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## Definitions



Abhishek  
online



Abhishek, omg help!!  
8:44 AM ✓

Please reply asap. I really need your help  
8:44 AM ✓

Hey! I am here! What happened?  
8:44 AM


Boss gave me the client which I have to save from catastrophe. It's a video platform, and they have a major drop in their views, as I understand. And I don't have any clue about video metrics and no idea how to approach this problem!  
8:44 AM ✓


Calm down! It's not rocket science. I have a guide with all the terms and some articles you can read. That will help you to get an idea within an hour  
8:44 AM

Okay, please send it across! I'll read it all now before Elizabeth from that company messages me. Thank you so much!  
8:44 AM ✓

No worries, sending in 2 min!  
8:44 AM

Cool!  
8:44 AM ✓





[Click here to Download Data](#)

## Definitions

### Business Definitions:

**Video view:** A video view is counted when at least 3 seconds of video is streamed

**Ad view:** Ad view is advertisement video view and is counted even if 1 sec of video is watched

**Paid Users:** Users which land on the site or app by clicking on ad from some other website or blog are called paid traffic

**Organic users:** Users who directly come on App or site to consume video is known as organic traffic

**New users:** Users who registered on the platform this month

**Repeat users:** Users who registered on the platform in the previous periods

Important things to keep in mind:

Proportion of new / repeat users and video views has information about platform retention.

Platform with higher number of repeat users has better retention

Column Name	Description	Sample values
subscription_type	Type of subscription	Free, Premium
Platform	Device on which content was consumed	Android, Web, etc.
Number of Video views	Bucket of number of video views	0,1,2,3-5,6-10, etc
Number of ad views	Bucket of number of ad views	0,1,2,3-5,6-10, etc
Month	Month of year	1,2,3, etc.
new_repeat	Users are new or old for respective month	new, repeat
paid_organic	Users acquisition	Paid, Organic
Total users	Number of unique users	Integer
Total video views	Number of unique videos watched by users	Integer

## Materials to study

1/1 point (graded)

Study the additional materials below and mark them after completion. This is necessary to understand the following topics and to pass the test at the end of the module.

☒ Root Cause Analysis

☒ Paid VS Organic Marketing

☒ Unique user VS Unique visit

☒ What Is a Freemium?

