Design for Sharing
In short-form video platform

POLITECNICO

MILANO 1863

TIAN LONG

850476

Supervisor

Matteo Ciastellardi

Politecnico di Milano
Scuola del Design
Design della Comunicazione
Laurea magistrale A.A 2017/2018

Content

Abstract

In the recent years, We have witnessed the emergence of short-form video platforms. From Vine, Instagram to musical.ly. The failure or success of these app seems to be unpredictable. The only thing that proves one's success is the users. In the age of web 2.0, sharing becomes the primary way that users obtain information. In the UGC platforms like short-form video platforms, Sharing is especially important. Sharing is the momentum for online media circulation, also the key for the sustainable development of short-form platforms. This thesis analyzes the motivation behind user's sharing behavior, through in-depth research of viral media and spreadable media. And combine it with the FBM model to deliver a way to design for sharing in the short-form video platform.

Part One：

Theoretical research

1.Introduction

The founder of Facebook, Mark Zuckerberg once said: "Most of the content ten years ago was Text, and then photos, and now it's quickly becoming videos. I just think that we're going to be in a world a few years from now where the vast majority of the content that people consume online will be video." Indeed, Video is the simplest, the most direct, and the most popular way of all kinds of media, and social network is the most fundamental and urgent need of Internet users all over the world. The combination of video and social network can maximize the interaction between users as well as the content propagation.

With the expansion of internet users, the needs of internet users have shifted from simply obtain information to more diverse and personalized objective. Netizens have increasingly high demand for properties such as Entertainment, Interactivity, and Immediacy. According to Analyzing The ROI Video Marketing, published by the Aberdeen Group, Now people share video more than any other medium. There are 2.78 billion active social media users throughout the world according to We Are Social's Digital in 2017 report. Meanwhile, online video consumption is one of the most popular Internet activities worldwide. Under such a circumstance, the emerging short-form video hosting service has became the mainstream of cultural spread. Recently, the world has witnessed the convergence of online social network service and online video service. Mobile applications such as Vine, Instagram, Snapchat provide a new experience for users' video consumption as well as a new solution for social networking.

The continuous development of Internet technology enables the users to fulfill their various needs. The increasingly abundant bandwidth and computational resources have made content propagation changed from text form and picture form to video form. The convergence of streaming media technology and social network brings users a new way of video viewing and sharing. It changed the status that big video hosting sites control the online video resources. The social attributes of the emerging short-form video hosting platform have reshaped how video content is generated, distributed, and consumed on the Internet. It gives the right of content creation and dissemination to the users and makes users become the protagonist of online video circulation. The role change from video consumer to video producer and disseminator will further blur the boundary between video hosting service and social media service. On the one hand, it brings more user-generated video content to the social network. On the other hand, the social network provides a convenient communication channel for users' creativity and emotion.

The emergence of the short-form video has brought Internet users a whole new experience for video consumption and communication. But from the point of interaction design, it is still hard to design a short-form video service which both has a good user experience and an extended product lifecycle. So what is a good user experience and how to improve it? Robert Rubinoff said the user experience is made up of four independent elements which are Branding, Usability, Functionality, and Content.[1] Jennifer Preece thinks

---

1 Saffer, Dan. 2009. Designing for Interaction: Creating Innovative Applications and Devices. 2 edition. Berkeley, CA: New Riders.

the goal of interaction design should be divided into two parts; besides the usability goals, designers should also consider the user experience goals like Satisfying, Enjoyable, Motivating, etc. "The two differ in terms of how they are operationalized. Usability goals are concerned with meeting specific usability (e.g., efficiency) and user experience goals are largely concerned with explicating the quality of the user experience (e.g., to be aesthetically pleasing)".[2] Besides, Peter Morville's user experience honeycomb also indicates that there are more things (Desirable, Findable, Accessible)we should care about regarding user experience.[3]

Media scholar Henry Jenkins said:" If it doesn't spread, It's dead."[4] Indeed, the success or failure of social media highly depends on the active participation of its users, and the popularity and the lifecycle of short-form video services are highly connected to its content propagation mechanism. In an user-generated content platform, users are the content producer, consumer, and disseminator. The change of users' role will cause different user motivations and different user needs. As a content producer, the primary factor that affects the user experience is the usability or functionality. For the consumer, gratification is what they ask for the user experience. But as a disseminator, without being driven by the political and commercial interests. What are their user needs? And what is the standard for examining their user experience?

In media study, spreadability is the wide distribution and circulation of information on media platforms. Henry Jenkins coined the term in his book spreadable media. Spreadability emphasizes producing content in easy-to-share formats which make it easier to share across the Internet. And encouraging access points to that content in a variety places. But from design and user experience point of view, what can we do to improve the spreadability of one product? The objective of my research is to find new possibilities for improving the spreadability of short-form video service.

2 Preece, J., Rogers, Y., & Sharp, H.. Interaction Design: beyond human-computer interaction. 2002
3 Peter Morville, Louis Rosenfeld. Information Architecture for the World Wide Web. O'Reilly Media
4 Jenkins, Henry, Sam Ford, and Joshua Green. 2013. Spreadable Media: Creating Value and Meaning in a Networked Culture. New York ; London: NYU Press.

1.

Short-form video

1.1 The definition of short-form video

1.2 Types of short-form video platform

1.3 The development of short-form video platform

1.4 Transmission of short-form video

1.1
The definition of short-form video

1.1.1 The concept of short-form video

In the recent years, Short-form video became a new trend on the internet, especially on the mobile Internet. Apps like Instagram and snapchat all introduced their short-form video services. So what is the popular term short-form video? At present, the short-form video remains a highly contested concept. In general, the short-form video refers to a new form of short video clips which based on mobile intelligent terminal and allow its users to shoot, edit and share their videos on the social network instantly. It combines text, voice, and video, and enables the users to express their feelings and communicate with each other more directly and intuitively, to the maximum extent to meet users' needs of displaying and sharing.

A short-form video is a new form of communication, a new way of entertainment and online video consumption in the Internet era. Compare with the traditional long videos on the video hosting sites, the high-frequency pushed short video is more suitable for fragmented leisure time or mobile use due to its limited length. The content includes skills sharing, humorous, fashion, hot issues of social concern, street interviewing, public education, creative advertising, etc.

From the video length perspective, there are also many controversies about the definition of short-form video. There are two famous statements: the first point of view is the video length of the short-form video should be less than 20 minutes. Another aspect thinks the length of the short-form video is strictly limited to less than 60 seconds. For example, Vine allows its users to upload maximum 6 seconds video, and Instagram allows the users to upload short videos that up to 15 seconds. Some short videos on the Youtube and Vimeo which are less than 20 minutes could also be count as short-form videos. But in this paper, we will focus on the short videos that could be shot, edited and shared on social network instantly, Youtube and other similar video hosting websites will not be our research target.

1.1.2 The Characteristic of short-form video

Different from V-logs, podcasts and the traditional long videos, the short-form video has its distinctive features since its birth. In addition to the obvious characteristics like the short length of the video and the simplified content, It also has some other highlights:

- **Really-time transmission**

- **Simplification of production**

- **Content fragmentation**

- **Socialized sharing**
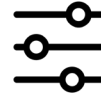
1. Real-time transmission

First, In general, the length of the short-form video is controlled within 5 minutes. The short time and the small size of the video make the real-time transmission possible; Second, With the development of mobile Internet, the mobile client applications become the primary route of video transmission. It only takes a few minutes to generate and publish a short-form video online. Meanwhile, the streaming media technology and the abundant bandwidth allow users to watch the videos instantly. The convenient playback system of the short-form video provides a powerful condition for its rapid spread. On 1 February 2013, A Turkish journalist successfully used Vine to capture the terrorist attack on the U.S. Embassy, and then shared on Twitter.[5] This 6 seconds video is one of the first attempts to use Vine for journalism. The real-time transmission of the short-form video coincided with the immediacy of the news and showed the potential value for short-form video in the future.

2. Simplification of production

The essential characteristic of the short-form video is the limited video length. The short videos that count in seconds are straightforward and quick to produce. Compared with the professional production procedure of the traditional long videos, the short-form video simplified the content production process and reduced the threshold of video editing skills. All the tasks can be finished on the intelligence terminal devices, including shooting, producing and editing. Also, most of the short-form video mobile applications have already prepared ready-made filters and special effects which helps to make the content more professional.

---

5 Ungerleider, Neal, Neal Ungerleider, and Neal Ungerleider. 2013. 'Using Vine To Cover Breaking News'. Fast Company. 7 February 2013.
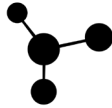
3. Content fragmentation

The limited length of short-form video determines the incompleteness of its content and narrative. Most of the short-form video platform only allows users to upload maximum 1-minute video; some are even less. For example, Initially, Vine only allows its user to upload videos within 6 seconds. In the modern society, the pace of people's life is increasingly fast and full of excitement and pressure, people are used to browsing information in the fragmentary time of the daily commuting. For the traditional long videos, viewers might need a complete period of free for watching. But in the fragmented time, the viewing might be interrupted by anything possible things. So people tend to give up watching regarding the time, so short-form video became the perfect choice in this occasion. The fragmentation of time makes it easier for people to accept the fragmented content of the short-form video.

4. Socialized sharing

The short-form video application is not a scaled-down version of the traditional video hosting website. It is more of an extension of the social networking site. On the one hand, users are more engaged and involved in the online activities by participating in short-form video topics. Communication between people become more accessible and more interesting because there are no limits of time and space. Users can enjoy short videos and enjoy the satisfaction of participation anytime and anywhere; On the other hand, Its extensive participation and social attributes provide a perfect channel for users to share their emotions and creativity.

1.2
Types of short-form video platform

1.2.1 Social type

The convergence of streaming media technology and social network is one of the most significant trends in the social media industry. Many big players in this field are trying their best to seize this opportunity. Twitter first acquired the once famous short-form video sharing platform Vine. But Facebook leveraged the vast user cardinal number of Instagram and quickly occupied the market.

But the emergence of new technology always brings new opportunities to some up-rising stars. Musical.ly, an instant music-video app designed by a small Chinese company. It first came on the scene in 2014. But then it hit the No. 1 app in the App Store charts. Since then, It hasn't fallen below the top 40 apps in all of iTunes. Often, it's swapping top places in the app store with Snapchat and Instagram. Musically is famous among teenagers due to its special social features. Like "Youtubers", Musically also has an active community in which users call themselves "Musers". The co-CEO Alex Zhu said: "Today the very proposition of the app is not about creating music videos. It's not about lip-syncing. It's about a social network. It's a community, and people want to stay because there are other people."[6]

1.2.2 Tool type

Almost all the Short-form video application can share their content on other social platforms, some of them take advantage of multiple social platforms to distribute their videos. And in their early stages of development, they tend to put all the effort to highlight their functionalities as a video editing tool.

Before Instagram launched "stories," Instagram incorporated 15-second video sharing feature. The feature allows the user to edit video and it also provides 13 filters which help the users to generate more professional videos. On August 26, 2014,

---

6 Carson, Biz. n.d. 'How a Failed Education Startup Turned into Musical.Ly, the Most Popular App You've Probably Never Heard Of'. Business Insider. Accessed 10 July 2018.

VUE

Footage

Vine

2014, Instagram also launched an independent video editing tool called Hyperlapse. Hyperlapse enables the users to produce record videos up to 45 minutes of footage in a single take, which can be subsequently accelerated to create a hyper-lapse cinematographic effect. Videos that generated from Hyperlapse can be shared through Instagram instantly.

VUE is also an excellent example of tool type short-form video applications. VUE is a video camera and video editor empowering users to capture art videos, edit them through adding cinematic filters, sticker or montage. Users can easily share their edited video to other social websites. Later VUE introduced its short-form video sharing platform "Footage". Footage is a community exclusively designed for VUE staring and discovering. Users can watch, comment and share their videos on Footage. It is crucial for tool type short-form video applications to have their social platform and sharing channels.

There are some different examples. For instance, Vine is one of the first short-form video applications that focus on users' social experience. But after the failure of Vine, Twitter the parent company of Vine, decide to revamp it into a simple video editing tool for Twitter.

1.2.3 Media type

In the previous discussion of short-form video's characteristics, we mentioned that the real-time transmission of short-form videos is similar to the immediacy of the news. A lot of media type short-form video applications emerge because of this characteristic. Media type short-form video applications have definite advantages in the instant publishing of news events and the interactive participation of public's opinions. The media type of short-form video application could be divided into two types; One is that the ordinary users take the first-hand information and upload to the site, and the other is that professional media production team releases the edited short-form video news on the platform.

Vine is an excellent example for the Media type short-form video applications. Like we mentioned,

A Turkish journalist used Vine to report news; there are also many experiments like this. Vine did very well in this field; Vine had set an independent content section of "news", and also got support and collaborated with many professional news publishers.

Another good example is Snapchat. In January 2015, Snapchat introduced "Discover", an area containing channels of ad-supported short-form content(video, text, picture) from major publishers, Including BuzzFeed, CNN, ESPN, Mashable, Vice, New York Times, National Geographic, etc.[7] This functionality increases the media properties of Snapchat to a large extent.

There is a special publisher which seize the opportunity of the short-form video first. "Now this news" as a digital media startup, focuses on producing and distributing bite-sized short-form video news to mobile devices and social platforms. At the very beginning, Now this news has already started to distributing well-produced short-form video news to Facebook, Twitter, and Youtube.

And Now this news also take the lead in publishing short-form video news in Vine and Instagram. The video length that customized for Vine and Instagram is 6 seconds and 15 seconds respectively. Later it also collaborated with Snapchat to distribute short-form video news. Now this news chooses to distribute news in multiple social platforms and put mobile and social in the first place. [8]All these efforts are to achieve the "viral" transmission.

---
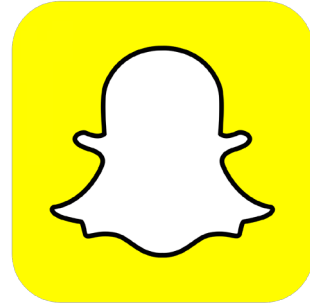
7 Chowdhry, Amit. n.d. 'Snapchat's New "Discover" Feature Has Content From ESPN, CNN, Food Network And Others'. Forbes. Accessed 10 July 2018.
8 Sternberg, Josh. 2012. 'Can NowThis News Crack Mobile Video?' Digiday (blog). 9 November 2012.

1.3
The development of short-form video

In the past two decades, with the development of the Internet, the online content propagation has shifted from text form and picture form to video form. The iteration and recombination of content had made the online communication more visualized and also increased the amount of information it conveys. Meanwhile, the interactivity and instantaneity of online communication became more and more apparent. The video form changed from long video to short video, and the threshold of video production has been reduced. From personal computer to a mobile device, the convenience of video communication has been increased. As a result, the short-form video industry ushered in a whole outbreak in the recent years. The short-form video applications have become the main entrance of the online social network.

The short-form video sharing applications first appeared in the United States. Video sharing application Viddy is the pioneer of short-form video; it was officially launched on April 11, 2011. Viddy describes itself as " a simple way for anyone to capture, produce and share beautiful videos with the world."[9] Viddy is like Instagram for video. It combines cool video editing tools with the social scene of Facebook, the hashtags and tag streams of Twitter, and the viewer commentary on Youtube. It's easy to make professional-looking video clips and share them across multiple social networks. Encoding and uploading the 15-second videos is fast, making the creation and sharing process instantly rewarding. At the peak of its popularity, Viddy had over 50 million users, but it was unable to keep up with other big video app player that stepped into this territory.[10] In 2013, Viddy eventually rebranded itself as Supernova, and then is was sold to Fullscreen.[11]

Vine was founded by Dom Hofmann, Run Yusupov, and Colin Kroll in June 2012. The company was acquired by Twitter in October 2012. Vine officially launched on January 24, 2013, as a free app for iOS devices. On June 2, 2013, an Android version was released.[12] Vine was a video-sharing app designed to allow users to film super short clips that could be linked together in one video for a total of six seconds. Each short video played in a continuous loop. They could be embedded and viewed directly in Twitter's timeline or any web page. Since the launch of Vine, It has become a popular online platform. In November 2015 it already had 200 million monthly active users.[13] But Twitter shut it down and revamped into Vine Camera- A simple tool which users can shoot 6.5-second looping videos that can be uploaded to Twitter. One former executive of Vine said, "Instagram video was the beginning of the end." " A major competitive challenged emerged in the form of Instagram."[14] Vine didn't break the 6-second barrier until the very end of its life, and vine didn't move fast enough to differentiate.

9   Erin Willey Oh.'Viddy - App Review'. Common Sense Media. 2012. 30 May 2012.
10 Moreau, Elise. n.d. 'What Is Viddy? Review of the Viddy App for IPhone'. Lifewire. Accessed 10 July 2018.
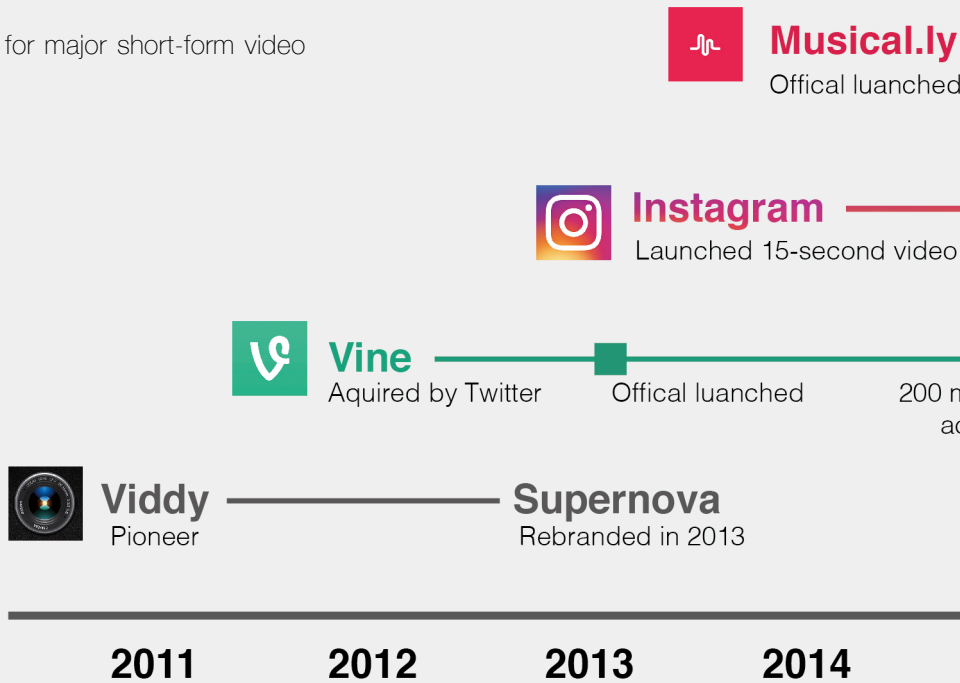11 Kafka, Peter. 2014. 'Viddy, the "Instagram for Video" That Wasn't, Acquired by Web Video Startup Fullscreen'. Recode. 15 January 2014.
12 Sippey, Michael (January 24, 2013). "Vine: A new way to share video". Twitter Blog. Twitter. Retrieved July 25, 2013.
13 Smith, Craig. '27 Amazing Vine Statistics and Facts | By The Numbers'. 2014. DMR. 24 August 2014.
14 Newton, Casey. 2016. 'Why Vine Died'. The Verge. 28 October 2016.

Figure. 1 Timeline for major short-form video

Musical.ly
Offical luanched

Instagram
Launched 15-second video

Vine
Aquired by Twitter   Offical luanched   200 m
                                          ac

Viddy ————— **Supernova**
Pioneer   Rebranded in 2013

**2011   2012   2013   2014**

The half-year after Vine's official launch. In June 2013, Instagram, initially a purely photo-sharing application, as well as " one of the most influential social networks in the world" [15]incorporated 15-second video sharing. The feature includes simple editing capabilities as well as 13 new filters, which were specially created for video. The addition was seen by some in the technology media as Facebook's attempt at competing with then-popular video-sharing application Vine. In March 2016, Instagram was eventually bumping the limit to a more flexible 60 seconds.[16] In August 2016, Instagram launched Instagram Stories, a feature that allows users to take photos, add effects and layers and add them to their story. Images uploaded to user's story expire after 24 hours. Many people see it as a clone of Snapchat's functionality. In November, Instagram added live video functionality to Instagram stories, allowing the user to broadcast themselves live, with the video disappearing immediately after ending. Like Snapchat, Instagram stories also incorporated augmented reality stickers in its image and video sharing process.[17] Until now Instagram stories is still one of the most popular short-form video sharing platforms. The short-form video sharing function also brings vitality to Instagram and make it dominate the social media market.

There is another recently popular short-form video app musical.ly. musical.ly is a Chinese video social network app for video creation, messaging, and live broadcasting. Through the app, users can create 15-second to 1-minute video and choose soundtracks to accompany them, use different speed options

15 Taylor, Colleen .'Instagram Launches 15-Second Video Sharing Feature, With 13 Filters And Editing'. n.d. TechCrunch (blog). Accessed 10 July 2018.
16 Strange, Adario. n.d. 'You Can Now Post 60-Second Videos on Instagram'. Mashable. Accessed 10 July 2018.
17 Constine, Josh. 'Instagram Stories Hits 200M Users, Surpassing Snapchat as It Copies Its AR Stickers'. n.d. TechCrunch (blog). Accessed 10 July 2018.

Aquired by Betedance

Instagram Stories

sharing

Bumping to 60 seconds
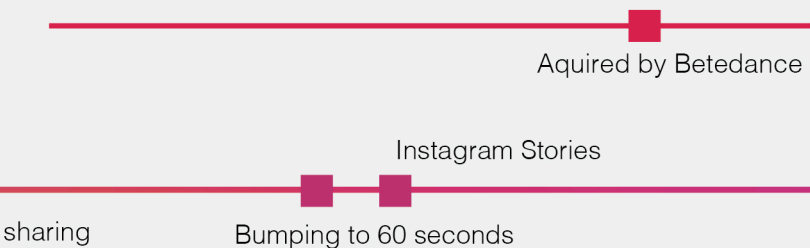
Vine Camera
Closed and renamed

million monthly
ctive users

2015   **2016**   **2017**   **2018**   **2019**

(time-lapse, slow, normal, fast, and epic) And add pre-set filters and effects. The app also allows users to browse popular "muser", content, trending songs and sounds and hashtags. Musically's structure allows the viral dissemination of teens through the platform. Using hashtags to organize online campaigns and encourage users to participate. One of the famous campaigns launched by musical.ly was the "Don't Judge Challenge."[18] This campaigns quickly became a bizarre viral trend within the platform and spread to other platforms like Instagram, Twitter, and Vine.[19]

Although, musical.ly was designed and run by a Chinese company, It is not famous in the Chinese market. In November 2017, It was sold to another Chinese short-video company Douyin. Douyin is one of the hottest short-form video platforms in China. In the recent years, Douyin, as well as some other short-form video apps, become an emerging trend of online social media. For example, Kuaishou, Meipai, they all have been popular for a time. But like Viddy and Vine, they were also facing many challenges from their competitors due to the identity embarrassment, fuzzy orientation, and seriously homogenization of content.

18 Hamill, Jasper. 2015. 'Kids Declare War on Body Shaming in Bizarre Viral #dontjudgechallenge Craze'. Mirror. 6 July 2015.
19 Linshi, Jack. 'Here's How the "Don't Judge Challenge" Totally Backfired'. n.d. Time. Accessed 10 July 2018.

1.4
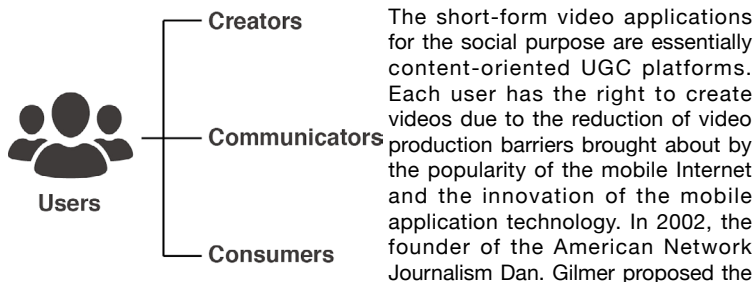**Transmission of short-form video**

From 2011 to now, we have witnessed the evolution of short-form video services, the varying video length, the updating functionalities and the homogeneous content. Many of these short-form video apps have succeeded, but there are also many that have failed. So, in the development of short-form video applications, what decided the success or failure of these apps, and what affects the enduring strength of the long-lasting short-form video platforms? From the inability of Vine, we can quickly answer this question. The answer is the users. The increasing new users are the momentum of healthy development and the secret of the platform's vitality. But If the content of platform the doesn't spread, then it can't attract more users and the user growth will stop. Meanwhile, if the users stop creating or sharing contents, then the app is close to its end.

It can be found that the transmission of short-form video is the key to its sustainable development and more potential users could be attracted through the realization of the flow of information and contents within the platform. The users are the main body of short-form video transmission, and their behavior and motives determine the mode of transmission.

1.4.1 The main body of transmission of Short-form video

The short-form video applications for the social purpose are essentially content-oriented UGC platforms. Each user has the right to create videos due to the reduction of video production barriers brought about by the popularity of the mobile Internet and the innovation of the mobile application technology. In 2002, the founder of the American Network Journalism Dan. Gilmer proposed the concept of "We media"[20], which means "everyone can be a communicator" and "everyone is a media." In the context of web2.0, the participatory culture proposed by Henry Jenkins also emphasizes that users are both the consumers and creators of contents.[21] In the short-form video platform and other UGC platforms, the user's role presents a three-in-one phenomenon in which the user can be the creator, consumer, and communicator of the content.

As the main body of short-form video transmission, users play the most important role during the transmission, and they could be roughly divided into two categories, namely creators and consumers or audiences of short-form videos. At the same time, their user roles and user behaviors are driven by their motives. The knowledge of the main body of short-form video transmission could help us better understand the short-form video transmission.

20 Gillmor, Dan. 2006. We the Media: Grassroots Journalism By the People, For the People. New edition edition. Beijing ; Sebastopol, CA: O'Reilly Media.
21 Jenkins, Henry, Ravi Purushotma, Margaret Weigel, Katie Clinton, and Alice J. Robison. 2009. Confronting the Challenges of Participatory Culture: Media Education for the 21st Century. MIT Press.

