Distribution of advertisements on YouTube among diverse content categories

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ABSTRACT

YouTube has become one of the largest video sharing services on the planet. Among other reasons, this is because of the diversity in content on the website. This results in a great diversity of users, which is a great attractor for advertisements and, as the users know, there are a lot of them on YouTube.

In this paper the distribution of advertisements on YouTube among diverse content categories is measured. A Chrome extension will be used to give conclusions to the following questions: How many advertisements are there on YouTube on average per video and how are these numbers distributed among the different categories of content? The expectations are that better rated content categories have a higher amount of advertisements, since more people watch these videos and are often more attracted to the video than worse categories. It is also expected that there is no difference between better rated content categories. Yet, these expectations turned out to be wrong. The major findings of this research are that the results are very varied. Further the category of music seemed unattractive for companies to advertise in. The category of comedy has, probably because of the longer total duration, a higher amount of seconds watched before showing an advertisement. Additionally, there is hardly any difference between top rated content categories and low rated content categories.

Keywords

Distribution, advertisements, YouTube, social media, content categories, Chrome extension

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1. INTRODUCTION

With 2 billion registered viewers every month, YouTube has become one of the largest video sharing services on the planet. They reached a total of 500 hours of content uploaded every minute and with that more than 5 billion videos are being watched on YouTube every day by people all over the world. One of the reasons for this success is the diversity of content which automatically causes a diversity of users [10]. This makes YouTube a very interesting platform for companies to advertise their products. YouTube makes good use of this and shows you advertisements in different ways. One of their methods to make revenue, is advertisements before, during and after the videos on the website.

However, the amount of advertisements per video is varied. Videos on YouTube were constantly interrupted by advertisements until the end of 2018. At that point YouTube switched to ad pods. These ad pods would stack two ads back to back instead of one ad per certain amount of time. This would make the likelihood of being interrupted by ads smaller [6]. This made the amount of advertisements per video lower.

Yet, it is still uncertain how these advertisements are distributed. The goal of this paper is to identify this distribution of the advertisements on YouTube.

1.1 Research Questions

The following research questions will be discussed in this paper:

RQ 1 How can advertisements on YouTube be measured?

- RQ 2 How are the advertisements distributed in YouTube?
 - **RQ 2.1** Is there a difference per content category in the amount of advertisements?

RQ 2.2 How many seconds can be watched before YouTube shows an advertisement on average per content category?

RQ 2.3 What percentage of advertisements is in video advertisements?

RQ1 is needed because we must count the amount of advertisements on YouTube to find the distribution. The research should be done by hand if this research question was not in the paper and that would take a lot of time. This time should be spent on other things like writing the paper since this research paper had to be finished in nine weeks.

RQ2 follows from the measurements of **RQ1**. The amount of advertisements **RQ2.1** needs to be measured to conclude anything. This needs to be compared among the content

categories to answer **RQ2**. That is the reason why this is the first subquestion of **RQ2**. This will also give us the information to answer **RQ2.2**. The amount of seconds of a video that can be watched before YouTube shows an advertisement is a factor which can be used to give a good indication of how these advertisements are distributed. That is the reason why this is the second subquestion of **RQ2**.

It would be an addition to this paper to analyze what percentage of advertisements is in video advertisements (**RQ2.3**), since in video advertisements are one of the most irritating types of advertising. That is the reason why this is the third subquestion of **RQ2**.

2. BACKGROUND

This section gives the necessary background information on content categories, specifications of a YouTube user, YouTube ad format and skipping ads.

2.1 Content categories

Content categories can be defined as the types of videos that can be watched on YouTube. The top five content categories are: Comedy/Skit Videos, Gaming Videos, Vlogs, How-To Videos and Product Review Videos following a research of Medium [9]. Reaction Videos and Prank Videos are examples of the worst types of videos. Four of these categories (comedy, gaming, music [4] and prank) will be used in **RQ2** to get a good view at the distribution between the advertisement videos on YouTube.

2.2 Specifications of a YouTube user

A company needs to choose who they want to target when promoting their products/ideas on YouTube. It can filter their targets by age, gender, parental status, added detailed characteristics, interests, video remarketing and target locations [7]. This means that an advertisement of YouTube is different for every user.

2.3 Youtube ad format

There are a few types of advertisements on YouTube [5]. There are in video ads, video discovery ads, outstream ads, bumper ads and YouTube masthead ads. For this paper the in video ads and the bumper ads will be measured, because those are the best advertisements to measure following the increase of the count of the extension (the extension will be explained in section 4). In video ads have two types, namely skippable and non-skippable ads. Skippable ads can be as long as you want. Non-skippable ads that are six seconds or shorter. These ads can be before, during or after a video. This variety of ad formats is a strategy of YouTube to get the attention of the users.

