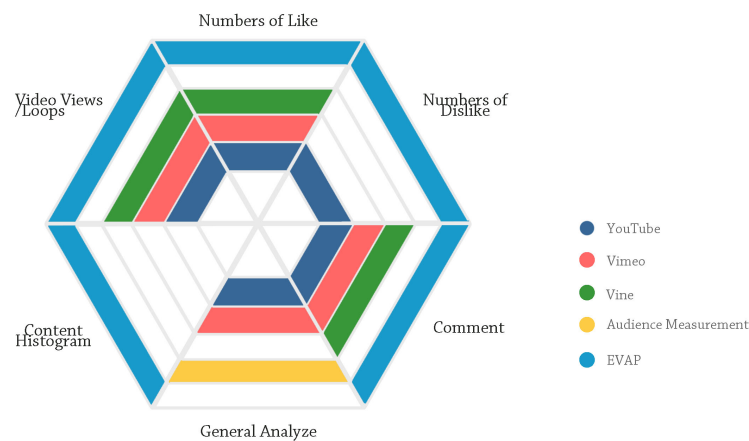


Figure 3.1: The Uniqueness of EVAP

research focuses on the value of specifically evaluation. EVAP gives a limitless possibility to amateur promotion video producers of providing them practical feedback by a histogram with comment tags, allowing producers to inspect the histogram by ten seconds time unit, and able to check the comments on every bar, obtain more specific feedback and reexamine of their products. Finally it aims to help amateurs to improve their ability of producing, increase the numbers of high quality contents online.

3.2 First Prototype

This section concludes the tools required to construct the prototype, work-flow of this design, the prototype development based on original conception, as well as the changing during the development and test of the prototype.

3.2.1 Initial Prototype Workflow Development

As mentioned before in this thesis the concept of EVAP has three main features, and for a well designed user interface in this research, all these features are required in prototype setting. Since the author worked in an User generated Contents project in master one period, the author thought over the problem that after user shooting, editing, uploading and watching, what is next step of user generated contents, how to call for more users to participate their contents after-works. consequently the author drew the initial work-flow. The initial work-flow is very important for prototype design and after-works. The original work-flow concept can be seen in Figure3.2.

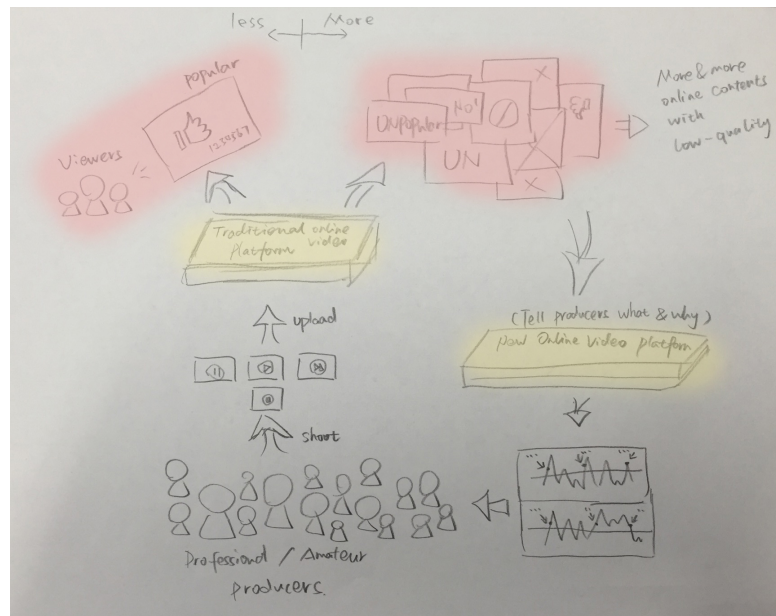


Figure 3.2: The Initial Prototype Workflow

3.2.2 Development Tools

As soon as the conception comes out, it was decided that the prototype will not be constructed under the environment of IOS or Android system. Though run under different systems, EVAP aims at being mainly used on mobile devices. Only for prototype test, it will be done based by web. In order to create the prototype, Adobe Photoshop and Adobe Flash Player were used to do the user interface design. It was decided that to put a flash shadow over the player section to record users operation. Some programming languages were used to do the web construct, which were HTML, PHP and CSS, the most used was HTML. The programming work was done by collaborate with Xiaobo Tan, a graduate school student in Dalian University of Technology.

One of the main feature on EVAP is generate real-time histogram, available for amateur promotion video producers to receive visible and practical feedback. The real-time histogram will generate right after viewers watch the promotion video. In order to contribute an easier understandable feedback, Y-axis of the histogram will be set as numbers of like or dislike with percentage results on every bar, and X-axis will set as time slots. After watching several promotion videos, 10 seconds time unit was decided to put on X-axis of the histogram. Because the length of most promotion videos are limited in 5 minutes, if set time unit as 1 second or 2 seconds, histogram results will consist of more than 200 even 300 bars, in this case, the result would be complicated for amateur producers to speculate on their products, and also, it would be a quite hard work for viewers to tag comments to every bar. On the other hand, if set time unit as 20 seconds or more, the histogram results will reveal only 5 to 10 bars, this is difficult for amateur producers to realize the trend and specific evaluation feedback. Therefore, from the first prototype, 10 seconds time unit was set on EVAP feedback histogram.

3.2.3 Questionnaire Study

In order to investigate users especially amateur promotion video producers needs and habits, two different questionnaire studies were arranged. The first questionnaire's target are normal users, who access online and watch videos.

The first questionnaire study was implemented in two ways: paper questionnaire and online survey tool using. Paper questionnaire was translated to five languages, English, Japanese, Simplified Chinese, Traditional Chinese and Korean. These questionnaires were sent to several universities in USA, UK, Australia,

Table 3.1: Finding from Questionnaire : Preference Factors Toward Promotion Video

Ranking	Viewers	Producers
1	Storyline 18%	Scene 18%
2	Audio 16%	Audio 15%
3	Actor/Actress 14%	Storyline 14%
4	Scene 13%	Actor/Actress 13%
5	Image Quality 12%	Image Quality 10%
6	New Function/Service 9%	Camera Work 8%

China, Korea and some cities in Japan, like Tokyo, Osaka, Kobe, Fukuoka and Sapporo. Also, some questionnaires were done by tourists from different countries to Ueno Park in Tokyo. The total samples of first questionnaire was 1,027 copies, and the valid subjects were 1,024 copies. Here are summaries of the first questionnaire study (See Figure 3.3, Figure 3.4, Figure 3.5, Figure 3.6 and Figure 3.7).

Furthermore, in order to analyze more about the research target audience, the second questionnaire study was implemented. The valid subjects were 121 copies. Based on results of the first questionnaire, another survey was conducted to promotion video producers (See Figure3.8).

To compare the two questionnaires results, some common points have been found. Top four factors that viewers think important when watching a promotion video are storyline(18%), audio(16%), actor/actress(14%) and scene(13%). On the other hand, to a producer, the best five factors are scene(18%), audio(15%), storyline(14%) and actor/actress(13%). Based on these results, viewers and producers preferences were founded.

By analyze the questionnaire results, some changes took place from the original prototype work-flow to first prototype. Things have been finished in the first prototype were setting of like or dislike button and a questionnaire of users evaluation motivation. (See Figure3.9 and Figure3.10).

3.2.4 First Prototype Experiment

Because EVAP is a platform where amateur promotion video producers can get their products evaluated and get real-time feedback from viewers, a city promotion video *Fantasy Yantai*, made by an amateur producer - Mark Zhangchao, was

Gender

Male	543
Female	481
Total	1,024

Occupation

Education	55
Finance	58
Services	52
Research	55
Government	48
Manufacturing	47
Student	310
Freelance	110
Others	289

Age

9~19	59
20~29	436
30~39	314
40~49	162
50~59	49
Over 60	4
Total	1,024

Figure 3.3: Result of The First Questionnaire, *Part 1*

Have you ever used an online video service website?

Yes	1,009
No	15
Total	1,024

How frequently do you use an online video website?

Everyday	350
2 or 3 days per time	367
1 time per week	169
1 time twice a week	88
1 time per month	35
Total	1,009

Have you ever registered to log into an online video website?

Yes	708
No	301
Total	1,009

Have you ever uploaded a video/film to an online video website?

Yes	595
No	414
Total	1,009

Figure 3.4: Result of The First Questionnaire, *Part 2*

Why did you upload? (Motivation)

Share an idea	289
Share fun	364
Hope to attract viewers	182
Hope to be famous	97
Hope more people know about my product	367
Hope to get comments	217
Others	58

What kinds of videos have you uploaded?

Funny	343
Selfie	127
Scenery	234
Education	62
Game	83
Promotion	129
Documentary	165
Drama	33
News	29
Animation	18
Others	70

Figure 3.5: Result of The First Questionnaire, *Part 3*

What features of your product do you consider when you upload videos ?

Storyline	165
Image quality	95
Actor/Actress	128
Scene	141
Lighting	16
Editing	29
Back Ground Music	121
Camera work	27
Punchline	194
Others	68

About videos you uploaded, would you like to get professional comments or get feedback based on big data?

Yes	392
No	218

Figure 3.6: Result of The First Questionnaire, *Part 4*

Have you ever checked comments or discussed with other users after you watch a content online?

No	121
Checked but not commented	686
Check and left my own comments	217

Have you ever watch a Promotion Video?

Yes	935
No	89

When you watch a promotion video, what do you think are important factors for this promotion video ?

Storyline	400
Image quality	262
Actor/Actress	306
Scene	292
Lighting	81
Editing	93
Back Ground Music	358
Camera work	198
New Function/Service	199
Others	19

Figure 3.7: Result of The First Questionnaire, *Part 5*

When you produce a promotion video, what do you think are important factors in your product ?