1.4.1.1 The Creators of Short-form Video

Under the content production mechanism of the UGC platform, a group of people is actively participating in video production. Some of them are grassroots groups; others are professional production teams. Under the decentralized content production mechanism, each user is the potential content creator. The UGC-based short-form video platform liberates the user's creativity and vitality, providing grassroots the way and space to express themselves on the Internet. Through short-form video, ordinary people have the right to participate in the media circulation, and users can also interact with other users and establish contacts.

Like most UGC platforms, users in the short-form video platforms comply with Pareto principle and 90-9-1 principle (Figure 2), which are the principles of participation inequality between different users. Because different user groups have varying levels of engagement on short-form video platforms under the influence of different motives.
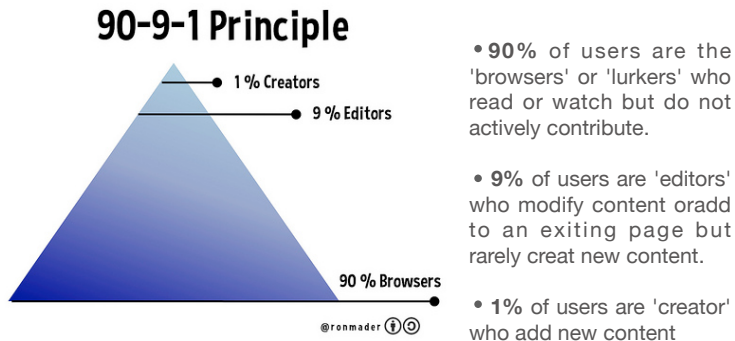

90% of users are the 'browsers' or 'lurkers' who read or watch but do not actively contribute.

9% of users are 'editors' who modify content oradd to an exiting page but rarely creat new content.

1% of users are 'creator' who add new content

Figure. 2 90-9-1 principle

In most cases, the users involved in content creation only make up a small portion of the overall users, but their participation has contributed most premium contents in the platform. This part of users originated from grassroots communities becomes the so-called online celebrity because of the advancement of technology and the opportunities brought about by the development of short-form video platforms. They are the backbone for the platform development due to their participation and contributions in the short-form video community. At the same time, there is another nonnegligible group among the creators of short-form video contents. They are the ordinary people in the grass-roots group and the long-tail users in short-form video platforms. With strong uncertainty, they may turn from usual audiences into content creators at any time because of various user motives that lead to the dynamic change in the user roles and user behaviors.

1.4.1.2 Motives of Short-form Video Creators

Through the observation of each major short-form video platform, it can be seen that UGC short-form video contents can be roughly divided into three categories: image display (such as self-portrait, pets, and babies), art display (such as dance, music and other talents, makeup, life skills, etc.), life presentation (travel, food, etc.). The users' motives to create contents could be easily identified after the classification of these categories. In Zhao Xiaoxian's thesis, the motives for users to create video are roughly divided into three categories: the appeal of self-expression, the drive of cognitive surplus, and the record of spectacle phenomenon.[22] I will briefly summarize his point of view with my knowledge and understanding.

▬ The Appeal of Self-expression

The person's self-identity is formed in connection with others, which includes three aspects:

• **Imaging how others "know" the person;**

• **Imaging how others "evaluate" the person;**

• **The person's feeling of others' "knowledge" or "evaluation".**

Short-form video users have the imagination of the things belonging to and recognized by themselves, such as their appearance, talent, experience, and social status, etc. Such imagination of their own makes them eager to obtain confirmation from the surrounding people and gain recognition from others. Before the emergence of social networking, such motive was mainly achieved through exchanges between acquaintances, and it could not be arbitrarily displayed due to the limited timing. In the age of social networking, the Internet connecting all things and breaks the limitations of time and space for people's activities, making personal displays more convenient. The demands for image display have been fully satisfied with the expanded mass communication of video contents because of the visualized presentation of mobile short-form videos. The users have met their psychological needs by receiving more response from people for their appeals of self-expression.

▬ The drive of cognitive surplus

American scholar Clay Shirky puts forward the concept of cognitive surplus in his book Cognitive surplus: creativity and generosity in a connected age. People in modern society have more and more time at their disposal.[23] The media of the 20th century has been considerably developed, gives people the ability to consume media, and turns them into the couch potato. People at

22 Zhao, xiaoxian, Research on Communication Of Mobile Short Video Based on Social Platform, Chongqing Technology and Business University, 2017
23 Shirky, Clay. 2011. Cognitive Surplus: How Technology Makes Consumers into Collaborators. Reprint edition. Penguin Books.

"The **world** has over a **trillion hours** a year of free time to commit to **shared projects**."

-Clay Shirky

are very good at consuming, but this also leads to an enormous waste of free time. However, with the development of science and technology, the Internet has given people a chance to participate in global projects with low costs, such as Wikipedia, Ushahidi, and others. The essence of "cognitive surplus" is that if people are regarded as a collective of limited social resources, the rest of the resources that are devoted to the purpose of earning a living are mostly used for personal entertainment consumption in the era of traditional media, and the surplus resources are pooled into public social resources through group collaboration and individual behaviors for the creation of rich, civilized achievements in the era of network media.

In fact, almost all Internet UGC products and services are using people's "cognitive surplus" resources. Users of UGC platforms conduct human creation activities in their own free time. This is the source of contents for Internet UGC products, so is for the short-form video sharing platform. Marlows' hierarchy of needs theory divides human needs from low to high to five levels: physiological needs, safety needs, social needs, esteem needs, and self-actualization needs. Users engage in creative activities with their surplus knowledge, receiving respect and self-realization, which is the high level of human needs. The reason why there are a large number of skill-sharing videos and talent videos, which enable viewers to obtain useful videos on short-form video platforms. Video creators or communicators can share their videos and make their knowledge or skills used by people, to help others and realize their social value at the same time.

▬ Record of Spectacle Phenomenon

The emergence of short-form video platform has given people a new tool to record and share life. In everyday life, people will encounter various peculiar phenomena, such as beautiful landscapes, cultural wonders, etc., which will become contents popularly disseminated by short-form video users due to their novelty and topicality. In the concerts, accident sites, scenic areas, etc., the use of mobile phones to record short-form video has increasingly appeared in people's daily lives, and the shooting and sharing of these extraordinary moments in ordinary life could help users record the bright spots in everyday life.

1.4.1.3 Audience of Short-form Videos in Participatory Culture

The term participatory culture was coined by the media scholar Henry Jenkins. Jenkins said: "Participatory culture describes a world where everyone participates, where we take media into our own hands, where we have the capacity, often, to produce media, share media."[24] To be more specific, Jenkins defines participatory culture as one which allows free expression of artistic talent and civic engagement sharing one's creation with others. In the process, everyone becomes a "producer" (producer and user). The user also establishes the social connection with others by sharing their creations. With the power of web 2.0, online communities begin to produce media to share ideas among themselves.

As a new form of entertainment and social networking, short-form video attracts a large number of users, among which a vast majority of new users initially appear as the audience. The audience in the process of short-form video transmission refers to those users who browse the video as both the consumers and the feedback providers of short-form video contents. The audience will reinterpret the received information and materials according to their understanding and knowledge, and then communicate with video creators, express their attitudes, and even establish some connection or socialization through the behaviors of commenting, giving like and sharing. For example, in many short-form video platforms, the relationship between the content creator and the audience of the short-form video is that between follower and followee, which is the connection based on fandom social relationship. There are also interactions and exchanges between viewers of short-form videos. Such user contacts may be based on social relations that are existing offline or the online social relationships linked by common interests or topics.

In the context of participatory culture, the status of the media audience has dramatically changed by having a strong subjective initiative. Such users are not only consumers of contents, but also play an important role in creating and disseminating contents. Only by mobilizing them to participate in the media circulation can the flow of information and contents be realized.

1.4.2 Transmission Mode of Short-form Video

Under the participatory culture, Audience is not a passive recipient anymore but an active participant. The relatively low barrier between content consumption and production enables new forms expression and engagement in public discourse. People now are more engaged to produce their content and disseminate them through their social connections. As a result, the new media like short-form video platform has dramatically reshaped the way of information spreading: people now are more use to receive information (texts, pictures, videos) directly from their friends.

---

24 Jenkins, Ravi Purushotma, Katie Cliton, Margaret Weigel and Alice Robison Confronting the Challenges of Participatory Culture: Media Education for 21st Century. 2015

In the UGC platform like short-form video platform. Individuals do not act as consumer only, but also as contributors or producers. Therefore, the communication is no more a top-down linear structure like Lasswell's 5W model of communication (Figure. 3). The media systems being built around us can no longer be understood merely regarding who says what to whom with what effect. Because of the social media, the one-to-many content distribution has shifted to a many-to-many media circulation, like the figure 4. The change from distribution to circulation means there is a community where individuals exchange meaningful bytes. Now the content distribution or media circulation highly depends on people's sharing behavior. Sharing has gradually become the momentum for media circulation.
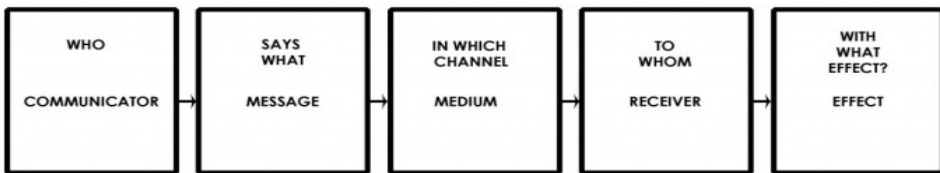
Figure. 3 Lasswell's 5W model of communication

Figure. 4 Social media content Distribution

2.

Sharing & Spreadability

2.1 Why sharing is important?

2.2 Virus-like spreading model

2.3 Spreadability

2.1
Why sharing is important?

In the previous chapter, we have discussed all aspects of short-form video applications, including their characteristics, types, and development history. At the same time, we have discovered the importance of short-form video transmission according to our observation of the short-form video industry. A variety of short videos have emerged in recent years. Some are very successful in challenging the status of traditional social media, but a large number of them have failed or become difficult to survive in the cracks of social giants. In this chapter, in conjunction with the discussion of short-form video transmission mode in the previous chapter, we will further explore the impact of user sharing behaviors on the sustainable development of short-form video platforms, discovering the contents of video sharing and the motives and reasons for media circulation through the research on virus-type spread and spreadability.

2.1.1 Chicken-and-egg debate in short-form video platform
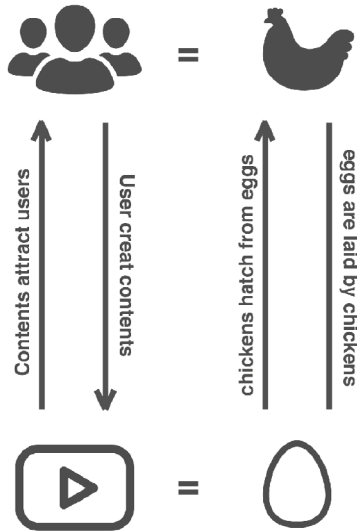
One of the biggest factors constraining the development of short video is the user. Therefore, one of the reasons for Vine to lose the competition with Instagram is that Instagram has a huge user base accumulated as early as the picture sharing stage. There are many benefits brought by the large user base, such as the activity of the community, the richness of contents, and so on. Another factor constraining the development of short video is that too few people are willing to shoot and share. Ordinary users often regard short-video applications like the media for enjoying video contents, rarely taking the initiative to shoot and share the content. Just like the well-known Pareto Principal, 20% of people contribute 80% of the contents of the platform. In this way, when there are more users on the platform, there will be more original contents. However, the growth of the user base in a platform is inseparable from the high-quality contents. It is only a large amount of good original contents that can continue to attract new users and maintain the vitality of the platform. From this point of view, this problem seems to become

chicken-and-egg. Users are no longer a problem for social giants such as Instagram, but it is the disaster for emerging short-form video platforms to have no users nor contents, so they normally have to survive in the cracks of Facebook, Twitter, and other social giants.

How should the emerging short-video platform break through the competition without the constrain of the user base and the original contents? Many UGC platforms firstly invite some professional creators to publish exclusive contents on their platform for the attraction of more users. However, in many cases, users are slowly losing interests and returning to the original social platforms due to the imperfect environment of the platform. In short-video applications such as Xiaokaxiu (A Chinese short-form video app which allows users to create and share short lip-syncing video clips. The unique features are that all the lip-syncing video clips all come from the popular movies and TV show, etc. So the users can reinterpret the classic film bridge that they like through their actions), some unique features may allow specific video contents to become highly popular and spread like viruses in a short period, attracting a large number of users. But the various problems still cannot be fundamentally solved in the short-video platform. In the face of continuous loss of users, many short-video platforms choose to constantly increase the video editing and composition functions, such as new filters, new stickers, new interactive features, and so on, which, to some extent, do stimulate users to create and share videos, but lead to the promotion or copy of new features for all platforms. This approach has caused the homogenization of the contents of various short-video platforms. Without its characteristics, the emerging short-form video platform is difficult to survive due to the insignificant growth of user base.

The establishment of a good environment for a short-video platform or all UGC platforms is inseparable from the continuous contribution and sharing of users. Although in most cases, 20% of users contribute 80% of the content, each user is both a content consumer and a potential content producer in the context of participatory culture. There will be two benefits when these long-tailed users get stimulated to actively participate in the media circulation and make or share video contents. First, in the media circulation, the video produced by these long-tailed users will greatly increase the richness of contents in the short-video platforms. Second, the sharing of users will also become an entry point for new user growth, which will significantly enhance the vitality of short-video platforms. If this is done, then the chicken-and-egg debate will be solved. With the participation of users, the media circulation will bring a virtuous development to the contents and user environment of the short-form video platform.

The short-form video platform is a content-oriented medium, whose success or failure lies in the spread of content, that is, users' sharing behaviors. The media circulation of short-video content could be enhanced by effectively improving the spreadability, to establish a suitable environment of contents for the platform and increase the life cycle of the short-video application. This is why sharing and spreadability are so important.

2.1.2 The power of sharing

The core spirit of Web 2.0 is sharing. The author of Contagious: why things catch on, Jonah Berger said in his book " 'self-sharing' follows us throughout our lives."[25] Sharing noteworthy information is an innate aspect of the human condition.[26] In the oral communication era, the way that people spread information is simply sharing a story. Until now, this word-of-mouth communication hasn't changed too much through the development of technology. In the Internet era, sharing is still an important channel for our communication. The new media has strengthened the connections between individuals and made sharing much more accessible.

In the era of Web 2.0, the power of sharing is far beyond people's imagination. Sharing can make an obscure person become famous overnight, or make the unknown brands and products become household names. The power of the Internet has magnified the influence of communication. Countless videos, some of which are the viral videos suddenly becoming very popular, have been uploaded to various video-sharing websites every day. What are the secrets that make these videos so popular in a short period? The answer is users' sharing, which has spread the videos so rapidly that make them receive public attention in a short period. Knowing the reasons for the viral popularity of video can help us understand the motives and reasons behind the users' sharing behaviors.

25 Berger, Jonah. 2016. Contagious: Why Things Catch On. Reprint edition. Simon & Schuster.
26 Bouman, Jesse. 'The Psychology of How and Why We Share Content on Social Media'. 2016. EveryoneSocial (blog). 29 January 2016.

2.2
Virus-like speading model

2.2.1 What is Viruses-like spreading and Viral media?

The digitization of media made it increasingly easy to create and share all kinds of content. Then the convergence of technologies made it even easier to consume, remix and share that content at all times on multiple devices. Which enables much user-generated content quickly become famous on the Internet. For example, The Don't judge challenge campaign is a selfie video fad in which the participant records oneself at a close-up angle while wearing heavy facial makeup to appear as unattractive as possible, before transitioning into another self-portrait in which the subject is shown in their most photogenic form. This campaign becomes a trend among the teenagers. Who can imagine that the teenagers' selfie video could become so popular? When videos become so popular, they have deemed to have gone viral. But what does viral means in the media propagation?

The name "Viral" comes to form the way that viruses propagate. But the Viral we are talking here has nothing to do with computer viruses. According to TechTerms, It refers to a digital video, Image, text that has spiked in popularity and has reached a large number of users in a short period. " Viral media" is a common term that describes the popularity of digitized media content has been fueled by the rise of social network sites. Different from spreadable media, viral media uses the viral metaphor of "Infection" and "contamination," which means that audiences play as passive carriers rather than an active role to spread contents.[27]

The epidemic model is a good example to understand the viral phenomenon and how viral media propagates. An epidemic model describes the spread of a contaminative disease through a population. One classical epidemic model is the Susceptible-Infectious-Recovered (SIR) model.[28] In the media landscape, we could describe this model like the following: Initially, a user shares content from the Internet, and this initiator becomes infectious. All other users in the social network are safe except the friends of the initiator. The shared content appears in the news feed of the initiator's friends and, thus, they become susceptible. Over time, these friends gradually log into the comical network and decide whether to watch or read the content (infected) or not (immune). The infected users will decide whether to share after the watch or read the content. They become recovered if they choose not to share, and infectious if they choose to share. Again, these infectious user will maker their friends who are in the safe stage become susceptible.

27 Jenkins, Henry, Sam Ford, and Joshua Green. 2013. Spreadable Media: Creating Value and Meaning in a Networked Culture. New York ; London: NYU Press.
28 Wang, Zhi, Jiangchuan Liu, and Wenwu Zhu. 2016. Social Video Content Delivery. SpringerBriefs in Electrical and Computer Engineering. p.23. Springer International Publishing.

2.2.2 Examples of Viral media

2.2.2.1 Memes

"Meme" is a good example to explain what " Viral media " is. The evolutionary biologist Richard Dawkins coined the term "meme" in his book The Selfish Gene. [29]The book focused on the importance of self-replication in evolution and pointed to the gene as the unit of biological information that is subject to selection pressures.[30] A "meme" is a virally-transmitted cultural symbol of the social idea, and it behaves like a mass of infectious flu and cold viruses, traveling from person to person quickly through social media. A key component to meme concept is that the information can self-replicate, and in turn undergoes a type of natural selection, much like biological genes and viruses. As we know, a gene has intrinsic properties which get passed on from one generation to the next. And depending upon the environment, they will either succeed in their propagation or will not. It quite similar to human ideas, Idea has its intrinsic qualities, and we have the environment where it spreads, nowadays the Internet.[31] So Meme is like a gene for ideas.

The majority of modern memes are captioned photos that are intended to be funny, often as a way to publicly ridicule human behavior. Most commonly, Meme comes with a humorous image with funny facial expression or pop-culture reference and adds text or quote to it.

Figure. 5 Meme of Toy story from the Internet

29 Dawkins, R. 2011. The Sel sh Gene. First Thus edition. Oxford ; New York: Folio Society.
30 Gil, Paul. n.d. 'Examples of Memes and How to Use Them'. Lifewire. Accessed 10 July 2018.
31 TEDx Talks. n.d. What's in a Meme? | Andrew Baron | TEDxSacramento. Accessed 16 July 2018.

Figure. 6 Memes of Leonardo DiCaprio from the Internet

Figure. 7 Memes of Barack Obama, from the tInternet

2.2.2.2 Viral video

In most instances, when people think of the term "viral," they often think of the viral video. Although anything can go viral on the Internet, video tends to be the most common case. According to the definition from PC Mag Encyclopedia. A viral video is a video that becomes popular through a viral process of Internet sharing, typically through video sharing websites, social media, and email.

50 years ago, Andy Warhol once said: "In the future, everyone will be world-famous for 15 minutes." Now "15 minutes of fame" has already become a reality. User-generated content platforms accelerate the "democratization of celebrity"[32] and enables any of us, or any of the creative things that we do can become utterly famous in part of our world's culture. Anyone can be famous now for just being themselves, all they need to do is making a video of their life, talent, creativity, and share it on a video-sharing website. When people are talking about online video, there is a big chance that they are talking about videos on Youtube. Youtube launched in 2005 as a video-sharing website. A central feature of this website is the dazzling number of videos, uploading daily by many thousands of users. According to research from Youtube, there are over 48 hours of video uploaded to Youtube every minute. And of that, only a tiny percentage ever goes viral and get tons of views and become a cultural moment. So what determines which video could go viral?

A trends manager from Youtube, Kevin Allocca, shared his answer at the TED talk. From his work experience at YouTube, he found out that three things could affect the popularity of one video, which are "tastemakers," "communities of participation" and "unexpectedness." [33]

32 Silverman, Jacob. 2016. Terms of Service: Social Media and the Price of Constant Connection. Reprint edition. New York London Toronto Sydney New Delhi Auckland: Harper Perennial.
33 TED. n.d. Why Videos Go Viral | Kevin Allocca. Accessed 10 July 2018.
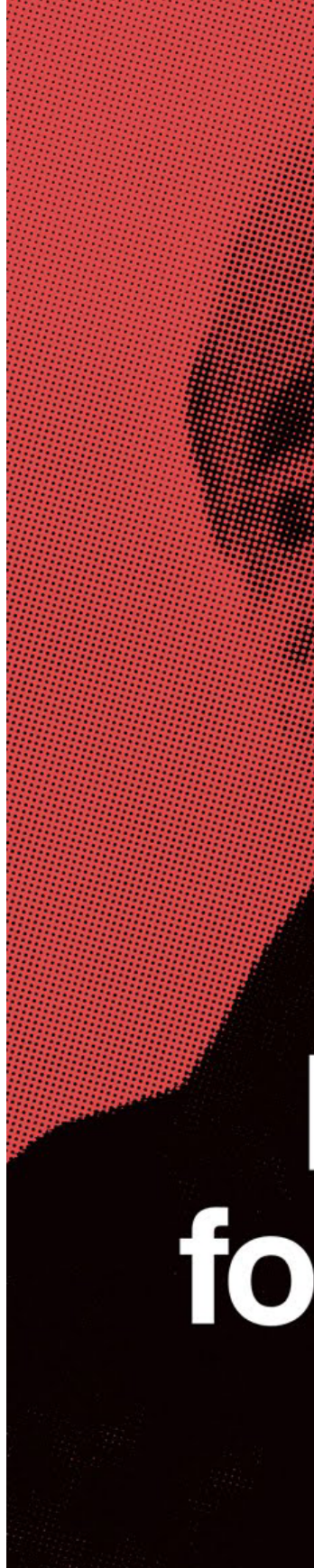
in the future
everybody will
be world famous
r fifteen minutes.

15 minutes of fame, Andy Warhol

▬ Tastemaker

The concept of "tastemaker" is that some super spreaders will dramatically affect the video popularity. The idea is quite similar to "Law of the few" which is one of the three rules in Malcolm Gladwell's book The Tipping Point: How Little Things Can Make a Big Difference. "The Low of Few" is, as Gladwell states: " The success of any social epidemic is heavily dependent on the involvement of people with a particular and rare set of gifts." According to Gladwell, economists call this the "80/20 Principle, which is the idea that in any situation roughly 80 percent of the 'work' will be done by 20 percent of the participants". Gladwell[34] describes three different characters in "the low of few." There are "Connectors," "Mavens," and "Salesmen." The connectors are quite similar to the "tastemakers." The Connector is the people in a community who know large numbers of people and who are in the habit of making introductions. They usually know people across an array of social, cultural, professional, and economic circles, and make a habit of introducing people who work or live in different circles. They are people who "link us up with the world… People with a special gift for bringing the world together". In the Internet era, these "connectors" are those online celebrities or Internet stars who are regularly active in social media. Their re-sharing or tweets play a vital role in the further explosion of propagation.

Kevin Allocca shared an excellent example in his presentation. In 2010, a homemade video on Youtube, Double Rainbow went viral on the social network. The video has nothing special to expect the user who uploaded it himself. He declares feelings of awe and wonder after witnessing a rare "double rainbow" in Yosemite National Park. In the video, he can be heard crying in the background, which was inspired by The user Hungrybear9562 who uploaded this video also uploaded many video scenery videos of Yosemite National Park before, but none of them became so popular like the Double rainbow. So what made this video went viral? In the Figure 9, In this chart, we can see the trend of popularity for this video. The video was not popular at all before it was discovered by the talk show host Jimmy Kimmel. On July 3rd, Jimmy Kimmel posted a tweet that linked Twitter users to the video. An hour later, more and more super-spreader retweeted his post. After that, this video became extremely popular in a short period. In this cases, Jimmy Kimmel is the tastemaker; he is the main reason why this video went viral. As Kevin Allocca said in his speech " Because tastemakers like Jimmy Kimmel introduce us to new and interesting things and bring them to a larger audience." [35]

---

34 Gladwell, Malcolm (2000). The Tipping Point: How Little Things Can Make a Big Difference. Little Brown.
35 TED. n.d. Why Videos Go Viral | Kevin Allocca. Accessed 10 July 2018.

Figure. 8 Screen shot from the video Double rainbow

Figure. 9 Screen shot from Kevin Allocca's speech

▬ Community participation

The second factor that Kevin Allocca mentioned in his speech is participation, more specific community participation. He explained "this community participation is how we become a part of the phenomenon, either by spreading it or by doing something new with it. The media scholar Henry Jenkins coined the term "Participatory culture" in the paper Confronting the Challenges of Participatory Culture: Media Education for the 21st century. As he said: "Participatory culture describes a world where everyone participates, where we take media into our own hands, where we have the capacity, often, to produce media, share media."[36] The concept of Participatory Culture is quite similar to Kevin Allocca's idea about community participation. Participatory culture is directly linked to spreadability which is the main topic of this paper, and we will discuss in the next chapter, so here we will not discuss too much about it. To fully understand this idea, Kevin Allocca made an example about the "Nyan Cat" which is a looped animation with looped music.
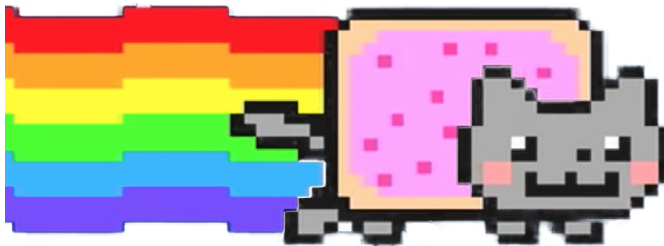
Figure. 10 Nyan Cat, from the Internet

Nyan Cat, also know as Pop Tart Cat, is an 8-bit animation depicting a cat with the body of a cherry pop tart flying through outer space. The video was uploaded on Youtube in April 2011 and ranked at number 5 on the list of most viewed Youtube videos in 2011.[37] Moreover, The Nyan Cat video reached ninth place in Business Insider's top ten viral videos of April 2011, with 7.2 million total views.[38] The original YouTube video has received over 146 million views as of May 30, 2017.