2.4 Skipping ads

Skipping ads can be a bad habit for users of YouTube [3]. It will add more in video advertisements, which means that there will be more interruptions during the video. Most people hate in video advertisements more than advertisements that are played before the video, thus they should actually watch more advertisements before the video instead of skipping them.

3. RELATED WORK

This section gives a few previous works concerning this paper.

3.1 YouTube characterization

Previous work exists on the topic of YouTube characterization and infrastructure [1, 11], but hardly on the distribution of advertisements. The first reference [1] is about the usage of YouTube. How long does a user watch, what settings do they use and what data is transferred during the video are all questions that will be answered in that paper.

The second reference [11] tries to understand the mechanisms and policies used to determine which data centers users download video from. This is done from several university campuses and ISP (Internet Service Provider) networks.

3.2 Food and Beverage Advertisements

There is one specific example for this subject. In 2018, the amount of food and beverage advertisements in YouTube videos targeted children were researched. The measurements were done by recording the advertisements by hand instead of by a chrome extension. The difference in this work is that this work will only measure the amount of advertisements on a few specific video and on a larger scale with more content categories instead of just the one for children [8].

3.3 Browser forensics: ad-blocker

extensions

This article researched how ad-blockers work and what their results are in several browsers (Google Chrome, Mozilla Firefox, Internet Explorer and Microsoft Edge). The code is explained in this article which makes it easier to make an extension for our research [12].

4. METHODOLOGY

This section discusses how the research questions will be answered.

To solve **RQ1**, there is a need for a method that counts the number of advertisements in a video. There exists a method on the internet which recognizes and blocks advertisements. This method is an ad blocker extension. There are already several extensions for this purpose and AdblockPlus is one of the highest rated advertisement blocking extensions. It is the most popular free ad blocker on Firefox, Chrome, Safari, android and IOS. AdBlockPlus is an open-source browser extension, which means users may inspect, modify and enhance the source code of the product.

It is easy to think that an extension can count advertisements if it can already block them. That is why this AdblockPlus will be adapted to serve the purpose of counting advertisements on YouTube. There are different ways of doing this, but in this paper the chrome version of AdBlockPlus will be adapted, since the chrome version was already installed on the tested computer and it worked without showing any advertisements. After the explanation of how this extension works, the research for **RQ2** will be discussed.

4.1 Chrome Extension

An extension is a bundle of files containing the languages HTML, JavaScript and CSS. Most of the Chrome extensions can be found in the Chrome Store. These extensions can personalize the browser experience on Google Chrome in several ways. Putting notes on a browser, changing the readability of a website and messaging notifiers are just a few of the many things that can be done with a chrome extension [2].

Every Chrome extension starts with a manifest file. This file is a JSON file and describes the application. It describes which scripts have to be loaded in order to let the extension work properly, what icon is used as the extension icon, etc. The scripts that are loaded are Javascript, HTML and CSS files, which describe all functionalities of the extension itself.

After becoming familiar with how these Chrome extensions work, AdBlockPlus can be adapted. AdBlockPlus has a popup built in the extension. The amount of advertisements blocked at the moment and the amount of advertisements blocked in total are shown when clicking on this popup.

The amount of advertisements blocked at the moment and in total are described in the popup.js file. There is a function that is called UpdateStats, which passes the amount of advertisements blocked at the moment through to the popup. This function will be adapted in order to find the amount of advertisements before and in the video. It now contains a script which makes the user download a file immediately after clicking on the popup. This file contains all the information needed for this research and will be described in section 5.1.

4.2 Google Test Accounts

Several new Google accounts will be created. Only the required details will be filled in. These details are the name, email address and birthday. The gender does not need to be filled in since you can click on rather not known. Four accounts will be created in this way. Every category will have his own Google account. Every account will only focus on its own category. In this way the personal advertising aspect in advertisements will be excluded as much as possible to prevent personal advertising influencing the number of advertisements. That is why all accounts will have the same birthday.