Storyline	77
Image quality	55
Actor/Actress	69
Scene	97
Lighting	23
Editing	37
Back Ground Music	84
Camera work	44
New Function/Service	42
Others	19

Figure 3.8: Result of The Second Questionnaire

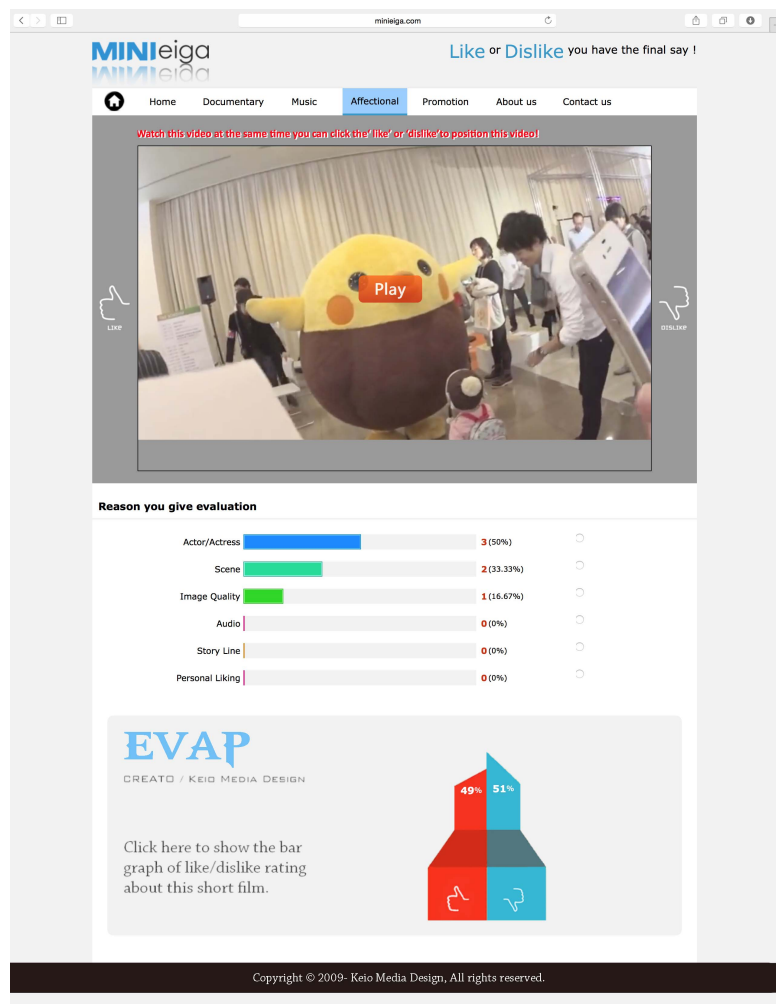


Figure 3.9: Sample : Evaluate Page of First Prototype

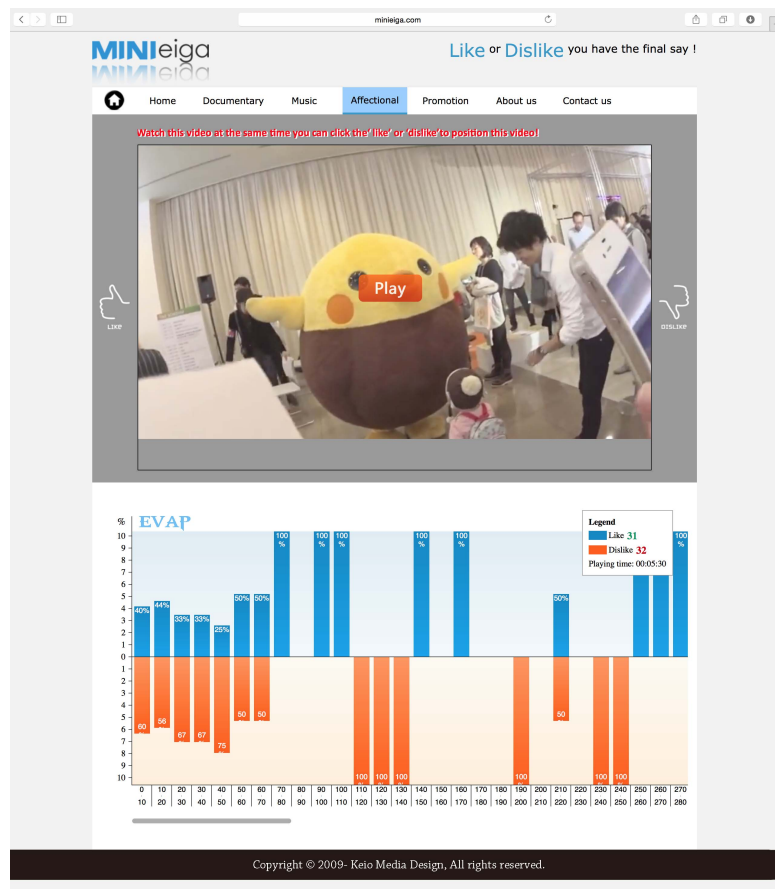


Figure 3.10: Sample : Content Evaluation Result Page of First Prototype

selected for the prototype one test.

The promotion video *Fantasy Yantai* is an unofficial city promotion product, which length is 3 minutes and 58 seconds, using Time-lapse to record the city from morning to late night. (See Figure 3.11.) Name of the city is called Yantai, a seaside city in east part of Shandong Province, China. The producer is a worker in local port, producer's hobby is photography but never get formal educated or trained.

First the testability time was selected to limit in one week, from April 22nd 2015 to April 28th 2015. This is because it had to be long enough to call for more viewers to participate in this test. After open the source of this experimental subject, the site link was dispatched by several social applications to random users. On the other hand, a local test was held on April 23rd 2015 at C3S07 discussion

Figure 3.11: Promotion Video *Fantasy Yantai*

room in KMD. Two viewers were arranged to watch this promotion video on EVAP, and encouraged to click the like button or dislike button when they feel negative or positive about this product during the watching process, available to click the button at any time and for several times. These operations were recorded by EVAP system, after watching the whole promotion video, a histogram result of like and dislike based on every 10 seconds time unit was showed in the bottom of the page. Before viewing the result, viewers were asked to choose one reason that mostly influenced their judgment towards the evaluation of this promotion video. These five factors was set based on questionnaire result which discussed in last topic. After the test, a short interview was held to testers.

3.2.5 First Prototype Evaluation

In order to get the test result that prototype one proposes, a qualitative research method of evaluation was used [17]. Based on previous study, to walk through the whole evaluation process, the first step of it involves the identification of specific user [46].

Table 3.2: Questionnaire for Prototype One

Question	Viewer 1	Viewer 2
Was it difficult to use EVAP?	Easy 1 2 3 4 5 Hard	Easy 1 2 3 4 5 Hard
Do you like the user interface?	Dislike 1 2 3 4 5 Like	Dislike 1 2 3 4 5 Like
Do you like result in histogram?	Dislike 1 2 3 4 5 Like	Dislike 1 2 3 4 5 Like
Are you fresh with it?	No 1 2 3 4 5 Yes	No 1 2 3 4 5 Yes
Will you use EVAP for your product?	No 1 2 3 4 5 Yes	No 1 2 3 4 5 Yes

Question 1, Was it difficult to use EVAP?

Viewer 1 : Not hard, though I felt a bit confused at first, I thought I can only click one time for this show. It's really interesting but when I focus on evaluating, I was nervous and cannot enjoy the video in a relax mood.

Viewer 2 : I think it's easy to use it, I felt like I'm a director, or a critic. I can give encouragement or criticism to producer, it's interesting. But sometimes delay occurred after I click, I'm not sure does that matter or not.

Question 2, Do you like the user interface on EVAP?

Viewer 1 : I like the design except the color, I can't understand why a gray square surrounds video section. The button is fine, similar to YouTube, but different color. I also like set two buttons to two sides, sometime I click a wrong button on YouTube because they are too close.

Viewer 2 : Yes, I think it's nice. But this site looks more like a research or experiment site, not like a social UGC site, maybe because it's too simple. And I like the result section, I have to click a button before I get the result, I like this interface design.

Question 3, Do you like the result provided by a histogram?

Viewer 1 : Yes, I like this part, or I would like to say I felt a bit surprised about it. I thought this platform would generate a piece of number or something like that, but it was a histogram, it's more clearly and easy going! I like this

function and this method.

Viewer 2 : Yes, I like it! It's really easy to check which part I liked or disliked, and 10 seconds unit is also a nice setting, specific results and not complicated, I like this way of showing results.

Question 4, Are you fresh with it?

Viewer 1 : Yeah... kind of, it looks like YouTube, paste a link from YouTube, and the button also similar to YouTube, for these reasons it's not new, but since this platform provided a histogram for several slots' evaluation of the video, yes, this is fresh for me.

Viewer 2 : Yes, I think with the histogram result, I can check which part of the video is most popular and I will watch that part by preference, and also, I can click unlimited times when watching, that is quite convenient for me.

Question 4, Will you use EVAP if you are a producer?

Viewer 1 : It depends, for example, if I make some contents just for fun, I don't think I want to know the evaluation result or feedback. But if I produce a promotion video like this or a documentary, exactly I wish my production could get evaluated and provide me feedback. I do agree this would help amateur producers.

Viewer 2 : Why not? I have uploaded a video to YouTube, it has been 2 years but the view numbers are less than 200, with one like and three dislikes, I feel frustrated about this. I really wondering about the reason why people do not like it. So I think I'm willing to try this platform.

After Interviewed two viewers, the histogram result (See Figure 3.12) generated by EVAP was provided to promotion video *Fantasy Yantai* producer, Mark Zhangchao. Meanwhile, several qualitative questions were asked.

Although the producer was an active viewer on online video websites, he felt "surprised" when he saw the feedback result in a histogram. "It shocked me", the producer said he never think about to analyze his content in several slots, "I'm

