

Marketing Analytics Assignment

FOR:

[MS JOANNE FOO]
[MODULE LECTURER]
[NANYANG POLYTECHNIC]

BY:

[TEY JIA YING]
[202704D]
[STUDENT]
[NANYANG POLYTECHNIC]

[26 May 2021]

Table of Contents

1. Introduction	4
2. Primary Data Collection	4
2.1 Designing Questionnaire.....	4
2.2 Primary Data Survey Results	5
2.3 Primary Data Analysis and Insights	6
2.3.1 Overall Analysis	6
2.3.1.1 Popularity of Video Conferencing Tools	6
2.3.1.2 Distribution of Video Conferencing Tools by Age Groups Analysis.....	6
2.3.2 Analysis based on Age Group.....	7
2.3.2.1 Analysis of Age Group from 15 to 25	7
2.3.2.1.1 Video Conferencing Tool Usage Frequency	7
2.3.2.1.2 Customer Satisfaction Level	8
2.3.2.1.3 Causes of Usage Frequency and Customer Satisfaction Level	9
2.3.2.2 Analysis of Age Group 15 to 25	13
2.3.2.2.1 Video Conferencing Tool Usage Frequency	13
2.3.2.2.2 Customer Satisfaction Level	13
2.3.2.2.3 Causes of Usage Frequency and Customer Satisfaction Level	14
2.3.2.3 Analysis of Age Group 36 to 45	15
2.3.2.3.1 Video Conferencing Tool Usage Frequency	15
2.3.2.3.2 Customer Satisfaction Level	16
2.3.2.3.3 Causes of Usage Frequency and Customer Satisfaction Level	17
2.3.2.4 Analysis of Age group above 45.....	20
2.3.2.4.1 Video Conferencing Tool Usage Frequency	20
2.3.2.4.2 Customer Satisfaction Level	21
2.3.2.4.3 Causes of Usage Frequency and Customer Satisfaction Level	22
3. Secondary Data Research	23
3.1 Rising Usage of video conferencing tools	23
3.2 Benefits of Video Conferencing tools	23
3.3 Challenges of using Video Conferencing Tool	24
3.4 Different conferencing tools by Google platform	25
3.5 Profitable Industries and Regions	26
3.5.1 Regional Level	26
3.5.2 Industrial Level	26
3.5.2.1 Education Industry	27

3.5.2.2	Accounting and Finance Industry	27
4.	Customer Segmentation	28
5.	Customer journey map	30
6.	Suggestion.....	31
6.1	Improving Google Meet	31
6.1.1	Overall Strategy: Integration of Features from other video conferencing tools to Google Meet	31
6.1.2	To attract Customer Segment 1: Integrate Zoom's and Discord's features with Google Meet (Free Version)	31
6.1.2.1	Social Mode: Features to be incorporated from Discord	31
6.1.2.2	School mode: Features to be incorporated from Zoom	32
6.1.2.3	Problems of Google Meet that needs to be resolved	32
6.1.2.4	Features of Google Meet that should be advertised more	32
6.1.3	To attract Customer Segment 2: Integrate Microsoft Teams' features with Google Meet Workspace and Essential	33
6.1.3.1	Features to be integrated from Microsoft Teams	33

1. Introduction

As COVID-19 pandemic has hit the country borders recently, there has been an increasing emergence of using video-conferencing tools such as Zoom, Skype, Microsoft Teams, and Google Meet. Due to the increasing demand of the online communication, many companies have developed their own platforms, which are geared towards various purposes and audiences. The video conferencing industry has seen strong competition, causing companies to constantly upgrade their products to attract more buyers. As a business analyst hired by Google, I have done a proposal on how Google can assess and relook at the use of Google platforms to facilitate online discussions and meetings. As a result of the data analysis, both primary and secondary data, I have determined the profitable customer segment Google can target to drive more sales.

2. Primary Data Collection

2.1 Designing Questionnaire

Number of questions: 10 questions.

Tools used for Survey: Google Forms

For my questionnaire, I decided to design a total of 10 questions to ask people who are currently using video conferencing service. My intention is to understand more about how they feel about the services. These are the questions designed and the rationale of the questions.

Number	Question	Rationale of the question
1	What is your age group?	Based on the age group, we can know the demographic of people from different age groups and get a good grasp of their profile such as the industries they are in. Through this analysis, we can know the relation between the age groups and how they affect their choices and mindsets when it comes to video conferencing tools. It can also help in my analysis when relating to their psychology needs such as their preferences, interest and needs of the video conferencing tool.
2	Are you a student or a working adult?	This question allows me to analyse if their occupational status would affect their choices and mindsets. Also, it plays a part in the video conferencing tools used.
3	If you are a working adult, what is your occupation?	This question allows me to analyse on how the occupational type affects the choices they make based on their industries and occupations.
4	What is the video conferencing service you use most of the time?	This question allows me to know which current tool they are using. Also, it allows me to question further in the later stage based on the choices that they had made.
5	How often do you use the video conferencing service?	This question allows me to know their frequency of using a video conferencing tool. Also, it allows me to analyse and relate further to their mindset when they answer the subsequent questions. (For example, if they are not a frequent user, some features or functions may not matter to them as it may not affect their convenience on a regular basis.)
6	How do you feel about the current video conferencing	This question allows me to find out if they are satisfied with the current tools and would let me have a rough

	service you are using?	gauge of which tools bring the most customer satisfaction. From there, Google Meet could use that company or brand as a gauge to improve on their product and services.
7	What is/are important to you in video conferencing services?	<p>This question allows me to have a gauge on their priorities and what feature(s)/service(s) they look out for the most when it comes to using video conferencing tools.</p> <p>Also, by analysing this in relation to age group and occupation would allow me to know how their demographics affects the differing priorities that different people may have.</p> <p>This could help to provide suggestions on how Google meet can have more personalized marketing efforts targeted towards people of different profiles and their differing priorities.</p>
8	Given the video conferencing tool you have chosen, what features (Example, higher time limit, Participant limit) do you like about it? Why?	<p>By having them answer this question with more than one answers, we would know which features attract which age groups of the customers who are satisfied with the tool that they are using.</p> <p>Google would be able to investigate those tools that have impressive features and may consider including these features that they lack of to improve and attract more customers.</p>
9	Given the video conferencing tool you have chosen, what do you think you are not satisfied with and why?	<p>This question allows me to find out the relation to their age group and their preference of the video conferencing tool. With this, it would allow me to know the reason that affects their dissatisfaction.</p> <p>By analysing the customers' dissatisfaction, we would know what other tools may be lacking and how Google can make use of this to gain a competitive advantage of the market.</p> <p>Also, Google could make use of this analysis to find out what is lacking in their own products and improve it to a higher standard.</p>
10	Any other features do you think you want from the service but are not existing in the current video conferencing tool you are using?	<p>This question allows Google to know what people may be interested in seeing. This would be able to expand outside the realm of social norms of video conferencing tools.</p> <p>This would allow Google to invert their current service and bring it to a higher level than would be more impressive to consumers.</p>