4.3 Categories

As explained in the background there are four categories which will be used for this research. The categories are music, prank, gaming and comedy. These categories are chosen, because there is a preference for top content categories. The category prank is added beside the other categories to compare top ranked categories to worst categories

4.4 Research

All accounts will watch ten videos every day for a week. In this case we can evaluate whether there is a difference in the amount of advertisements during the week. During these videos the popup of the adapted extension is used before and after the video. The amount of in video advertentions can be found by subtracting the amount of advertisements blocked after the video by the amount of advertisements blocked before the video. So twenty files have been downloaded after watching ten videos. These twenty files will be combined into one file so that all strings will be seen beneath each other. After that, the results will be filled into a Google spreadsheet and several calculations will be made. These calculations can be found in the results section.

5. DATASET

This section discusses the datasets used in this paper.

5.1 Chrome Extension

As described in 4.1 the Chrome extension downloads a file immediately after clicking on the popup of the extension. This file is a .txt file which contains a string with the following information: the amount of advertisements blocked at the moment, the url, the date and the duration of the video.

The amount of advertisements blocked at the moment adds up when clicking on a new video on YouTube. This is because the webpage will not reload when a new video is loaded. This means that the application just adds the new amount of advertisements to the previous amount of advertisements. These advertisements blocked at the moment will be subtracted from the previous downloaded file so that it is known how many advertisements are blocked before or during a video.

The url is included in this file because a YouTube video gives a code in the url which is unique for every video. This means that the url represents the video in this format.

The date is included in this file since it will show the difference in days of advertisements.

The duration of the video is included to show the correlation between the number of advertisements in the video and the duration of the video.

See figure 1 for an example of such a .txt file after clicking on the popup of the extension.

These strings will all be included into four files in which every category has its own file.

Figure 1: An example of a .txt file

6. **RESULTS**

The results of the experiments will now be discussed (see tables 1,2,3,4 and also figures 2,3 and 4).

The average advertisements per day will be used to compare the amount of advertisements of the categories and thus will be used to answer **RQ2.1**. The average advertisements per day is calculated by adding the amount of advertisements of every day. This result will be divided by the amount of days (in this case seven).

The average in video ads per day will be used to answer to calculate the percentage in video ads per day and thus will be used to answer **RQ2.3**. The average in video ads per day is

adblockerAds (8) - Kladblok

Bestand Bewerken Opmaak Beeld Help "11 | https://www.youtube.com/watch?v=AWGqoCNbsvM | 19/1/2020 13:29:43 | 3:14"

calculated in the same way.

The percentage in video ads per day will be used to answer **RQ2.3**. The percentage is equal to in video ads / total ads.

The amount of seconds a user can watch a video before needing to watch an advertisement is the seconds per ad. It will be used to answer **RQ2.2**. This amount is calculated by dividing the amount of time by the average advertisements per day since the total duration will be watched every day.

Table 1: Results from the category of music

Music			
Average advertisements per day	25.85714286		
Average in video ads per day	9.714285714		
Percentage in video ads per day	37.57%		
Total duration	3 hours 2 minutes and 53 seconds		
Seconds per ad	424.3701657		

Table 2: Results from the category of prank

Prank			
Average advertisements per day	45.42857143		
Average in video ads per day	29.28571429		
Percentage in video ads per day	64.47%		
Total duration	1 hour 43 minutes and 55 second		
Seconds per ad	137.2484277		

Table 3:	Results	from	the	category	of	gaming

Gaming			
Average advertisements per day	52		
Average in video ads per day	35.85714286		
Percentage in video ads per day	68.96%		
Total duration	2 hours 10 minutes and 13 second		
Seconds per ad	150.25		

Table 4: Results from the category of comedy

Comedy			
Average advertisements per day	45.85714286		
Average in video ads per day	29.85714286		
Percentage in video ads per day	65.11%		
Total duration	4 hours 34 minutes and 29 second		
Seconds per ad	359.1370717		

Figure 2: Average advertisements and in video advertisements per day

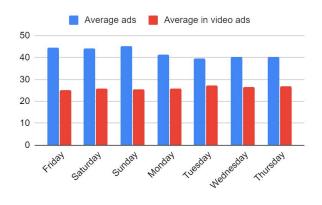


Figure 3: Amount of advertisements every day per content category

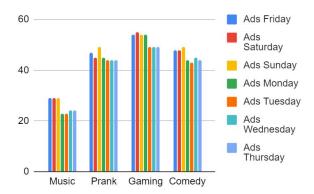
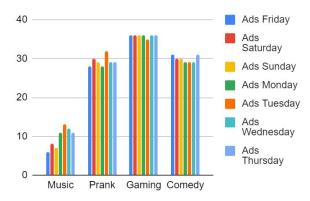


Figure 4: Amount of in video advertisements every day per content category



7. DISCUSSION

This section discusses the results from the previous section.