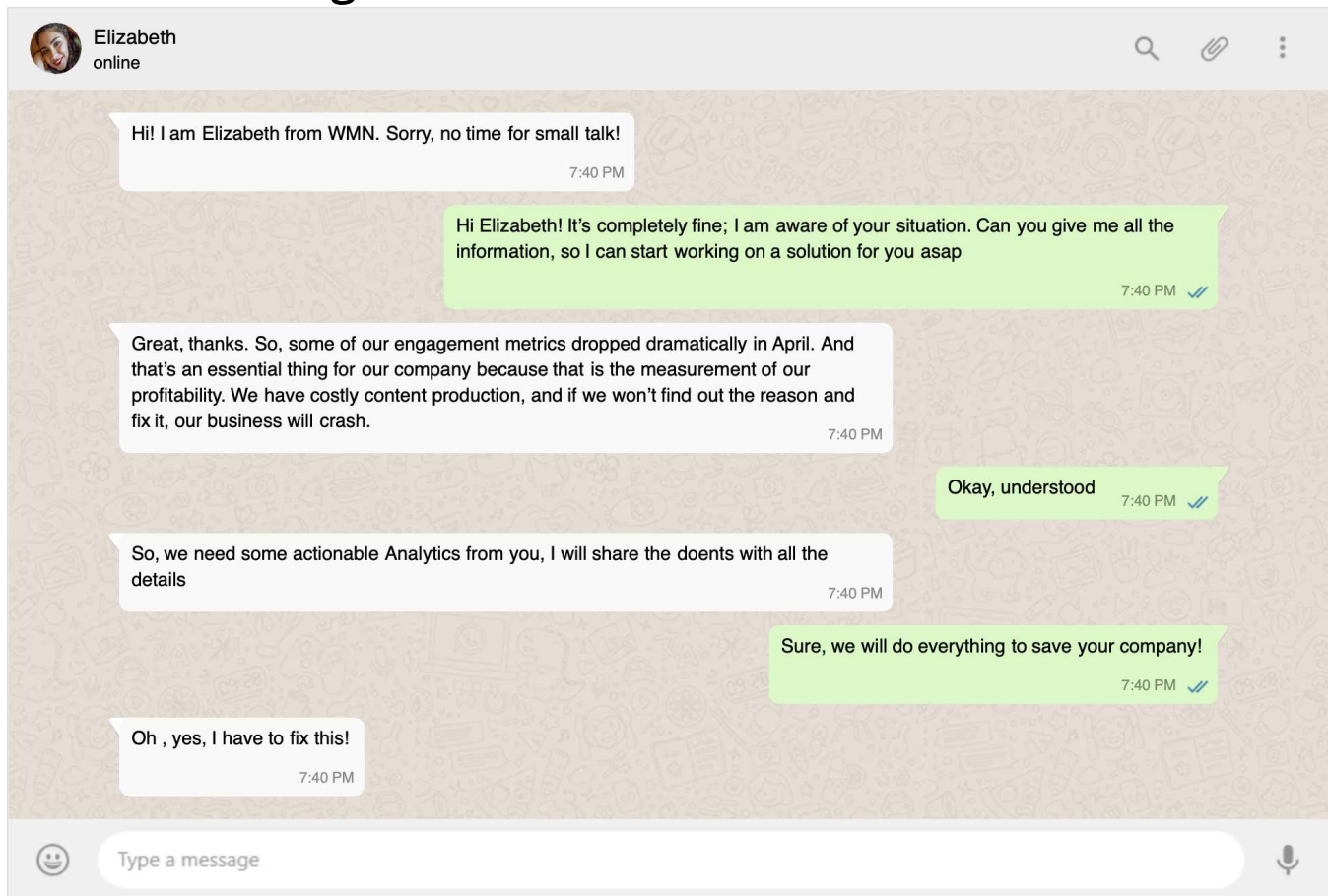


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## Individual assignment



### Dashboard 1 : Analyzing Month on Month change in users and video views

Month on month change is calculated as  $(\text{This month users} - \text{Last month users}) / (\text{Last month users})$

*Note: You can't calculate the MoM change for the first month.*

If the latest month users are higher than the previous month then the sign is positive and it means growth.

If latest month users are less than a previous month then the sign is negative and it means a drop in users.

Subscription type: Free

			% Change M-O-M	
Month	Total Users	Total video views	Users	Video views

Subscription type: Premium

			% Change M-O-M	
Month	Total Users	Total video views	Users	Video views

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## Assignment 1

1/1 point (graded)

One of the important business goals is to convert “Free” users to “Paid” users. Regularly analyzing the change in the number of Free users can give a direct indication of the strategy.

What is the drop among users with the “Free” subscription type from January to February?

**Note: Please submit the answer without a % sign for all the questions**



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## Assignment 2

1/1 point (graded)

Let's also analyze the video views of the "Free" users

What is the change in video views among users with Free subscription type from March to April?



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## Assignment 3

1/1 point (graded)

As much as we want to convert Free users to Paid users. We also don't want to reduce Paid customers. It can be a serious loss to the business.

Let's analyze the change in Premium users from March to April. What is the change?



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## Assignment 4

1/1 point (graded)

Also, let's analyze the change in video views among Premium users. Which month shows poor(negative) results?

☒ January to February

☐ February to March

☐ March to April



Submit

## Dashboard 2 : Analyzing %Change in users and video views by subscription type and marketing channel

**Note:** You can create multiple specific pivot tables as shown below(make sure to use appropriate filters for correct results). In case if you are getting confused by making one larger pivot table with all the categories.

Subscription type: Free

		Organic		% Change M-O-M	
Month	Total Users	Total video views	Users	Video views	

		Paid		% Change M-O-M	
Month	Total Users	Total video views	Users	Video views	

Subscription type: Premium

		Organic		% Change M-O-M	
Month	Total Users	Total video views	Users	Video views	

		Paid		% Change M-O-M	
Month	Total Users	Total video views	Users	Video views	

## Assignment 5

1/1 point (graded)

Let's analyze % change for each combination of categories.



What is % change from February to March among the following type of users?

**Subscription type:** Free

**Acquisition channel:** Organic

**Note: Please submit the answer without a % sign for all the questions**



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## Assignment 6

1/1 point (graded)

What is the % change in video views from February to March for the following users:

What is % change from February to March among the following type of users?