Table 1: Questionnaire and its rationale

2.2 Primary Data Survey Results

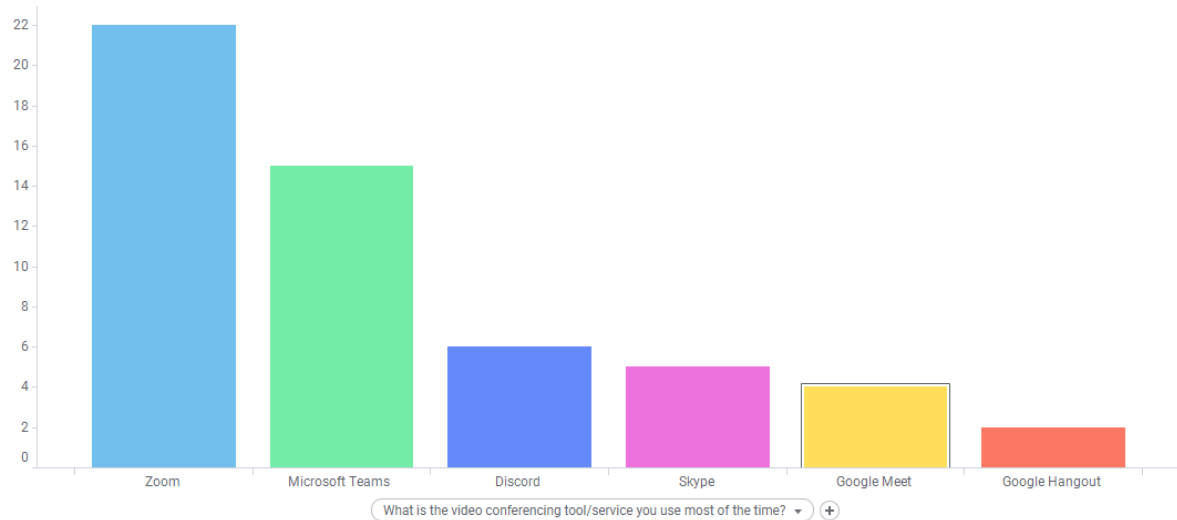
Total Responses Gathered: 52 responses

2.3 Primary Data Analysis and Insights

2.3.1 Overall Analysis

2.3.1.1 Popularity of Video Conferencing Tools

From the overall analysis, we can see that the most popular video conferencing tool is Zoom, followed by Microsoft Teams, Discord, Skype, Google Meet, and lastly Google Hangouts.



Graph 1: Count of Video Conferencing Tools used by every age group

2.3.1.2 Distribution of Video Conferencing Tools by Age Groups Analysis

From the different age groups, we can see which age group used the video conferencing tool the most and the reason behind it based on different areas of analysis. Through this, we would know what type of customer segments we can formulate based on their demographics and how this affects their lifestyle's habits. This would in turn relate what type of tools they would use.

Age Group/ Ranking	1st	2nd	3rd	4th
15 to 25	Zoom	Discord	Google Meet	Microsoft Teams
26 to 35	Zoom	Google Hangout	Microsoft Teams	-
36 to 45	Microsoft Teams	Zoom	Skype	
Above 45	Microsoft Teams	Skype	Zoom	-

Table 2: Rankings of Video Conferencing Tools by Age Group



Graph 2: Distribution of video conferencing among all Age Group

Zoom is the most popular video conferencing tool among all age groups as it appeared in the top two rankings for three of the age groups. This may be due to the fact that Zoom is commonly used by schools and corporate workplaces.

Interestingly, Discord placed second in the rankings between the ages of 15 to 25 years old while it did not appear in other older age groups. However, Discord is not a professional video conferencing tool that any school or workplace would opt for. This may suggest that Discord is a tool that young people are genuinely interested in using outside of school or work hours. Hence, Discord is another popular option among young people.

Google Meet ranked as third between the ages of 15 to 25 years old and it did not appear in other age groups. This shows that older people or the workplaces may not be inclined to use Google Meet as a video conferencing platform to conduct their meetings. We may assume that Google Meet is mostly used by young people in a school setting as this group who may be in their secondary and tertiary education requested by their school to use Google Meet.

Google Hangout which ranked second was used by respondents between the ages of 25 to 35 years old. This shows that millennials may use Google Hangout more.

Microsoft Teams is a popular tool among older age groups, which are, the ages of 36 to 45 and above the ages of 45. Also, it ranked first in these two age groups.

Skype is the least popular tool as it ranked third and second between the ages of 25 to 35 years old and above the ages of 45 respectively. It did not appear as a tool in two younger age groups.

Note: There may be some assumption in place as it is generally based on the data collected. However, it can still be a good representation of the popularity of video conferencing tools used by different age groups as I tried to collect data from people from different workplaces, companies, and schools.

2.3.2 Analysis based on Age Group

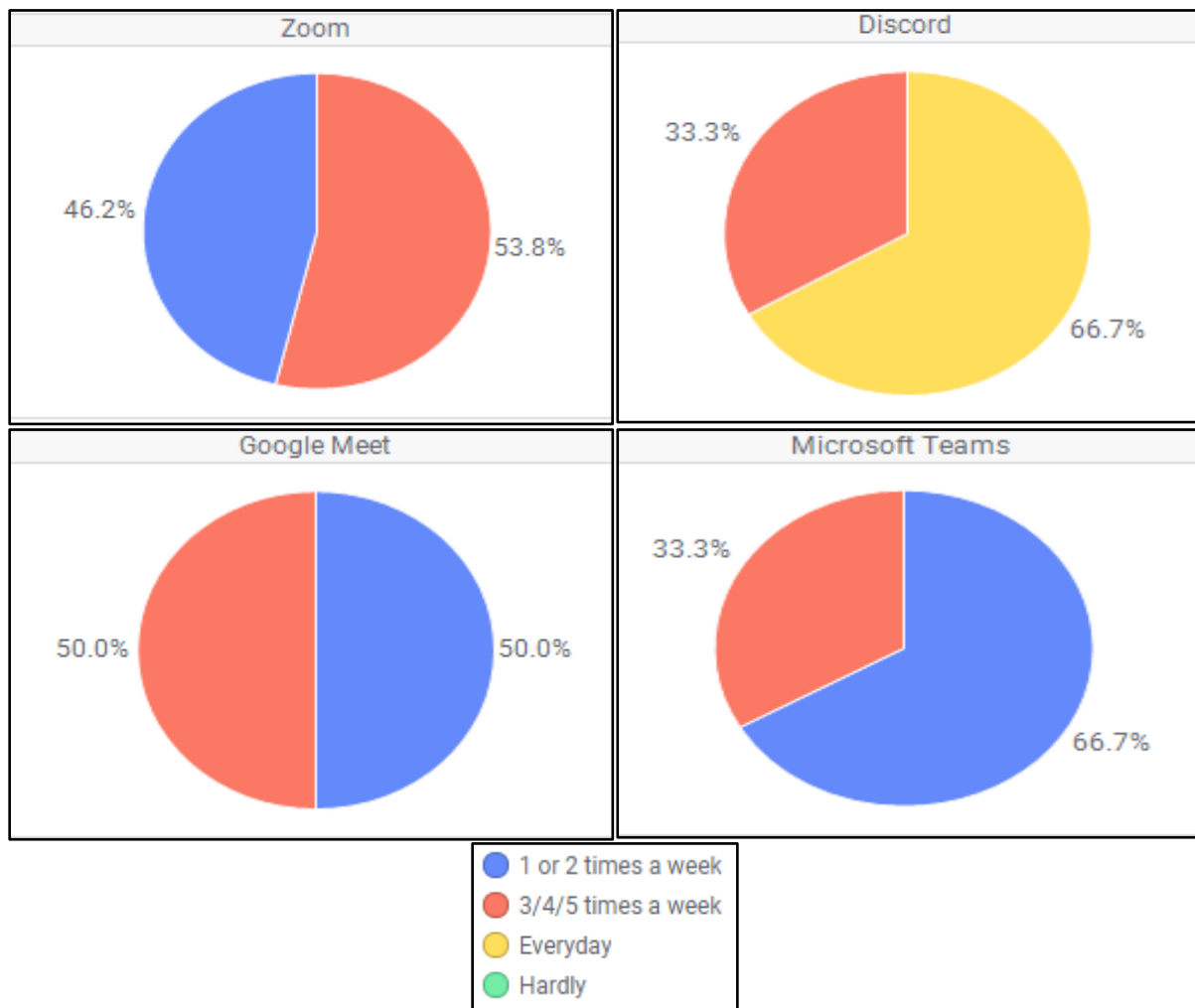
Next, I would be analysing based on individual age groups and the reason behind their preferences and interest based on usage frequency, satisfaction level, good and bad reviews and their expectations of a video conferencing tool. By analysing this, we would have a better understanding of their choices and see what customer segments we can create and meaningful insights that can help Google to improve on.