First of all, the advertisements on YouTube are really varied. This can be seen in the differences between the first and the second day of the category of music (see appendix A). Although they the ending result in the amount of advertisements is the same, there are still a lot of differences between those days. On the first day there are more advertisements before video two while there are more advertisements before video six on the second day. This is only one example of the many differences between those days.

The differences between the urls can be explained since the video queue was changed during the measurements on the first day.

From the results, it can be concluded that the amount of advertisements is nearly the same for every day (see figure 2 and 3). However, there is a difference between the first three days and the last four days of the week. The following two reasons could be considered. The first reason is that there is a difference between the weekend (friday included) and the week (friday excluded). This is probably because there are more people watching YouTube videos during the weekend, since most people have more spare time during the weekend. The second reason is that there is a feature in YouTube which detect how many videos an account has watched (duration). It can be that this feature gives older accounts less advertisements. However, when looking at the amount of in video advertisements per category (see figure 1), it stays the same for the whole week except for the category of music. So the amount of advertisements per videos goes down, but the amount of in video advertisements goes up. This can be a result of the feature introduced at the end of 2018 which has been discussed in the introduction. It stacks up advertisements in the beginning of the video and this can be varied because the user already watched the videos and that changes the feature.

The next thing that can be concluded from the results is that there is a huge difference in percentage in video ads per day when comparing music to the other categories (see table 1,2,3 and 4). It is 37.75% in the category of music while the other categories vary between 64.47% and 68.96%. This is probably because most people play music in the background while doing other things. That is probably the reason why this category is not popular for companies to advertise in. The same reason can be used to explain the big difference between the average advertisements per day among the categories. This is twenty six advertisements in the category of music while the other categories all have on average forty five advertisements or more.

There is also a difference in seconds per ad (see table 1,2,3 and 4 again). The categories of music and comedy have above 359 seconds per ad. Probably the same reason as the huge difference in percentage in video ads per day and the average advertisements per day can be used for the category of music. It is not attractive for companies to advertise in music videos. However this reason cannot be used for the category of comedy. Comedy has to be watched without doing anything else otherwise a watcher would not get the jokes. The high amount of seconds per ads can also be caused by the higher total

duration but this cannot be proven. This can be researched in future work.

There is hardly any difference when comparing a bad content category to the other good content categories. The average amount of advertisements along with the average in video ads per day of the category of prank is nearly the same as the category of gaming, while the percentage in video ads per day of the category of prank is a little bit lower than the category of comedy but this can be neglected since The difference between these categories and the others is way bigger.

There seems to be a connection between the total duration of the video and the average amount of advertisements per day except for the category of comedy and music. The category of prank has one hour, 43 minutes and 55 minutes and on average 45 advertisements a day which makes 137 seconds per advertisement. The category of gaming has two hours, ten minutes and thirteen seconds and on average 52 advertisements a day which makes 150 seconds per advertisement. The difference between the duration of the videos and the amount of seconds per advertisement seems connected.

Figure 4 shows that there is a difference in the amount of in video advertisements during the week. Looking at friday and tuesday it increases by more than one hundred percent. This phenomenon cannot be seen in the other categories. This can be the case since the AdBlocker constantly skips advertisements. As discussed in section 2.4 this may result in an increase of in video advertisements. However, this does not explain that the difference in the category of music is higher than the differences in the other categories. At the moment this cannot be explained and may be used in a future work.

8. FUTURE WORK

This section discusses ideas for future research papers. Our analysis has pointed out several possible follow up points for further research. This can all be used for future work.

There can be a future research paper to examine the category of music. "What is exactly the reason for companies to advertise less in the music videos?" is a good research question.

Another idea is to find the correlation between the advertisements and the background videos. A user listens to the video which will still make them vulnerable to advertisements. Spotify can be a good program to compare with. That program plays advertisements around three times in ten songs. Finding a good reason between why Spotify plays so many advertisements and YouTube does not is also a good topic for a future research paper.

Why does the category of comedy have such a big difference in seconds per ad is also a good research question for a future research paper.

Due to time constraints this paper researched ten videos for seven days; the deviation between another research with the same categories but other videos can be big. That is why a research with a greater amount of videos is recommended to exclude this deviation. The last idea for a future research paper is a paper which discusses the differences in in video advertisements during the week. "Why is there a difference in the category of music considering the amount of in video advertisements during the week?" can be used as a research question for this paper.

9. CONCLUSION

This section summarizes and concludes the paper.