Due to the popularity of Nyan Cat, many new remixes and cover versions have been made, some several hours long. There is a ten-hour version of this

36 Edutopia. n.d. Henry Jenkins on Participatory Culture (Big Thinkers Series). Accessed 16 July 2018.
37 'Talking Twin Babies, Nyan Cat among YouTube's Top Videos of 2011'. 2011. LA Times Blogs - Technology (blog). 20 December 2011.
38 Wei, Will. n.d. 'TOP VIRAL VIDEOS OF APRIL: What's A "Nyan Cat"?' Business Insider. Accessed 16 July 2018.

video that has been viewed more than seventy-four million times. The most interesting thing is the Nyan cat has brought an amazing remix of trends. People from all over the world started to participate in this online remix events. For example, as we can see in Figure 11, people from different countries used different flags, colors and classic music from their own country and remixed it with Nyan Cat. An entire remix community sprouted out because of this simple video which is something that allows us actually to be part of.

Figure. 11 Nyan Cat In 205 Countires

▬ Unexpectedness

There are many once the famous viral video on the Internet. After we saw this two examples, first we should know, in a world where over two days of video get uploaded every minute, not every video could "go viral". Second, the quality of the video is not necessary, like the double rainbow which was shot by a non-professional people using the mobile phone, it has nothing to compete with the professional scenery documentary produced by BBC, but it went viral. The tastemaker and community participation is essential for the video to go viral. Besides these, the video which went viral seems to be unexpected. This is the third factor that Kevin Allocca mentioned in his speech - Unexpectedness, which might not be entirely accurate and I don't wholly agree. On the marketing side, viral marketing is a popular concept to spread your Idea, product, and brand. And with some strategies, people could increase the possibility that one video goes viral.

2.2.3 The difference between Viral marketing and Viral media

Many people may not hear viral media before, But most people have already known viral marketing in their life. Viral marketing first becomes a popular term after Hotmail generated millions of new users in just a few months by inserting the message "get your free web-based email at Hotmail" into every email sent through their service. Hotmail was one of the first internet company become extremely successful utilizing viral marking. Because of this viral marketing campaign, Hotmail was able to sign up 12 million users in 18 months.[39] At the time, this was historically the fastest growth of any user based media company.[40] After the big success of Hotmail, many companies started leveraging viral marketing as an essential strategy for their business.

These two terms sound similar, and they all browed the concept of viral form biology. But there still are some noticeable difference between this two terms. Viral marketing is a marketing technique that uses pre-existing social networking services and other technologies to produce increases in brand awareness or to achieve other marketing objectives through self-replicating viral processes, analogous to the spread of viruses or computer viruses.[41] This marketing strategy aims to spread product or brand information to thousands upon thousands of potential customers in a short period. Therefore, Viral marketing has it innate commercial purpose. The ultimate goal of viral marketing is to achieve the economic interests for the product or the company. But Viral media is generated by the spontaneous behavior of different individuals, which is aimed for self-expression or pop-culture, or only just for fun. Like the famous viral double rainbow video on the youtube. When the people shot that video, he didn't want to make any money; he want to share his experience and feelings. The viral marking instead, has its manifest purpose and plan at the very beginning. Briefly, Viral marketing is a marketing strategy, and viral media just a regular media which fueled by the rise of social network sites and made it extremely popular in a short period.

39 Lloyd, Tony. 'Are You Using The Dynamic Power of Viral Marketing?' n.d. Business Know-How. Accessed 10 July 2018.
40 Subramani, R., & Rajagopalan, B. (2003). Knowledge-Sharing and In uence in Online Social Networks via Marketing. Communications of the ACM, issue 8(12), p.300-307
41 Howard, Theresa(2005-06-23). "USAToday: Viral advertising spreads through marketing plans." USA Today. June 23, 2005

2.2.4 Why people share and what makes something go viral?

On the Internet, a piece of content can spread just like viruses if people become infected or contaminated when they see it. The infection usually comes from evoked emotions that spur the viewer to share it, so they can relate with other people and discuss how they feel. But it is not enough to describe what makes something go viral. Here are some ideas about what makes things go viral.

Idea one: the media perspective

A publisher of BuzzFeed, Dao Nguyen made a speech in TEDxNYC about "what makes something go viral?"[42] She shared some experience of BuzzFeed about how to create content go viral in the conference. When BuzzFeed signed on to the Facebook Live experiment, the BuzzFeed employees decided to live stream a prank to their boss on his birthday. In that day, the boss was delayed, and people were continuing to logging in to watch this event. By the time the boss walked in more than 30 minutes later, 90,000 viewers were watching the live stream. After the big success of this video. The team had a lot of discussion about this video and why it was so successful. They read some of the 82,000 comments that were made during the video, and hypothesized that the viewers were excited because they were participating in the shared anticipation of something that was about to happen, they were part of a community, just for an instant, and it made them

Figure. 12 Screen shot from BuzzFeed's facebook

42 TED. n.d. What Makes Something Go Viral? | Dao Nguyen. Accessed 10 July 2018.

happy. Later they tested this hypothesis by making a video that two people dressed in hazmat suits and wrapped rubber bands around a watermelon until it exploded. The result is eight hundred thousand people watch this at the time, making it the biggest Facebook Live event at that time.

So How to make something go viral? Dao Nguyen thinks the question itself is misplaced. It is not about something; It is about what is the audience doing something and what are they thinking? BuzzFeed also started a project called Cultural Cartography. It is a project to formally categorize their content and analyze how their content connects with people's actual lives, and how people use their content to connect with each other. By doing this project, they got the answer about how to make something go viral. " Don't just think about the subject matter, also think about, and in fact, primarily about, the job that your content is doing for the reader or the viewer."

In figure 13, The map of Cultural Cartography shows the job that BuzzFeed's content is doing for the audience. In this map, each bubble is a specific job, and each group of bubbles in a specific color are related jobs. This map contains five different categories. "Makes me laugh," "This is me," "Helps me connect…","Helps me…", "Makes me feel..". This five category represents five important factors that help people to connect with each other which affects the viral propagation of the content. It represents Humor, Identity (self-deprecating), Connection(bond with someone), Helpful (learn something), Emotion (Faith restored) respectively. If the content has some of this properties could go viral.
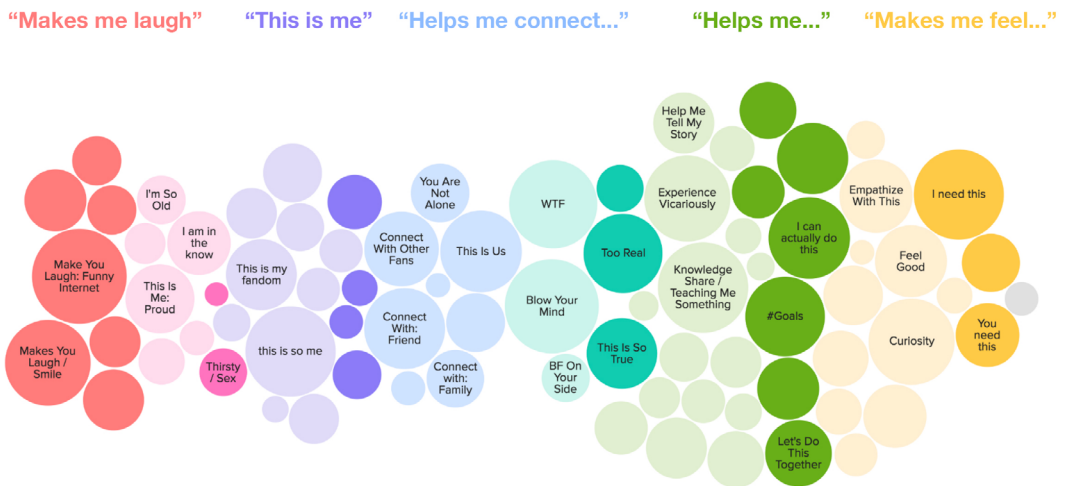
Figure. 13 Screen shot of BuzzFeed " Cultural Cartography"

Idea two: the marketing perspective

Remember when we talked about the Unexpectedness factor in the viral video, I said it might not be true. The truth is in the viral marketing researches; there are already many strategies for making things go viral. Long before viral marketing emerged, there was already some assumptions about what could be popular. In 1963, David Ogilvy, the advertising tycoon, known as the father of advertising, proposed his three principles of advertising creative processing in his book Confessions of an Advertising Man. The 3B principle (beautiful-beauty, beast-animals, baby-baby) has been widely used in advertising industry up to now. In the Internet era, this three principle still works. In the short-form video apps most people like watch video which has beautiful girls or handsome boys. And on the social network and online video websites like Facebook and Youtube, people like to share and watch cats videos and pictures, as well as funny baby videos. But the question is still there. There hundreds and thousands of cat video, baby pictures, but why some of them could become extremely popular and went viral?

Figure. 14 Photo of David Ogilvy, from the Internet

Jonah Berger, a world-renowned expert on word of mouth, viral marketing, social influence, and how products, ideas, and behaviors catch on. His book Contagious: Why Things Catch On discussed what make things go viral. He thinks things went viral was not random, and it was not luck. He introduced the six key factor that he called "STEEPS,"[43] which drive people to talk and share, and he thinks that is the reason behind why things go viral. The STEEPS stands for six different principles which are :

- **Social Currency**

- **Triggered**

- **Emotion**

- **Public**

- **Practical Value**

- **Stories**
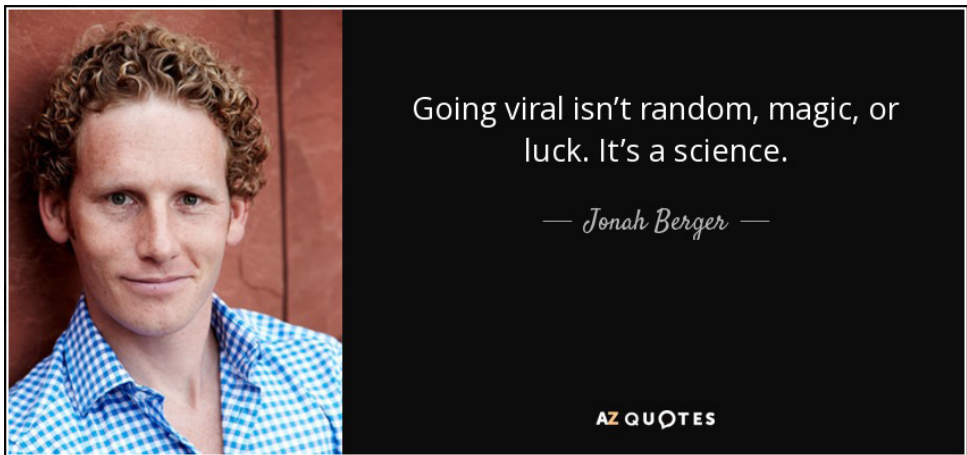
Figure. 15 Photo of Jonah berger, from AZ Quotes

---

43 Berger, Jonah. 2016. Contagious: Why Things Catch On. Reprint edition. Simon & Schuster.

▄▬ Social curreny

The first principle, Social Currency. The idea with social currency is that people share whatever makes them look good, so if anything makes people look good, or smart, or cool, they are much more likely to share it. Many people on the social network like to post their luxuries, things like expensive cars or bags, to show their friends that they are rich. Anything that makes people look good could make them share, money and fortune is not the only thing. For example, there was a small charity campaign in China in 2017. The campaign aimed to help the children with infantile autism by selling their paintings online. Anyone who donated 1 CNY for helping that kid will get a copy of that painting, and on that donate web page there was a clear button for people to share it on their Wechat (a famous Chinese social network). The result is, the whole thing went viral. Millions of individuals donated their money and shared the paintings they brought on the Wechat, and the entire charity campaign was a big success. Why did it happen, the painting, as the product in this whole event, is very ordinary just like the painting every kid could easily draw. The reason behind this massive sharing behavior could also be explained by the social currency principle, the painting here is the social currency. People donate money and share it because they want to show their sympathy which makes them look good.
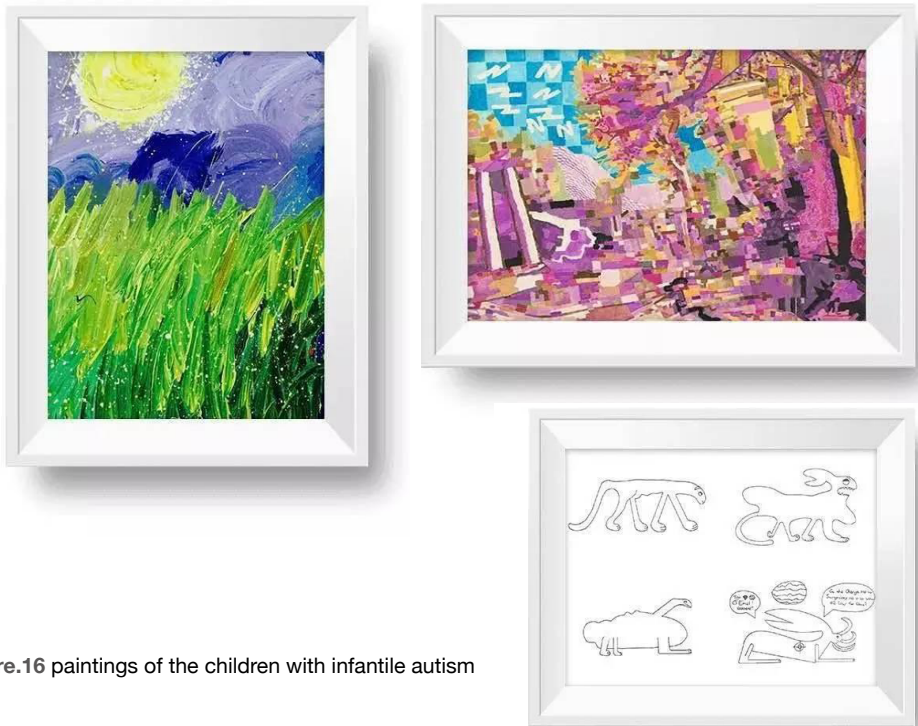
Figure.16 paintings of the children with infantile autism

▬ Tiggers

The second principle, Triggers.The idea is people need to be reminded of your idea or product, and you can help them by providing a strong trigger. Jonah Berger made an example about Rebecca Black's Friday in "Talks at Google." Rebecca Black's "Friday" is one of the most popular videos in 2011. It was seen over 300 million times in 2012. Many people argued that this is the worst song ever, and actually, it is one of the most thumbs-down songs on the Youtube, on the Youtube over 75% of viewer gave a thumbs-down on that video, and yet it went viral. According to a chart of video views provided by Youtube, like figure 17, we can see the tipping point of this MV, is a spike on the chart, that spike is a Friday, and all other spikes are also Fridays. There is a spike every seven days. In this case, as Jonah Berger said: "Friday is an environmental reminder to think about it with others. And that's what I'll call a trigger."[44] Friday is a good trigger because it happens every week. Jonah Berger also made an example about KitKat. KitKat did the same thing in 2007. Before their new marketing strategy, their sales were declining every year they needed an effective marketing campaign. And what they did was they decided to link KitKat to coffee. And all of their advertisement, KitKat was always presented with coffee. The result is every time consumers drink coffee. They have a higher chance to think about KitKat. The reason why KitKat chose coffee as a trigger is that people often drink coffee in their life, and just like the "Friday" for Rebecca Black's song, the coffee is a good trigger for KitKat. In the next twelve months after the campaign, KitKat's sales were up by 33%.
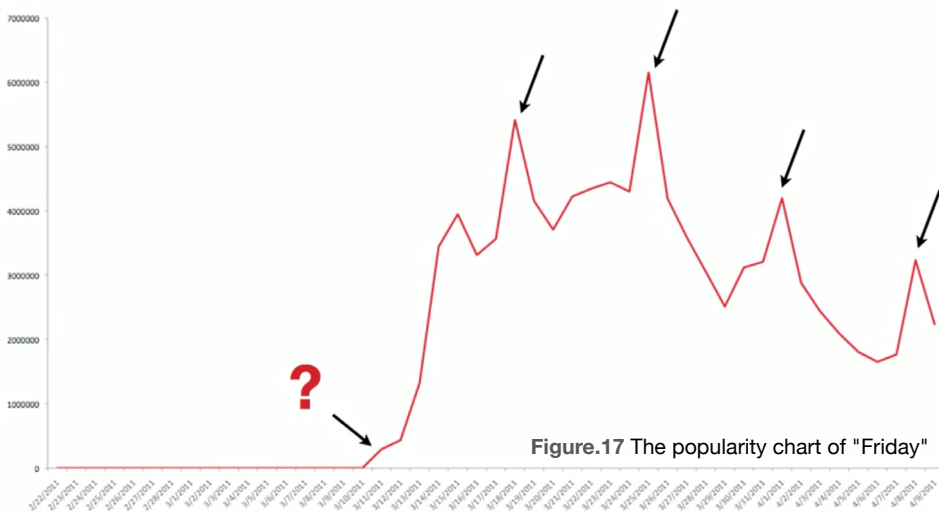
Figure.17 The popularity chart of "Friday"

43 Talks at Google. n.d. Jonah Berger: 'Contagious: Why Things Catch On' | Talks at Google. Accessed 16 July 2018

▬ Emotion

The third principle is Emotion, the idea is people share what give them high-arousal emotion. It means when people feel strong emotions, they want to share. Emotions help people to connect with each other, and sometime sharing some emotions could make them look good, same as social currency does. In general, human's emotion could be divided as positive and negative or pleasant and unpleasant. But in both sides, there are emotions that people wants to share. We could understand that people like to share the thing that is them feel happy or proud or other positive feelings. But in many cases, people also want to share things that express their anger or anxiety or other negative feelings. For example, recently, there is a short video on Chinese social network Weibo become extremely popular, many people shared and commented this few second video. The video is about Chinese customer get mistreated in the Balenciaga store in Paris Printemps (figure.19). The video only lasts for a few seconds, and it was recorded by a mobile phone. All you can see is the security form Pintemaps savagely dragging an Asian customer out the Balenciaga store , very similar the video that a Asian passenger forcibly dragged off a United Airline plane in 2017 which has been viewed over 4 million times on Youtube (Figure.20). In this two cases people all feel extremely angry, and this video went viral. So Negative and Positive can't explain this. However, psychologist have argued that emotions can also be classified based on the brain activation or physiological arousal. According to Jonah Berger's research, high arousal emotions could stimulate people's sharing. As we can on the figure 19, Anger an anxiety are both high arousal emotions, that explains why these two videos became viral.

Postive emotion

Emotions that sitmulate sharing

Awe
Excitement
Amusement

Contentment

Low arousal ———————————————— High arousal

Sadness

Anger
Anxiety

Negitive emotion
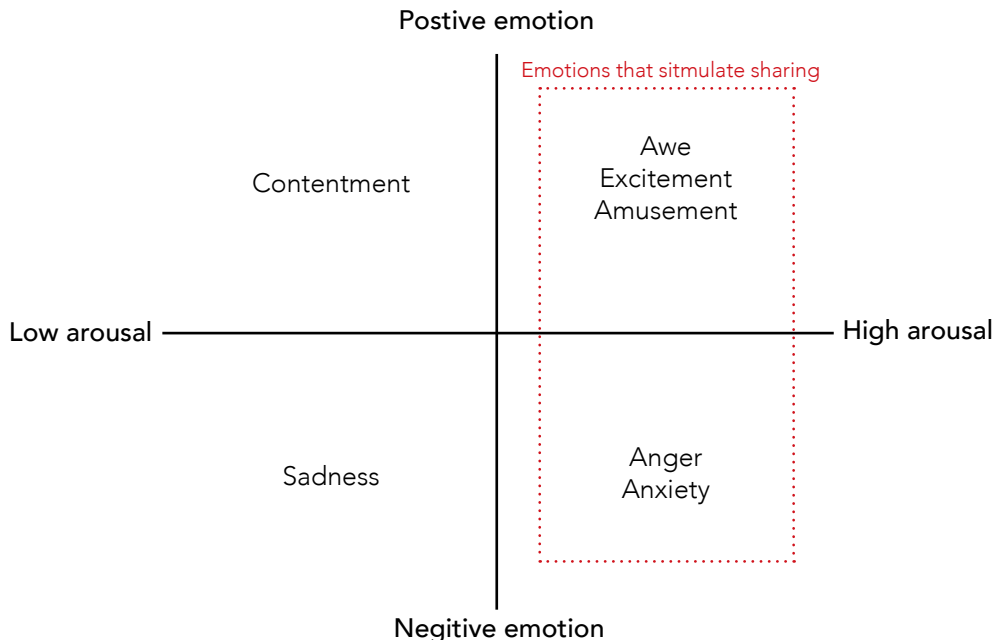
Fig.18 Emotion classification accroding to Jonah berger's reserch

Figure. 19   Paris Pintemps Balenciaga video screen

Figure. 20 Screen shot United Airline plane drag passenger out

Public

The fourth principle Public, or social proof. The idea is people's decisions are affected by what everyone else around that people is doing. In Psychology, there is a well-known term called herd mentality. It describes behavior in which people act the same way or adopt similar behaviors as the people around them, and often ignoring their felling in the process. For instance, Like the Don't judge Campaign from Musically. It became popular among teenager because it is a trend. Teenagers want to imitate other's behaviors because they want to be in, and being an insider make them feel and look good. It is due to the social currency which Jonah Berger mention in the first place. To some extent, the herd mentality is very similar to the principle of Public, except this principle emphasize the visibility of the product or the content. In the book, Jonah Berger made many examples, like Steven Jobs, decide to flip the Apple logo upside down to make the band more visible to other people instead of the owner of the laptop.

Practical value

The fifth principle is the practical value; If people can offer something of some information that can help their friends or other people, there is a higher chance that they will want to share it with the people they know. In the BuzzFeed's " Cultural Cartography" project we also can see that the "helps me" or practical value is quite significant. That explains why Skill-sharing videos are always popular in the online social network or short-form video application.

Stories

The last principle Stories. The idea people like to share stories rather than talk about specs and details. Stories are the most effective way to share ideas. And it is crucial to integrate your idea and product into the narrative. Leveraging good stories that useful, engaging, will help your Idea and product become popular.

Summary

In the actual marketing practice, your product or idea doesn't have to have all of these six principles, and in the media or video aspects, some of these might not even be very applicable. But the more, the better. If we can use these principles in service design or user experience design will help the user-generated content to be contagious, and help to boost the vitality of the platform. To summarize and answer the question" What makes things go viral?", First, we know participation is crucial. Second, from both the media side and marketing side, we know that the audience is important, It is all about their social needs, their emotions, and the practical value for them and their habit. Last but not least, we know not everything could go viral, and like some viral videos we talked about, things that went viral do not have to be excellent or professional.

2.3
Spreadability

2.3.1 The definition of spreadability

As we all are aware, The modern-day media landscape has changed because most of the media like video, photography, and music have all been digitized for the audience to use and spread. The communication is no longer a top-down structure. Instead, media has been shaped through content that may be spread by or engaged with by various audiences.[44] So under this circumstance, what makes people spread a piece of media? "Viral" is one of answer that we have already talked in the previous chapter. The term viral is derived from an infection like the flu and the way that is spreading rapidly from person to person. But this metaphor reduces consumers to passive transmitters that can't control what media they spread.

In the viral media world, people believe the media is constructed specifically to become viral, it means consumers do not have choices of their own, but to follow the epidemic mode and become infectious and mindlessly spread the media. But under the participatory culture, the public has the power to create, share, reframe, or participate in all types of media and message. That means the metaphor of the infection and the contagious overrates the media power and underrates the one of the audience. So the term viral is starting to become a little outdated, but which term can describe the complexity of how we all engage with the media more accurately? Jenkins, Ford, and Green argue that we should adopt the concept of spreadability which better describes why media is spread, rather than emphasizing the ability to infect and contaminate. Spreadability acknowledges the power of active audiences and their role in spreading content. Spreadability recognizes that is the choices, agendas, and actions of the audience that determines what gets valued.

Moreover, Henry Jenkins gives us the definition that says spreadability refers to the technical resources that make it easier to circulate some kinds of content than others, the economic structures that support or restrict circulation, the attributes of a media text that might appeal to a community's motivation for sharing material, and the social networks that link people through the exchange of meaningful content. To explain further he says spreadability looks not just at the individual but how their social connections and how them sharing can amplify reach. It emphasizes producing content in easy to share formats, to encourage more points of access. It focusses on producing text that different audience may want to circulate the different reasons. It encourages open-ended participation where the audience may use content in unanticipated ways. It values audience activities generating interests. It assumes anything worth hearing will circulate through any channels available. It values unofficial parties like influences and advocates you can control the flow of messages into their community and recognizes that the lines between producer, marketer, and the audience can blur.

---

44 Laura M. Gorham. A Review of Spread Media: Creating Value an Meaning in a Networked Culture. Journal of Applied Communications, Volume 100, Issue 2, Article 2

To summarize, here is the main elements of spreadability according to Kirby Prickeet' book review:

• **Flow of Ideas** - understanding circulation based on analysis of the social motives of those who are actually doing the spreading.

• **Dispersed material** - creating multiple access points to content and texts that are both "grabbable and quotable."

• **Diversified Experiences** - content is often customized and localized for niche audiences by community members, rather than commercial producers.

• **Open-ended Participation** - participatory activities differ substantially, depending on the community and the media property in question.

• **Motivating and Facilitating Sharing** - seeking to compensate for the loss of control, media producers and networks are developing new business models seeking to benefit from at least some forms of grassroots circulation.

• **Temporary and localized communication** - traditional top-down models of distribution have given way to a hybrid model that is partially top-down and partially bottom-up. Creators are listening closely to their audiences and meeting them when and where they are having a conversation.

• **Grassroots intermediaries who advocate and evangelize** - if an audience is going to spread media content, it will be because it serves their own communicative purpose and fits into conversations they were already having.

• **Collaboration Across Roles** - there has been a blurring of relationships between producers, marketers, and audiences. Participants may be reconciling different motivations—between their professional, personal, and social concerns.