2.3.2.1 Analysis of Age Group from 15 to 25

2.3.2.1.1 Video Conferencing Tool Usage Frequency

	Everyday	3-5 times a week	1-2 times a week	Hardly
Zoom	-	53.8%	46.2%	-
Discord	66.7%	33.3%	-	-
Google Meet	-	50%	50%	-
Microsoft Teams	-	66.7%	33.3%	-

Table 3: Frequency of Video Conferencing Tools used



Graph 3: Frequency of Video Conferencing Tools used

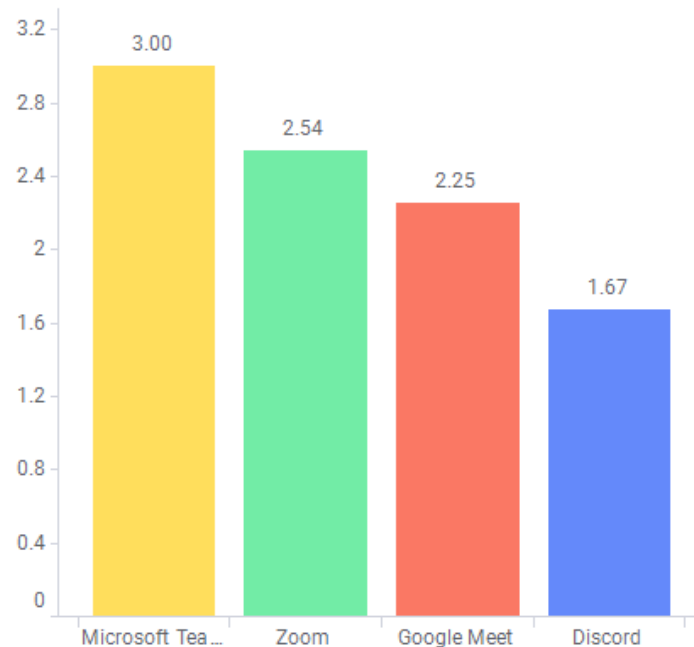
Based on the table above, it shows that Discord has the highest usage frequency as its users use Discord daily and the rest of the users use it more than two days per week. This is an interesting sight that we could take into consideration for further analysis at the later stage.

As for the rest of the video conferencing platforms, usage frequency is between 1-2 times and 3-5 times a week where there is around 50% to 60% for frequency of 3-5 times a week and 30% to 40% for frequency 1-2 times a week.

2.3.2.1.2 Customer Satisfaction Level

Video Conferencing Tool	Average Customer Satisfaction Level
Discord	1.67
Google Meet	2.25
Microsoft Teams	3.00
Zoom	2.54

Table 4: Average Satisfaction Level across all Video Conferencing Tools'



Graph 4: Average Satisfaction Level across all Video Conferencing Tools

*Note: The lower the score, the higher the satisfaction level (1-Very Satisfied, 5-Very Unsatisfied)

1: Very Satisfied, 2-Satisfied, 3-Neutral, 4 -Unsatisfied, 5-Very unsatisfied

Benchmark for satisfaction Level: 1-2

From the table, we can see that Discord has the highest customer satisfaction level, followed by Google Meet, Zoom then Microsoft Teams. This could be a supporting evidence to the high usage frequency of Discord as its users are satisfied with the product and would want to use it frequently.

As for Microsoft Teams, there is a contradiction to its usage frequency (66.7% uses 3-5 times a week) as its customer satisfaction level is the lowest out of all. Its users give it a 3.00 which means "neutral" feeling towards the product. This is a very conflicting analysis as the customer still uses the product quite often when they do not express much satisfaction towards it.

For Google Meet and Zoom, there is also a small contradiction to its usage frequency as even though the customers are satisfied with their service, there is still 40% to 50% that uses it 1-2 times per week.

Next, I would be further analysing the reason behind the correlation of customer satisfaction level and usage frequency in the further analysis.

2.3.2.1.3 Causes of Usage Frequency and Customer Satisfaction Level

Importance of the features

Feature	Raw Count/ Number of Occurrence
Security	15
Availability on Operating Systems (Example, Android, macOS, IOS, Websites and etc)	15
Multiple features (Example, Screen Sharing, recording and etc)	20
Ease of Use	23

Table 5: Feature Importance of a Video Conferencing Tool

From this table of feature importance, we can see that Ease of Use is the most important to the ages of 15 to 25 years old, followed by multiple features, security, and availability on Operating Systems. This would mean that they expect the video conferencing tool to be user-friendly, effective, efficient, easy to toggle and configure with. They would also want a tool with multiple features that can fulfil their needs and make it more usable in many situations. As for Security and availability, it is still good to have, however, they may not view it as important. Hence, the focus should be on increasing usability and improving and inventing more features to fulfil this age group's expectations.



Preferences, Dislikes and Purpose of Usage

	What do they like?	What do they dislike?	What do they expect?	Additional Remarks
Discord	1. Music bot-can play music without the trouble of opening tabs from external sources, can stream music together. 2. Live streaming of games and movies 3. Easy multi-tasking of live streaming of projects/movies/games while video calling and texting/ sending documents in the Discord Server 4. Very nice UI	Nothing Unsatisfied about Discord	No higher expectations of Discord	Purpose of Discord is for social activity- young people to connect with their friends. Discord allows for streaming a wide a variety of music, movies, and projects.
Google Meet	1. Easy and simple UI. 2. Can connect to google calendar.	1. UI too simplistic. 2. Lacking functions, not as many features.	1. Can be similar to zoom settings, having more features such as reactions hand ups features and audio settings.	Seems like users only use Google Meet for school purposes that was requested by their teachers and not out of their genuine interest. Users may think Google Meet is too simplistic and may not have multiple features.