This research paper aimed to provide a clear distribution of the advertisements among four content categories (music, gaming, prank and comedy) on YouTube. By analyzing the four content categories for a week several conclusions were made.

The intuition was that better rated content categories have a higher amount of advertisements, since more people watch these videos and are often more attracted to the video than worse categories. It was also expected that there is no difference between better rated content categories.

However, this research concluded the following things: music is a non popular content category to advertise in. As discussed in section seven, this is probably because music videos will be played on the background and thus most advertisements will not be listened to. The category of comedy also shows a big difference when comparing it to the other categories. It had a higher amount of seconds watched before showing an advertisement. This could be because the category of comedy had a higher total duration of the videos. Likewise, this research concluded that there was hardly any difference between a bad ranked content category and a good ranked content category.

This research paper had to be written within nine weeks and there were some technical difficulties during the adaptation of the AdBlocker extension. Those are the reasons why this research is more limited than originally planned. This makes the deviation between another similar measurements high. The data set has to be a lot bigger to make the deviation as low as possible and make better conclusions from the results.

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APPENDIX A

Restar	id Bewerken Opmaak Beeld Help		
	L duration: 3 hours 2 minutes and 53 seconds		
7	https://www.youtube.com/watch?v=QRhoP1xr75s&list=TLPQMTkwMTIwMjAhCEMpTX bwA&index=1	17/1/2020 14:20:13	33:34"
7	https://www.youtube.com/watch?v=QRhoP1xr7Ss&list=TLPOMTkwMTIwMjAhCEMpTX_bwA&index=1		33:34"
11	https://www.youtube.com/watch?v=QKNOFIXF/SSQIISt=TLPQMTkwMTIwMJAhtCHpTX_bwAQIndex=1 https://www.youtube.com/watch?v=ALZHF5UqnU4&list=TLPQMTkwMTIwMJAhtCHpTX_bwA&index=2	17/1/2020 14:21:32	3:19"
12		 Respectively and the second state of the second state	3:19
13	<pre>https://www.youtube.com/watch?v=ALZHF5UqnU4&list=TLPQMTkwMTIwMjAhCEMpTX_bwA&index=2 https://www.youtube.com/watch?v=amRT92Kws0o&list=TLPOMTkwMTIwMjAhCEMpTX bwA&index=2</pre>	17/1/2020 14:22:31	31:12
14		17/1/2020 14:22:41	
	https://www.youtube.com/watch?v=amRT92Kws0o&list=TLPQMTkwMTIwMjAhCEMpTX_bwA&index=2	17/1/2020 14:23:41	31:12"
15 17	<pre>https://www.youtube.com/watch?v=7I8E0swNo_U&list=TLPQMTkwMTIwMjAhCEMpTX_bwA&index=3 https://www.youtube.com/watch?v=7I8E0swNo_U&list=TLPOMTkwMTIwMjAhCEMpTX_bwA&index=3</pre>	17/1/2020 14:23:50	14:10"
17		17/1/2020 14:26:22	14:10"
	https://www.youtube.com/watch?v=wfKs3ProM7M&list=TLPQMTkwMTIwMjAhCEMpTX_bwA&index=4	17/1/2020 14:26:30	21:38"
17	https://www.youtube.com/watch?v=wfKs3ProM7M&list=TLPQMTkwMTIwMjAhCEMpTX_bwA&index=4	17/1/2020 14:28:51	21:38"
18	https://www.youtube.com/watch?v=9uftDdaqCis&list=TLPQMTkwMTIwMjAhCEMpTX_bwA&index=5	17/1/2020 14:29:45	11:47"