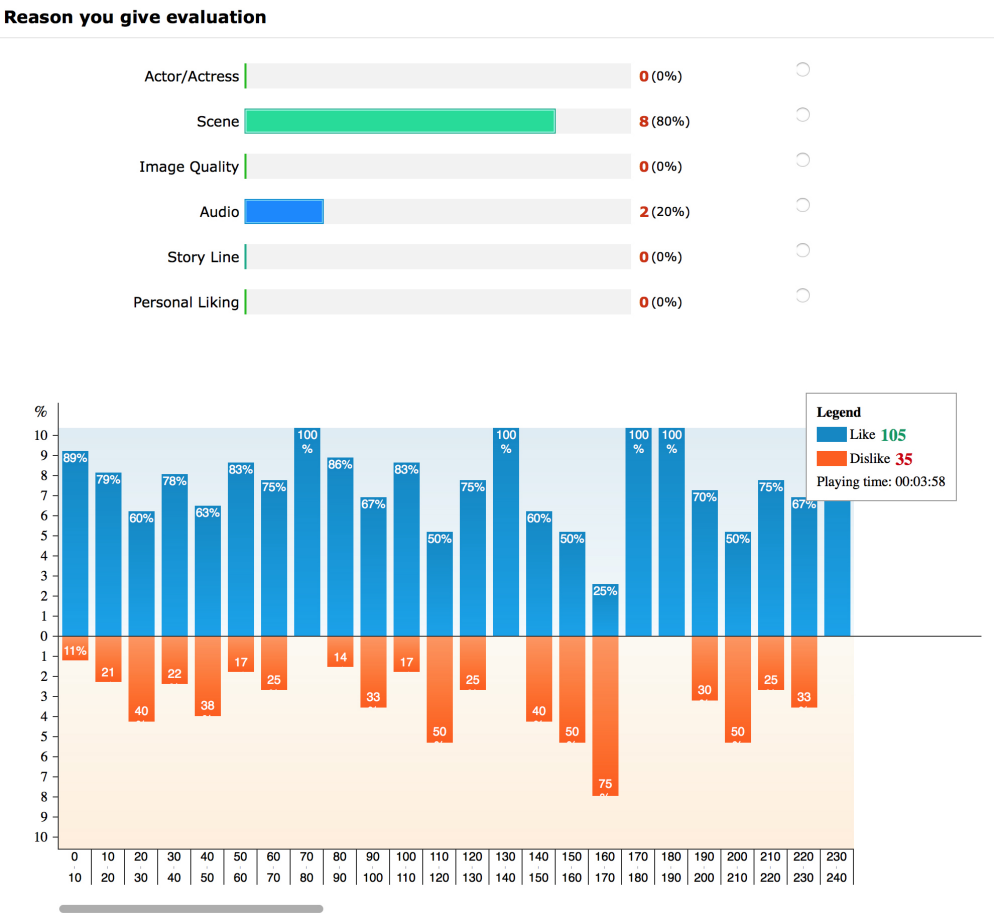


Figure 3.12: Evaluation Result of Promotion Video *Fantasy Yantai*

interested in the bar graph, cause it's more interesting than words or paragraphs". In curiosity, the producer reviewed his product, followed with the histogram feedback. First he watched from 160 seconds to 170 seconds, because result shows 75% viewers didn't like this part. "Is it because the scene repeated too much times so viewers felt bored?" The producer curious about the reason why viewers didn't like. Before looking down, the producer was encouraged to check some positive evaluations. Focusing on 170 seconds to 190 seconds, the producer said "I enjoyed these scenes either". To promote a city by photography and contents makes the producer happy, what's more, "I'm so glad that so many people like it, this is a big encouragement and a big gift for me, I want to try another content now." The producer watched his promotion video again with crossing reference the histogram result. Whereafter, the producer was interviewed about the section of reason why viewers give evaluation. The result showed that 8 viewers gave evaluation based on scene and 2 viewers gave evaluation based on audio. "I like the histogram result but I'm confused about this part", the producer figured out that it's hard to understand the meaning of this section, producer cannot match the reason to the bar, in that case retroaction occurred. Finally, the producer was asked about the whole experiences about this prototype. "I like this system, I think the histogram helps a lot, I can get viewers honest opinion instead of flatter words, I like the way this system showing result, it's directly perceived through the senses, I can learn a lot from it". When asking about the disadvantages or the limitation of this prototype, the producer stated "It's great to let me know which part viewers like and which part viewers don't like, but after I checked the result, I want to know more about the reason, I wondered why, especially why viewers dislikes, I think that worth more, though I enjoyed the likes very much".

According to the experiment of the first prototype, evaluate a content by every 10 seconds and generate a histogram to provide feedback to amateur promotion video producers are positively proved. Meanwhile, the limitation is this prototype cannot analyze reasons why viewers like or dislike. It's not practical enough if only provide a histogram, some interactive improvements should be redesign in next step.

3.3 Second Prototype

It can be stated from the interview of the amateur producer that the histogram result is easy to understand but producer would like to know more about the

reason, or motivation why viewers give evaluation, especially for minus evaluation. Based on the implementation and evaluation feedback from the first prototype, the second prototype has several important changes and new features.

3.3.1 Second Prototype Design

Continue the past research in order to solve the questions obtained in last prototype test, new user interface design and a new community model are set in prototype two (Figure 3.13.).

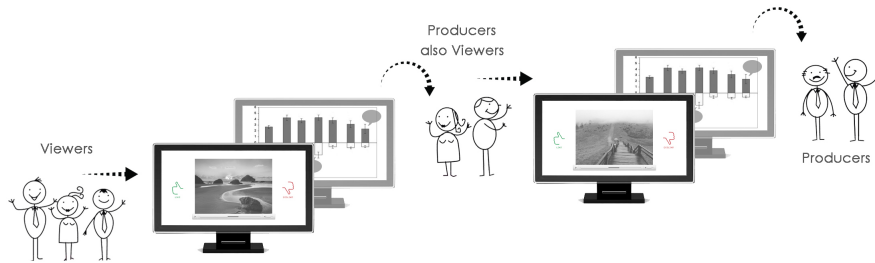


Figure 3.13: Model Design of the Second Prototype

The first difference is the button setting of like and dislike. It's easy to find that eight flat new button are set in play section, instead of the like and dislike button. But the tendency didn't change, left side is like and right side is dislike. With this setting, viewers can choose different factors to give evaluation, after watching the whole promotion video, five different histograms based on audio (back ground music, sound, voice etc.), Scene (Shooting place, environment, tools etc.), Actor (Actress), Storyline and a general result will be generated. The reason why set this four factors was based on analyze questionnaire study discussed in topic two of this chapter, take the intersection function of factors that viewers care about and producers concern most. Since this change shows viewers preferences, the questionnaire set in prototype one was removed. Next difference occurs at histogram result. In order to provide producers more clearly and easier understandable feedback, EVAP set comment section on every bar of the result

histogram, allow users move mouse over the bar, and comment section will fade in. When viewers check their evaluated operations, they are also able to submit their own comments on the bar they manipulated (Figure 3.14.). On the other hand, the time unit on X-axis didn't change because due to the feedback from prototype one test, 10 seconds time unit is suitable for a promotion video.

3.3.2 Second Prototype Experiment

Though section has changed, the aim of EVAP didn't change. By well designed content evaluation user interface to provide practical and easy understandable feedback for amateur promotion video producers.

For students in graduated school of media design, Keio University, a series classes called Innovation Pipeline one, two and three have to be taken. This class belongs to introductory project, impart overall awareness walk through design, technology, management and policy. When taking this class, all students were divided into different groups by four members every group. All groups were taught methods of design and promotion, usually at the end of the second innovation pipeline class, Every group was encouraged to generate a promotion video for product of service they did during innovation pipeline class.

Test object of prototype two experiment was from one of the innovation pipeline two class group's production, Elements. (See Figure 3.15) This promotion video was created by Team Euro Asia, four members with different background come from Mainland China, Taiwan, Russia and Finland . Under their conception, "ELEMENT" is a digital smart cup that fit any occasion, any time, to evoke. The length of this promotion video is 1 minute and 34 seconds.

As previously stated viewers and producers both took part on the testing of EVAP. The experiment took place in C3S09 at KMD, from 20th May 2015 to 24th May 2015. Since the operation greatly different from one individual to another, the experiment was set as one participant one day.

Due to platform condition, the same video was shown four times, each time with a different evaluation factor of this promotion video. Sequence of evaluated factors was followed by audio, actor/ actress, scene and storyline. At the end of all four times demonstrated, the participant was asked to give a whole impression and comments for this promotion video.

The experiment was started with a short introduction by the researcher. A piece of paper and one pencil was given to participant allow participant to memo

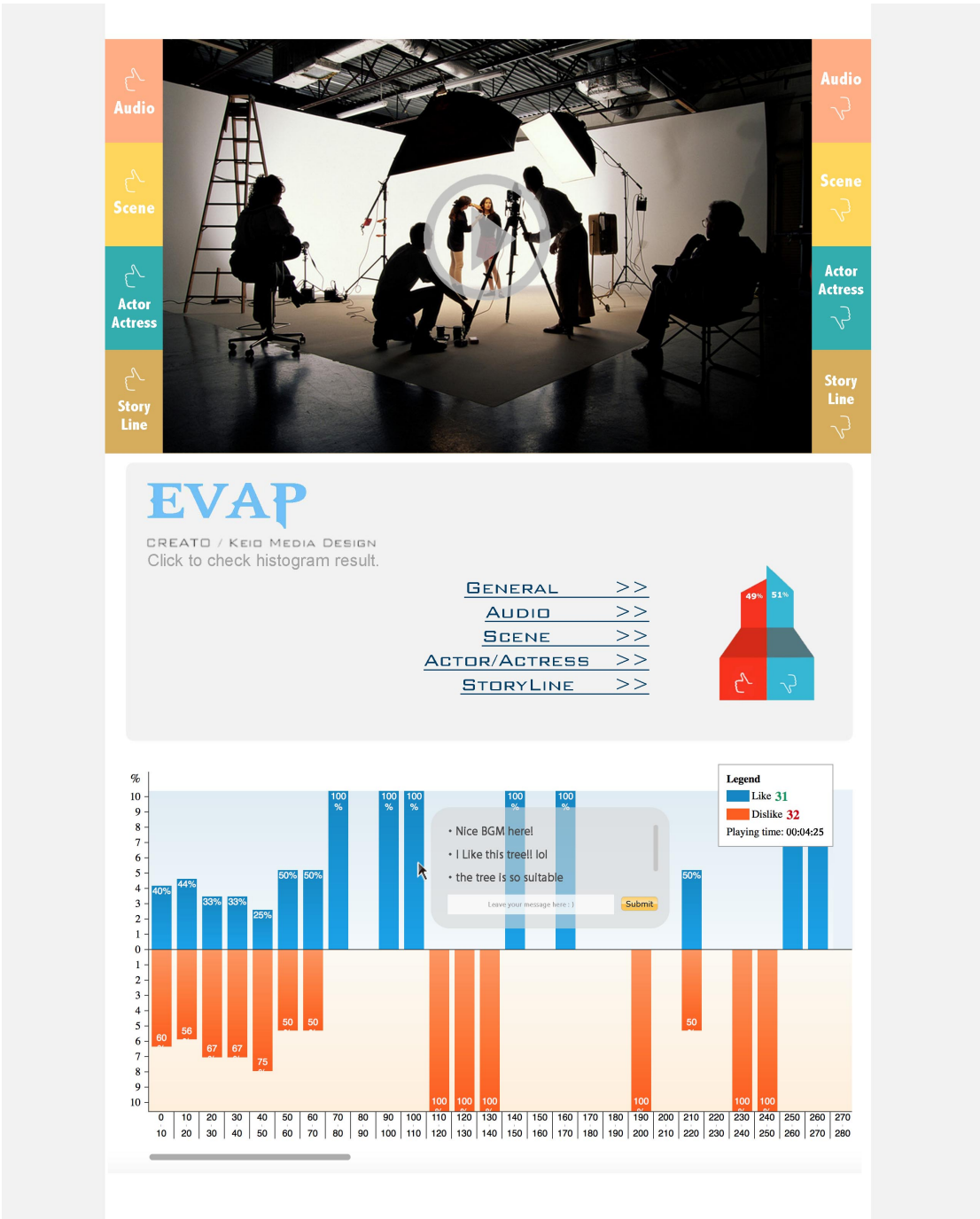


Figure 3.14: The Second Prototype

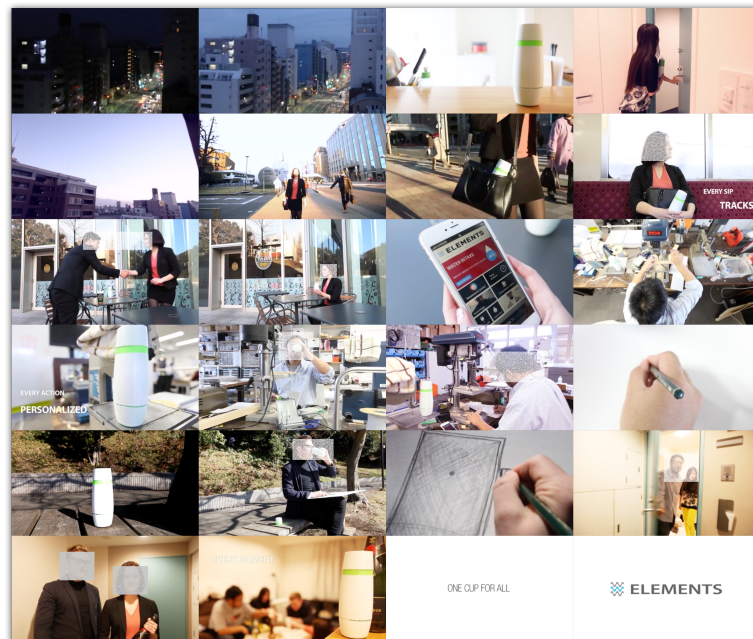


Figure 3.15: Promotion Video : *Elements*

something if necessary.