Microsoft Teams	1.Can form separate private chats with group mates while doing group works, ensuring a common platform to track group's work progress. In this way, work can be done efficiently.	1. Hard UI to navigate. 2.No notifications of unexpected calls incoming (Some meetings are surprised calls so you must be ready 15 min before).	1.Cross-platform conference	Seems like users uses Microsoft Teams for school purposes only
Zoom	1.Simple and professional user interface. 2.Easy Screen sharing. 3.Nice gallery view for everyone to adjust easily based on who they want to see 4.Nice filters and background for privacy	1. 40 minutes time limit is too short and have the trouble of re-joining when time is up.	1. Have a higher time limit. 2.Have a virtual whiteboard/sketch tool. 3.Have lower data consumption.	Zoom is also used for school purposes. Seems like Zoom has a high ease of use and nice user interface. The only problem with Zoom is that there is short time limit of 40 minutes

Table 6: Age Group's Perception of Video Conferencing Tool

Word Cloud based on different video conferencing tools

Discord	
Google Meet	

Microsoft Teams	
Zoom	

Table 7: Word Cloud of Age Group's Perception of Video Conferencing Tool

From the table and graph, we can see that Discord is the only platform that is used by students for their own social activity and out of their own interest. Meanwhile, Zoom, Microsoft Teams, and Google Meet are used for schooling purposes.

Based on the feature importance table, young people view ease of use and multiple functions as the top priority in using a video conferencing tool. Therefore, Discord has the highest usage frequency and customer satisfaction level as it suits the needs of young people. Based on the analysis, it brings in the best of both worlds, allowing them to use the tool for school and their own purpose. It allows them to socialize through interactive functions and features such as live streaming of games and music while being able to video call and text through the different channels on the server at the same time. This would maximize their efficiency and effectiveness when socializing or doing group projects on Discord. Also, it has a very interactive and nice user interface which successfully catches the attention of young people.

As for Google Meet, it meets the need for ease of use due to its simplistic user interface. However, some of its users have feedback that the user interface may not appear professional for school settings in comparison to Zoom. Another point is that Google Meet does not meet the needs of multiple functions as it may not have features such as reaction tools like Zoom. Overall, users are satisfied with the ease of use. Hence, its customer satisfaction level is ranked at 2 but not 1.

For Zoom, it has quite a lot of positive reviews about the ease of use and multiple features. There is only a bad review on the short time limit of 40 minutes which is not enough to hold a meeting. An interesting catch is that even though Zoom is used for school purposes, it is still likable by its users. This is because it meets the needs of its users.

As for Microsoft Teams, it does not meet both the needs of ease of use and multiple features. Hence, it is self-explanatory why it has the lowest customer satisfaction level.

The usage frequency of Google Meet, Zoom, and Microsoft Teams, is around the same where there is 50% to 60% of people using it 3-5 times a week as most of its users use it for school purposes and

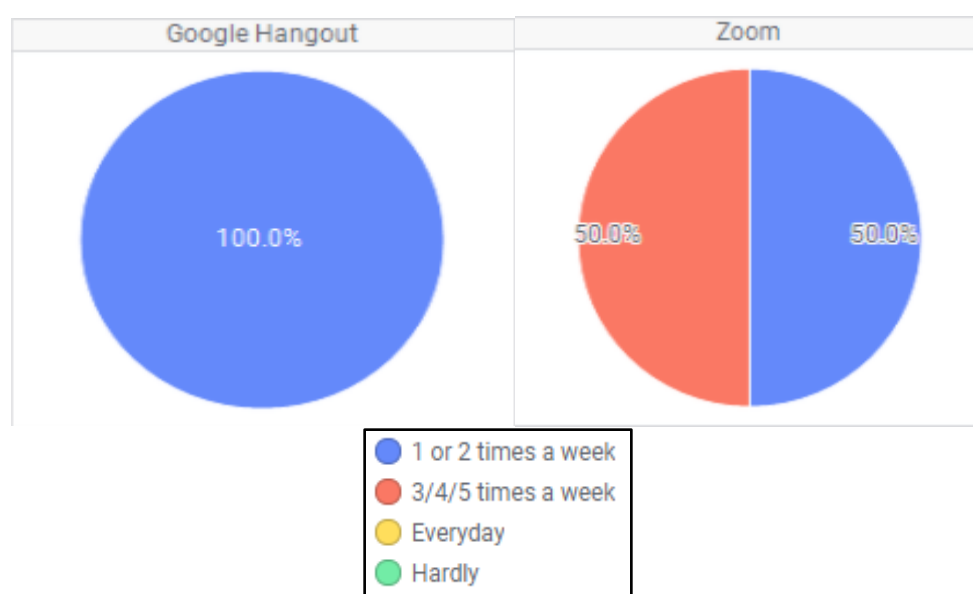
teacher's requirements. Hence, they use it for home-based learning only. This could be something that Google can take into consideration on how to increase its usage frequency. Reference could be taken from Discord features and user interface.

2.3.2.2 Analysis of Age Group 15 to 25

2.3.2.2.1 Video Conferencing Tool Usage Frequency

Tool/ Frequency	Everyday	3-5 times a week	1-2 times a week	Hardly
Zoom	-	50%	50%	-
Google Hangout	-	100%	-	-

Table 8: Frequency of Video Conferencing Tools used



Graph 5: Frequency of Video Conferencing Tools used

Based on the table above, it shows that Zoom users have a higher usage frequency as it is the only tool with users that uses it 3-5 times a week.

As for the rest of the video conferencing platforms, usage frequency is 1-2 times a week.

2.3.2.2.2 Customer Satisfaction Level

Video Conferencing Tool	Average Customer Satisfaction Level
Zoom	1.50
Google Hangout	4.00

Table 9: Average Satisfaction Level across all Video Conferencing Tools

*Note: The lower the score, the higher the satisfaction level (1-Very Satisfied, 5-Very Unsatisfied)

1: Very Satisfied, 2-Satisfied, 3-Neutral, 4 -Unsatisfied, 5-Very unsatisfied

Benchmark for satisfaction Level: 1-2

From the Table and Graph, we can see that Zoom has the highest customer satisfaction level, followed by Google Hangout and Microsoft Teams. This would be supporting evidence to the high usage frequency of Zoom as its users are satisfied with the product and would want to use it frequently.

As for Microsoft Teams and Google Hangout, the customer satisfaction level of 4 (unsatisfied) explains the usage frequency where 100% of their users use the tool only 1-2 times a week.

Next, I would be further analysing the reason behind the correlation of customer satisfaction level and usage frequency in the further analysis.