---

45 Prickett, Kirby. 'Book Review: Spreadable Media | WordPress Hosting by @WPEngine'. 2014. WP Engine. 7 February 2014.

2.3.2 How to increase the spreadability of media?

In the participatory culture, media is spreadable. The concept of spreadability refers to the capability of media being spread. Spreadability is crucial for media to survive in the media circulation. So how to increase the spreadability? From the media itself, the content should have some attributes that can facilitate audience sharing behavior. In Jenkins books Spreadable media: Creating Value and Meaning in a Networked Culture. In the "Designing for Spreadability" chapter, Jenkins provided some technical and strategic considerations that can increase the chance content might be spread. The content is more likely to be spread if the content creator thinks about what motivates participants to seek out information and then share the information. To increase the spreadability, Jenkins, Ford, and Green suggest that spreadable media should be created based on five important factors, which are Available when it and where audience want it; Portable; Easily reusable in a variety of ways; Relevant to multiple audiences; Part of a steady stream of material.[46] And most importantly, content creator must also be aware of the audience needs as well as patterns and motivation of media circulation, both of which are driven by meanings people can draw from the content.[47] Understand a person's or community's motivation and interests is key for creating texts more likely to spread. Another thing that content creator should know is people choose to share material they value and anticipate others will value. We will discuss these five factors more specifically.

▬   First, "Available when and where the audience wants it." With the development of mobile Internet and the web 2.0. Our culture has shifted into a form of engagement-based viewing. Audiences now can view content at any time from multiple devices and participate in the online media circulation. The producer should move beyond an "If you build it, they will come." mentality. Therefore, media producer or content creator should make sure that the place they send their content is where the audience will find it most useful.

▬ Second, "Portable." Spreadability emphasizes producing content in easy-to-share formats, which make content easier to spread across the Internet. Audiences will often abandon material if sharing proves too onerous. Portable is an important factor that makes media more easy to share. Being portable means that media should be, as Jenkins said, "quotable" and "grabble," this means the media is editable and could be easily picked up and inserted elsewhere by the audiences.

---

46 Jenkins, Henry, Sam Ford, and Joshua Green. 2013. *Spreadable Media: Creating Value and Meaning in a Networked Culture*. New York ; London: NYU Press.
47 Laura M. Gorham. A Review of Spread Media: Creating Value an Meaning in a Networked Culture. Journal of Applied Communications, Volume 100, Issue 2, Article 2

■ Third, "Easily reusable in a variety of ways." The name of the book is Spreadable Media: Creating Value and Meaning in a Networked Culture. Value it an important thing of the whole concept. In the second chapter of the book "Reappraising the Residual," the author said, "Media may be appraised when someone decides whether or not media is valuable by spreading, and what is not valuable by not spreading the information." Media producers and media audiences circulate content for many different reasons, but behinds those diverse reasons, there is something in common, which is the value that motivates them to share. So creating media texts that are open to a variety of audience uses and purposes is crucial for creating material that spreads.

■ Forth, "Relevant to multiple audience" Content that appeals to more than one target audience, both intended and surplus audiences, has greater meaning as spreadable media.

■Fifth, "Part of a steady stream of material" The viral mentality leads brands to invest all their energy in a particular media text that is expected to generate exponential hits. Blogging and microblogging platforms emphasize the importance of a regular stream of material, some of which may resonate more than others in ways greater may not always be able to predict.

2.3.3 Summary

All the strategies and methods that we talked in viral media and spreadable media, they all aimed to help the media marketers or content creators to make their creations or contents to be more popular. What if we change another perspective? The popularity of the content is also crucial for a media platform or user-generated content platform. Just like what Jenkins has said, " If it doesn't spread, it's dead." Although originally Jenkins was talking about the media itself, I think it is also applicable to the platforms. For a media platform, no matter the people who use your service is a content creator or a viewer; they are all your users. So from the designer's point of view, what can we do to help the users to circulate media that they produced or they liked?

3.

Design for sharing
in short-form video platform

3.1 UX design for sharing and spreadability

3.2 Design for the access point

3.3 Motivation, Ability, and trigger

3.1

User experience design for sharing and spreadability

The importance of spreadability to short-video platforms, the positive role of human participation in the media circulation, and the forces of people's values, meanings, and emotions driving people to share have been discussed previously. But both the virus-type spread and the spreadability think about people's motivation of sharing, spreading and cycling the media from the perspective of the media itself, emphasizing the attributes of the media itself. In the short-video platform and some other UGC platforms, the designers of the platform cannot determine the contents uploaded by the producers. A short-video platform is like a confidential machine, whose operation and cycle could not be interfered by the designers and manufacturers as soon as they complete the machine. If a designer of the short-video platform could take into account all factors affecting the user's participation in the media circulation at the beginning of design, it will provide a good foundation and prerequisite for users to actively participate in the media circulation. That will undoubtedly greatly help the future development of the platform and the establishment of a sound environment. Either the virus-type spread or spreadability is emphasizing the role of the audience, or the user, whose needs, motivation, and emotions all directly affect their sharing behavior. The potential problems in the future platform could be well resolved by designing the short-video platform with the emphasis on the user-oriented feature and the spreadability of contents and by adding the user's participation and sharing and the media circulation into the user experience. Is it possible to integrate the motives and behaviors of users involved in media spreading and sharing as part of the user experience?

Over the last decade, user experience(UX) became a buzzword in the field of human-computer interaction(HCI) and interaction design. In the early stage, the task and work-related 'usability' paradigm was the mainstream, but scholars and the industry gradually realize that the usability is not primary. Primary is the person's experience at the moment experienced(Whiteside and Wixon 1987). For a long time, the academic community has not formed a unified understanding of the concept of user experience. Researchers in many fields give different opinions on user experience in their respective fields. Alben(1996) thinks user experience includes all the aspects of how people use an interactive product: the way it feels in their hands, how well they understand how it works, how they feel about it while they're using it, how well it serves their purposes, and how well it fits into the entire context in which they are using it. Mäkelä & Fulton Suri (2001) consider user experience as a result of motivated action in a certain context. User's previous experiences and expectations influence the present experience; this present experience leads to more experiences and modified expectations. Hassenzahl & Tractinsky (2006) think user experience is a consequence of a User's internal

state (predispositions, expectations, needs, motivation, mood, etc.), the characteristics of the designed system (e.g. complexity, purpose, usability, functionality, etc.) and the context (or the environment) within which the interaction occurs (e.g. organisational/social setting, meaningfulness of the activity, voluntariness of use, etc.). From my point of view, the user's interactions that happen in the media circulation is driven by user's value, needs, motivation, and emotion, etc.. To some extent, it is an inseparable part of user experience for the short-form video applications. By optimizing this part of user experience, the designer could increase the spreadability of the short-form video platform at the early stage of design, which will help to stabilize the content circulation and help to establish a benign development for the platform.

3.2
Design for the access point

First of all, at the beginning of the user experience design, the designer will use the persona, user research, and other methods to determine user needs and predict user behaviors, to design appropriate user experience. The common user story is generally like this, (persona) As a... (Action) I want to... (expected outcome) So that.... There is also another model that puts more emphasis on the context, (situation) when... (motivation) I want to ... (expected outcome) So I can ... It includes both the user's motivation and the context and user scenario during the interaction. If this model is applied in the example of short-form video, the user story should be like this, when I…, I want to share or also create a short-form video, so I can…? But when we take into account the source of information, which may be the push notification through the intelligent algorithm or the sharing from friends, the user story will be like this, where do I get this information or see the contents, when I think…, so I want to share /create it... so I can.... So what if we add media circulation to this model? Assuming that the source of the information is the sharing of friend A, then the user story will be like this: User A get the information/ contents from…, when A thinks…, so A wants to share/create…, so he/she can... and then, I saw the information/contents because of A's sharing, when I think..., I want to share/create it, so I can... As a result, the story becomes much longer. If A has a friend B, who has a friend C, the story may be endless. The effective dissemination of contents is driven by the different values and motivations of each user. Although the current artificial intelligence algorithm can send appropriate contents to the users according to their habits and preferences, the platform designers cannot influence or change the nature and attributes of each dissemination content and the different people's different feelings. In other words, each user's motivation for sharing is uncontrollable. What designers can do is build bridges and establish the foundation for social communication among friends. That is, they should well create the connection for every two endless user stories mentioned just now, which is the access point for users to participate in the media circulation.

A Common User story:

As a _____

Persona

I want to _____

Action

So that _____

Expected outcome

User story with context:

When _____

Situation

I want to _____

Motivation

So I can _____

Expected outcome
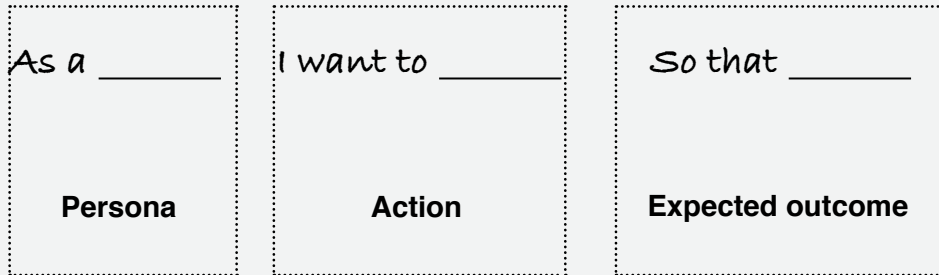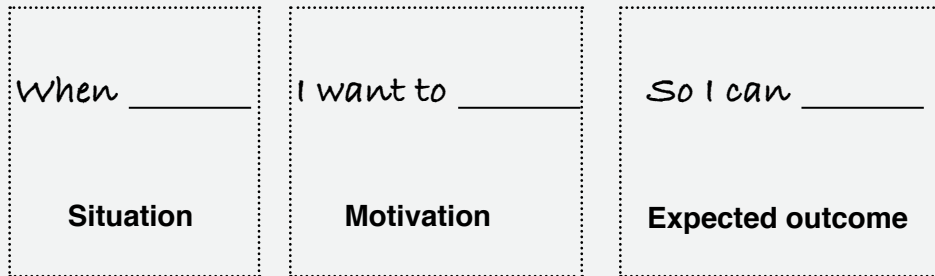
User story with media circulation:

Access point / Info ssources

Where __User A get the content__

Situation

When __A feel....__

So A want to __share / create__

Motivation

So __A__ can _____

Expected outcome

User B——User C —— ......
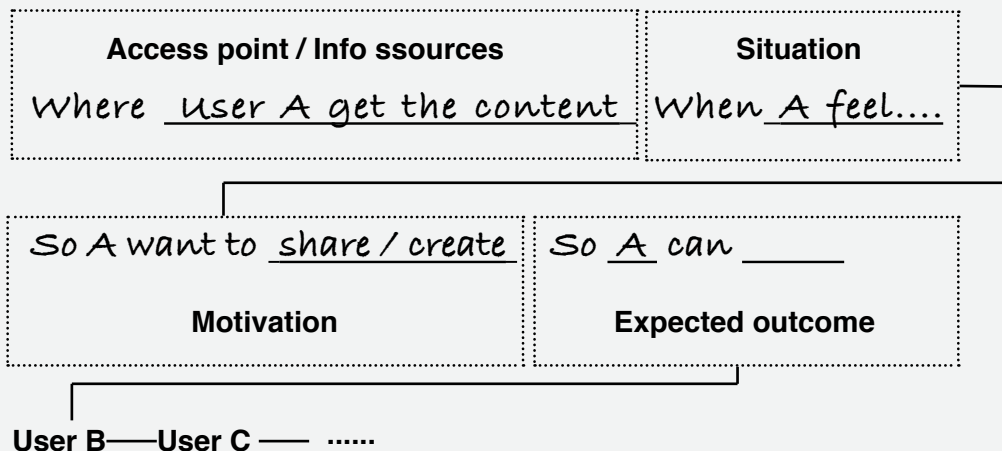
Figure. 21 Different user stories
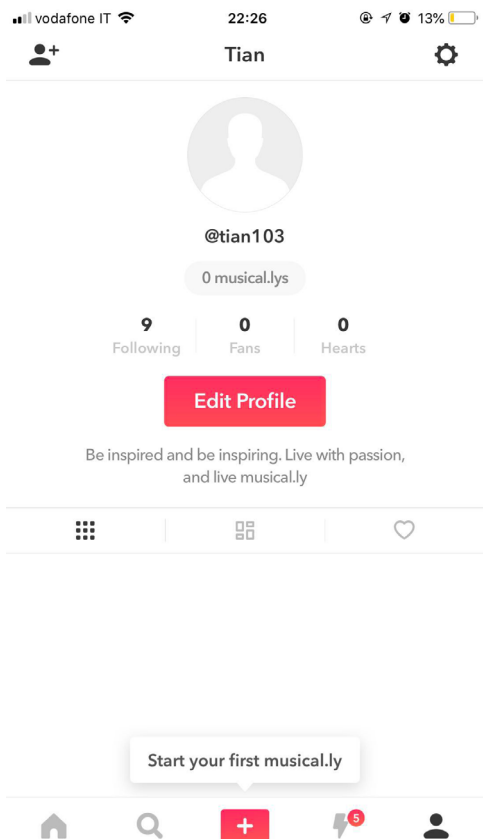
Figure.22 Screen shot from Musical.ly profile page

Social relationship based on "Following"

3.2.1 Two types of social relationships

So how to well create the access points for the media circulation? The best way is to strengthen the connection between users, which asks for the good social attributes of short-form video applications. As is mentioned, the short-form video application is not a scaled-down version of the traditional video hosting website. It is more of an extension of the social networking site. Therefore, social networking is an indispensable part of short-form video applications. The social networking of many short-form videos is achieved in the form of followers. For example, users of musical.ly can comment on or give like to the users they follow up; some applications also have the function of instant messaging. This type of social model based on followers has its advantages and disadvantages. Such social relationship has the advantages in stimulating the democratization of celebrity and developing their traffic and so on. However, from the perspective of content dissemination and media circulation, its advantage is the user will have a high motivation to imitate his/her favorite online celebrities after seeing their videos. To a certain extent, it could stimulate users to produce the contents for dissemination and participate in the media circulation. Its disadvantage is that such social relationship in the form of followers is a kind of social networking between strangers. However, the behavior of sharing often occurs among acquaintances. Therefore, the sharing function of many short-form video website is often achieved through the sharing of video to external social networking sites, which will lead to the difficulty of retaining users for many emerging short-form video sites. When users feel tired or lose interest in the contents, they will often choose to go back to the major social networking sites, where they have their social relations and networking. Therefore, the social network based on offline social relationships is necessary to lay a foundation for the sustainable development of short-form video platforms. Instagram has done an excellent job at this point. Even though Instagram can share Facebook users, it is still committed to building its social system. This makes it a complete social networking site that is entirely independent and has its users. To summarize, the social network based offline social relationships is the foundation of

a good user ecosystem, and the follower relationship that based on fandom is also important for user's participation. For a good short-form application, this mixed social relationships is essential for its social network.

3.2.2 Community participation

Another factor that influences the user's participation in the media cycle is the community, which refers to the online virtual community and becomes an important part of online social networking. Constance Elise Porter from the University of Notre Dame in a paper entitled A Typology of Virtual Communities: A Multi-Disciplinary Foundation for Future Research offers this definition: "a virtual community is defined as an aggregation of individuals or business partners who interact around a shared interest, where the interaction is at least partially supported and/or mediated by technology and guided by some protocols or norms". Just like BBS in the early days, the online community was a gathering place of information and communication, and the source for many users to publish and obtain information. Also, to push message and friend forwarding, the online community is one of the most important ways for many users to gather information. Different from the two types as mentioned above of social networking where users passively accept the information, users in the online community could actively take information and participate in the discussion based on interests or other motives. So the online community is also the access point for users to participate in media circulation.

The significance of the online community is to provide a large number of users with a gathering place based on shared interests or topics. Such gathering can also become an index for users to obtain relevant information, and also serve as an entry point for promoting user participation. The popular hashtag on the website is an example of information gathering and classification. The hashtag is widely used in social networking sites such as Twitter, Instagram, allowing users to apply dynamic, user-generated tagging which makes it possible for others to find messages with a specific theme or content easily; it will enable easy,
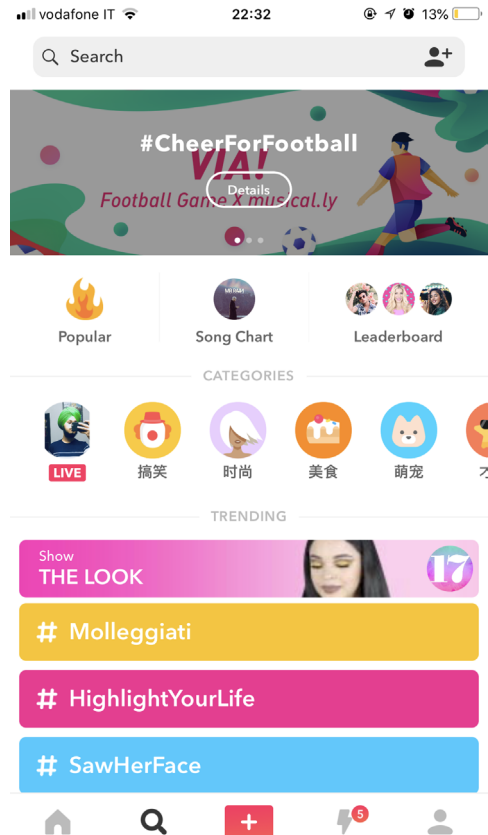
Figure.23 Screen shot from Musical.ly search page

Community paticipation based on # tags

---

48 Porter, Constance Elise. n.d. 'A Typology of Virtual Communities: A Multi-Disciplinary Foundation for Future Research'. Journal of Computer-Mediated Communication 10 (1): 00–00.

informal markup of folk taxonomy without need of any formal taxonomy or markup language. To some extent, the hashtag can also be counted as a dynamic temporary community. Just like online communities based on shared interests, users participate in community exchanges and discussions through hashtag based on their attention on common topics.

In the short-form video platform, the concept of community is not clear, but the community discussion and sharing based on hashtag are very popular. Musically did a great job in this regard, for instance, we already mentioned the Don't judge challenge campaign. And Ellen's Dance Dare challenge has also received a lot of attention recently. In fact, musically designs a prominent section which displays favorite topics in the content search page specifically for hashtag topics, increases the access point for users to access video content, and facilitates users to participate in discussion and sharing of topics quickly. In contrast, there are independent recommendations for popular content which integrates tag searches in the Instagram search page, but there is no recommendation for hot topics. Although this allows users to understand popular hot contents, it is not conducive to motivate grassroots users' participation.

From another design point of view, Snapchat and Instagram's search page integrates geo-based content searches, while musically does not. Such common ground as the same geographical location may be a factor that affects user participation in the community. The content classification or indexing becomes access point that affects the user's participation in the media circulation.
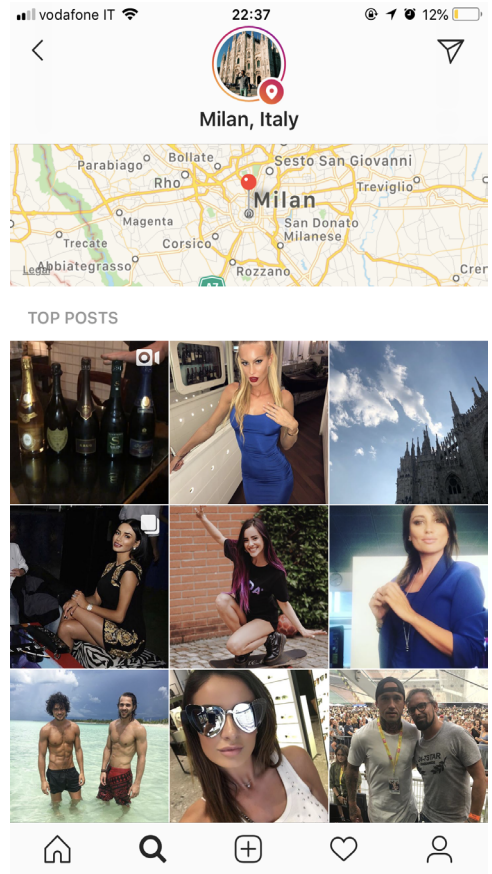
Figure.24 Screen shot from Instagram search page
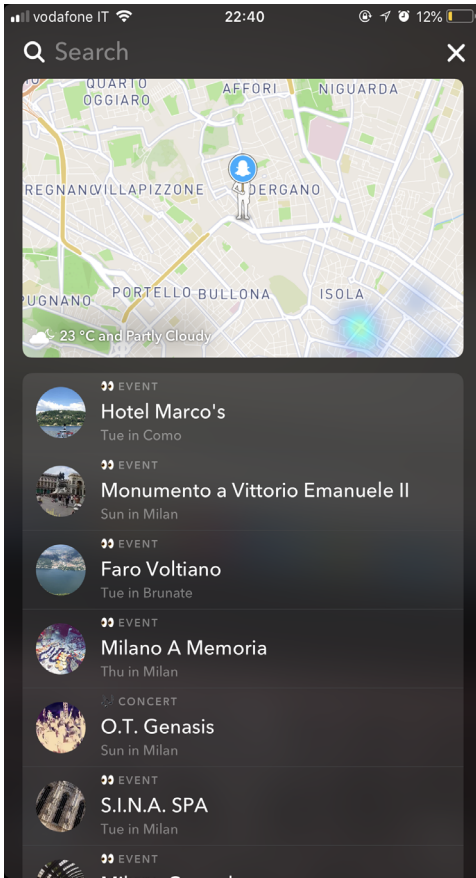
Figure.25 Screen shot from Snapchat search page

Figure.26 Screen shot from Snapchat search page

3.3
Motivation, ability and trigger

In the previous chapter, we have discussed the user's access point in the media circulation, and also explored the factors affecting the access point from the two aspects of user experience design. It can be said that access point is a prerequisite for users to participate in sharing and media circulation, but it is not enough to just consider the design of short-form video applications from the point of the access point. To increase the participation of users in the media circulation and the desire of users to participate in sharing, we must also consider the motives and values behind users' sharing and participation behaviors, the users' ability or the ease of use of the products, as well as the trigger point of users' sharing behavior.

In the previous chapter of viral transmission, Jonah Berger et al. have mentioned in the research the concepts including emotion, practical value, social currency (i.e., social value), and trigger points in the research. And the emotion, practical values, and social currency, etc., is all about the motive for people's sharing behavior. Jenkins has also emphasized in the book spreadable media that motivation is an important factor affecting the media circulation, repeatedly pointing out the importance of ease of use or sharing, for example, producing content in easy to share formats and Easily reusable. From the above studies, it can be seen that user's sharing is inseparable from the user's motivation and easy-to-share features. The FBM model of persuasive design put forward by BJ Fogg[49] of Stanford University's Persuasive Technology Lab can be used to explain the issue of user sharing behavior. In this model, three factors have to be present for specific behavior to occur, including motivation, ability, and triggers. Fogg has stated that "the model asserts that for a target behavior to happen, a person must have sufficient motivation, sufficient ability, and an effective trigger." As shown in Figure 27, there are two axes in the FBM model; the vertical axis represents motive of the user, A person who is low on motivation to perform the target behavior would register low on the vertical axis. High on the axis means high motivation. In the diagram, the horizontal axis represents the user's ability, and on the other hand, it also represents the simplicity of the product, i.e., how easy it is for the user to perform the target behavior. From left to right, the user's ability is from high to low, and the product's ease of use is from low to high. In the upper right-hand corner is a star that represents the target behavior. The placement of this star is symbolic, meant to suggest that high motivation and high ability are typically necessary for a target behavior to occur. But sometimes it is not enough to prompt the user to achieve the target behavior that the designer presets simply with motive and ability. In many cases, it needs a certain trigger point to guide the user.

In the short-form video applications, users' sharing behavior is what we want to achieve. With the combination of FBM model, the analysis of the motivate of the users to share the video and the ease of sharing, and the rational design of the interactive mechanism triggering user behavior, the designers of the short-form video platform can improve the probability of the user sharing the video and promote the sustainable development of the platform.

48 Fogg, BJ. 2009. 'A Behavior Model for Persuasive Design'. In Proceedings of the 4th International Conference on Persuasive Technology, 40:1–40:7. Persuasive '09. New York, NY, USA: ACM.
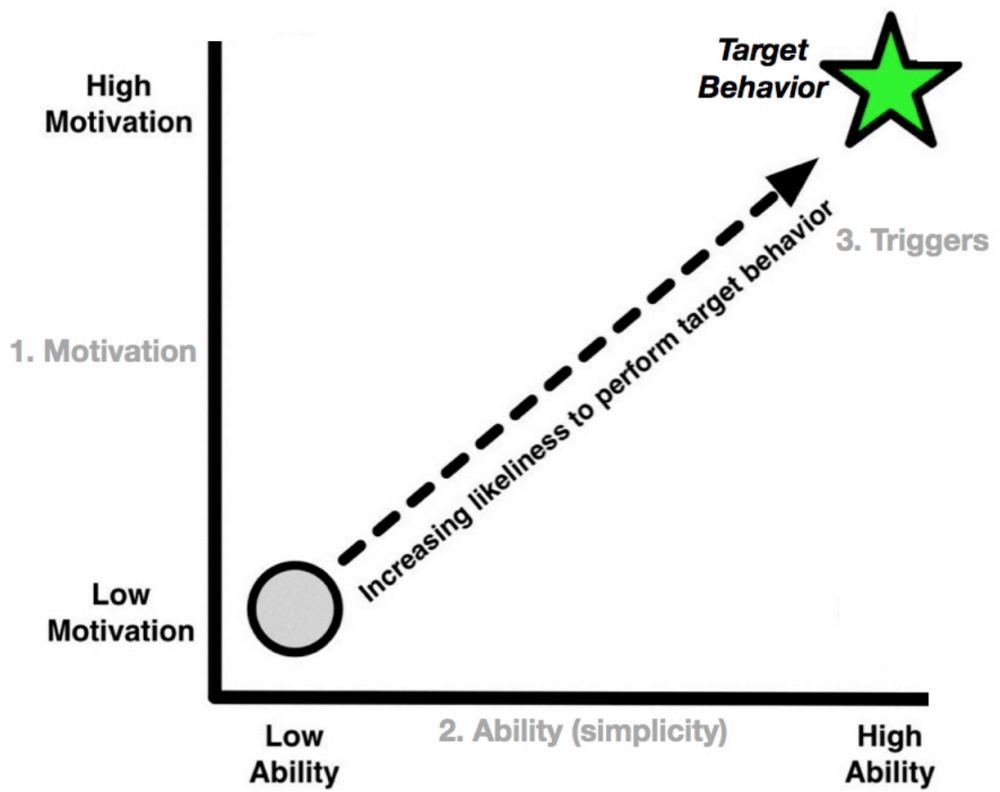
Figure.27 FBM model

3.3.1 Motivators for sharing

The user needs analysis is a very important part of the user experience design. Usually, the designer determines the user needs and use motivations through qualitative analysis (such as interviews, observations, etc.), quantitative analysis (such as questionnaires, etc.) and user portraits. The user's motivation for sharing is just as important as the motivation for using it in the UGC platform such as the short-form video app. In the FBM model, Fogg has proposed three elements of motivation, which are called as Motivator and include Pleasure/Pain; Hope/Fear; Social Acceptance/Rejection.[49] According to Fogg, these motivators are applicable to most situations. However, the user's sharing behavior has its uniqueness, and I don't think the above motivators are entirely applicable to the combination of our previous discussions on viral transmission and spreadability. But Fogg's method of dividing and distinguishing the three motivators is worthy of our discussion and research.