After watching this promotion video for four times, four different histograms were generated immediately. Participant was interviewed about their definition of audio, actor or actress, scene and storyline, then interviewed the reason why they press like and dislike for every factor.

3.3.3 Compare Results

Obviously different from the first prototype experiment result (See Figure 3.12), user interface have been optimized based on previous evaluation feedback. The second prototype experiment generated a new style of histogram results, which showed the time unit, various evaluation factors, numbers of like and dislike, also reasons why views like or dislike (See Figure 3.16 and Figure 3.17). Promotion video evaluation results were separated into four categories in accordance with the needs of producers. In particular, viewers' comments were tagged to specific time unit bars. Although optimized several functions, due to the importance of the user experiences, detail comparison and evaluation will be discussed in next chapter.

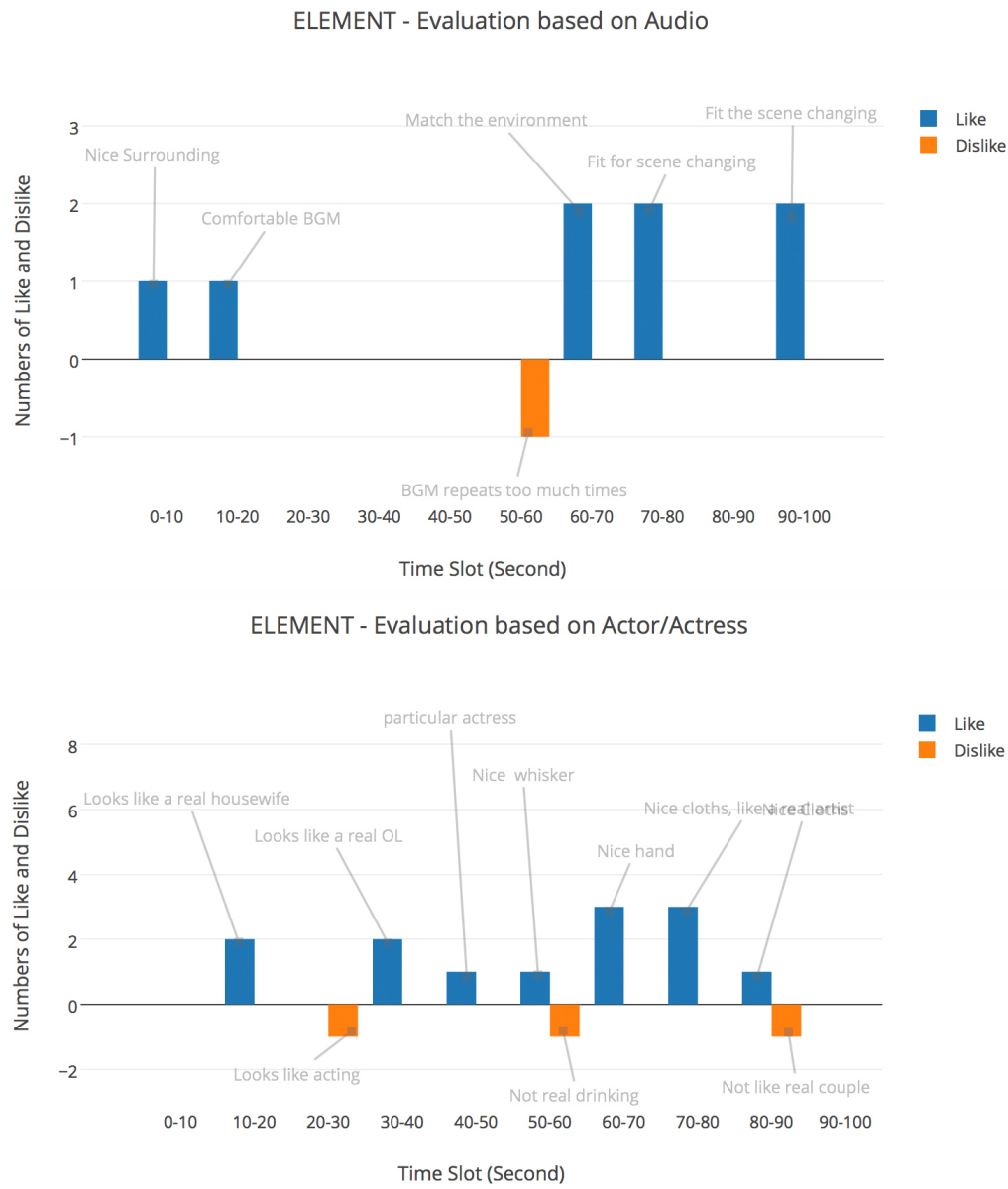


Figure 3.16: Evaluation Result for Promotion Video *ELEMENTS* , Part One

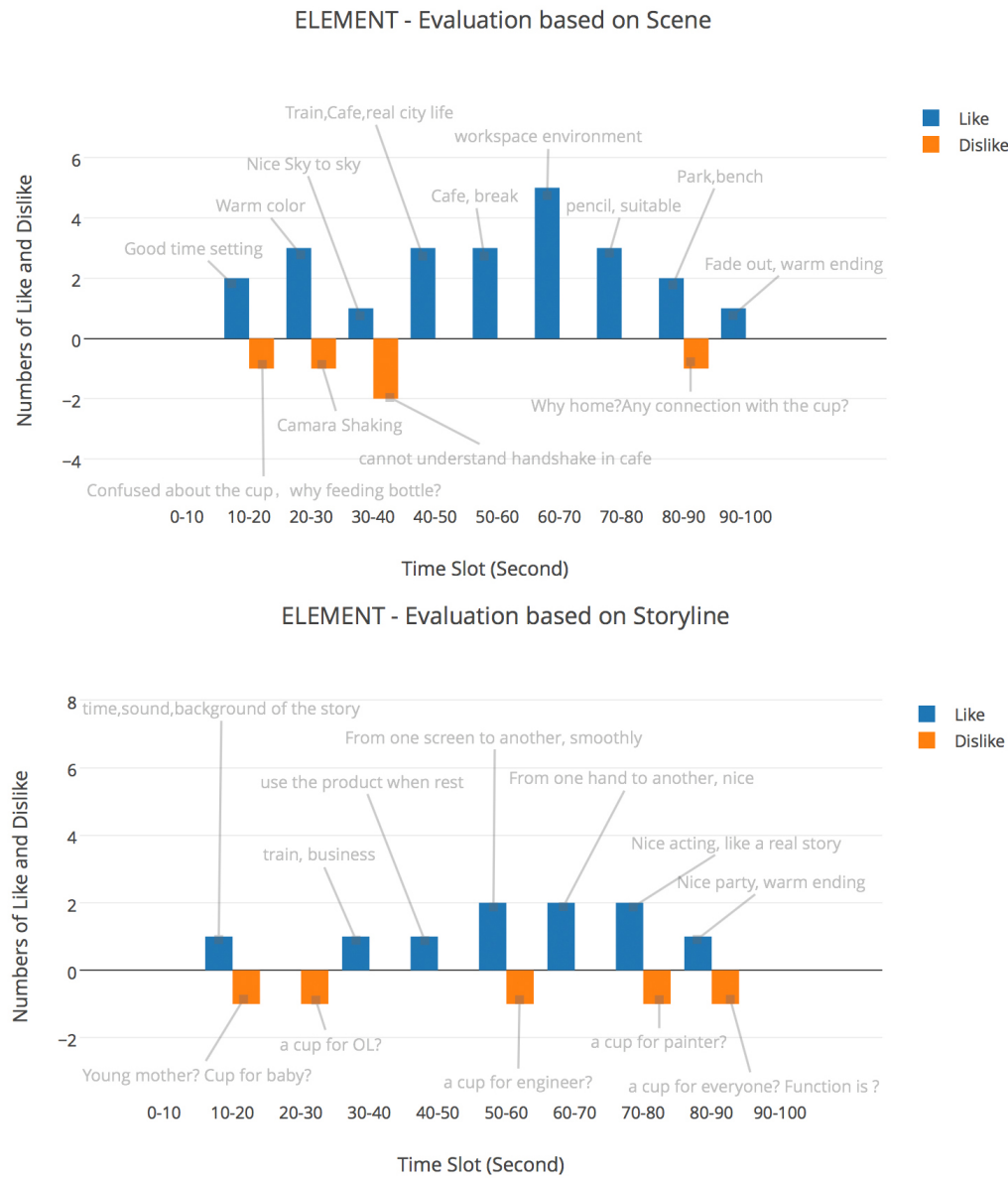


Figure 3.17: Evaluation Result for Promotion Video *ELEMENTS* , Part Two

Chapter 4

Evaluation

In this chapter, the methodology, test evaluate procedure and testers comments are described, as well as the feedback from amateur promotion video producers.

4.1 Overview of Evaluation

The user study consisted of deep interviews with 5 participants with different levels of content producing ability. Interviews were held from 20th May 2015 to 24th May 2015 and consisted of face to face interaction between the researcher and interviewee. The location was at C3S09 room in KMD. Participants were first asked general impression about the promotion video. Afterwards, participants were encouraged to share their experiences when using EVAP.

Since EVAP is a platform provide practical feedback for amateur promotion video producers, a promotion video produced by 2014 Fall's batch student in KMD was selected as experiment content. Length of this promotion video is 1 minute and 34 seconds. The same video was shown four times, each time with a different evaluation factor of this promotion video. At the end of all four times demonstrated, the participant was asked to give a whole impression and evaluation of this promotion video.

On the other hand, it is available for every viewers to access to the histogram result and tag comments on every bar. Because the goal of this thesis is to provide practical feedback to amateur promotion video producers, therefore, another in-depth interview was arranged with the promotion video producers, target audience of this research.

Table 4.1: Profile of Participants

Age	Gender	Nationality
60s	Male	Japan
20s	Female	Indonesia
20s	Female	Indonesia
40s	Male	Canada
20s	Male	Japan

4.1.1 Profile of Participants

The user experience test included five participants with various level of content producing ability. As to best reflect the influence throughout the experiment, participants with various background and majority were purposely selected. Participants' age ranged from early twenties to sixties. The nationality of participants included Japan, Indonesia and Canada, of these five participants, two were female and three were male. All interviews were conducted in English.

4.2 Methodology

In order to get the theory that this thesis proposes, a qualitative research method of evaluation was used [21]. This method was chosen based on previous study, the first step in cognitive walk through evaluation involves the identification/selection of specific user task that the interface design is intended to support [46]. On the other hand, as it was explained before in this thesis, EVAP uses its features to provide practical feedback, histogram with tagged comments, for amateur promotion video producers. In order to make sure that these features serve in an expectable and logical ways, the qualitative evaluation method is efficient in this case because it provides specific and deeper feedback of users real experiences. To evaluate EVAP, the testers of qualitative method included viewers and producers.

As a qualitative research evaluation, feedback was not measured by web system or scale measurement. In order to obtain more specific feedback, guiding principles and appraisal questions were inquired [45].