20	https://www.youtube.com/watch?v=9uftDdaqCis&list=TLPQMTkwMTIwMjAhCEMpTX_bwA&index=5	17/1/2020 14:30:4	
20	https://www.youtube.com/watch?v=IhkS7V1Pqr4&list=TLPQMTkwMTIwMjAhCEMpTX_bwA&index=6	17/1/2020 14:30:52	
20	https://www.youtube.com/watch?v=IhkS7V1Pqr4&list=TLPQMTkwMTIwMjAhCEMpTX_bwA&index=6	17/1/2020 14:31:22	23:32"
22	https://www.youtube.com/watch?v=uihtx26dJMM&list=TLPQMTkwMTIwMjAhCEMpTX_bwA&index=7	17/1/2020 14:31:30	15:0"
22	https://www.youtube.com/watch?v=uihtx26dJMM&list=TLPQMTkwMTIwMjAhCEMpTX_bwA&index=7	17/1/2020 14:32:48	15:0"
24	https://www.youtube.com/watch?v=A-f6OwnAe_U&list=TLPQMTkwMTIwMjAhCEMpTX_bwA&index=8	17/1/2020 14:35:18	16:28"
26	https://www.youtube.com/watch?v=A-f60wnAe_U&list=TLPQMTkwMTIwMjAhCEMpTX_bwA&index=8	17/1/2020 14:35:18	16:28"
28	https://www.youtube.com/watch?v=BdchFh-V3sw&list=TLPQMTkwMTIwMjAhCEMpTX_bwA&index=9	17/1/2020 14:36:13	12:13"
29	https://www.youtube.com/watch?v=BdchFh-V3sw&list=TLPQMTkwMTIwMjAhCEMpTX_bwA&index=9	17/1/2020 14:36:35	12:13"
7	https://www.youtube.com/watch?v=QRhoP1xr7Ss&list=TLPQMTkwMTIwMjAhCEMpTX bwA&index=1	18/1/2020 12:18:28	33:34"
7 1	https://www.youtube.com/watch?v=ORhoP1xr7Ss&list=TLPOMTkwMTIwMjAhCEMpTX_bwA&index=1	18/1/2020 12:18:53	33:34"
9 1	https://www.youtube.com/watch?v=ALZHF5UqnU4&list=TLPQMTkwMTIwMjAhCEMpTX bwA&index=2		3:19"
10	https://www.youtube.com/watch?v=ALZHF5UgnU4&list=TLPOMTkwMTIwMjAhCEMpTX bwA&index=2		3:19"
10	https://www.youtube.com/watch?v=amRT92Kws0o&list=TLPQMTkwMTIwMjAhCEMpTX bwA&index=3	18/1/2020 12:19:26	31:12"
10	https://www.youtube.com/watch?v=amRT92Kws0o&list=TLPOMTkwMTIwMjAhCEMpTX_bwA&index=3	18/1/2020 12:19:57	31:12"
11	https://www.youtube.com/watch?v=7I8E0swNo U&list=TLPQMTkwMTIwMjAhCEMpTX bwA&index=4	18/1/2020 12:20:1	14:10"
14	https://www.youtube.com/watch?v=7I8E0swNo U&list=TLPOMTkwMTIwMiAhCEMpTX bwA&index=4	18/1/2020 12:20:28	14:10"
15	https://www.youtube.com/watch?v=wfKs3ProM7M&list=TLPOMTkwMTIwMjAhCEMpTX_bwA&index=5	18/1/2020 12:20:37	21:38"
15	https://www.youtube.com/watch?v=wfKs3ProM7M&list=TLPOMTkwMTIwMiAhCEMpTX bwA&index=5	18/1/2020 12:21:22	21:38"
17	https://www.youtube.com/watch?v=9uftDdaqCis&list=TLPOMTkwMTIwMjAhCEMpTX bwA&index=6	18/1/2020 12:21:26	11:47"
19	https://www.youtube.com/watch?v=9uftDdagCis&list=TLPOMTkwMTIwMjAhCEMpTX bwA&index=6	18/1/2020 12:21:58	11:47"
19	https://www.youtube.com/watch?v=IhkS7V1Pgr4&list=TLPOMTkwMTIwMjAhCEMpTX_bwA&index=7	18/1/2020 12:22:3	23:32"
21	https://www.youtube.com/watch?v=IhkS7V1Pgr4&list=TLPOMTkwMTIwMjAhCEMpTX_bwA&index=7	18/1/2020 12:22:45	23:32
23	https://www.youtube.com/watch?v=uihtx26dJMM&list=TLPQMTkwMTIwMjAhCEMpTX bwA&index=8	18/1/2020 12:23:33	15:0"
23	https://www.youtube.com/watch?v=uihtx26dJMM&list=TLPQMTkwMTIwMjAhCEMpTX_bwA&index=8	18/1/2020 12:23:33	15:0"
24	https://www.youtube.com/watch?v=A-f60wnAe U&list=TLP0MTkwMTIwMjAhCEMpTX bwA&index=9	18/1/2020 12:23:44	16:28"
	https://www.youtube.com/watch?v=A-f60wnAe_U&list=TLPOMTkwMTIwMjAhCEMpTX_bwA&index=9	18/1/2020 12:23:44	
27			1 10.20
27 28	https://www.youtube.com/watch?v=BdchFh-V3sw&list=TLPOMTkwMTIwMjAhCEMpTX_bwA&index=10		