▬ Motivator one: Emotion stimulation

In the first motivator defined by Fogg, he has pointed out that the motivator Pleasure/pain is different from the other two motivators in that the result of this motivator is immediate, or nearly so. There's little thinking or anticipating. People are responding to what's happening at the moment. As we discussed in the previous chapter, such situation also shows up in the user's sharing. The high arousal emotions proposed by Jonah Berger will stimulate people to share. These high arousal emotions include Awe, Excitement, Amusementhumor, Anger, Anxiety. These emotions tend to produce direct, or impulsive irrational sharing desires. According to Fogg's definition, these high arousal emotions are the first motivator for users to share video.

▬ Motivator two: Anticipated value

Fogg has proposed that the second motivator is Hope/Fear, this dimension is characterized by anticipation of an outcome. Hope is the anticipation of something good happening. Fear is the anticipation of something bad, often the anticipation of loss. This motivation based on anticipation is often not as strong and direct as the emotions mentioned in the first motivator. For the Buzzfeed video of binding watermelon with the rubber band we talked about before, Dao Nguyen has concluded that "people were participating in the shared anticipation of something that was about to happen."ref Fogg's interpretation of what user anticipate is not very clear by simply mentioning something good and something bad. However, in the user's video-sharing

49 Fogg, BJ. 2009. 'A Behavior Model for Persuasive Design'. In Proceedings of the 4th International Conference on Persuasive Technology, p.4. 40:1–40:7. Persuasive '09. New York, NY, USA: ACM.

behavior, the user is expecting the specific objective. According to Jenkins, the user may behave in a sharing manner only when the video content has a perceived value. Henry Jenkins has said, " people choose to share material they value and anticipate others will value."50 In conjunction with the definition of Fogg and Jenkins, the second motivator that affects user sharing can be summarized as Anticipated value.

With the combination of our previous analysis, the user's expected value from the behavior of video sharing can be roughly divided into three categories: entertainment value (humor, audio-visual stimulation, surprise of new things), practical value (knowledge, skill), and social value (identity, social currency, connection). User's sharing behavior is possibly stimulated when driven by these three values. These three values may exist alone or show up with two or three together at the same time. For example, in many cases, the user finds the video interesting and funny, so he wants to share it with friends out of the entertainment value of the video. But such sharing is also to establish communication and contact with friends, which has the social value.

▬ Motivator three: Social imitation

The third motivator proposed in the Fogg's model is social acceptance/ rejection, whose definition is "It's clear that people are motivated to do things that win them social acceptance. Perhaps even more dramatically, people are motivated to avoid being socially rejected." This point and the social value we mentioned in the second motivator somewhat overlaps with some difference and space for subdivision. In combination with the previous discussion on viral transmission, Jonah Berge has proposed the Public factor. In the online community, because of common interests, people are more susceptible to "herd mentality than ordinary social relationships on the Internet and thus imitate the behavior of others, so is the user's sharing behavior. If other people in the social circle choose to share, under the influence of herd mentality, the user will also want to share for becoming an insider or getting accepted by others. This imitation motivation in a social environment is the third motivator that affects user sharing.

In an actual user scenario, or under different contexts, people's sharing of the same information may be affected by different motivators. For example, one map suddenly went viral in the social networks in China, forwarded by many people on wechat. This is a viral marketing campaign. Users could get a visual map generated by the system after filling out an online questionnaire about personal travel experiences. The map visualizes the countries and regions that the user has visited, showing how their travel experience may exceed others by percentages. A seemingly simple idea has become very successful through the transmission. In fact, users' such crazy sharing can also be explained by the motivator we mentioned. First of all, this map meets up with the definition

50 Jenkins, Henry, Sam Ford, and Joshua Green. 2013. Spreadable Media: Creating Value and Meaning in a Networked Culture. New York ; London: NYU Press.

of the second motivator by having a certain social value, more precisely, the value of self-identity and social currency. Users show their quality, such as rich experience, etc. by sharing this map, which at the same time become the capital for users show off in social circles. However, this kind of conceited sharing is too high-profile to match with everyone's character. The person with sharing action must have strong motivation and desire, with which he can ignore other people's opinions about himself. But when this picture is madly forwarded and even flooded with the entire social circle, those people who wouldn't otherwise share due to the low-sounding character or psychological burdens might be affected by the motivator of "social imitation" and share it. Jenkin has said in the spread media that media can be well spread when it is Relevant to multiple audiences. Through this example, we can understand that designers should consider the impact of different motivators on different users in different contexts. In the design, the full consideration of the sharing motives of different users through investigation could well guide the user to complete the target sharing behavior.

3.3.2 Easy to share mechanism

In user-centered interaction design, the usability of products and systems is also an important criterion for verifying the user experience. Usability refers to the ease of access and use of a product or website. The official ISO 9241-11 definition of usability is: "the extent to which a product can be used by specified users to achieve specified goals with effectiveness, efficiency, and satisfaction in a specified context of use." In Fogg's FBM model, the user's ability to complete an activity is a necessary condition for the occurrence of specific user behavior. However, in the interactive design, guiding users through education has to be given up due to the too high user's learning cost. Therefore, instead of improving the user's ability, it is better to make the user's behavior or operation easier. In other words, it should be achieved by improving the usability of the product through design. Ref

Fogg has listed many factors that affect simplicity in his paper, including Time, Money, Physical Effort, Brain Cycles, Social Deviance, and Non-Routine. But as he said, "Each person has a different simplicity profile, These factors vary by the individual, but they also vary by the context." In the research on the simplicity, Fogg has found a significant common denominator, "Simplicity is a function of a person's scarcest resource. Even more accurate is this statement: Simplicity is a function of a person's scarcest resource at the moment a behavior is triggered." In the design, the designer should consider what the scarce resources for the users during the setting of user behavior are? Is it time, the related skills, or for other reasons? If the user's problem is solved and corresponding resources are provided, for example, the operation time and operation difficulty are reduced, the barriers for performing a target behavior can be well suppressed.

In the user-sharing behavior, the difficulty of sharing is an important factor affecting the user's decision making. Henry Jenkins has also said: "Audiences will often abandon material if sharing proves too onerous." This is equally important in short-form video applications. As we mentioned in the chapter on short-form video, the reason why short-form videos based on the mobile platform are so popular is that shooting short-form videos is easier than shooting long videos. The time limit of short-form video greatly reduces the cost for users to share. In addition to the common scarce resource of time, the different short-form video applications should be designed with the relevant mechanism based on their characteristics and the user's possible "scarcest resource." For example, the scarcest resource for users in tik tok (douyin), which focuses on music-based song and dance videos like Musically, is possibly the ability of dance and another talent. So tik tok has introduced different levels of slow recording functions, and the video becomes consistent through the adjustment of frame rate during video processing. The advantage of doing this is that users who can't dance can take a coherent and smooth dance video by decomposing and imitating the dance of others without spending much time practicing. Because of the success of Tik Tok,

51 Bevan, Nigel. 1995. 'Human-Computer Interaction Standards'. In Advances in Human Factors/Ergonomics, 20:885–90. Elsevier.
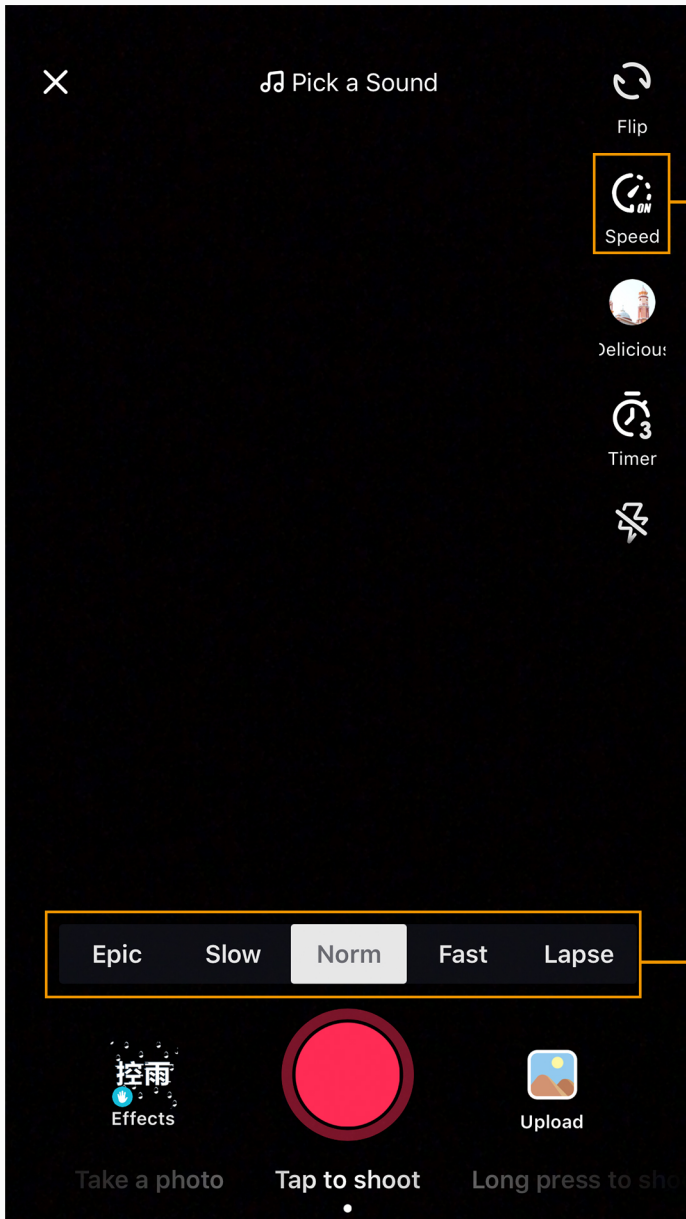
Figure.28 Screen shot from tik tok shooting page

laters imitators have also realized the importance of this point because of the success of Tik Tok. Weishi of Wechat Company is also the platform of short-form video focusing on song and dance entertainment, further simplifying its user operations on the basis of Tik Tok. Next, to each video, it additionally adds the function of follow shoot apart from the regular comment, sharing and other function keys. When the user shoots his video, the imitated video appears in the form of a small window, which is convenient for the user to imitate. In the spreadability media, Jerkins has said that media could be well spread if it has quotable and grabble attributes and becomes Easily reusable in a variety of ways. Weshi's approach happens to coincide with this. In the design of short-form video applications, full consideration should be given to the product features and positioning of different apps and the users' scarcest resources affecting interactive simplicity, and the reasonable design should be made for these scariest resources to reduce the difficulty of user behavior and provide convenience for user, so as to well facilitate the user's sharing behavior.

Follow shoot

Montage

Frame rate

Film filters

定点停

变速

美化

双击关闭

慢　正常　快

Change record spread

魔法　情动茲

本地　大片
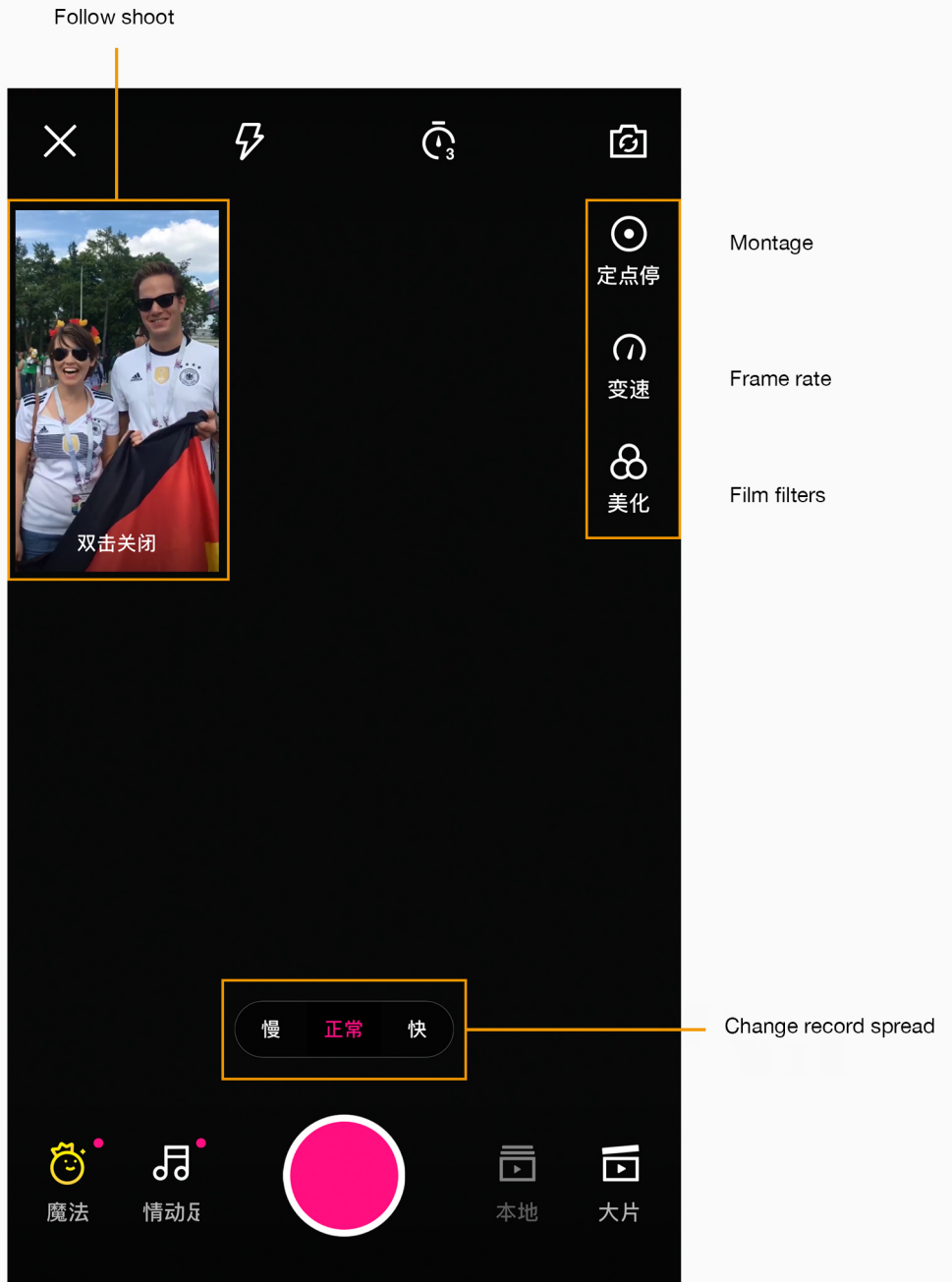
Figure.29 Screen shot from Weshi shooting page

3.3.3 Triggers for persuading users

In our previous discussion, Jonah Berger has suggested "STEEPS," among which trigger is one of the six key factors affecting viral transmission. Although this kind of trigger is more of a viral marketing method, its essence is the same as the Triggers put forward by Fogg in the FBM model. Fogg's definition of the trigger is: A trigger is something that tells people to perform a behavior now. When the user has enough motivation and ability, the trigger may become the only missing factor to guide the user to complete the target behavior at this time. Fogg has summarized three kinds of triggers in the FBM model: sparks, facilitators, and signals. He has defined the three triggers as "A spark is a trigger that motivates behavior. A facilitator makes behavior easier. And a signal indicates or reminds." Spark and facilitator correspond to user motivation and ability. When a person lacks the motivation to perform a target behavior, a trigger should be designed in tandem with a motivational element. When the user has enough motivation but lacks the necessary ability to implement behavior, the facilitator can be used to reduce the difficulty of the target behavior and trigger the target behavior. Signal refers to triggering the target behavior as a reminder when the user has both motivation and ability.

The trigger is critical in the user's sharing behavior, and many companies have also included the trigger in the interactive design of products. In the just-concluded Apple WWDC 2018[52], Apple released the latest version of ios 12, the mobile operating system. The built-in application of "photos" was highlighted by Craig Federighi as one of the major upgrade highlights in this iteration. In addition to optimizing the search function of photos and videos, the apple company has included the user's sharing behavior in the application design. In the newly designed photos application, the Apple designer has added a new tab called For you, which integrated the original "memories" and "iCloud Shared Albums" functions and added "Featured photos," "Effect suggestions," "Shared album activity," "Sharing Suggestions" and other functions. "Featured photos" can highlight a photo that you took on this day in past years. "Effect suggestions" can give users suggestions for adding effects to the existing photos and videos, such as suggesting looping a live photo or applying a new portrait effect to one of your portrait phots. Shared album activity can highlight the record of the user's sharing activity. The most important function is "Sharing Suggestions." When the user clicks this window, the system will automatically select a series of photos and videos that the user may want to share according to the machine learning algorithm system. At the same time, it also recommends the person that the user may want to share by recognizing the people appearing in the photos and videos based on facial recognition. This may be easier for the user to share. More interestingly, friends who receive photos are prompted to share back any photos and videos they have from the same trip or event.

52 Apple. n.d. WWDC 2018 Keynote — Apple. Accessed 16 July 2018.
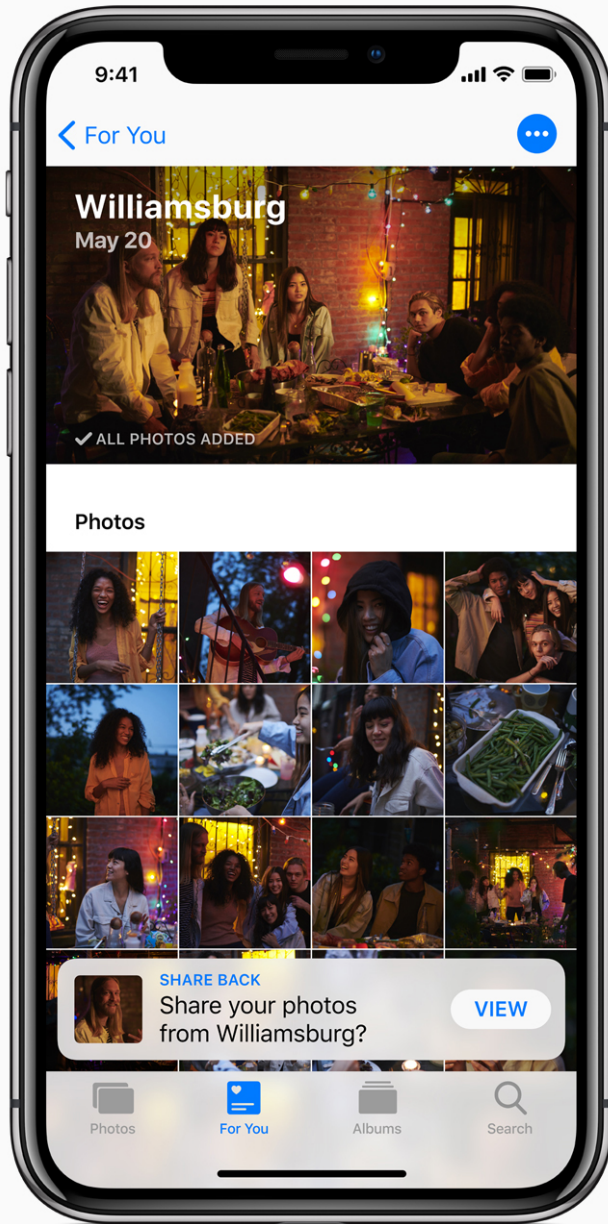
Figure.30 IOS 12 "Photo", Sharing suggestion

In this update iteration of the "photos" application, sharing was redesigned as the focus of the application. From the above functions, it is not difficult for us to find the trigger design made by Apple designer for the user sharing behavior. Firstly, "Featured photos" will remind the user of photos or videos taken on this day of the year. This is in accordance with the definition of signal, reminding the user as a reminder. If the photo taken on that day happens to record some meaningful person or activity, such as an unforgettable trip with friends or a major anniversary, it will become a trigger (i.e. Spark) to increase the user's sharing desire because of its value, or more accurately, the social value of contacting friends. Secondly, "Effect suggestion". In the user's sharing behavior, users always want to share good photos and videos with others, but the difficulty and time-consuming of picture and video editing often become the "scariest resource" of user's sharing, which to a certain extent hinders the occurrence of user behavior. "Effect suggestions" provides users with suggestions for beautifying or editing photos or videos, and to a certain extent, reduces the difficulty for users to edit photos. This meets the definition of facilitator. Thirdly, "Sharing Suggestions." The user could click on a small window that pops up on the page and says "Share your photos from..." This reminds the user as a reminder, serving as a trigger of signal. Next, the automatic recommendation of photos through machine learning can be counted as a facilitator because it reduces the user's time and effort. The user is recommended with the sharing object, so it could serve as both facilitator and spark by simplifying the user's operation steps, reducing the difficulty of sharing, and giving the user the social motivate to share. In the process of this series of user operations, Apple's designers provide all the necessary factors such as motive, ability, and trigger for the occurrence of these target behaviors through the technology of machine learning and their ingenious design.

Figure.31 IOS 12 "Photo", For you tab

3.3.4 Conclusion

In the participatory culture, the users of short-form video platforms are not only audiences anymore. They are also the content creators and communicators. They are the main body of short-form video transmission, and also the active participants of online media circulation. Because of the development of social media, people now are more use to receive information directly from their social network. People's sharing behavior now became the momentum for online media transmission and circulation.

Through the research, we found out people's sharing behavior is also crucial for short-form video platforms. It likes a magnet, pushes the contents out and pulls more users into the platform. The people engaged by the users' sharing will further contribute more user-generated contents, which will help to sustain the vitality of the platform. Through the research of viral media and spreadable media, we found out the elements that affect video's popularity, and the users' sharing behavior. According to Fogg's behavior model, each user's behavior is affected by three factors, which are the user's motivation, ability to accomplish the behavior and triggers that stimulate user's behavior.

In the ordinary interaction design process, the designer's job is to optimizing user experience and make the interaction more user-friendly. In general, designers need to find the user's need, improve the usability of the software, etc. But In the design practices, If we want the target user behavior to happen, then we need to fully consider the user's motivation and user's scarest sources when the target behavior occurs and design proper triggers to stimulate users. In the design of short-form video platforms. The motivation, ability, and trigger should be taken into account in the design if the user is guided to complete the target sharing behavior. In the user research, it is necessary to make a corresponding investigation based on the three motivators, combine the features or the main function of the short-form video platform, and determine the user's motivation for use and sharing. At the same time, in the survey or questionnaire, the user's scarcest resource at the time of the target behavior or the obstacle to restricting the user behavior should also be taken into consideration as a goal to optimize the usability of the short-form video. Finally, in the process of designing, the user motivation, ability and other factors obtained by user research should be combined to design the three types of triggers, which can guide the user to complete the target sharing behavior.

In the real world, the user's motivation for sharing is diversified, there many things such as emotions that designers can not control, the method I proposed is not applicable to all the scenarios. There are still many things worth further exploring.

Part Two:

Design practice

4.