The goal of the user interview were as follows:

(I) To perceive the advantage and disadvantage of user experiences aspect on EVAP.

Solution of this goal in the particular evaluation experiment was based on several question and answer statement to recognize whether this platform was well designed or not, and perceive the advantage and disadvantage.

(II) To perceive whether the histogram feedback practical and meaningful or not to amateur promotion video producers.

The goal of EVAP is to create an equal environment for amateur promotion video producers, provide them practical and meaningful histogram feedback. To define it meaningful or not, producers who produced the test promotion video were interviewed by several questions.

4.3 Procedure

This thesis aims to get real feedback from users, which is also qualitative method required. In order to approach that goal, a deep interview of tester after experiment is necessary for this research. These are main procedure of the testing:

- Eight experiment evaluation testers (five viewers and three main producers)
- The test was arranged for five days, from May 18th of 2015 to May 22nd of 2015
- At the end of the experiment, all users were interviewed to answer some questions and express their feelings
- Five viewers were deeply interviewed about their user experiences
- Three main producers were encouraged to share their feeling after compare with the comments they got by the traditional ways.

The following evaluation results are divided into two subsections, the viewers' side and the producers' side. The interview of viewers' side focus most on user experiences and user interaction. The interview of producers focus most on

the promotion video evaluation result analyze and whether it is meaningful to producers. Any significant comments during the interview process will be noted.

4.4 Viewer's Feedback

4.4.1 Participant One

Participant one is a professor in Keio University, a professional in motion picture field. As he has specialized knowledge about video evaluation, this participant worked as a supervisor and guided thesis *Research on Real-time Subjective Evaluation for Motion Pictures Utilizing Script Structural Analysis*, proposed a real-time evaluation system focus on storyline analyze in order to clarify the reasons why viewers like the story and characters. The participant stated out that “there is no system for amateur producers to collect the clip analyze data, of course for professional, there are many tools to do evaluation, for example film preview showing, arrange selected journalists, media man and fans to watch the film before it screening, and interview these chosen viewers”.

Since network is running faster and smartphones are getting much more popular, content generating has become common in normal life. But this participant figured that large amounts of contents are lacking of evaluation, so most of these contents are not popular, few people know about it even nobody would like to watch it. How to encourage normal users evaluate contents and how to help amateur producers make higher quality contents should be research and develop.

After experiencing EVAP platform, the participant stated that the when using this tool by mouse, he has to move the mouse frequently from one side to another side, this will occur “time delay” that “influence the evaluation result”. Because of EVAP set like and dislike button at two sides of player section, when evaluating, viewer has to move their mouse to right zone in order to do evaluate operation. “How about set like and dislike shortcut keys on keyboard? In that case I don’t have to always move the mouse, I only need to press buttons on keyboard, it’s easier to control, that will bring better user experiences I think.”

The participant said it is useful to generate detail evaluation data for producers, allow amateur producers get specific feedback. “Different from others rough evaluation, producers subjected big comments, sometimes puzzle them more”, producers hope to get feedback from comments, but sometimes abstract words confused them, for amateur producers, it’s hard to understand professional but

abstract word. Based on deliberate what amateur producers need, “This tool has a good structure, provides separate feedback based on different factors, I think these well designed graph will help amateurs understand their promotion video”.

As EVAP provided various histograms by different factors, with regard to these four different factors, the participant indicated that the background music can be considered as an independent factor to evaluate, but the sound has to match the scene. And the scene should fit for the story, transit smoothly. However, the word *scene* means different to every viewers, it is necessary to make sure about that. For the factor of actor or actress, most viewers would focus on the face, give evaluation by emotional preference, but actually things that important are their acting, expression or clothes, all these have to match the environment that the story set.

Finally, the participant figured out that this platform hasn't finished completely, for a complete platform, well designed user interface on upload, share, watch and evaluation sites are essential. On the other hand, since EVAP aiming at provide subjective evaluation feedback, beside four factors EVAP provides now, there must be more factors that influence viewers experiences or feelings, for example camera work, framing or something else. Many other subjective evaluation factors should be considered and arranged.

4.4.2 Participant Two

Participant two is a lady from Indonesia, whose background was programming. This participant now researching on digital interactive games for children, during her research process, she has experiences on contents shooting and editing. With regard to user experience on EVAP, the participant stated out that she focused too much on evaluation factors, paid less attention to the content itself. When evaluating, the participant felt “It was hard to click”, when she had strong emotional expression or uncomfortable feelings, she would like to have double-click or click for several times at a same frame. So far, EVAP background system only allow users to click one time every second, in this case, it is not available for viewers to express strong emotion on subjective evaluating. The participant figured out that “Sometimes I feel one scene is really fun, so I prefer click more than one time like button, but now I cannot click too fast, that made me feel a bit boring.” About the user interface setting, this participant said she like the setting of put two different buttons to two sides. “When I watch videos on YouTube, I'm willing

to do evaluate by click the like or dislike button, but that two button are too close, I would like to click on like, but sometimes made a wrong click.” Though only one click, many a little make a mickle, for contents evaluation, every click have significant bearing on conclusions.

When talking about the four different evaluation factors on EVAP, the participant agree with existed four factors. She believed that audio and scene have intimate connection to storyline. “The audio have to fit the scene, and the scene serves for the story”. But she stated that for a promotion video, suitable background music, good actor or actress, shoot good scene are of course essential, “I agree that it has good structure with perfect length, show nice scene, acting and edit effects”, and the story was followed time and place changing, “ But I’m confused with the product itself, I didn’t get the function of the product”. This participant figured that the conception or function of product or service was another important factor to evaluate a promotion video.

4.4.3 Participant Three

Participate three also comes from Indonesia, her background was fine art and design. This participant is capable of judging art, also has experiences on photography and content social work, accessible to many online platforms, among design, social, media, music and video. This participant think EVAP is easy to access and control, when she was using EVAP, she liked the user interface design. “The histogram feedback is quite easy to understand.” The participant figured that when she uploaded the video to a platform, she would like to discuss with people who left comment to her product, but in some cases the comment was so “big”, the participant cannot understand the meaning of comment though she tried to think over it. With EVAP’s function, producers like this participate could get more specific feedback. On the other hand, asking viewers to tag their comment to the bar on histogram won’t take more time than traditional ways. “People can point out which part they like or not, and tell producers reasons.”

But the participant stated out that when she check the histogram result after watching the whole promotion video, “I forgot the reason why I didn’t like this part”, writing comments comes after watching, caused the forgettery of evaluation motivation. The participant suggested put an extra tag section or comment section on progress bar in order to memo comment as soon as comment comes out. That will helpful for viewers to take notes also for producers to get more

specific feedback.

With regard to different factors to evaluate a promotion video, the participant insisted that EVAP is helpful for amateur producers to obtain detail comments. Since the target audience of EVAP are amateur promotion video producers, contents being evaluated on this platform are all promotion videos, "To introduce a product, I care a lot on shooting angle, or call it camera works". The participant has aesthetic appreciation of arts, so she evaluate the promotion video more like evaluate an art product. She believed that the product in promotion video belongs to category of scene, and the scene has close connection to storyline. How to show the best feature of the product by camera work is an important topic. Last but not the least is about the actor or actress, acting like real life can make viewers feel comfortable, influence viewers' evaluation judgment, the participant figured.

4.4.4 Participant Four

Participant four comes from Canada, he is a professional in programming field. "At first I thought it is same with YouTube, but it's different after I saw the histogram". The participant said he like the way of evaluate a content on EVAP but he prefer YouTube's setting better, put two buttons together. "If you put like and dislike for two sides, it's nice and clear, but when I am watching a video, I don't like to move the mouse across the screen frequently, that will annoy my watching feelings". On the other hand, the participant figured that "I didn't pay attention to other factors cause I was required to evaluate based on one factor, but I do think a general evaluation should be more objective than focus on every single aspect".

After checking the histogram result, the participant stated out the visualization feedback is more meaningful to producers than words, especially for amateur producers. But the participant also said that he would like to have more feedback if he is a producer. And the participant suggested to design the evaluate function more interactive, in order to attract more viewers. At the same time, the participant expressed he like the page of EVAP, "It's quite simple and easy to use".

When interviewing about the various factors of evaluate a promotion video, the participant stated his preference of evaluating, "The product should be more clear, no matter how gorgeous the scenes are, if a promotion video didn't show the

function, I won't understand it", the participant insisted, if it's not available for viewers to understand the product, that's meaningless to make a promotion video. In storyline or storyboard, concept and function should be fully inserted. What's more, the participant also focus on image quality, he believed that if viewers watch a content in higher image quality, they will feel more comfortable and willing to give higher subjective evaluation.

4.4.5 Participant Five

Participate five is a student in Keio University. This participant lives by himself in an apartment without television, he has dependence on online video sites. Since the participant is an active user on several platforms like Niconico, Vimeo and YouTube, he has created funny videos to record his daily life, uploaded but with less comments and likes. "I feel lonely if nobody care my products", the participant said.

With access to EVAP, the participant stated he will use EVAP to evaluate his videos. "It's easy to use and I'm happy to do that". When interviewing about the user interface design on EVAP, the participant said he like the button setting, that makes him feel like interactive with the content and producer. Meanwhile five histograms will help a lot as feedback for producers. "It's a nice idea to review a video with a histogram feedback, but the play section is on the top of the screen and the histogram result is on the bottom of the site", in this case, it is complicated because users have to move down to find the time bar and move up to watch the content, do that again and again will be boring for most users. The participant suggested to set a narrow oscillogram under the play section, allow users to check peak and foot result by moving to right or left, also the play section also changed follow that operation. "That will be better for viewers' experiences, though the results are the same to producers", the participant figured. Since this is a platform for amateur producers, "I'm willing to try this EVAP platform because it provides an interesting feedback for producers", the participate said, "When I uploaded my video to YouTube, I hope to call for more viewers but it's quite hard, so I can't get many comments, but I do care about the comments for my videos".

Finally, when discussing about to evaluate a promotion video by different factors, the participant stated that he prefers general histograms. "If we evaluate a promotion video only by one factor, that is not enough, also if we evaluate

a promotion video separately, that is not objective enough because I think all factors related to each other". The participant figured that general histogram is more helpful for him.

4.5 Producer's Feedback

The promotion video *ELEMENTS* was produced by four producers in group work. These producers own different backgrounds and various habits of content generating. After showing the evaluation result generated by the second prototype, (See Figure 3.16 and Figure 3.17), a deep interview was implemented to three main producers. Every producer was encouraged to answer some questions and share their real feelings to this evaluation system.

4.5.1 Producer One

This producer wrote the scenario for promotion video *ELEMENTS*. It is most basic but quite important to have a good storyboard first, "I really like our product and promotion video since all of our group members worked on it very hard together". Since they have made great efforts on the promotion video, viewers' real opinion will be useful feedback for them. When asking about this producer's opinion about the histogram results that EVAP provided, the producer said "I like it very much and I'm very glad to see both positive and negative comments from viewers. Normally we only get overall evaluation but the histogram feedback point out specific moments and aspects which people like or dislike". The traditional overall evaluation do helps but not practical, for amateur producers, easy understandable and specific feedback are necessary. "It is very helpful for improving and modifying the video itself since we've known the exactly revising scene."