**Subscription type:** Free

**Acquisition channel:** Organic

**Note: Please submit the answer without a % sign for all the questions**



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## Assignment 7

1/1 point (graded)



What is %change from February to March among the following users?

**Subscription type:** Free

**Acquisition channel:** Paid

**Note: Please submit the answer without a % sign for all the questions**



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## Assignment 8

1/1 point (graded)

What is the % change in video views from March to April for the following users?

**Subscription type:** Free

**Acquisition channel:** Paid

**Note: Please submit the answer without a % sign for all the questions**



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**Now, Let's analyze the same for the "Premium" subscription type**

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## Assignment 9

1/1 point (graded)

What is the %change in users from March to April?

**Subscription type:** Premium

**Acquisition channel:** Organic

**Note: Please submit the answer without a % sign for all the questions**



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## Assignment 10

1/1 point (graded)

What is the %change in video views from March to April for the following users:

**Subscription type:** Premium

**Acquisition channel:** Paid

**Note: Please submit the answer without a % sign for all the questions**



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## Dashboard 3 : Analyzing the User behavior(New/Repeat) on a monthly basis

As we are analyzing which month we have got how many new users.

## Questions 1 & 2

2/2 points (graded)

How many new users arrived in April?

Note: Please do not share answers with a comma for example 230,15,286



How many video views were generated by repeated users in March?



## Question 3

1/1 point (graded)

Similarly, let's analyze in what month there were more Paid users than Organic?

☐ January☐ February☒ March☐ April

Submit

## Dashboard 4 : Platform analytics

Considering we have many platforms to consume video content. Platform plays an important role in making any marketing strategy to acquire free users or convert free users into paid users.

For example, if we look at the below (dummy) data,

	New	Repeat	Total
Platform 1	10	90	100
Platform 2	60	50	110
Total	70	140	210

If we have to answer, What is the distribution of the share of users for Platform 1? Then we will take % of rows.

% of Rows	New	Repeat	Total
Platform 1	10.00%	90.00%	100
Platform 2	54.55%	45.45%	110
Total	70	140	210

We can see that Platform 1 has 10% of new users and 90% of repeat users.

Similarly, We can also analyze the share of new users across various platforms. In that case, we need to take % of the column.

% of Columns	New	Repeat	Total
Platform 1	14.29%	64.29%	100
Platform 2	85.71%	35.71%	110
Total	70	140	210

We can see that 14.29% of the new users are from Platform 1 and the rest of the new users are from Platform 2.

## Questions 1 & 2

2/2 points (graded)

Now let's analyze, Which platform has the highest share of video views generated by repeated users compared to new users?

i.e on which platform repeated users (vs new users) generate the highest share of video views

☐ Web

☐ Android

☒ AFS

☐ iOS

☐ HTML5

☐ Android TV

☐ Xiaomi



Which platform has the highest share of new users?

☒ Web

☐ Android

☐ AFS

☐ iOS

☐ HTML5☐ Android TV☐ Xiaomi



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## How to work in groups

### Why group task?

Apart from the technical expertise, you have to focus on your soft skills too.

- Build Team Player skills
- Delve with data
- Time management
- Different ideas but a common conclusion
- Communication & Presentation skills

### Guidelines:

- A group must choose a leader and a name
- The leader is responsible for organizing the work of the group
- The group's goal is to prepare a presentation for 7 minutes covering 2 task
- Before the presentation, it is necessary to split the solution among the group members
- During the Review session, each member of the group must perform his/her part

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**Task 1.** Root cause analysis as to why the drop was observed in the month of April 2020 with respect to March 2020?

**Hint:** Lockdown was announced on 25th March 2020, which impacted the shooting of episodes of free content



**Hint 2:** Identify where most of the paid traffic is coming. Check for engagement metrics such as Video views per user by the platform to understand which are our strong platforms.

**Hint 3:** Root cause analysis is done by checking user drops across various data cuts such as Platform, subscription type, Paid organic etc. Once it is identified where the major drop is coming from, interpret the data as to why it must be happening. Use all 4 months of data to check the trend.

**Hint 4:** The marketing budget is usually spent by the end of the quarter. This results in very high paid traffic in the month of March, June, September and December.

**Task 2.** Analyze the data and come up with recommendations for the marketing plan. E.g. Which devices should be targeted? Why?

**Hint:** You can use metric average Video views per user. It is calculated as total video views/total users. Compare overall average video views per user with platform level average video views per user