Travlog - A short-form video app for traveler

4.1 Background research

4.2 Personas

4.3 User Journey

4.4 Wireframes

4.5 Visual design

4.1
Background research

4.1.1 Background

We have spent a lot of time taking about viral. During my research, there was a case about viral media caught my attention. In April 14,2015. There was a resignation letter went viral on the Chinese Internet and social network. A teacher who has spent 11 years teaching at a high school wrote this resignation letter. There was just a few words on that letter which explains the reason why she want to resign. The reason was quiet simple "世界这么大，我想去看看"(Figure.32) It means "the world is so big, and I want see it". And the most incredible thing is her resignation was permitted. This letter went completely viral, and this sentence became one of the most popular buzzword in that year.
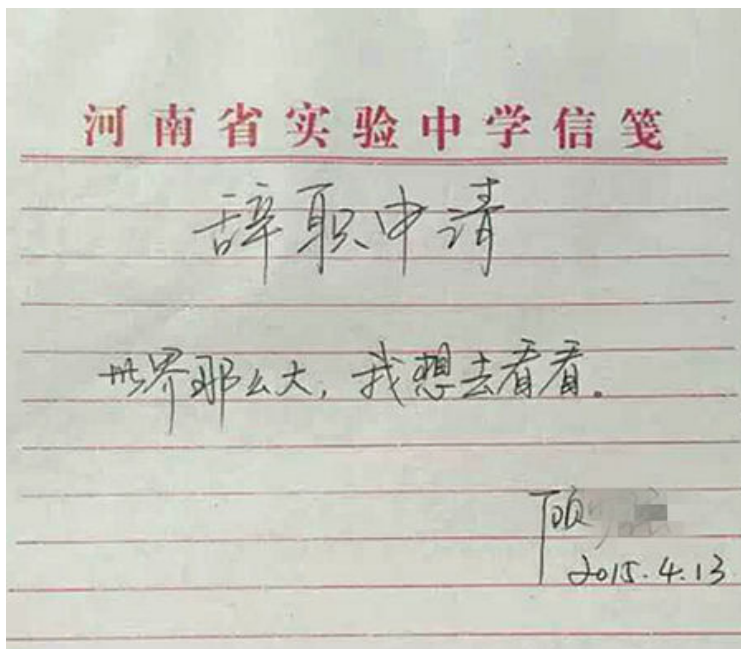
Figure.32 The resignation letter

The reason behind the popularity of this letter represents a core value of our human beings which is "understand ourselves and our world". It arouses our desire of traveling and going out for seeking adventures. It is not only exist in China or Asia, It's universal. According to the data from world bank, there is a increasing trend in the international tourism since 1996, And in 2016, it peaked at 1.459 billion departures.
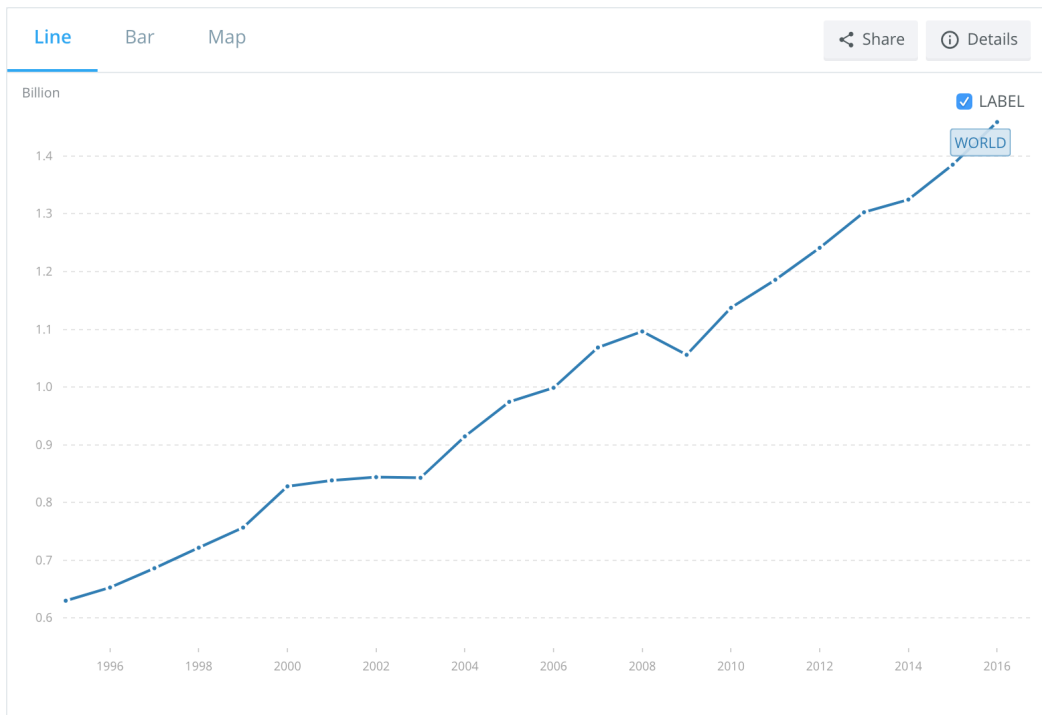
Figure.33 international tourism departures from 1996 to 2016，World bank

Another thing which is also universal is the travel decision process. According to google, there are five stages to travel decision process: dreaming, planning, booking, experiencing and sharing. Because of the development of Internet, now these five steps all happens online. People got inspirations by reading travel blogs or watching travel content on Youtube. Using peer review sites like TripAdvisor to plan their trip, Using Travel apps to book hotel and tickets, And sharing their experience via online social media. There is a growing trend of social media, mobile and user-generated content platforms as a key decision-making influencers for the travelers. According to a study Google conducted with Ipsos MediaCT, two out of three U.S. consumers watch online travel videos when they're thinking about taking a trip. And It is almost nature for travelers to record their experience during their trip. Compare with words and pictures, videos innately provides more information and more narratives, and give both the travelers and online viewers a more immersive experience. That is why travel Vlogs has became a mainstream nowadays. But there are also many problems that still restricting people from shooting travel vlogs. For example, the too high threshold for shooting and editing. So I want design a platform for travelers, using the format of short-form video to make producing and sharing travel Vlogs more easier and enjoyable.

Travel decision process
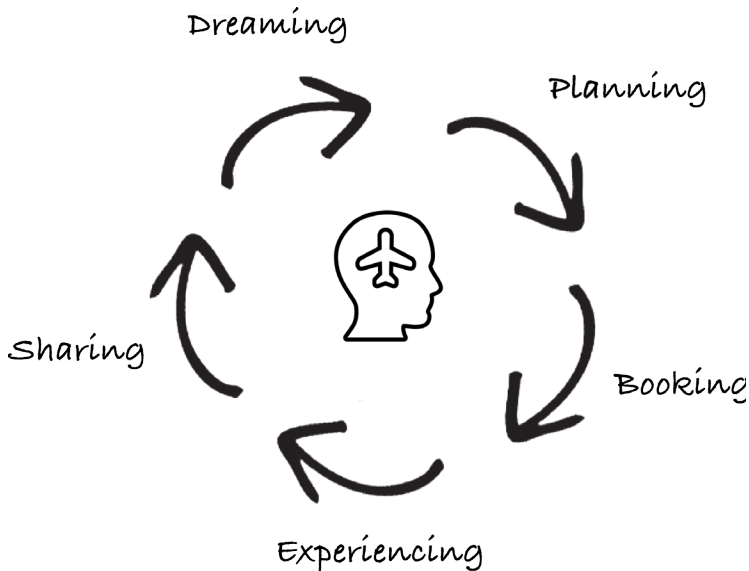
Figure.34 5 steps of travel decision process

4.1.2 Questionnaire

I designed a questionnaire about travel Vlogs according my research. This questionnaire fully considered the user's scarcest resource during the trip, and different motivators that affect users' sharing behavior. I got 137 feedbacks from people who have different age, job, cultural background. I will show some of the most relevant question that directly link to users' sharing behavior.

Did you ever shoot any video during your trip?
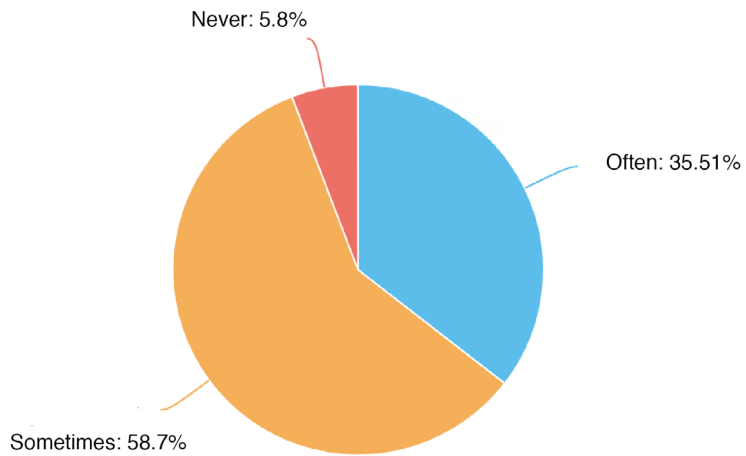
Fig.35 Vlog shooting probability

Do you have any incoveniences when you shooting a vlog during your trip? (Multiple choice)
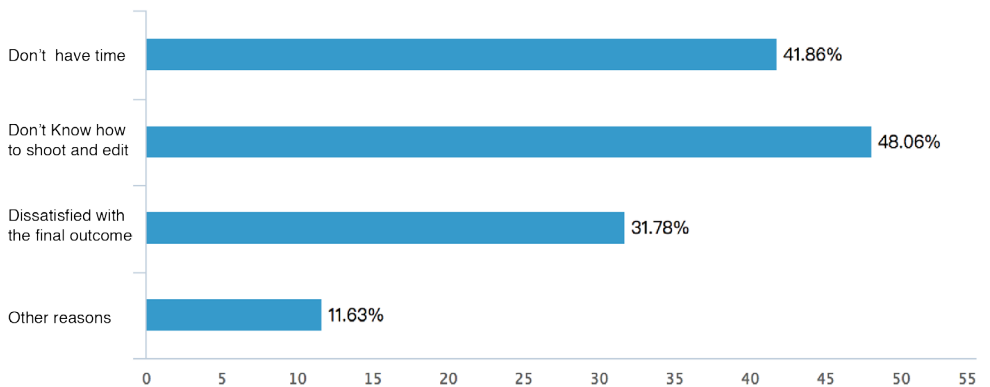
Fig.36 Inconveniences of shooting vlogs during travelling

Will you share your travel vlog with your friends or on social media ?

Definitely will: 12.31%   I will never share my travel vlog
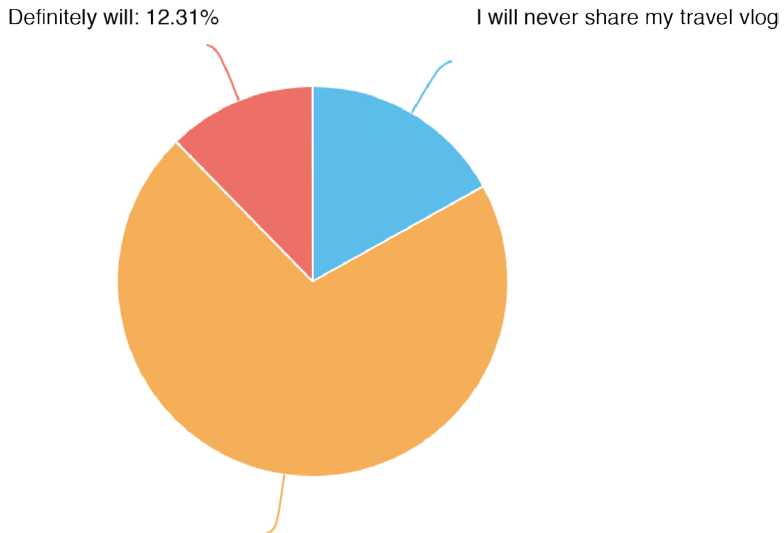
If it's good, I will: 70.77%

Fig.37 Probability of sharing vlogs

Why do you want to share your travel volg with your friends or on social meida ?(Multiple choice)
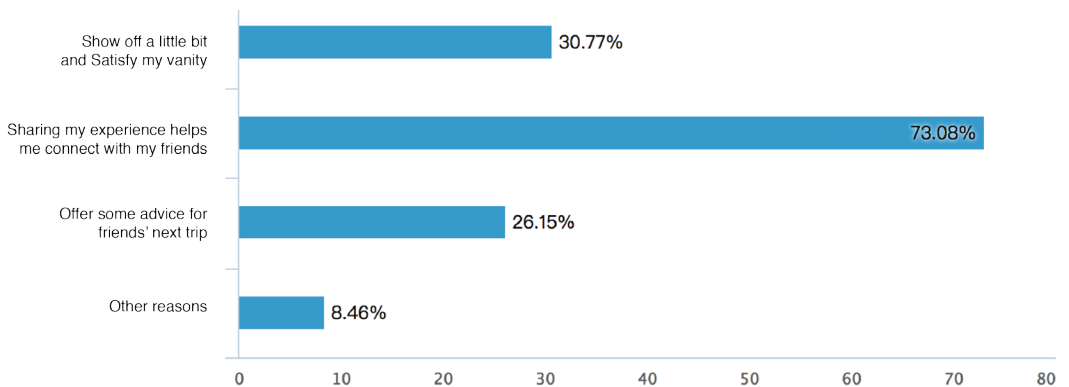
Fig.38 Reasons for sharing travel vlogs

Why you like watch other people's travel vlog?
(Multiple choice)
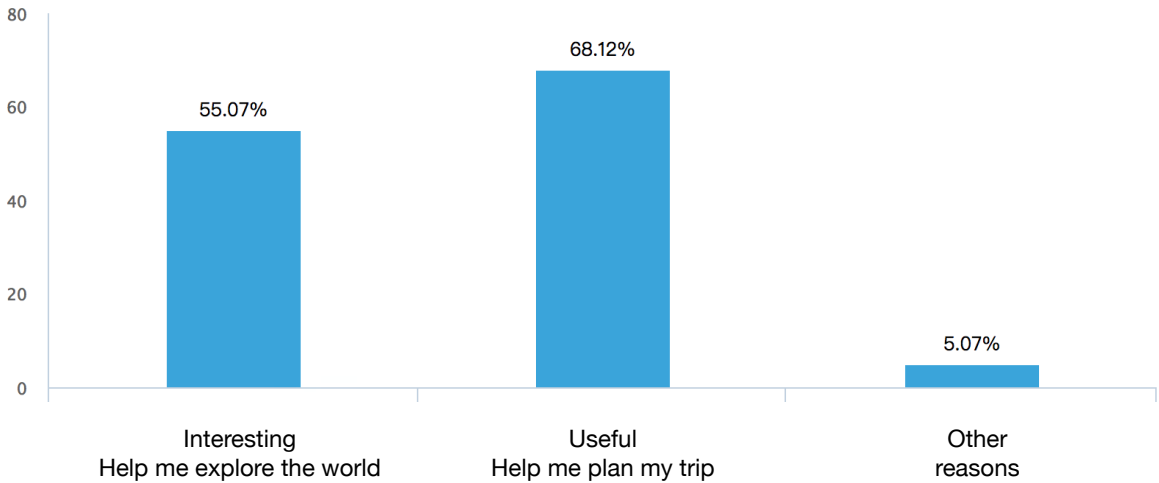
Fig.39 Reasons of watching travel vlogs

Will you share other peope's travel vlog with your friends?
(Multiple choice)
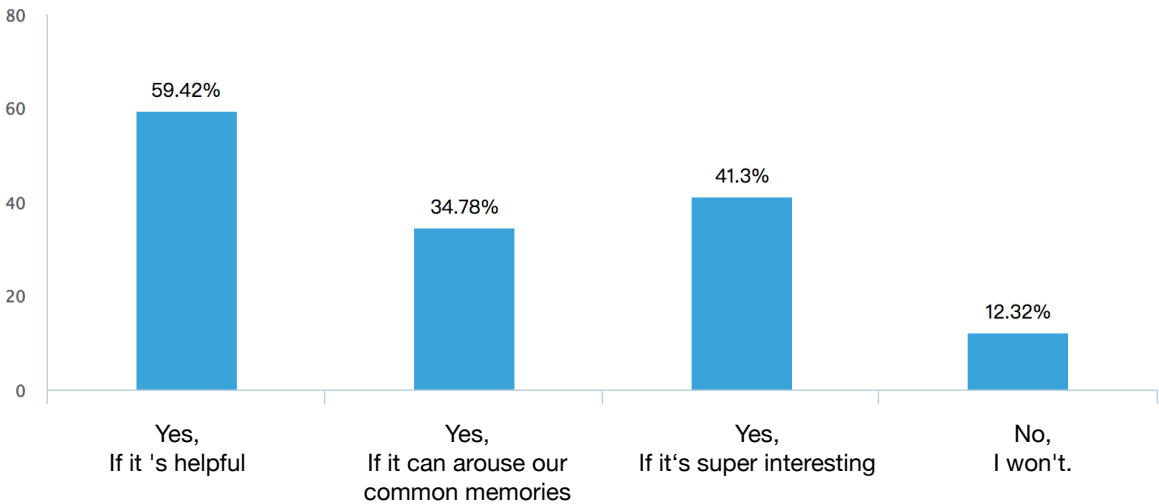
Fig.40 Probability of sharing other user's travel vlogs

4.2
Personas

Persona One

> " Embark on a 10,000 mile journey of p
> exploration while reading through 10,0
> of enlightening books.

■ Motivation:

Motivation for using

Cognitive Surplus	
Self-expressing	
Record of spectacle Phenimenon	
Practical value	
Entertinment	

Motivation for sharing:

Bond with firends	
Social currency	
Emotion	
Practical value	
Social imitation	
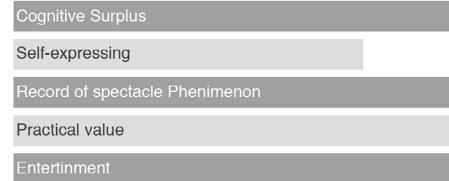
Liu
A student who loves traveling

Passion for traveling

Demographic
Age: 23
Occupation: Stud
Status: Single
Income: sponsored
Location: Yangzh

hysical

000 volumes

"

Goal:

- Record travel memories
- Get useful information for planning travel
- Find insteresting travel video
- Share useful travel tips with others

Frustrations:

- Unfriendly user interface
- Hard to search video
- Valueless information
- Complex edditing system
- Slow download/upload time
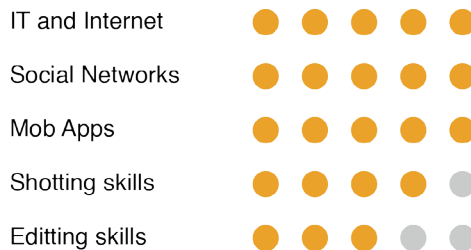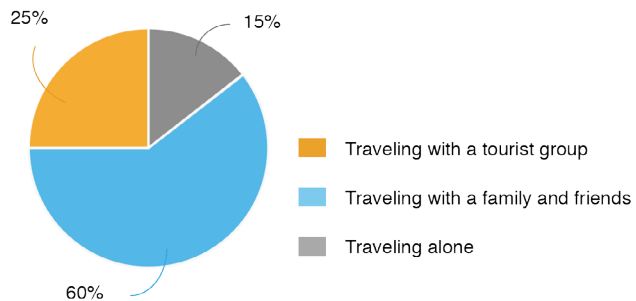
Technology and skills:

IT and Internet	● ● ● ● ●
Social Networks	● ● ● ● ●
Mob Apps	● ● ● ● ●
Shotting skills	● ● ● ● ○
Editting skills	● ● ● ○ ○

Way of travel:

25%

15%

60%

- Traveling with a tourist group
- Traveling with a family and friends
- Traveling alone

ent

d by parents

ou, China

99

Persona Two

▬ Motivation:

Motivation for using

Cognitive Surplus	
Self-expressing	
Record of spectacle Phenimenon	
Practical value	
Entertinment	

Motivation for sharing:

Bond with firends	
Social currency	
Emotion	
Practical value	
Social imitation	

Yao
A housewife who loves traveling

Passion for traveling

Demographic
Age: 53
Occupation: Hous[ewife]
Status: Married
Income: Middle c[lass]
Location: Suzhou,

Goal:

- Record travel memories
- Connect with friends
- Share travel experience

ny luxury
uitton than

"

Frustrations:

- Lack of shotting skills
- Complex edditing features
- Limited time during trip
- Poor communication
- Slow download/upload time

Technology and skills:

IT and Internet	●●●○○
Social Networks	●●●●●
Mob Apps	●●●○○
Shotting skills	●●○○○
Editting skills	●○○○○
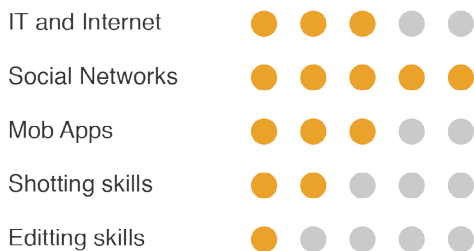
Way of travel:

sewife

ass

China

2%

18%   70%

■ Traveling with a tourist group

■ Traveling with a family and friends

■ Traveling alone
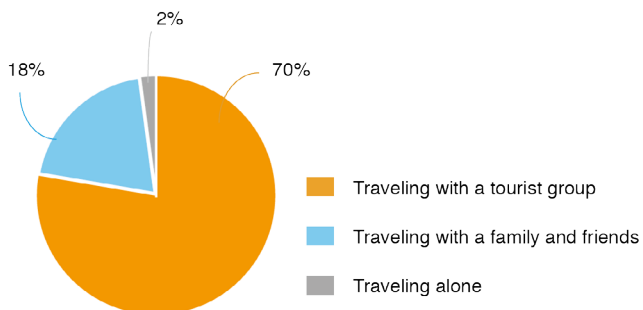
Persona Three

Travel for me is not only a hobby, but a way of living.

Motivation:

Motivation for using

Cognitive Surplus	
Self-expressing	
Record of spectacle Phenimenon	
Practical value	
Entertinment	

Motivation for sharing:

Bond with firends	
Social currency	
Emotion	
Practical value	
Social imitation	

Sebastian
A professional vloger

Passion for traveling

Demographic
Age: 32
Occupation: Vlog
Status: Single
Income: Middle c
Location: Italy

Goal:

- Record attracting vlogs
- Get more fans
- Share travel experience

Frustrations:

- Poor social systems
- lack of edditing features
- Limited followers
- Lack of profit model
- Slow download/upload time

Technology and skills:

IT and Internet	● ● ● ● ●
Social Networks	● ● ● ● ●
Mob Apps	● ● ● ● ●
Shotting skills	● ● ● ● ●
Editting skills	● ● ● ● ●

Way of travel:

5%

25%   70%

- Traveling with a tourist group
- Traveling with a family and friends
- Traveling alone
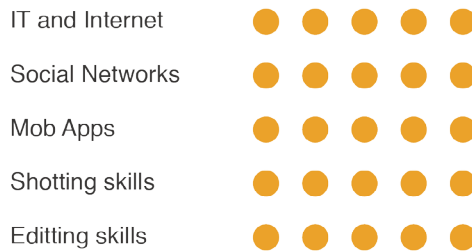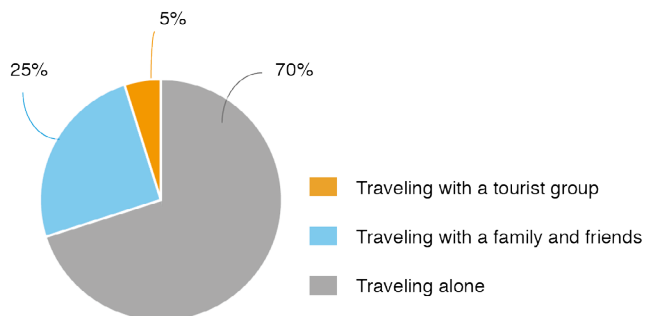
4.3
User Journey map

The user journary of Travlog

Phase

Dreaming | Planning

Viewer

happy

Emotion

A looping process

frustrated

Action

Download — Sign up — Sign in — Preference — Browse → Watch — Comment — Marked

Search ← Like
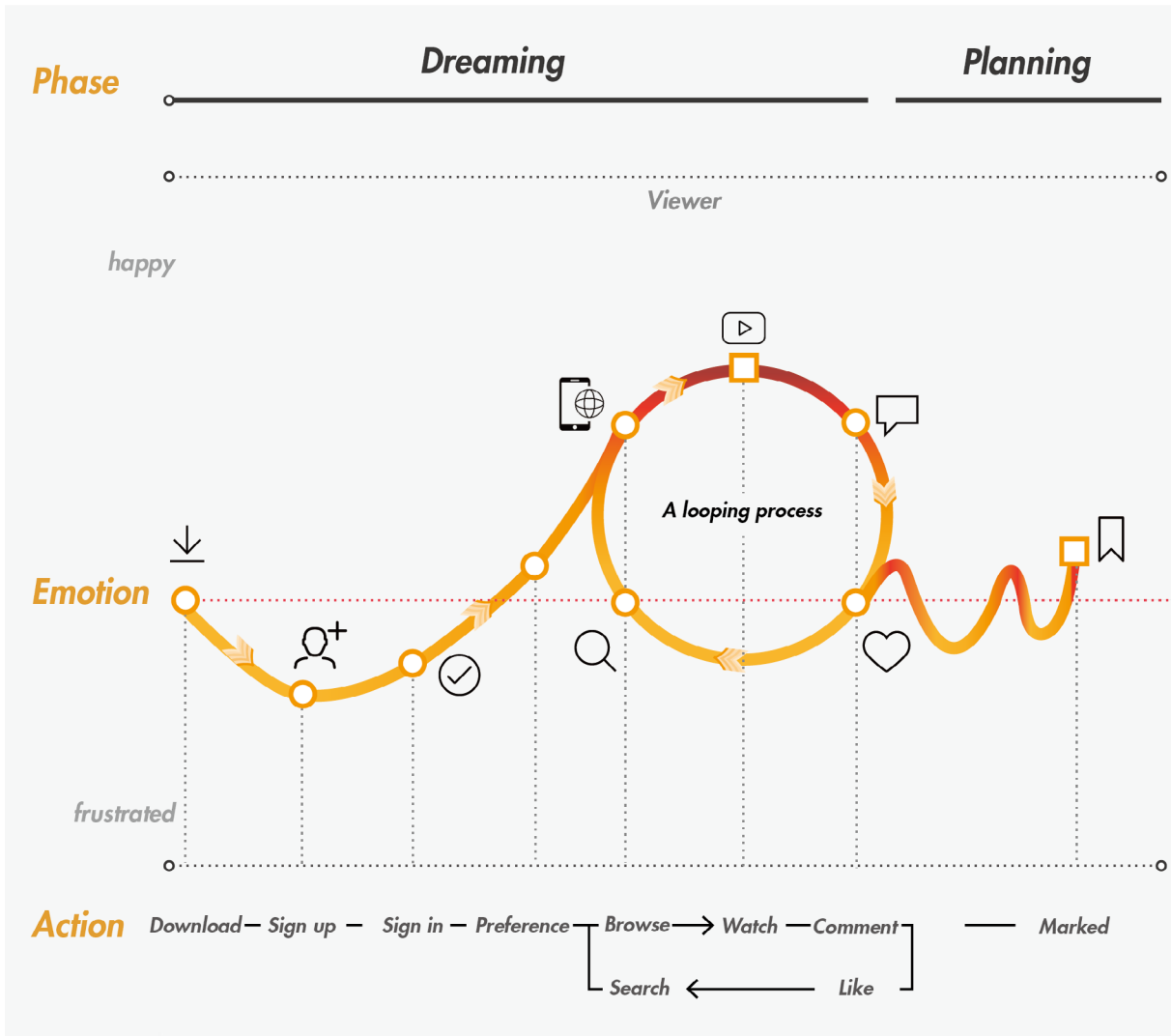
Sharing

	Sharing moment one : Watch	Sharing moment two : Mark
Motivation (Motivator)	Emotion stimulation, Anticipated Value (Entertainment, Social)	Anticipated Value (Practical, Social)
Ability (scarcest resource)	High ability No scarest resource	High ability No scarest resource
Tiggers (Design strtegy)	Spark & Signal	Spark & Signal