Because of EVAP provided several different factors for evaluating the promotion video, the producer was asked about this section. "I think they are all important since these are all essential elements of a promotional video. Particularly, the scene and storyline will give me more hint about how to adjust my work." In fact, this promotion video has been evaluated by several professors in KMD, compare with the traditional ways of feedback (by written language), the producer figured that "Data, or comment with charts seems more effective. Charts used to use widely in broadcasting industry when getting audience rate,

now it's good to see that amateurs can also see our own work with such evaluation system." On the other hand, this producer stated that "I want to see, how audience want the scene or story be, instead of only comments on the bar". This producer found EVAP provides histogram tagged with viewers' comments, but the producer also want to obtain some inspirations from viewers, like user generated story. This could be considering as part of future work for the system.

4.5.2 Producer Two

This producer comes from Finland, as a main actor in the promotion video *ELEMENTS*. Looking back over their promotion video, the producer found some shortcomings. If time allows, "Wish there would have been a bit more time to implement further image editing effects, sounds, resources to use, such as showing how the interface on the bottle might change based on certain conditions, such as alarm, add a bit more device display". The producer want to compare the difference between his reflect and EVAP evaluation result, he said "More time could have brought in different scenes as well as target group to display and we would like to improve the ending to a more precise presentation of the product, a climax". But in fact "Few scenes could have been altered a bit and made more clear. Taken into consideration the prototype and time in hand, we hope it communicated the message it was created to transmit, though a feedback session prior to finalizing the video could have been helpful, this could have given more time to improve the video". Since these producers didn't have professional trained on promotion video producing, they discussed the feedback from professors and tried to understand those. Compare with that discussion, the producer figured that the traditional ways "could have been both giving a focus group to see the video, give us comments, as well as on individual basis feedback that could have left out any biased or group pressure comments to more individual views on the end-product downside with this is it needs space, time and the participants to be located in the same place, but with the new system of EVAP, this could break the barriers and allow 'cross-border' feedback from multiple viewers in a reduced amount of time. If the interface is easy and quick to use, the participants should be able to provide honest feedback as well, without wasting their time. " But this producer stated that he doesn't mean he don't like the traditional way, because "I think both have pros and cons, the EVAP method might prove to be a real time-saver and more likely allow feedback, in comparison to traditional methods where par-

ticipants need to write their feedback, perhaps instead of hovering over the bar for comments, the comments could appear below the graph or on the side, maybe below as sliced with a screen grab thumbnail including timestamps and comments next to that, or display the length as the baseline x. Many people stare at their phones 24/7 and if the feedback could be accessed and created by using a mobile device, smart phone or tablet, I think the level of participation would increase. Sometimes people want to see the video for another round, or more, maybe the feedback could also hold the video somewhere to be played as needed”.

When interviewing about the various factors in different histograms, the producer said “It can be helpful to get quick impression on what the viewers are feeling about the video, info that can help to improve it, see if it is creating the desired emotion, result or if the message is coming across as clear as intended”. The producer also figured that there are some disadvantages of EVAP, he thought that the four basic factors are all important for evaluating a promotion video, but “Perhaps another section could be about effects, animation, graphics or any additional 3D products that were used in a video. Too much, too little, too unreal, too 80s, or something like that”. For this producer, the more specific feedback, the better, and this producer also agree with the researchers opinion, wish more and more viewers could do evaluation for online contents actively and initiatively, in order to access, the producer suggested “I think social sharing could be useful, similar to what is happening with a lot of surveys among students, for example, students can share the feedback (by a link) to social media and let their contacts to view and generate feedback. I think this type of link sharing could be easy to pass on to people to do the feedback session”.

4.5.3 Producer Three

The producer played an important role in promotion video *ELEMENTS*. Though she considered she could do her acting part better, according to the histogram feedback (See Figure 3.16), viewers gave affirmative evaluations to her acting. Because the producer has no experiences in promotion video producing, it was fresh for her to do design thinking. “Since its my first experience in this kind of teamwork, where we had to create the concept and design from scratch, I guess we did quite a good job. Talking about video, there are obviously some parts that could be done in a better way, but in overall Im satisfied with video.” When asking the whole impression of the histogram feedback tagged with comments,

the producer said “Its very helpful! Evaluation of our own work is something that we will never be able to do by ourselves. We can think that we have played quite good or did nice filming but only strangers (those who know nothing about our work) can tell us the truth.” This producer figured she hope to get comments or objective feedback from various viewers. “Getting feedback from people is one of the most useful things, especially when we are creating content or take a part in its creation”. As the system provided histogram feedback in four different factors, the producer stated factors she concerned were deeply related to what role she played in promotion video producing process. “For me it is probably the acting part and the way people evaluated the concept and design because I was playing a role in the promotion video and were working on concept and design together with others. However we also had people involved in filming and editing, so for them scene and audio part are probably the most meaningful factors”. Compare with the traditional ways of feedback, this producer prefer the way EVAP provided, because it's easy to understand. “One graph has many important points that make the evaluation very precise. And it makes me feel extremely serious about the evaluation”. The producer showed great interest in histogram feedback, “In simple words, when I look at the chart I trust it”. Finally, because this is the first promotion video producing experience for the producer and the first time getting feedback by a histogram tagged with comments, the producer was asked whether she would like to use this tool for her future products or not. The producer responded positively, “Sure, because it directly shows my strong and weak points of our work. That means we can work on our weak points, make them better and then check if our adjustments were right.” The producer said she enjoyed the feedback mailed by written languages, but for EVAP, she can get more visualized feedback which are easy to understand. “Its just like submitting our papers to professors and getting them back with corrections and notes. And we can be sure that perception of our product is not biased since people who know nothing about us and our concept evaluate it”. In conclusion, this producer gave high evaluation of the feedback EVAP provided. Depending on the different evaluation factors, the producer suggested to provide more details for people who are involved in filming, editing or acting.

4.6 Results

Interviews with viewers and producers were transcribed and evaluated as qualitative data. All these data were separated into two main aspects in accordance with the goals of the interview. The first is to perceive the advantage and disadvantage of user experiences on EVAP. The second is to perceive whether the histogram feedback practical and meaningful to amateur promotion video producers.

4.6.1 Amateur Based User Interface Design

So far, the user interface design on EVAP includes player section and histogram section. All operations were recorded by player section and results were generated by histogram section. To evaluate the player section, three out of five viewers responded affirmatively to the question of whether it is easy to control the tool and whether the player section user interface design easy understandable. Two participants stated it was complicated to move the mouse frequently, because operated repeatedly damaged their viewing experiences. One of the participants figured that it was hard to focus on watching the content if move the mouse too frequently. Another important constituent part of the user interface was histogram section. All participants gave positive reception for histogram result, which can show comments on every bar. This positive reception demonstrates that the user interface design of histogram tagged with comments has the potential of bring out resonance.

4.6.2 Effectiveness of Comments Tagged Histogram

Response was positive to answer the question of whether the histogram feedback practical and meaningful to amateur promotion video producers. The overall positive reception by three amateur producers shows that there is a demand for a tool that can provide easy understandable evaluation feedback. All producers were interested in comments tagged histogram which EVAP generated. Normally producers only get overall evaluation but the histogram feedback point out specific moments and aspects which people like or dislike, and with the new system of EVAP, it could break the barriers and allow “cross-border” feedback from multiple viewers in a reduced amount of time. Because the histogram feedback directly shows promotion video’s strength and weakness, this allow amateur promotion video producers have a clear understanding of their weak points, fix the weakness

in order to make them better and then check if producers' adjustments were right. With this method, producers can get more visualized feedback which are easy to understand.

One of the most obvious issues that was brought up through the interviews was the evaluation factors setting. So far, EVAP provides four different factors based histogram which are audio, actor or actress, scene and storyline. Although it has been proved that these four factors are accessible to provide amateur promotion video producers practical and useful feedback, there are several other factors that some amateur producers concern about.

Although the generally affirmative evaluations by both viewers and producers demonstrated histogram feedback tagged with comments section as an effective solution for amateur promotion video producers, many improvements still need to be thought over based on user study result. In particular, how to attract more viewers do evaluation actively and voluntarily needs to be researched. What's more, how to avoid revenge behavior during evaluation process is another research topic based on producers' feedback. Future work for EVAP will be discussed in further detail in next chapter.

Chapter 5

Conclusion and Future Work

This chapter abstracts the summary of evaluation result and testers feedback of the prototype implementation. Discuss the shortages found during this process, and compose future implementations of this research.

5.1 Analyze Research Results

This thesis has proposed to contribute an equal environment for amateur promotion video producers, by constructing a platform called EVAP, which can provide feedback with histogram result and tagged comments after their products evaluated on this platform. This research aims to answer whether a well designed user interface online video evaluation platform that generate results by visualized histograms tagged with comments can provide amateur promotion video producers practical, meaningful and easy understandable feedback or not. Consequently, both viewers and producers were interviewed by qualitative questions.

According to the findings from the user study, to show the evaluated results by a histogram was considered as a distinct way for feedback. The overall positive reception by viewers and amateur promotion video producers in the user study process shows that histogram result feedback has high potential to generate practical information for amateur producers. Two prototypes featuring different user interface design were shown to totally eleven participants. In-depth interviews were conducted to evaluate the effectiveness based on two different promotion video evaluation results. Participants gave affirmative and mixed comments for both prototypes. However, participants also gave their suggestions for the system. It was also shown that participates agree with evaluate a content based on four different factors that generate more specific feedback, though several participates stated there shall be more factors can be used for evaluating a promotion video. On the other hand, some participants support the idea of encouraging online video

viewers to do evaluation more activity, in this case, social sharing could be useful, similar to what is happening with a lot of surveys among online social networks. It was figured if the feedback could be accessed and created by using a mobile device, smart phone or tablet, that would be much more helpful on encourage more viewers online.

In the user study, participants emphasized their feelings and needs. It is important to continue testing many different methods and details to do also encourage more viewers to give content evaluation. Currently, by prototype design, implementation and user study, it has been initially proved that a well designed user interface online video evaluation platform that generate results by visualized histograms tagged with comments can provide amateur promotion video producers practical, meaningful and easy understandable feedback.

5.2 Limitation

According to the user study, the evaluation done in this thesis was not enough to exactly prove the possibility of EVAP because evaluation, especially for subjective evaluation, which have different experiences from one to another. It is only possible to analyze a trend based on great majority users preferences.

For the technical aspect of this service, it maybe not the best way to set the tool used for recording viewers operation by a flash module shade on player section. In some cases, histogram result may not synchronize exactly with the stripe in the bottom panel.

For viewers' experiences, so far, it is difficult for viewers to pick up more than one factor by one click on one scene. Impossible to do evaluation for two factors carried on at the same time.

Another important point to take into consideration is that the current platform have to controlled by mouse, users have to move mouse around during the process of watching. What's more, when using this platform, it is not available to evaluate under full screen. If watched by full screen, it's not available to press button at the same time. This could damage users' experiences if not corrected.

5.3 Viewers Incentive

EVAP showed good potential with its prototype test, however the testers were not random selected. As a result, the information gathered in this thesis was not objective enough.