2.3.2.2.3 Causes of Usage Frequency and Customer Satisfaction Level

Importance of Features

Feature	Raw Count/ Number of Occurrence
Security	3
Availability on Operating Systems (Example, Android, macOS, IOS and Websites)	3
Multiple features (Example, Screen sharing, recording)	7
Ease of Use	5

Table 10: Feature Importance of a Video Conferencing Tool

From this table of feature importance, we can see that Multiple features is the most important to the ages of 26 to 35 years old, followed by Ease of Use, Security and Availability on Operating Systems. This would mean that they expect the video conferencing tool to be a tool with Multiple features that can fulfil their needs such that it can increase the usability in many situations. As for Security and Availability on Operating Systems, it is still good to have. However, they may not view it as important. Hence, the focus should be on increasing usability and improving and creating more features to fulfil this age group's expectations.

Preferences, Dislikes, and Purpose of Usage

	What do they like?	What do they not like?	What do they expect?	Additional Remarks
Zoom	1.Easy User Interface 2.Quick invite feature 3.Easy to configure gallery view	1.Low time limit	1.Lower price of premium subscription	Zoom users are particularly from Sales and Teaching industry Users requested a lower pricing subscription as most of them need to host meetings which requires more time limit (need to buy a package).

Google Hangout	1.Convenience of Arranging meeting through casual texting 2.Animated GIFs and emojis	1.No message tracking 2.Low participant limit of 25 3.UI too simplistic	(Nothing in particular)	Google Hangout users are particularly from Sales industry such as Sales Manager and Financial Advisor. They host meetings more instead of joining. We can probably assume that for company meetings they may need a higher participant limit.
-----------------------	---	---	-------------------------	--

Table 11: Age Group's Perception of Video Conferencing Tool

Word Cloud

Zoom	Google Meet

Table 12: Word Cloud of Age Group's Perception of Video Conferencing Tool

Based on the feature importance table, this age group views multiple functions as the top priority in using a video conferencing tool, which explains that it has the highest usage frequency and customer satisfaction level for Zoom as it suits the needs of this age group. However, there is also some feedback on the high pricing of the premium subscription and low participant limit. This can be a consideration Google can focus on its own product so that it can possibly attract other consumers.

As for Google Hangouts, it meets the needs for multiple features. However, there is still a low customer satisfaction level as this app may not be suitable for some business settings. Based on the analysis, it seems like people use it for corporate stuff. The users are found to be particularly from the Sales industry where most have to host meetings for clients or internal company meetings. In some situations where there may be a lot of participants. Hence, Google Hangouts may not be the best choice when it comes to some business meetings or settings as it has a low participant limit of 25 and the UI may be not as professional.

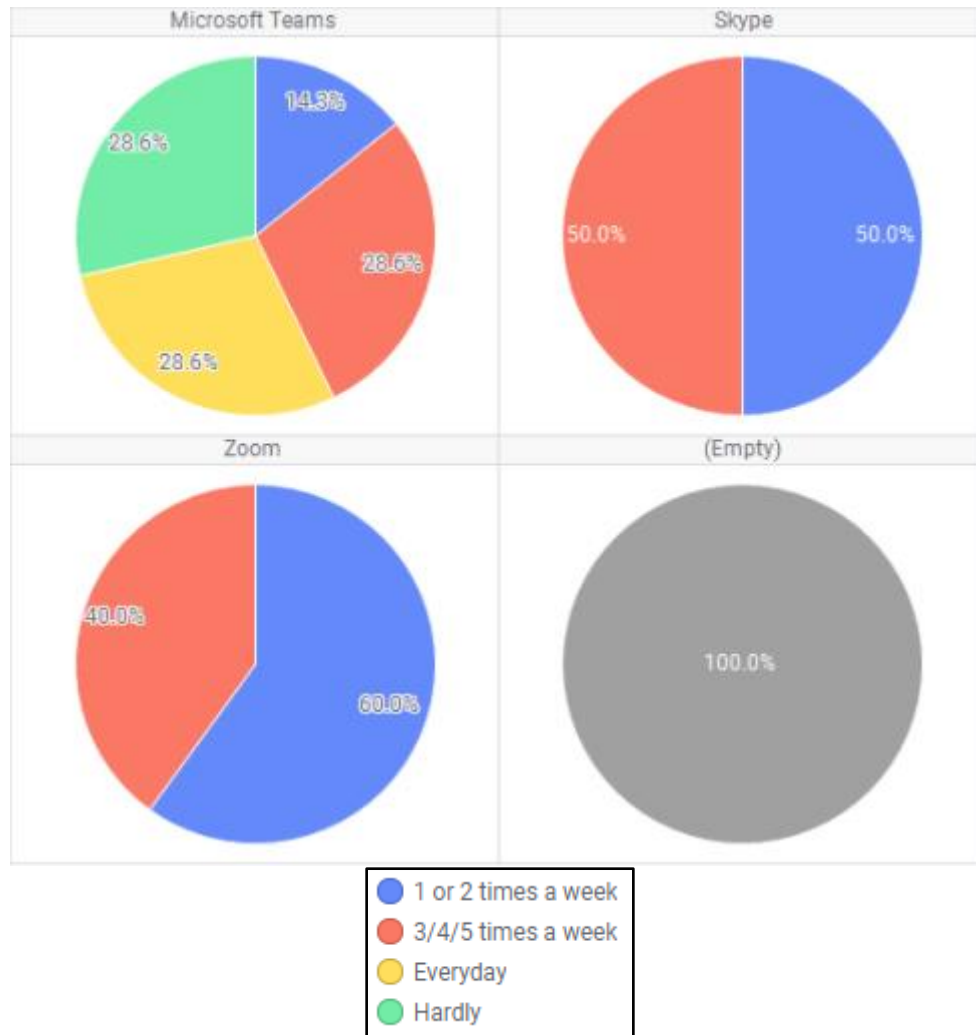
2.3.2.3 Analysis of Age Group 36 to 45

2.3.2.3.1 Video Conferencing Tool Usage Frequency

Tools/ Frequency	Everyday	3-5 times a week	1-2 times a week	Hardly
Zoom	-	40%	60%	-

Microsoft Teams	28.6%	28.6%	14.3%	28.6%
Skype	-	50%	50%	-

Table 13: Frequency of Video Conferencing Tools used



Graph 6: Frequency of Video Conferencing Tools used

Based on the table above, it shows that Microsoft Teams have quite a similar percentage of 14% to 28% across all the frequency periods. As for Zoom and Skype, around 40% to 50% of their users use it 3-5 times a week.