106

Experiencing

Sharing

Creter

Memory mode

Quick mode
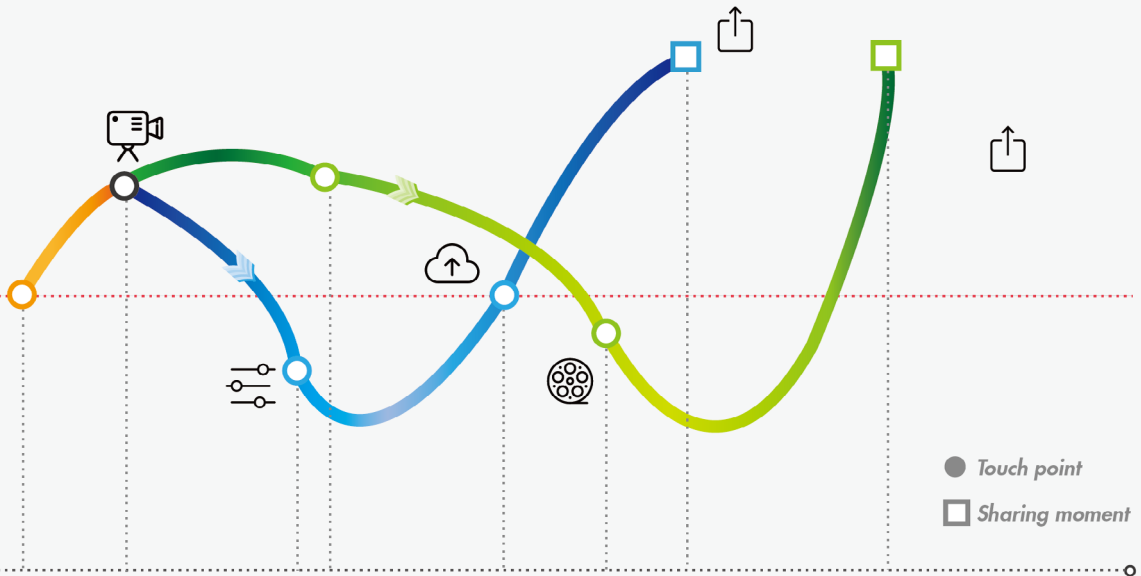
● Touch point

☐ Sharing moment

Open the app — Quick mode — Edit — Save ——— Upload — Pro mode — Share instantly — Share later

☐ **Sharing moment three : Share instantly**

Anticipated Value (Social, practical value)

Time
Shooting & Editting skills (Person one & two)

Facilitator

☐ **Sharing moment four : Share later**

Anticipated Value (Social, practical value)

Shooting & Editting skills (Person one & two)

Facilitator & Signal

4.4
Wireframe

Home page for you
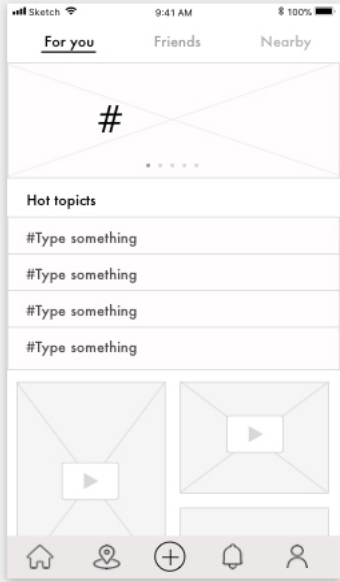
home page nearby
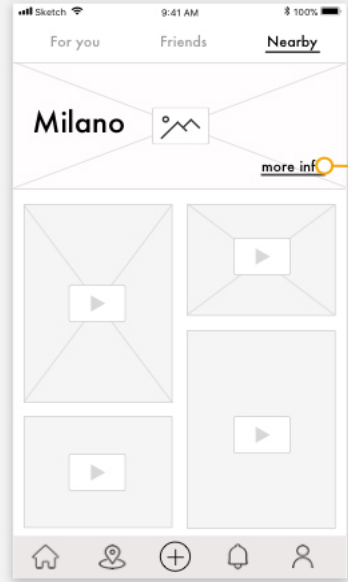
Home page-friends

city guide

Milano

Hot spot

Duomo   Brera   Navigli   Porta

Hot topics

Type something   # Type something   # Type something   # Typ

Latest   Hotest

Jake Frigger   5 min ago

destination page

Explore the destinations around the world

Search
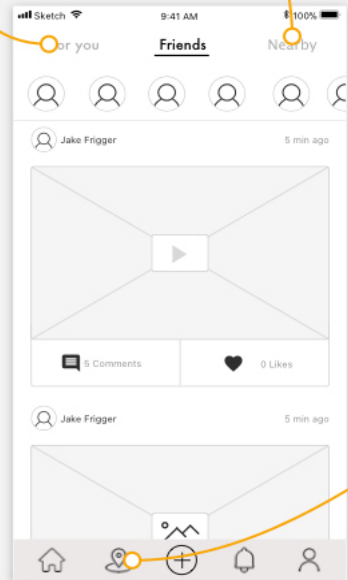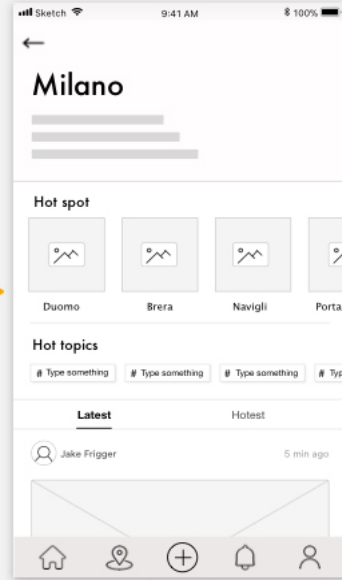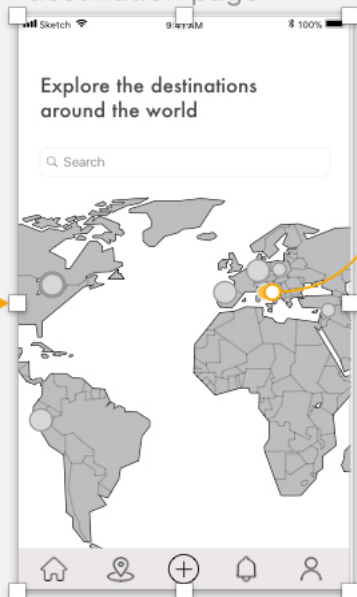
Profile Memory

Profile footprint

Luca

16,500 Kilometers

157
Subscribe

36
Follower

68
Likes

Memory   Footprints   Liked

Italy 2017.05

Luca

216,500 Kilometers

157
Subscribe

36
Follower

68
Likes

Memory   Footprints   Liked

My footprints
Have covered 15 countries, 76 cities

2017.05
Italy with

Milano

Venice
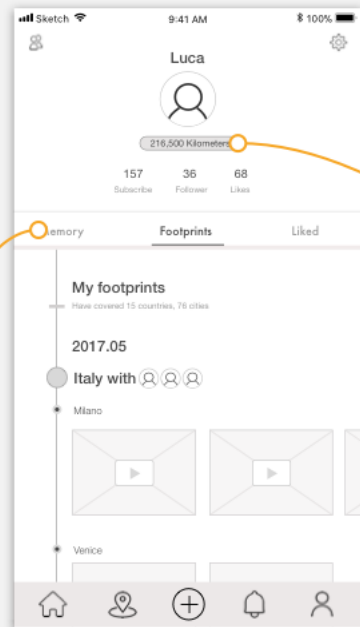
Profile foot...nt mile one
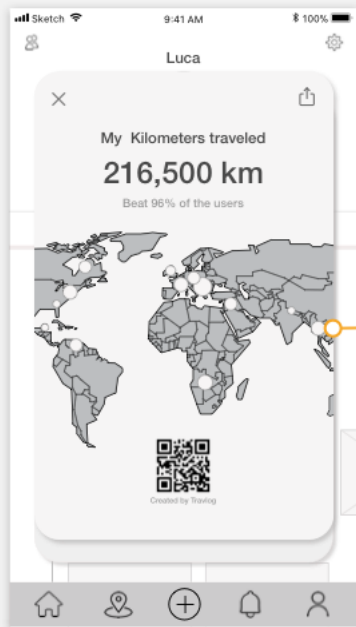
Profile footprint Copy 2

Add video

Record your trip

Snap

Memory

snap

Album   Video

snap copy

← Share   Post

Say something

Preview   @ Friends   Location

Visible to   Public   Friends only   Private

Facebook

Twitter

Instragram

Youtube

WeChat

Weibo
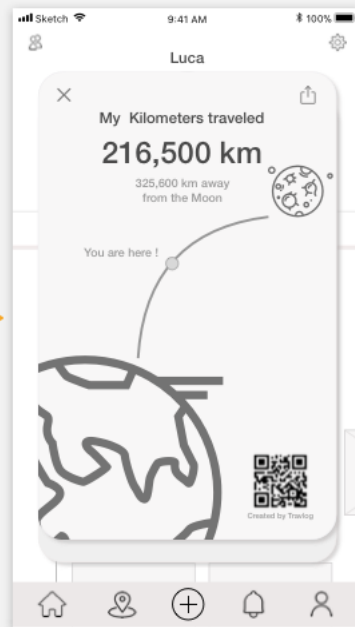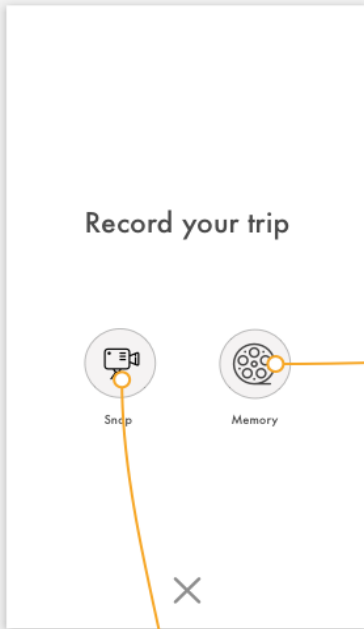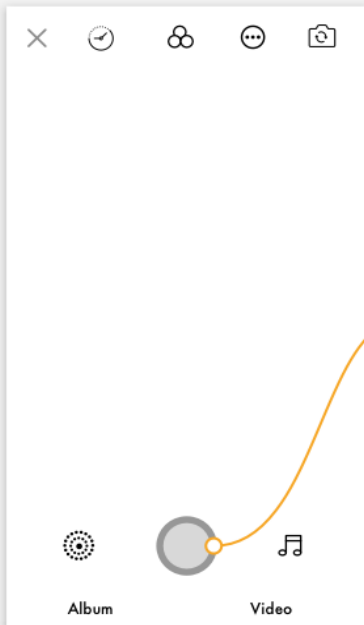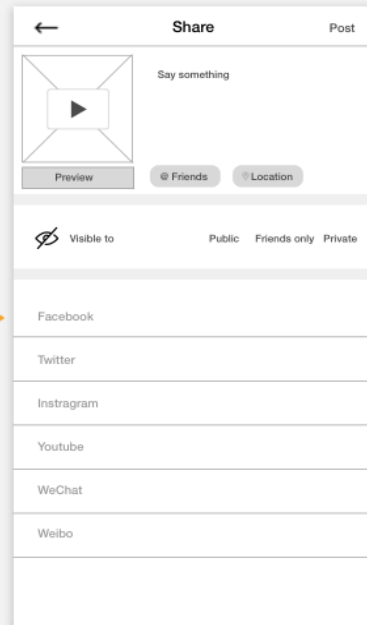
Creat Memory

Memory 1 Copy

✕

Create your memory

Easily generate your vlog

🖼

Your destination

📍 Milano

Time duration

2018-06-12 — 2018-06-15

Next

←

Eddit your travlog

Your travel duration is 4 days

Day one   +
2018-06-12

Sharing Suggestion   ⌃

Milano   12.06.2018

Day two   +
2018-06-13

Day three   +
2018-06-14

Day four   +
2018-06-15

Next
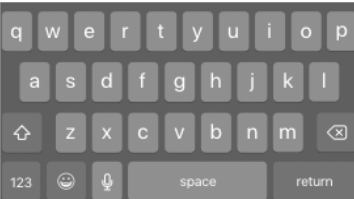
Step 1

←   Next

Write a title for your Vlog

A good tille will attract more attention.
You can also editt it later
Click "next" for next step.

q w e r t y u i o p
a s d f g h j k l
⇧ z x c v b n m ⌫
123 😊 🎤 space return

Memory 1 Copy 2

←

Day one

2018-06-12

Description

Where have you been? What have you saw ?

Add video

▶   Descirbe this video

@ Friends   ⌖ Location

Add some tags   # Add some tags   # Add some tags

+

Next

4.5
Visual design

01. Introduction

Logo:

Travlog

The name of the app is made up by a combination of travel and vlog. The name is intuitive enough for users to understand what the app could be use for. I chose Sign Painter as the logo of the app. Sign Painter is a brush script typeface, and it was inspried by vintage hand-painted advertising signage. The reason why I chose this font is beacuse the style of this font narurally brings a feeling of hand write diary.

Colours:

I choose the colour of sunset glow as the main colour of the app. Although the sunset represents the end of the daytime, but it's still beautiful. It is the same for travel vlogs. Sharing vlog is the last stage of travel, it means your trip is about to end, but the memory in the vlog is most beautiful and precious thing that left.

Sunset glow   =   #F5A623   +   #E95685   #4A90E2   #9B9B9B

Travlog

👤
USERNAME

🔒
PASSWORD

LOG IN

Create an Account
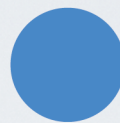
02. Browse module

Home page:

In order to create more access point for users, the home page is divided into 3 tabs, which are "For you", "Friends", "Nearby". For you tab is based on the AI algorithm recommendation. Nearby tab recommends videos based on users geographic location.

For you   Friends   Nearby

Search page

High

Low
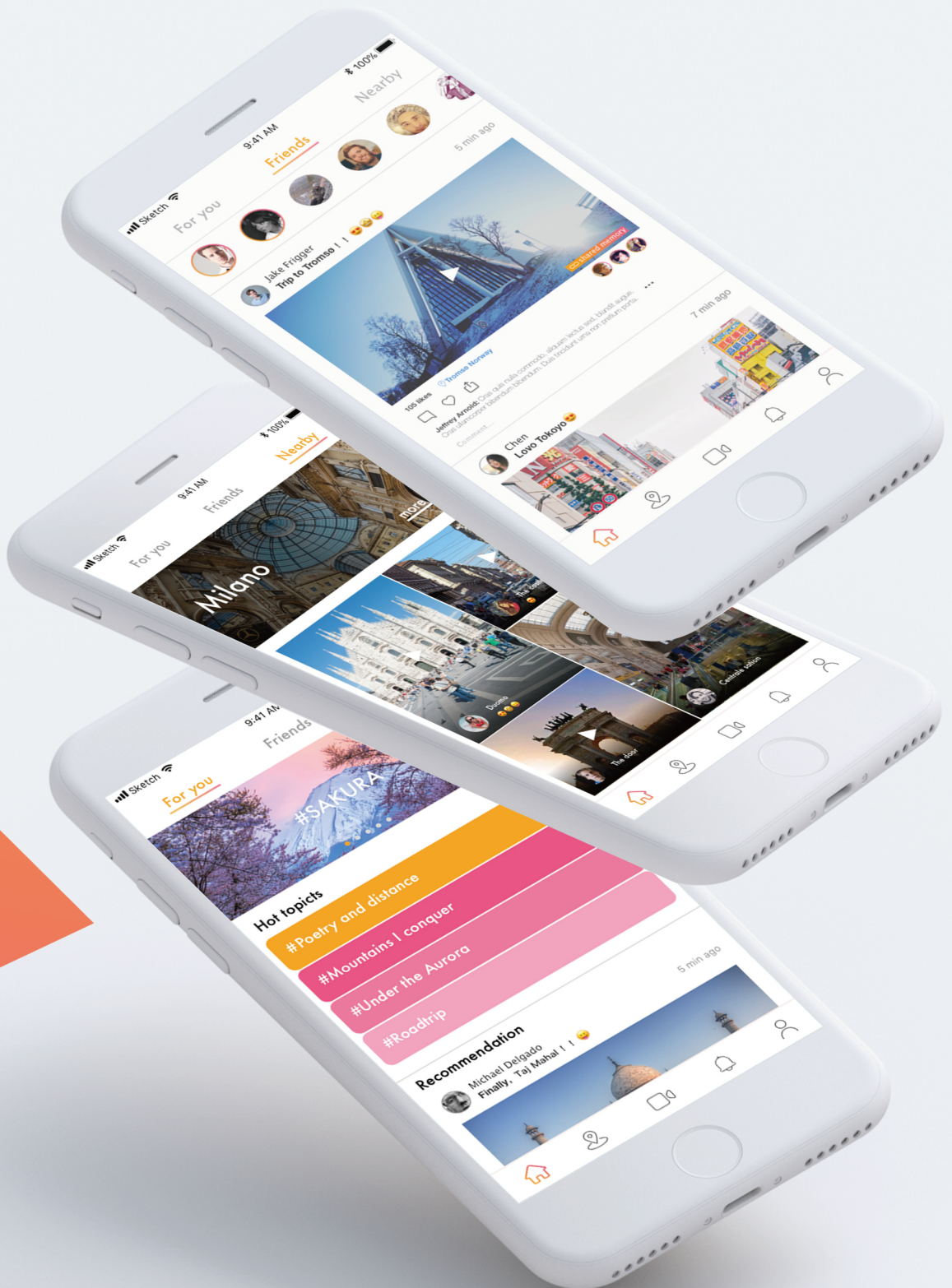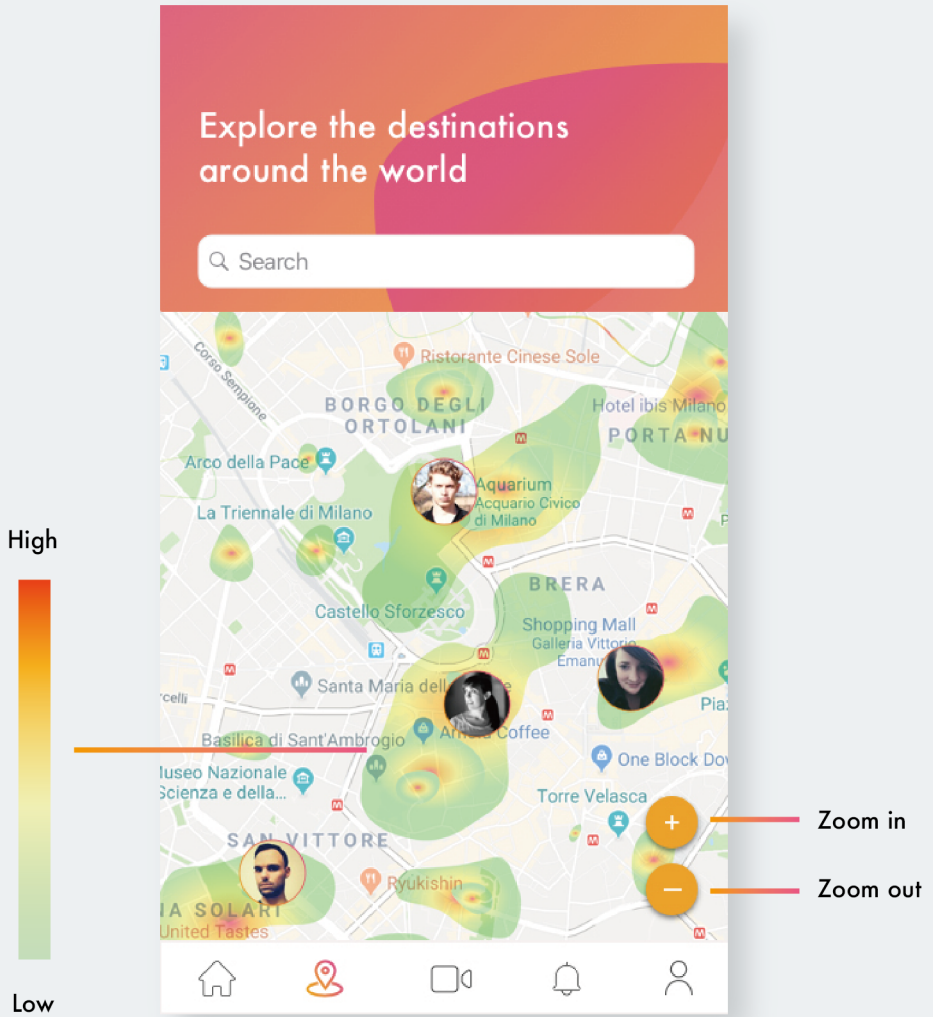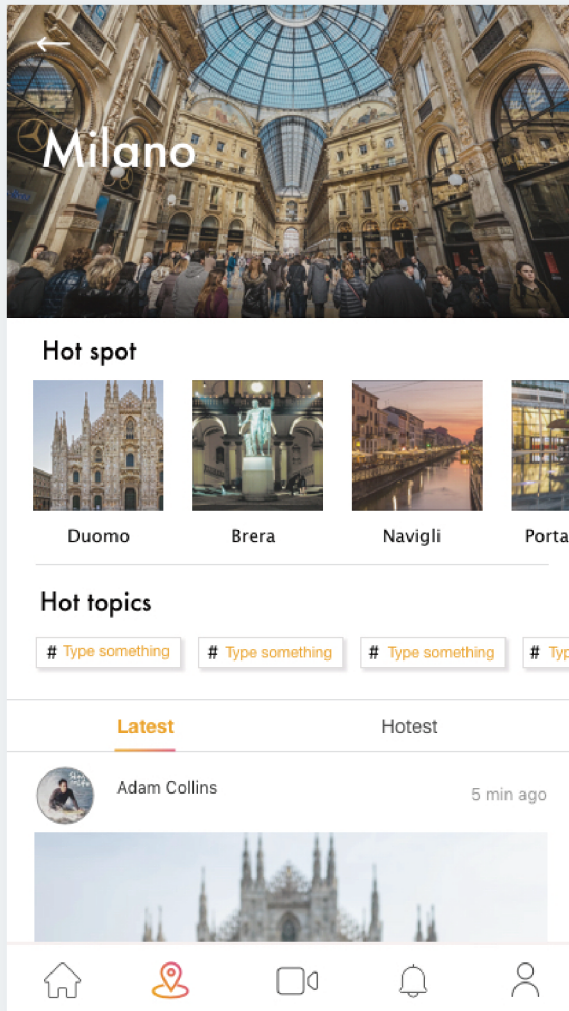
Density of uploaded video

Zoom in

Zoom out

Location page

Milano

Hot spot

| Duomo | Brera | Navigli | Porta |

Hot topics

Type something   # Type something   # Type something   # Type

| Latest | Hotest |

Adam Collins   5 min ago

View page

A wonderful summer in Phuket !

2017-10-10   1015 Views   #Pucket   #best summer

Luca
36 Followers   16500 km

Follow

Destination   Duration
📍 Thailland   🕐 4 days

🔗 shared memory

Description：

Day one:

The frist Day in Phuket was amazing. We went to the Big Buddha. And then we also went on boat trip to Phang Nga Bay.The view there was gorgeous!!! Highly recommend . Definitely worth going.

Also the hotel you guys saw in the video was fanstastic, If you are interested, Here is link for booking:
https://www.booking.com/hotel/th/dara.zh-cn.html?

Desciption

Links

Links provides a way for creaters to provide useful tips, also as a profit mode for content creater

Like   Mark useful info   Comment

Triggers for sharing

Triger Type: Spark & Signal

Remind user, his/her fiends minght be interesting,
According to friends view history record. Give user
a better way to connect with friends

Some of you friends might also be interesting in this video. ✕

2017-10-10   1015 Views   #Pucket   #best summer

Luca
36 Followers   16500 km

Follow

Destination   Duration
📍 Thailland   🕐 4 days

shared memory
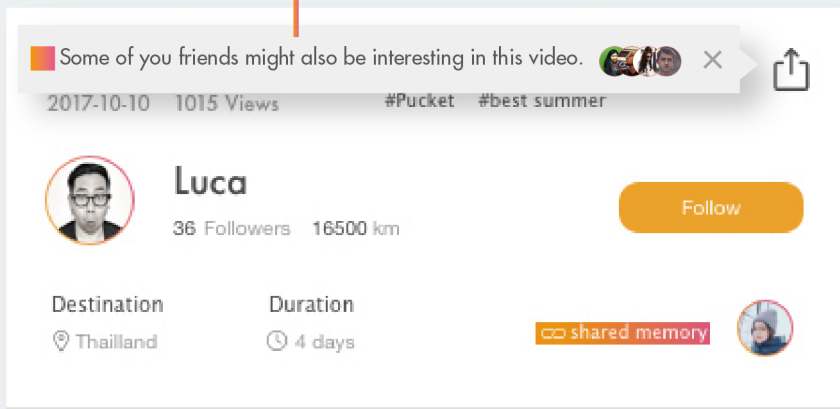
User Profile

The user profile page includs the all the basic information of the user, as well as all the video upload history, users can easily manage all their travel vlog in this page.

There three different tabs in this page which are "Memory", "Footprints", and "liked".

Footprints sort all the videos according to the geo loction and the time, It includs all the short videos that captured by quick mode. And the timeline setting help users to quickly find the right video.

Memory tab contains all the memorys that generated by momory mode. When user linked another user who he shared this trip with, this "memory" will also be synced to that person's memory tab simultaneously.