Since EVAP aims at constructing a platform where amateur promotion video producers can get their products evaluated, get practical and easy-understandable feedback, in order to create an equal environment for them. By this system, allow amateur producers get visualize feedback instead of hollow critique. Moreover, this research used a qualitative method to achieve the goal. During that process, it is necessary to attach importance to both viewers' side and producers' side, in other words, users incentive. It has been proved that more than half producers would like to get their contents evaluated according to the result got from questionnaire study, however, how to encourage viewers participate in, how to incent them to click buttons on EVAP becomes urgent problem before it comes to the real market.

5.3.1 Crowd-Sourcing

In order to attract more participants especially viewers to use EVAP for the initial step, one of the most useful way is to carry the strength of crowd-sourcing. Crowd-Sourcing is defined by Merriam-Webster as the process of obtaining needed services, ideas, or content by soliciting contributions from a large group of people, and especially from an online community, rather than from traditional employees or suppliers [37]. Today, it has transferred mainly to the Internet. The Internet provides a particularly good venue for crowd-sourcing since individuals tend to be more open in web-based projects where they are not being physically judged or scrutinized and thus can feel more comfortable sharing. This ultimately allows for well-designed artistic projects because individuals are less conscious, or maybe even less aware, of scrutiny towards their work. In an online atmosphere, more attention can be given to the specific needs of a project, rather than spending as much time in communication with other individuals [9].

5.3.2 Mechanical Turk

Nowadays, many researchers have used crowd-sourcing systems, one of the most popular is Amazon Mechanical Turk,(See Figure5.1.) to aid with research projects by crowd-sourcing some aspects of the research process, such as data collection,

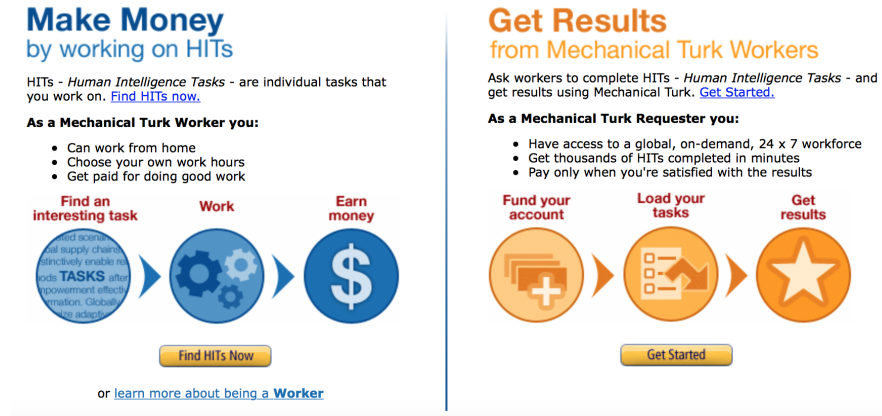


Figure 5.1: Amazon Mechanical Turk

parsing, and evaluation. Notable examples include using the crowd to create speech and language databases [4], and using the crowd to conduct user studies [24]. Crowd-sourcing systems provide these researchers with the ability to gather large amount of data. Additionally, using crowd-sourcing, researchers can collect data from populations and demographics they may not have had access to locally, but that improve the validity and value of their work [36]. This method provides good experience for EVAP to attract more participants, especially viewers to involved in contents evaluation in the initial step. Researchers also found that the most frequently mentioned motives of users participating in crowd-sourcing are: (1) money, (2) altruism, (3) fun, (4) reputation or attention, and (5) learning [3]. Based on these motivations, several extra services will be added to keep encouraging all users, like credit system to enjoy the benefits of the platform and to get access with more interesting contents or similar users. By this cycle to keep the efforts sustainable, in order to create an equal environment for amateur promotion video producers.

5.4 Future Work

As EVAP uses an evaluation system to generate practical feedback by a histogram with comment tags, allowing producers to inspect the histogram by ten second time unit, and able to check the comments on every bar. However, there are more than four basic factors that influence the evaluation result of a promotion

video. On the other hand, there is only little incentive mechanism to encourage or stimulate users interests to give evaluating voluntarily. Because not well designed website or no fresh user interface, only few users would like to click and do evaluation. How to attract more users to do evaluation voluntarily is a future research topic. Many platforms designed evaluation function only based on what producers need but forgot to consider about viewers interaction experiences. Things should not be discarding that for most cases, evaluation result provided by millions of users. The evaluation function and interaction need to be redesigned based on how people feel and experienced. Continue this online web service including user interactive and video evaluation function can be designed and developed by using multiple sensors or Leap Motion. Through these techniques, the result could help getting content evaluation closer with daily life. And provide feedback to producers, creators, investors and of course normal users. Whereby, it could contribute and heighten the quality of this content society.

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Appendices

A Pre-testing Questionnaire

B EVAP Poster on Showcase

日本語 English 简体中文 한국의 繁體中文
Online Video Service Data Questionnaire

Information

Q1 : Gender

☐Female ☐Male

Q2 : Occupation

☐Education ☐Finance ☐Services ☐Research ☐Government ☐Manufacturing
☐Student ☐Freelance ☐Others

Q3 : Age

☐9~19 ☐20~29 ☐30~39 ☐40~49 ☐50~59 ☐Over 60

Survey

Q4 : Have you ever used an online video service website? (Youtube/Vimeo .etc) ?

☐Yes ☐No

Q5 : How frequently do you use an online video website ?

☐Everyday ☐2 or 3 days per time ☐1 time per week ☐1 time twice a week
☐1 time per month

Q6 : Have you ever registered to log into an online video website ?

☐Yes ☐No

Q7 : Have you ever uploaded a video/film to an online video website ?

☐Yes ☐No

Q8 : (If you choose "Yes" in Q7 / Multiple Choice) Why did you upload ? (Motivation)

☐Share an idea ☐Share fun ☐Hope to attract viewers
☐Hope to be famous ☐Hope more people know about my product
☐Hope to get comments ☐Others _____

Q9 : (If you choose "Yes" in Q7 / Multiple Choice) What kinds of videos have you uploaded ?

☐Funny ☐Selfie ☐Scenery ☐Education ☐Game ☐Promotion
☐Documentary ☐Drama ☐News ☐Animation ☐Others _____

Q10 : (If you choose "Yes" in Q7 / Multiple Choice) What features of your product do you consider when you upload videos ?

☐Storyline ☐Image quality ☐Actor/Actress ☐Scene ☐Lighting ☐Editing
☐Back Ground Music ☐Camera work ☐Punchline ☐Others _____

Q11 : (If you choose "Yes" in Q7) About videos you uploaded, would you like to get professional comments or get feedback based on big data?

☐Yes, I would like to. ☐No, I don't care

Q12 : Have you ever checked comments or discussed with other users ?

☐No ☐Checked but not commented ☐Check and left my own comments

Q13 : Have you ever watch a Promotion Video ? (City/Government/Product/Service)

☐Yes ☐No

Q14 : (If you choose "Yes" in Q13 / Multiple Choice) When you watch a promotion video, what do you think are important factors for this promotion video ?

☐Storyline ☐Image quality ☐Actor/Actress ☐Scene ☐Lighting ☐Editing
☐Background Music ☐Camera work ☐New function ☐Others _____

Q15 : Are there any features you would like to see which are missing from video sharing websites ? What kind of new features would you like?

Thank you for sparing your precious time answering our questions.

Figure 2: Pre-testing Questionnaire in English

☐日本語 ☐English ☐简体中文 ☐한국의 ☐繁體中文

オンラインビデオサイトについて

利用者について

Q1: 性別

☐男性 ☐女性

Q2: 職業

☐教育 ☐金融 ☐サービス ☐研究者 ☐公務員 ☐メーカー ☐学生
☐フリーランス ☐その他

Q3: 年齢

☐9~19歳 ☐20~29歳 ☐30~39歳 ☐40~49歳 ☐50~59歳 ☐60歳以上

利用経験について

Q4: オンラインビデオサイトを使ったことはありますか? (Youtube/Niconicoなど)

☐ある ☐ない

Q5: ビデオサイトを毎日利用しますか?

☐毎日使う ☐二、三日に一回 ☐週に一回 ☐二週に一回 ☐月に一回

Q6: オンラインビデオサイトに登録したことはありますか?

☐ある ☐ない

Q7: オンラインビデオサイトにビデオをアップロードしたことはありますか?

☐ある ☐ない

Q8: (Q7" ある" と答えた方/複数選択可) ビデオをアップロードした目的は何ですか?

☐アイデアをシェアする ☐ハッピーをシェアする ☐注目されたい
☐有名になりたい ☐自分の作品を広げたい ☐コメントがほしい
☐他 _____

Q9: (Q7" ある" と答えた方/複数選択可) どんなタイプのビデオをアップロードしましたか?

☐エンタメ ☐自撮り ☐風景 ☐教育 ☐ゲーム ☐プロモーション
☐ドキュメンタリー ☐ドラマ ☐ニュース ☐アニメ ☐他 _____

Q10: (Q7" ある" と答えた方/複数選択可) アップロードした作品の自慢点とは何ですか?

☐ストーリーライン(脚本) ☐画質 ☐俳優女優 ☐シーン ☐ライト ☐エディット
☐BGM/サウンド ☐カメラワーク ☐爆笑 ☐他 _____

Q11: (Q7" ある" と答えた方) 自分の作品について、プロのコメントやビッグデータを利用したフィードバックを貰いたいですか?

☐ほしい ☐ほしくない

Q12: コメントを見る又は他のユーザーとディスカッションしたことはありますか?

☐見たことない ☐見るけどコメント書かない ☐見てコメントを書く

Q13: Promotion Videoを見たことはありますか?(政府、選挙、新製品、サービスなど)

☐ある ☐ない

Q14: (Q13" ある" と答えた方/複数選択可) PVを見る時に、注目する点は何ですか?

☐ストーリーライン(脚本) ☐画質 ☐俳優女優 ☐シーン ☐ライト ☐エディット
☐BGM/サウンド ☐カメラワーク ☐新機能 ☐他 _____

Q15: 今までのビデオサイト何か不足はありますか? ビデオサイトに何か新サービスを期待していますか?