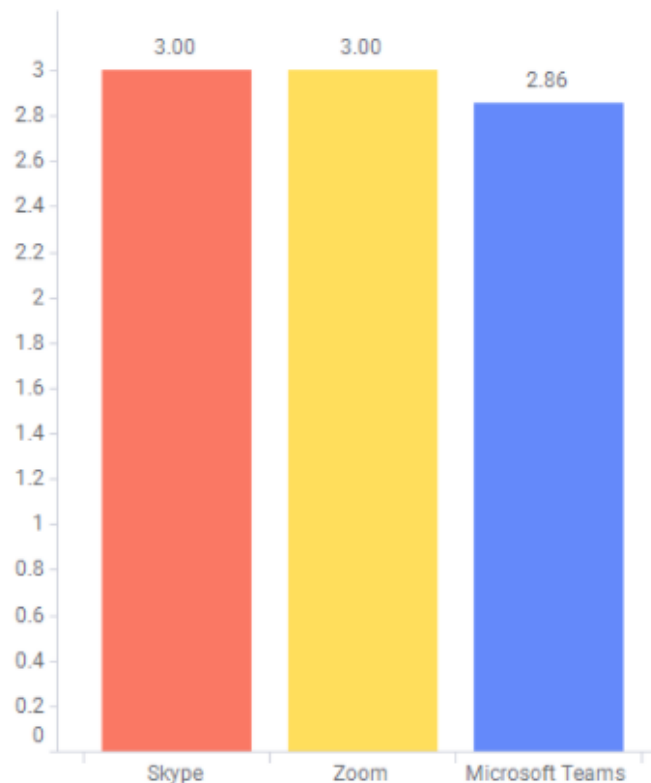
In general, Microsoft Teams is seen to have the highest usage frequency as around 56% of its users use the service either daily or 3-5 times a week.

2.3.2.3.2 Customer Satisfaction Level

Video Conferencing Tool	Average Customer Satisfaction Level
Zoom	3.00

Microsoft Teams	2.86
Skype	3.00

Table 14: Average Satisfaction Level across all Video Conferencing Tools



Graph 7: Average Satisfaction Level across all Video Conferencing Tools

*Note: The lower the score, the higher the satisfaction level (1-Very Satisfied, 5-Very Unsatisfied)

1: Very Satisfied, 2-Satisfied, 3-Neutral, 4 -Unsatisfied, 5-Very unsatisfied

Benchmark for satisfaction Level: 1-2

From the table above, we can see that Microsoft Teams has the highest customer satisfaction level which explains its high usage frequency, where 28.6% of its users use the service daily.

As for Zoom and Skype, both have the same customer satisfaction level of 3.00 which means its users have a neutral stand towards their services. This may also explain why both their users have around the same usage frequency.

Next, I would be further analysing the reason behind the correlation of customer satisfaction level and usage frequency in the further analysis based on the causes of it.

2.3.2.3.3 Causes of Usage Frequency and Customer Satisfaction Level

Industry and Occupation

Video Conferencing Tool	Occupation/Industry
Zoom	-Admin -Operation Manager -Teacher

	-Property such as realtor
Microsoft Teams	-Sales -Accountant -Human Resource -Procurement such as Purchasing Agent -Software Engineer -System analyst
Skype	-Engineering -Sales

Table 15: Age Group's General Occupation in relation to Video Conferencing Tool

Importance of the features

Feature	Percentage
Security	71%
Availability on Operating Systems (Example, Android, macOS, IOS and Websites)	28%
Multiple features (Example, Screen sharing, recording)	64%
Ease of Use	85%

Table 16: Features' Importance of a Video Conferencing Tool

Preferences, Dislikes, and Purpose of Usage

	What do they like?	What do they not like?	What do they expect?
Zoom	1.Easy User Interface	1.Low time limit 2.File sharing not as secure	1.Lower price of premium subscription 2.Ability to share screen in more than one breakout room
Microsoft Teams	1.Seamless file search, backup, and collaboration 2.No additional cost for office365 users 3.Helpful chatbots 4.Secure sharing of data	1Poor 3rd part app integration, Confusing UI	1.Having a virtual white board to do presentations
Skype	1.Simplicity of use	1.Exchange of files not secure, especially to external people	(Nothing in particular)

Table 17: Age Group's Perception of Video Conferencing Tool

Word Cloud of different conferencing tool

Zoom	
Microsoft Teams	
Skype	

Table 18: Word Cloud of Age Group's Perception of Video Conferencing Tool

Based on the table of features' importance, we can see that Ease of use and Security is the topmost priority to this age group. This would mean that the video conferencing service must be effective and efficient to use as this age group's users are older and may not be as tech-savvy as the younger age group. Also, many of the users are from industries that require more data and files collaboration over the video conference. Hence, security of their files and data is also important to them.

Based on the preference table, Microsoft Teams seems to have more features that are designated for corporate use such as the seamless sharing of files and collaboration over the call. Also, this age group cares most about security and protecting the confidentiality of the documents. There are also many positive feedbacks about the security of file sharing of Microsoft Teams. This is because Teams

enforces team-wide and organization-wide two-factor authentication, single sign-on through Active Directory, and encryption of data in transit and at rest. Files are stored in SharePoint and are backed by SharePoint encryption, according to <https://docs.microsoft.com/en-us/microsoftteams/security-compliance-overview> . This could be the reason why the users of Microsoft Teams seem to be working in industries that require more confidentiality such as Human Resource. As for ease of use, Microsoft has a helpful chatbot to help users find what they want. This may be a complementary solution for Microsoft Teams confusing UI. Hence, since Microsoft Teams fulfil both security and ease of use needs for this age group, it has the highest customer satisfaction level and usage frequency.

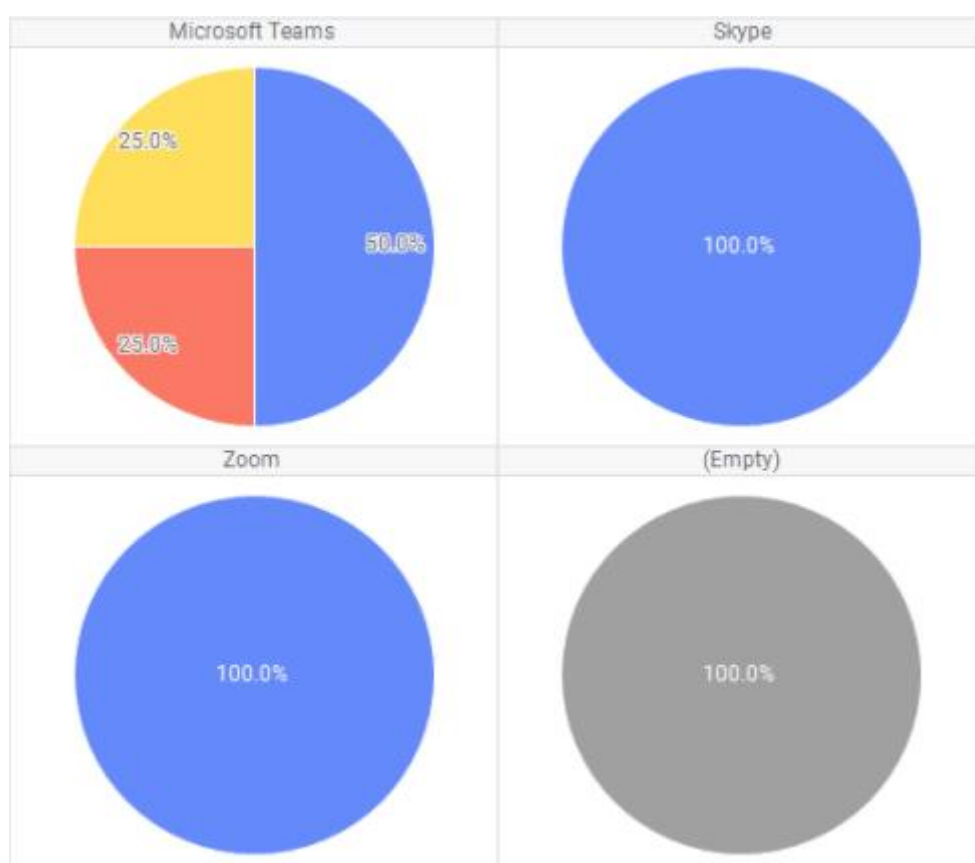
As for Zoom and Skype, it fulfils the need of ease of use as it has an easy and direct user interface. However, it may not fulfil the security need as it is feedbacking that file sharing across Zoom may not be secure. This may be a downside for those working in occupations that require more confidentiality. Hence, this may be the reason for the lower customer satisfaction level and usage frequency of Zoom as compared to Microsoft Teams.