Liked tab gathered all the valuable videos and informtion that user marked during watching or browsing. Helps users to easily review and share all the useful details that they got.
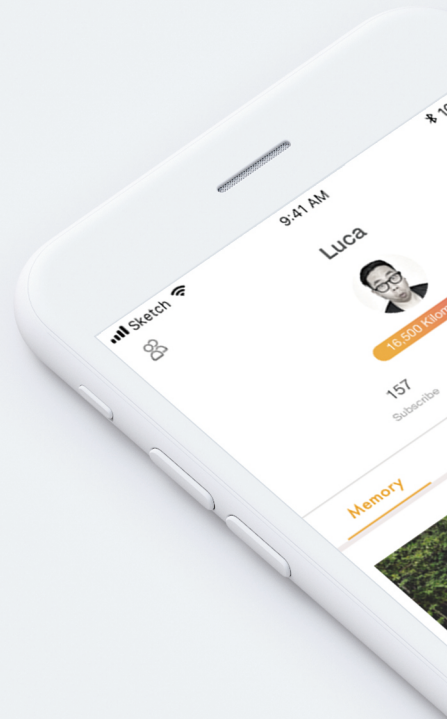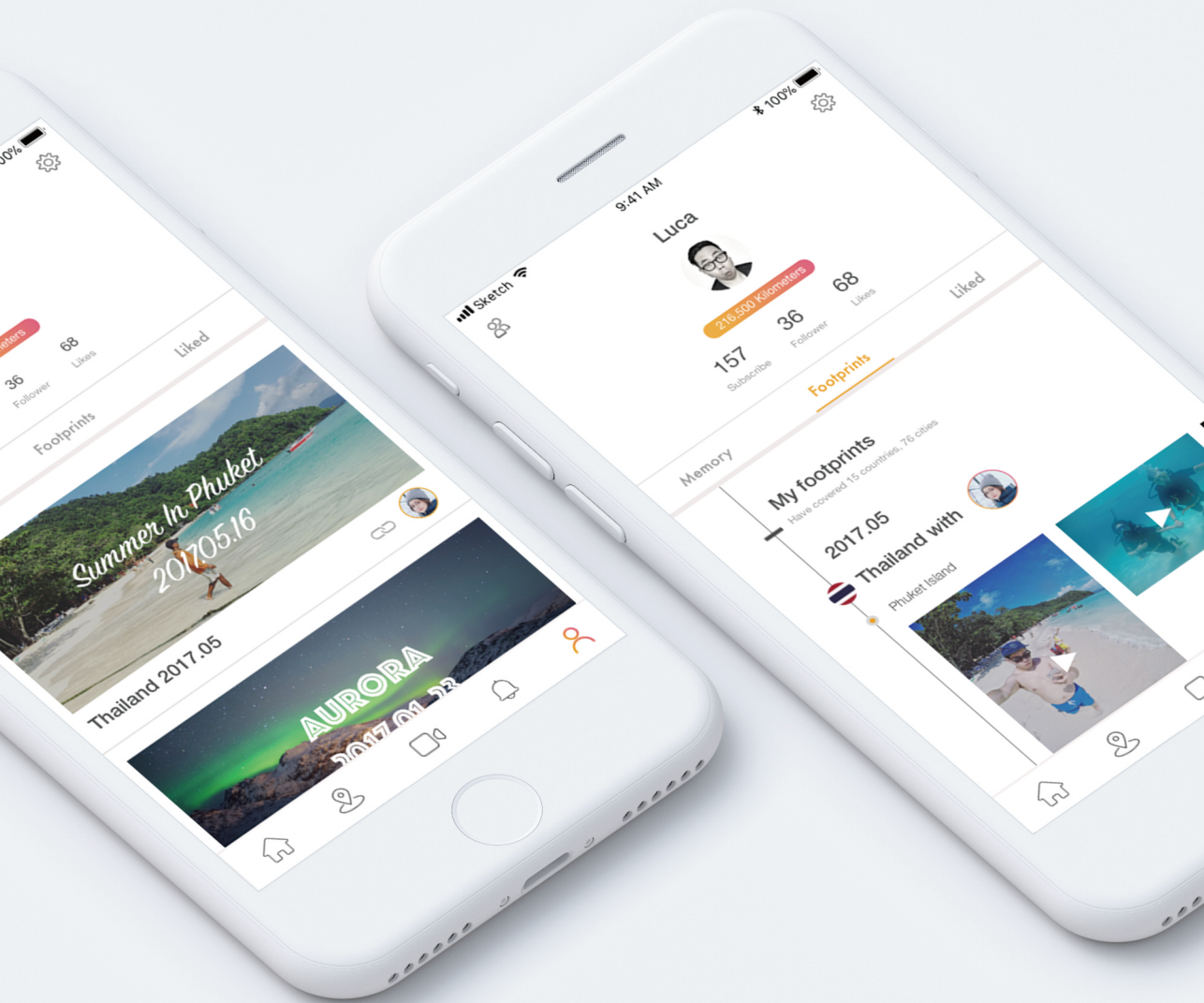
Profile page
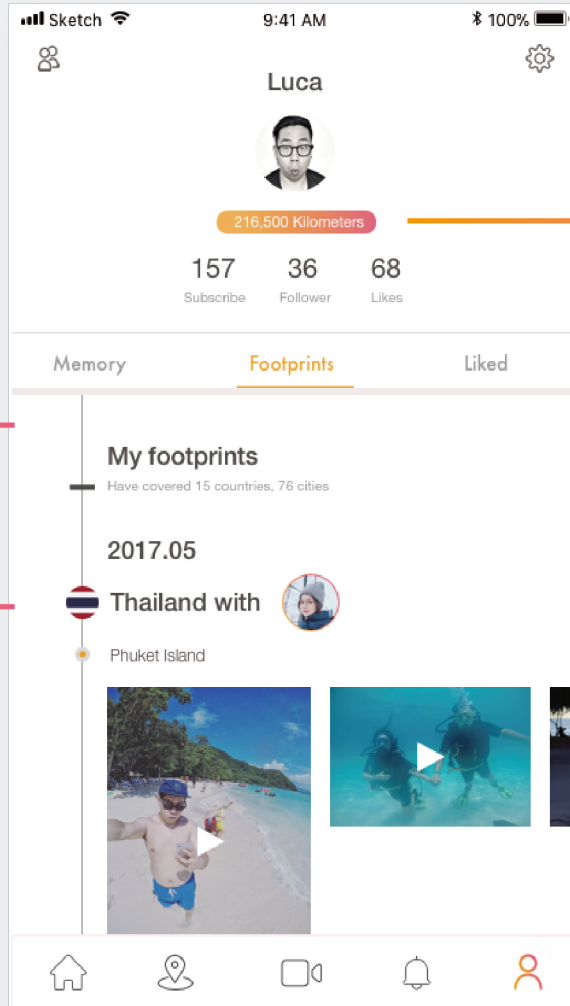
Time line

Shared memory

Tirggers for sharing

My Kilometers traveled

116.565 km

325,600 km away
from the Moon

You are here !

Created by Travlog
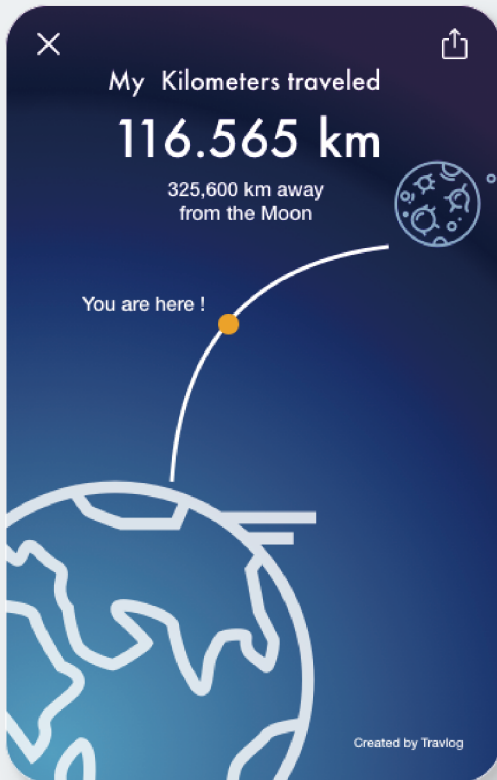
Triger Type: Spark

This card shows the informtion of user's travel experience. It functions as a social currcy for user.

My Kilometers traveled

116.565 km

Beat 96% of the users

Created by Travlog

03. Shooting module

The shooting module is divided into two different mode, Quick mode and Memory Mode.

- Quick mode allow users to quickly shoot short videos during thier trip.

- Memory mode helps the user to make a complete travel vlog step by step.

Quick mode

Create your memory

Easily generate your vlog

Your destination

📍 Milano

Time duration

2018-06-12

Next

✕

Next

Write a title for your Vlog

A good title will attract more attention.
You can also edit it later
Click "next" for next step.

Eddit your travlog

Your travel duration is 4 da

Day one
2018-06-12

Day two
2018-06-13

Day thre
2018-06-
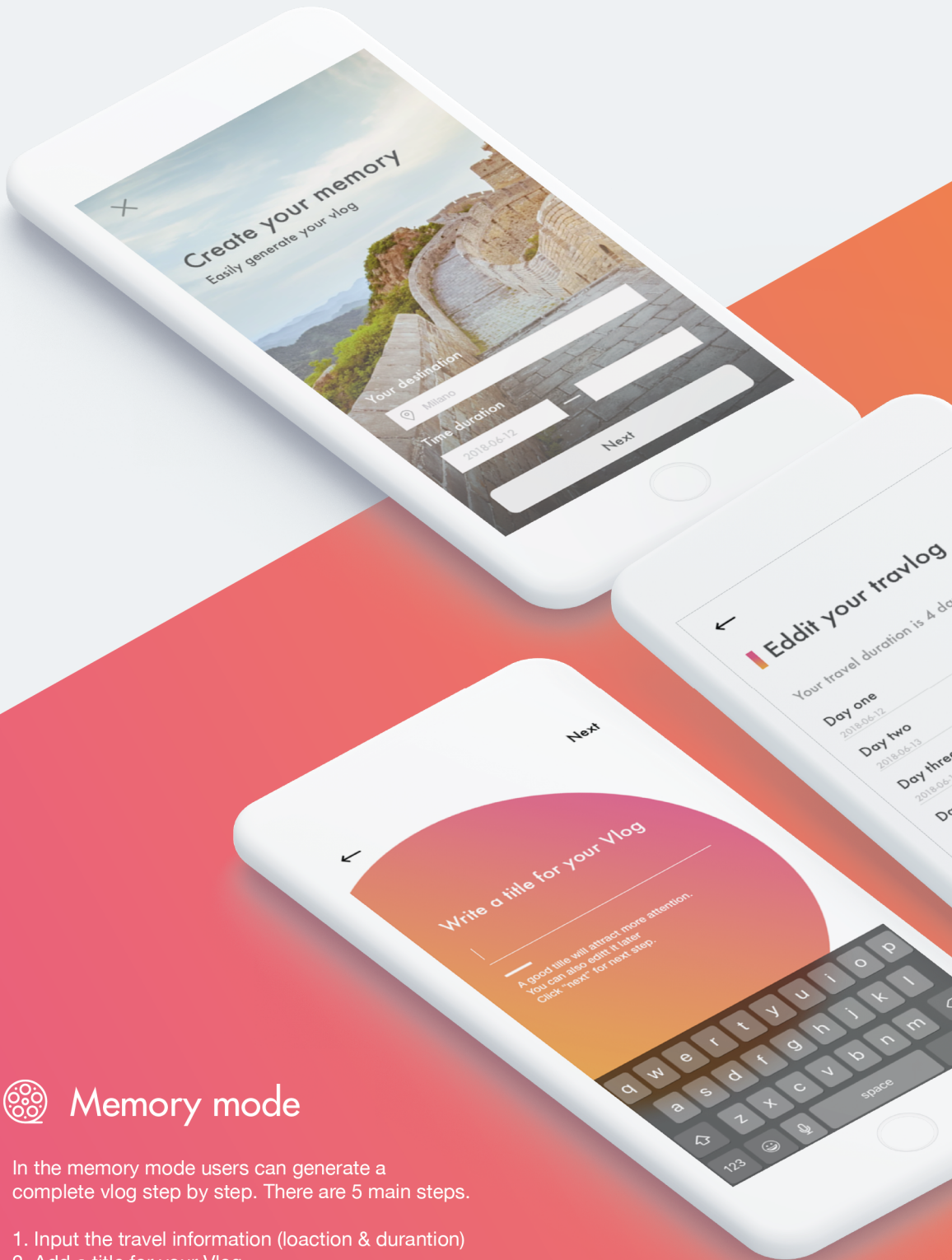
Memory mode

In the memory mode users can generate a
complete vlog step by step. There are 5 main steps.

1. Input the travel information (loaction & durantion)
2. Add a title for your Vlog
3. Upload anf edit video for each day
4. Add descriptions and other detail informations
5. Share the Vlog, Link with friends who you traveled with

132

Day one

2018-06-12

Description

Where have you been? What have you saw ?

Add video

▶

Descirbe this video

\# Add some tags   \# Add some tags   \# Add some tags

\# Add some tags

Next

ys   +

+

+

+

y four

2018-06-15

Next

return

Share

▶

🔗 Shared memory with   +   +

👁 Visible to   Public   Friends only   Private

Share now
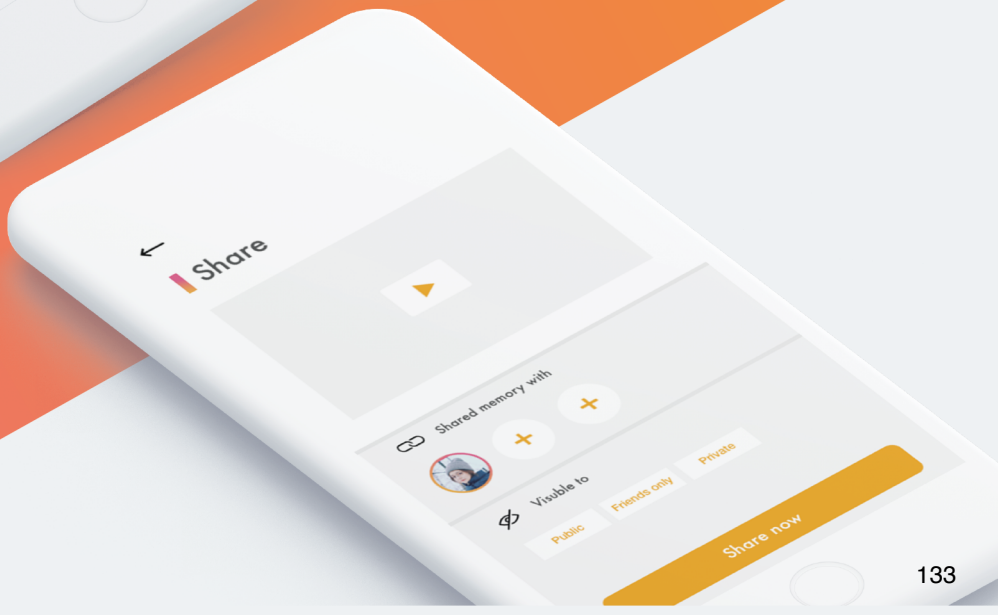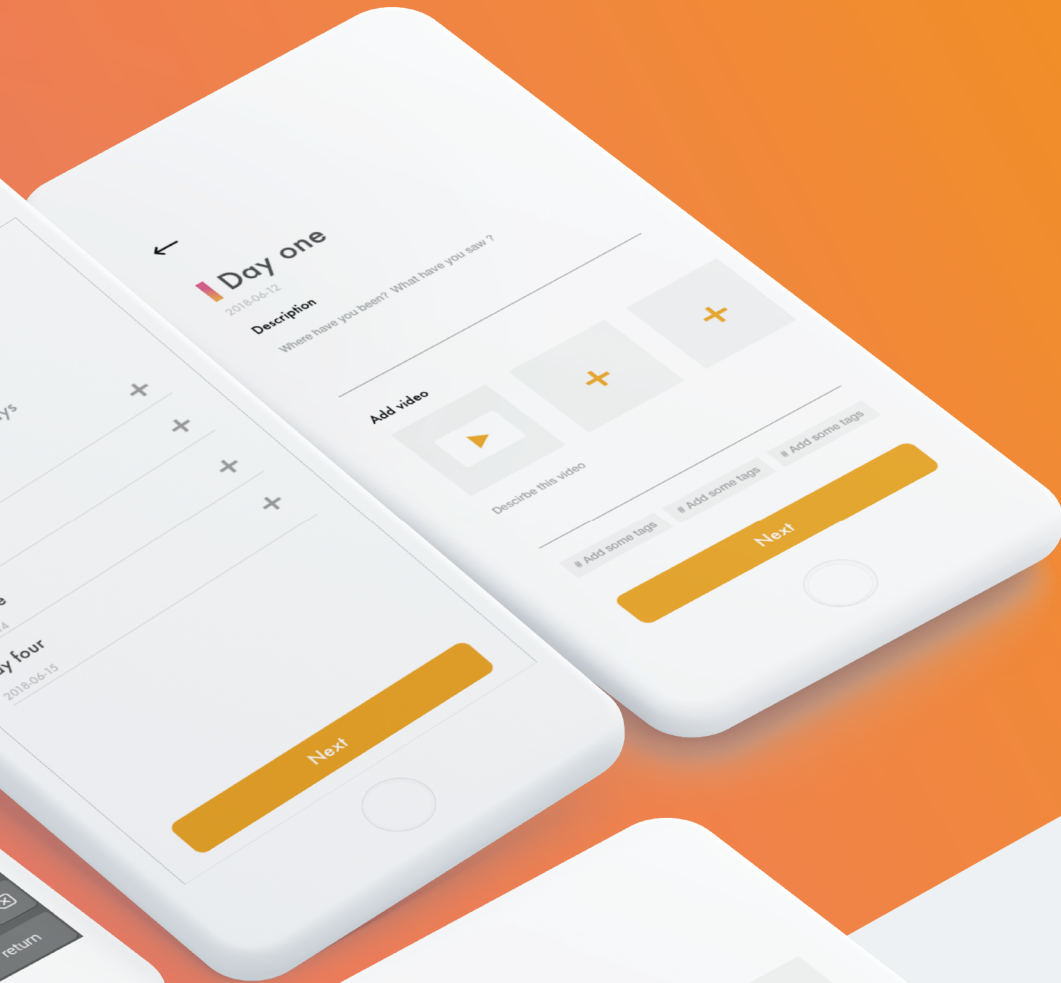
Bibliography

Books

Anderson, Chris. 2008. *The Long Tail: Why the Future of Business Is Selling Less of More*. Revised edition. New York: Hachette Books.

Berger, Jonah. 2016. *Contagious: Why Things Catch On.* Reprint edition. Simon & Schuster.

Dawkins, R. 2011. *The Selfish Gene*. First Thus edition. Oxford ; New York: Folio Society.

Gillmor, Dan. 2006. *We the Media: Grassroots Journalism By the People, For the People.* New edition edition. Beijing ; Sebastopol, CA: O'Reilly Media.

Gladwell, Malcolm (2000). *The Tipping Point: How Little Things Can Make a Big Difference.* Little Brown.

Jenkins, Henry, Sam Ford, and Joshua Green. 2013. *Spreadable Media: Creating Value and Meaning in a Networked Culture.* New York ; London: NYU Press.

Jenkins, Henry, Ravi Purushotma, Margaret Weigel, Katie Clinton, and Alice J. Robison. 2009. *Confronting the Challenges of Participatory Culture: Media Education for the 21st Century.* MIT Press.

Peter Morville, Louis Rosenfeld. *Information Architecture for the World Wide Web.* O'Reilly Media

Preece, J., Rogers, Y., & Sharp, H.. *Interaction Design: beyond human-computer interaction*. 2002

Saffer, Dan. 2009. *Designing for Interaction: Creating Innovative Applications and Devices.* 2 edition. Berkeley, CA: New Riders.

Shirky, Clay. 2011. *Cognitive Surplus: How Technology Makes Consumers into Collaborators*. Reprint edition. Penguin Books.

Silverman, Jacob. 2016. *Terms of Service: Social Media and the Price of Constant Connection*. Reprint edition. New York London Toronto Sydney New Delhi Auckland: Harper Perennial.

Wang, Zhi, Jiangchuan Liu, and Wenwu Zhu. 2016. *Social Video Content Delivery.* SpringerBriefs in Electrical and Computer Engineering. Springer International Publishing. //www.springer.com/gp/book/9783319336503.

Academic papers

Bevan, Nigel. 1995. *'Human-Computer Interaction Standards'*. In Advances in Human Factors/Ergonomics, 20:885–90. Elsevier. https://doi.org/10.1016/S0921-2647(06)80326-6.

Fogg, BJ. 2009. *'A Behavior Model for Persuasive Design'*. In Proceedings of the 4th International Conference on Persuasive Technology, 40:1–40:7. Persuasive '09. New York, NY, USA: ACM. https://doi.org/10.1145/1541948.1541999.

Fei, He. *'A Study of Viruses-like Spreading Model Online in the View of Media History.'* Sichuan University, March, 2007.

Laura M. Gorham. *A Review of Spread Media: Creating Value an Meaning in a Networked Culture*. Journal of Applied Communications, Volume 100, Issue 2, Article 2

Subramani, R., & Rajagopalan, B. (2003). *Knowledge-Sharing and In uence in Online Social Networks via Marketing.* Communications of the ACM, issue 8(12), p.300-307

Porter, Constance Elise. n.d. *'A Typology of Virtual Communities: A Multi-Disciplinary Foundation for Future Research'*. Journal of Computer-Mediated Communication 10 (1): 00–00. https://doi.org/10.1111/j.1083-6101.2004.tb00228.x.

Zhao xiaoxian, *Research on Communication Of Mobile Short Video Based on Social Platform,* Chongqing Technology and Business University, 2017

Zhang, Lu. *'The Research on Micro Video communication of social media'*, Hunan University, May, 2016 .

Web sources

Arik Hanson. *'Is Short-Form Instagram Video the Future of News Distribution?* |'. n.d. Accessed 10 July 2018. http://www.arikhanson. com/2013/10/02/is-short-form-instagram-video-the-future-of-news-distribution/.

Apple. n.d. *WWDC 2018 Keynote — Apple*. Accessed 16 July 2018. https://www.youtube.com/watch?v=UThGcWBlMpU.

Bouman, Jesse. *'The Psychology of How and Why We Share Content on Social Media'*. 2016. EveryoneSocial (blog). 29 January 2016. https://everyonesocial.com/blog/the-psychology-of-how-and-why-we-share/.

Carson, Biz. n.d. *'How a Failed Education Startup Turned into Musical.Ly, the Most Popular App You've Probably Never Heard Of'*. Business Insider. Accessed 10 July 2018. http://www. businessinsider.com/what-is-musically-2016-5.

Chowdhry, Amit. n.d. *'Snapchat's New "Discover" Feature Has Content From ESPN, CNN, Food Network And Others'.* Forbes. Accessed 10 July 2018. https://www.forbes.com/sites/ amitchowdhry/2015/01/28/snapchat-discover/.

Constine, Josh. *'Instagram Stories Hits 200M Users, Surpassing Snapchat as It Copies Its AR Stickers'*. n.d. TechCrunch (blog). Accessed 10 July 2018. http://social.techcrunch.com/2017/04/13/ instagram-stories-bigger-than-snapchat/.

Erik J. Martin. *'What You Can Learn from Short Form Video'*. 2014. EContent Magazine. 29 October 2014. http://www.econtentmag. com/Articles/News/News-Feature/What-You-Can-Learn-from-Short-Form-Video-100141.htm.

Erin Willey Oh.*'Viddy - App Review'*. 2012. 30 May 2012. https:// www.commonsensemedia.org/app-reviews/viddy.

Edutopia. n.d. **Henry Jenkins on Participatory Culture** (Big Thinkers Series). Accessed 16 July 2018. https://www.youtube.com/ watch?v=1gPm-c1wRsQ.

Gil, Paul. n.d. *'Examples of Memes and How to Use Them'*. Lifewire. Accessed 10 July 2018. https://www.lifewire.com/what-is-a-meme-2483702.

Hamill, Jasper. 2015. *'Kids Declare War on Body Shaming in Bizarre Viral #dontjudgechallenge Craze'*. Mirror. 6 July 2015. http://www.mirror.co.uk/news/technology-science/technology/dont-judge-challenge-teens-declare-6010468.

Kafka, Peter. 2014. *'Viddy, the "Instagram for Video" That Wasn't, Acquired by Web Video Startup Fullscreen'*. Recode. 15 January 2014. https://www.recode.net/2014/1/15/11622370/viddy-the-instagram-for-video-that-wasnt-acquired-by-web-video.

Lloyd, Tony. *'Are You Using The Dynamic Power of Viral Marketing?'* n.d. Business Know-How. Accessed 10 July 2018. https://www.businessknowhow.com/marketing/viralmark.htm.

Linshi, Jack. *'Here's How the "Don't Judge Challenge" Totally Backfired'*. n.d. Time. Accessed 10 July 2018. http://time.com/3948968/dont-judge-challenge/.

Moreau, Elise. n.d. *'What Is Viddy? Review of the Viddy App for IPhone'*. Lifewire. Accessed 10 July 2018. https://www.lifewire.com/viddy-app-for-iphone-3486482.

Newton, Casey. 2016. *'Why Vine Died'*. The Verge. 28 October 2016. https://www.theverge.com/2016/10/28/13456208/why-vine-died-twitter-shutdown.

Prickett, Kirby. *'Book Review: Spreadable Media | WordPress Hosting by @WPEngine'*. 2014. WP Engine. 7 February 2014. https://wpengine.com/blog/book-review-spreadable-media/.

Smith, Craig. *'27 Amazing Vine Statistics and Facts | By The Numbers'*. 2014. DMR. 24 August 2014. https://expandedramblings.com/index.php/vine-statistics/.

Sippey, Michael (January 24, 2013). *"Vine: A new way to share video".* Twitter Blog. Twitter. Retrieved July 25, 2013. https://blog.twitter.com/official/en_us/a/2013/vine-a-new-way-to-share-video.html

Sternberg, Josh. 2012. *'Can NowThis News Crack Mobile Video?'* Digiday (blog). 9 November 2012. https://digiday.com/media/can-nowthis-news-crack-mobile-video/.

Strange, Adario. n.d. *'You Can Now Post 60-Second Videos on Instagram'*. Mashable. Accessed 10 July 2018. https://mashable.com/2016/03/29/instagram-video-60-seconds/.

'Talking Twin Babies, Nyan Cat among YouTube's Top Videos of 2011'. 2011. LA Times Blogs - Technology (blog). 20 December 2011. http://latimesblogs.latimes.com/technology/2011/12/talking-twin-babies-nyan-cat-and-friday-top-youtubes-most-watched-videos-of-2011.html.

Talks at Google. n.d. **Jonah Berger: 'Contagious: Why Things Catch On'** | Talks at Google. Accessed 16 July 2018. https://www.youtube.com/watch?v=FN4eDk1pq6U.

Taylor, Colleen .*'Instagram Launches 15-Second Video Sharing Feature, With 13 Filters And Editing'*. n.d. TechCrunch (blog). Accessed 10 July 2018. http://social.techcrunch.com/2013/06/20/facebook-instagram-video/.

TED. n.d. *What Makes Something Go Viral? | Dao Nguyen*. Accessed 10 July 2018. https://www.youtube.com/watch?v=Kab-mpU-YVM.

TEDx Talks. n.d. **What's in a Meme? | Andrew Baron | TEDxSacramento**. Accessed 16 July 2018. https://www.youtube.com/watch?v=0swAqcMnrO0.

TED. n.d. *Why Videos Go Viral | Kevin Allocca.* Accessed 10 July 2018. https://www.youtube.com/watch?v=BpxVIwCbBK0.

Ungerleider, Neal, Neal Ungerleider, and Neal Ungerleider. 2013. *'Using Vine To Cover Breaking News'*. Fast Company. 7 February 2013. https://www.fastcompany.com/3005630/using-vine-cover-breaking-news. (last visit July 5, 2018)

Wei, Will. n.d. *'TOP VIRAL VIDEOS OF APRIL: What's A "Nyan Cat"?'* Business Insider. Accessed 16 July 2018. http://www.businessinsider.com/top-viral-videos-of-april-2011-5.

Image index