ご協力ありがとうございます。

Figure 3: Pre-testing Questionnaire in Japanese

□日本語 □English □简体中文 □한국의 □繁體中文

社交视频网站用户数据分析问卷调查

基本信息

Q1：性别
□男 □女

Q2：职业
□教育 □金融 □服务 □科研 □政府 □制造业 □学生 □自由职业 □其他

Q3：年龄
□9~19岁 □20~29岁 □30~39岁 □40~49岁 □50~59岁 □60岁以上

调查问题

Q4：请问你是否使用过在线视频网站（Youtube/Youku/Tudou/PPS等）？
□使用过 □没使用过

Q5：请问你使用在线视频网站的频率？
□每天都看 □两三天看一次 □一个周看一次 □两个周看一次 □一个月看一次

Q6：请问你是否注册成为过线视频网站的会员？
□会员 □非会员

Q7：请问你是否向在线视频网站上传过视频，短片或影片？
□上传过 □没上传过

Q8：（第7问选择了上传过的回答者/本题多选）上传的目的（动机）是什么？
□分享自己的创意 □分享快乐 □希望被关注 □希望出名
□希望更多的人看到自己的作品 □希望得到大家的意见或建议
□其他 _____

Q9：（第7问选择了上传过的回答者/本题多选）上传过什么类型的视频？
□搞笑 □自拍 □风景 □教学类 □游戏 □宣传片
□纪录片 □叙事类影片 □新闻采访类 □动画 □其他 _____

Q10：（第7问选择了上传过的回答者/本题多选）上传视频时觉得自己视频的卖点是？
□故事情节(剧本) □画面质量 □演员 □场景 □灯光 □剪辑
□背景音乐 □摄像角度 □有笑点 □其他 _____

Q11：（第7问选择了上传过的回答者）对自己上传过的视频，是否希望得到针对视频内容的专业的反馈意见或者基于自己视频的大数据分析？
□希望 □并不希望

Q12：请问你是否会去关注视频下方的讨论区或者去参与讨论？
□不会去看 □会去看但不参与讨论 □会去看并且发表意见参与讨论

Q13：请问你是否看过PromotionVideo？(如：城市/产品/网站/服务等宣传片，公益广告，科技产品广告等)
□看过 □没看过

Q14：（第13问选择了看过的回答者/本题多选）请问你在看PV的时候注意的因素有哪些？
□故事线 □画面质量 □演员 □场景 □灯光 □剪辑
□背景音乐 □摄像角度 □产品/服务的新功能 □其他 _____

Q15：请问你认为现有的视频网站有什么不足？你对视频网站有什么期待的新功能？

衷心感谢您的宝贵时间和意见！

Figure 4: Pre-testing Questionnaire in Simplified Chinese

☐ 日本語 ☐ English ☐ 简体中文 ☐ 한국의 ☐ 繁體中文

社交視頻網站用戶數據分析問卷調查

基本信息

Q1：性別

☐ 男 ☐ 女

Q2：職業

☐ 教育 ☐ 金融 ☐ 服務 ☐ 科研 ☐ 政府 ☐ 製造業 ☐ 學生 ☐ 自由職業 ☐ 其他

Q3：年齡

☐ 9~19歲 ☐ 20~29歲 ☐ 30~39歲 ☐ 40~49歲 ☐ 50~59歲 ☐ 60歲以上

調查問題

Q4：請問你是否使用過在線視頻網站服務（Youtube等）？

☐ 使用過 ☐ 沒使用過

Q5：請問你使用在線視頻網站的頻率？

☐ 每天都看 ☐ 兩三天看一次 ☐ 一個禮拜看一次 ☐ 兩個禮拜看一次 ☐ 一個月看一次

Q6：請問你是否註冊成為過在線視頻網站的會員？

☐ 會員 ☐ 不是會員

Q7：請問你是否向在線視頻網站上傳過視頻，短片或者影片？

☐ 上傳過 ☐ 沒有上傳過

Q8：（第7問選擇了上傳過的回答者/多項選擇）上傳的目的（動機）是什麼？

☐ 分享自己的創意 ☐ 分享快樂 ☐ 希望被關注 ☐ 希望出名
☐ 希望更多的人看到自己的作品 ☐ 希望得到大家的意見或者建議
☐ 其他 _____

Q9：（第7問選擇了上傳過的回答者/多項選擇）上傳過什麼類型的影片？

☐ 搞笑 ☐ 自拍 ☐ 風景 ☐ 教育類 ☐ 遊戲 ☐ 宣傳片
☐ 紀錄片 ☐ 敘事類影片 ☐ 新聞採訪類 ☐ 動畫 ☐ 其他 _____

Q10：（第7問選擇了上傳過的回答者/多項選擇）上傳影片時覺得自己影片的賣點是什麼？

☐ 故事情節(劇本) ☐ 畫面質量 ☐ 演員 ☐ 場景 ☐ 燈光 ☐ 剪輯
☐ 背景音樂 ☐ 攝像角度 ☐ 有笑點 ☐ 其他 _____

Q11：（第7問選擇了上傳過的回答者）對自己上傳過的影片，是否希望得到針對影片內容的專業的回饋意見或者基於自己影片的大數據分析？

☐ 希望 ☐ 不希望

Q12：請問你是否會關注視頻下方的討論區或者去參與討論？

☐ 不會去看 ☐ 會去看但不會參與討論 ☐ 會去看並且發表意見參與討論

Q13：請問你是否看過PromotionVideo？(如：城市/產品/網站/服務等的宣傳片，公益廣告，科技產品廣告等)

☐ 有看過 ☐ 沒有看過

Q14：（第13問選擇了看過的回答者/多項選擇）請問你在看PV的時候看重的因素有哪些？

☐ 故事情節 ☐ 畫面質量 ☐ 演員 ☐ 場景 ☐ 燈光 ☐ 剪輯
☐ 背景音樂 ☐ 攝像角度 ☐ 有笑點 ☐ 其他 _____

Q15：請問你認為現有的視頻網站有什麼不足之處？你對視頻網站有什麼期待的新功能？

衷心感謝您的寶貴時間的意見！

Figure 5: Pre-testing Questionnaire in Traditional Chinese

日本語 English 简体中文 韓국의 繁體中文

소셜 네트워크 동영상에 관한 사용자 설문조사

개인정보

Q1 : 성별

☐ 남성 ☐ 여성

Q2 : 직업

☐ 교육 ☐ 금융 ☐ 서비스 ☐ 과학연구 ☐ 정부부서 ☐ 제조업 ☐ 학생 ☐ 자유직업

Q3 : 연령

☐ 9~19살 ☐ 20~29살 ☐ 30~39살 ☐ 40~49살 ☐ 50~59살 ☐ 60살 이상

설문

Q4 : Q4 : 소셜 네트워크 동영상 웹사이트 사용한 적이 있습니까 (예:Youtube/Pandora등) ?

☐ 예 ☐ 아니요

Q5 : 소셜 네트워크 동영상 웹사이트 사용빈도가 어떤 정도입니까 ?

☐ 매일 ☐ 이틀 사흘 한번정도 ☐ 일주일 한번 정도 ☐ 이주일한번 정도 ☐ 한달 한번 정도

Q6 : 소셜 네트워크 동영상 웹사이트의 회원을 가입하십니까 ?

☐ 예 ☐ 아니요

Q7 : 소셜 네트워크 동영상 웹사이트에 동영상, 단편 영화,영화등 업로드한 적이 있습니까?

☐ 예 ☐ 아니요

Q8 : (Q7 " 예" 고르신분 대답하세요. 다답형입니다.) 업로드하는 이유(동기) 무엇입니까?

☐ 자기의 창의력을 나누기 위해 ☐ 기쁨을 나누기 위해 ☐ 주목을 받기 위해 ☐ 이름을 날리기 위해
☐ 다른 사람 널리 볼수 있도록 ☐ 다른 사람의 의견이나 견해를 받기 위해 ☐ 기타 _____

Q9 : (Q7 " 예" 고르신분 대답하세요. 다답형입니다.) 어떤 동영상 업로드했습니까 ?

☐ 코믹 ☐ 셀프 ☐ 풍경 ☐ 교육 ☐ 게임 ☐ 홍보
☐ 다큐멘터리 ☐ 극영화 ☐ 뉴스,인터뷰 ☐ 만화 영화 ☐ 기타 _____

Q10 : (Q7 " 예" 고르신분 대답하세요. 다답형입니다.) 자기 동영상의 특성(장점) ?

☐ 스토리(대본) ☐ 화면 ☐ 배우 ☐ 장면 ☐ 조명 ☐ 음니버스,편집
☐ 배경 음악 ☐ 촬영법 ☐ 웃음거리 있음 ☐ 기타 _____

Q11 : (Q7 " 예" 고르신분 대답하세요.) 자기의 업로드한 동영상에 대하여 , 전문적인 의견이나빅 데이터 분석을
수요합니까 ?

☐ 예 ☐ 아니요

Q12 : 동영상 하부의 전자 토론 게시판을 보거나 직접 토론을 참가합니까?

☐ 보지 않음 ☐ 보지만 토로하지 않음 ☐ 보고 토론도 함

Q13 : PromotionVideo(판매 촉진을 목적으로 특별히 만든 비디오, 신곡이나 신인 음악가의 인기를 높이기
위하여 만듦)를 본 적이 있습니까 ?

☐ 예 ☐ 아니요

Q14 : (Q13 " 예" 고르신분 대답하세요. 다답형입니다.) PromotionVideo를 보실 때 관심점이 무엇입니까 ?

☐ 스토리 ☐ 화면 ☐ 배우 ☐ 장면 ☐ 조명 ☐ 편집
☐ 배경 음악 ☐ 촬영법 ☐ 동영상에 나온 상품/서비스의 매점 ☐ 기타 _____

Q15 : 지금 동영상 웹사이트가 어떤 단점이 있다고 생각합니까 ? 동영상 웹사이트에 대해 어떤 기대가 있
니까 ?

수고하셨습니다.귀중한 시간을 내 주셔서 감사합니다.

Figure 6: Pre-testing Questionnaire in Korean

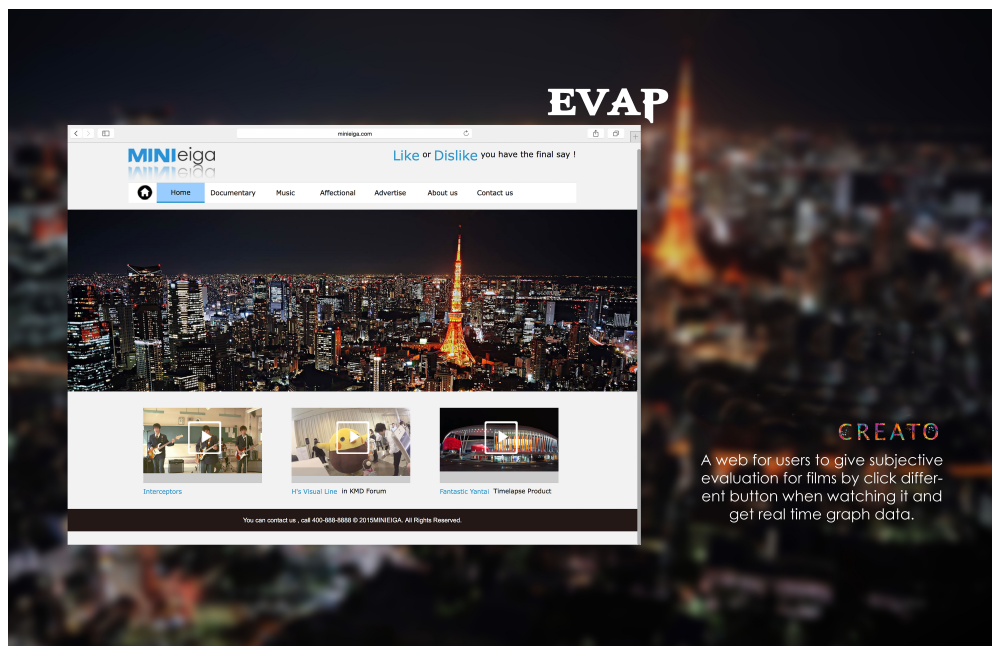


Figure 7: EVAP Poster on KMD Showcase 2015 Spring