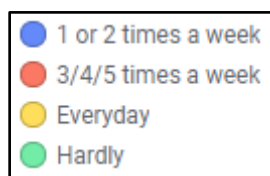
2.3.2.4 Analysis of Age Group above 45

2.3.2.4.1 Video Conferencing Tool Usage Frequency

Tools / Frequency	Everyday	3-5 times a week	1-2 times a week	Hardly
Zoom	-	-	100%	-
Microsoft Teams	-	25%	50%	25%
Skype	-	-	100%	-

Table 19: Frequency of Video Conferencing Tools used





Graph 8: Frequency of Video Conferencing Tools used

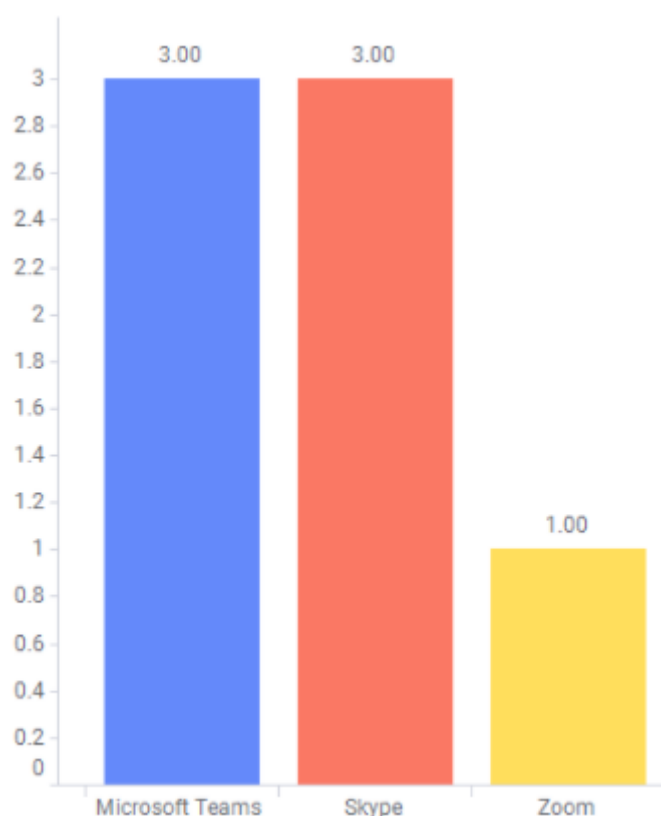
Based on the table above, the usage frequency for this age group is generally lower than other age groups. The average usage frequency is around 1 to 2 times a week.

For Microsoft Teams, it is the only service where 25% of its users use 3/4/5 times a week. Meanwhile for Skype and Zoom, there is lower usage frequency as all their users use the service only 1/2 times a week.

2.3.2.4.2 Customer Satisfaction Level

Video Conferencing Tools	Average Customer Satisfaction Level
Zoom	1.00
Microsoft Teams	3.00
Skype	3.00

Table 20: Average Satisfaction Level across all Video Conferencing Tools



Graph 9: Average Satisfaction Level across all Video Conferencing Tools

*Note: The lower the score, the higher the satisfaction level (1-Very Satisfied, 5-Very Unsatisfied)

1: Very Satisfied, 2-Satisfied, 3-Neutral, 4 -Unsatisfied, 5-Very unsatisfied

Benchmark for satisfaction Level: 1-2

From the Table and Graph, we can see that all the video conferencing tools have quite a fair satisfaction level ranging from 1 to 3, where Zoom has the highest customer satisfaction level of 1.00, followed by Microsoft Teams and Skype.

Next, I would be further analysing the reason behind the correlation of customer satisfaction level and usage frequency in the further analysis based on the causes of it.

2.3.2.4.3 Causes of Usage Frequency and Customer Satisfaction Level

Industry and Occupation

Video Conferencing Tool	Occupation/ Industry
Zoom	-Admin
Microsoft Teams	-Admin -Engineering and Technician
Skype	-IT

Table 21: Age Group's General Occupation in relation to Video Conferencing Tool

Importance of the features

Feature	Percentage
Security	42%
Availability on Operating Systems (EG Android, macOS, IOS, Websites)	42%
Multiple features (Example, Screen sharing, recording)	57%
Ease of Use	100%

Table 22: Feature Importance of a Video Conferencing Tool

Preferences, Dislikes, and Purpose of Usage

	What do they like?	What do they not like?	What do they expect?
Zoom	1.Easy User Interface 2.Easy to set up	(Nothing)	(Nothing expected)
Microsoft Teams	(Not much positive feedback, most say that it is requested by the company)	1. Confusing UI	(Nothing expected)
Skype	1.Having essential functions	(Nothing)	(Nothing expected)

Table 23: Age Group's Perception of Video Conferencing Tool

****Insufficient text to perform word cloud***

Based on the table of features' importance, we can see that Ease of Use is the top priority to this age group. A possible assumption is that this age group is the oldest and may not be as tech-savvy as other younger age groups. Hence, the video conferencing service must be easy to understand to allow them to use more effectively and smoothly without any troubles.

We can see that Zoom has the most positive feedback from the users as it satisfies the users main need which is ease of use. Zoom is feedbacked to have a simple and easy user interface which is easy for older people to understand and use. This explains why it has the highest customer satisfaction level.

As for Microsoft Teams, most of the users have stated that they are using it because of their company's requirement, and they do not have much positive feedback about the tool. However, there is negative feedback about the confusing UI of Microsoft Teams that does not fulfil this age group need of Ease of use. This explains the low customer satisfaction level of 3.00.

As for Skype, most of the users have feedbacked about the basic functions of screen sharing being good enough. However, there was no feedback about the Ease of Use. Hence, we may assume that the user may not be an active user and may not have many requirements from the app.

In general, people from this age group seem not have much requirement from the video conferencing tool. This may be because they may not be as tech-savvy and are just using it because of company requirements. Because of their age, they may not know too much about technology and do not need it. In addition, some of their occupations are quite simple and may not require many functions such as file sharing and collaboration while video conferencing.

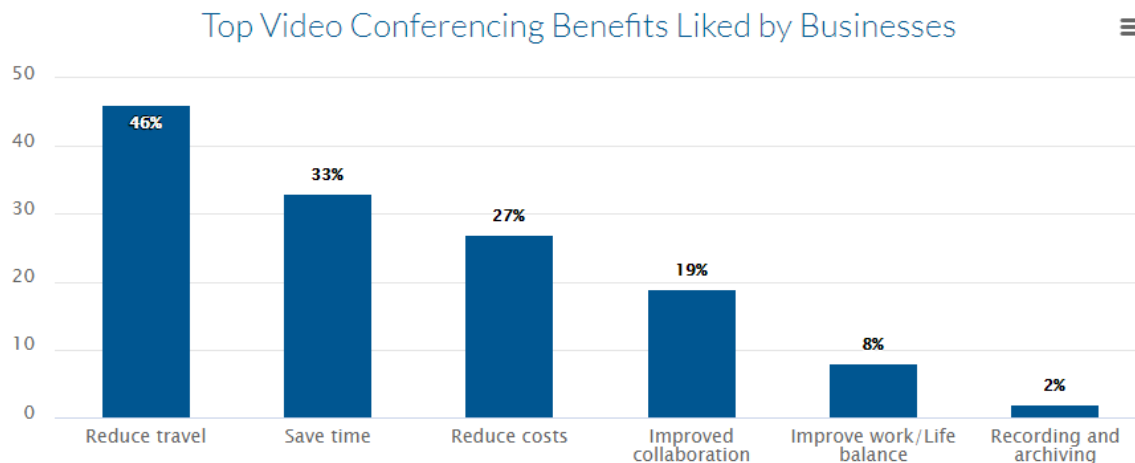
3. Secondary Data Research

3.1 Rising Usage of video conferencing tools

In a bid to ensure business continuity and economic sustainability during the COVID-19 crisis, businesses, schools, and enterprises, especially in highly affected countries, have allowed their employees and students to work or study from home.

According to Financial News Media 2020, web conferencing has become the medium of choice for communication for both business and personal purposes. In fact, major corporate organizations have noted that they do not anticipate going back to how operations and jobs are done before the pandemic (Financial News Media, 2020). According to Twilio Research 2020, 30% of organizations worldwide began using web conferencing solutions for the first time due to COVID-19. This has led to a surge in people using online video conferencing tools when schooling or working from home. Due to the growing number of people working from home, demand for video viewing and downloading online has risen, as has the need for video conferencing, which has increased network traffic and data consumption. It has allowed the video conferencing industry and market to expand and there has been a surge of many video conferencing tools and services such as Zoom, Google Meet, Hangout, Duo, Skype and more.

3.2 Benefits of Video Conferencing tools



Graph 10: Benefits of Video Conferencing Tool

According to research by Frost & Sullivan, it shows that the top 4 benefits of video conferencing is reduced travel followed by saved time, reduced cost, and improved collaboration.

3.3 Challenges of using Video Conferencing Tool



Graph 11: Challenges of using Video Conferencing Tool

According to Tech Radar's research, it shows that there are eight challenges faced when users adopt video conferencing tools. I have summarised it into 5 main challenges as shown in the table below.

Issue	Statistics	Possible Reason
Poor Availability	52% says that meeting rooms are not equipped for video 44% says that meeting rooms with video are always booked	This may be because some companies may not have bought a full package to cater to more employees of the organizations.
Pricey	44% says that it is too costly to make the video conferencing tool available to everyone	This may mean that video conference costs are difficult for the company to afford, especially if there are several

		<p>departments and employees.</p> <p>It may be that the pricing issues of video conferencing services contribute to poor availability of video conferencing tools to all employees at a company.</p>
Technical Limitations	32% says that there is constrained bandwidth	In teleworking situations, too many people may use video conferencing at home, resulting in lag situations and poor resolution.
Self-conscious, unawareness	<p>30% of employees are not comfortable bring on video</p> <p>26% of employees are unaware they have video</p> <p>26% of employees are not interested in using video</p>	Some are unaware and not interested in using video. This may be because many may have a lack of confidence when they are facing the camera, especially in front of their colleagues. Perhaps, this is since they are used to real life interaction where they cannot see their own faces, making it less awkward.

Table 24: Challenges of using Video Conferencing Tool

3.4 Different conferencing tools by Google platform

	Google Meet			Google Hangout	Google Duo
	Google Meet (Free Version)	Google Workspace Essential	Google Workspace enterprise		
Scalability	Large scale	Larger Scale	Larger Scale	Small Scale	Small Scale
Participants Limit	100	160	260	25	32
Maximum meeting Duration	1hr (24 hrs until June 28 2021)	24 hours	24 hours		
Google Drive Storage	15GB per user	100GB per user	Unlimited	-	-
Feature Available	For schools or any small organizations	For large organizations	For larger organizations		Person to person calling, More for Casual calling
Pricing	Free	\$8USD per	Custom	Free	Free

		active users/month			
Availability	Android, iOS, browser	Android, iOS, browser	Android, iOS, browser	Android, iOS, browser	Android, iOS, browser
Security	Basic security with end-to-end encryption	More security (with reminder centre)	Most security with additional functions such as Data Leak Prevention, End-point management, Access Transparency	Basic security with end-to-end encryption	Basic security with end-to-end encryption

Source: <https://apps.google.com/meet/pricing>

Table 25: Comparison of Features between different Google Platform

Google Hangout and Duo are for person to person or smaller groups of videos calling while Google Meet has a free version and for corporate level. Google Workspace Essential and enterprise are for corporate level. However, Google Workspace Enterprise is for larger organizations that require high end security.

3.5 Profitable Industries and Regions

3.5.1 Regional Level

According to Grand View Research, Asia Pacific is expected to emerge as the fastest-growing region over the forecast period. Increasing number of technology- and service-based start-ups in India and China is expected to propel the regional market growth. Strong presence of business and knowledge process outsourcing companies in the region is also expected to be a major factor driving the industry.

3.5.2 Industrial Level

Many different industries have started to incorporate more video conferencing technologies into their sector to adapt to the pandemic situation.

According to Skills Scouter, the Asia Pacific region is said to be one of the fastest-growing regions of the video conferencing industry. Specifically, the education and healthcare sectors are seeing a significant increase in the use of telecommunication networks for interaction between employees and participants.

According to conference technologies, it states that the accounts and finance industry has also started incorporating finance and technology and has started “using video more than ever”. In addition, the digitalization of payments and transactions has been witnessed before COVID-19. Thus, the COVID-19 could result in even more transactions taking place online since the finance and accounting industry stands at the core of any country's economy. As a result of these factors, accounting firms require video conferencing services to facilitate day-to-day operations online instead of their offices, business locations or within the financial institutions.

Hence, for my secondary research I would be focusing on the Education and Banking/Finance industry.

**Exclusion of Healthcare Industry:*

Even though the healthcare industry may be a more lucrative segment for Google to look into, my data are not relevant for the healthcare market as I have no connections to the healthcare industry. Therefore, I will omit the healthcare industry.

3.5.2.1 Education Industry

Target audience:

Students from primary, secondary and junior college/MI students, Students from Institutes of Higher Learning

Context:

According to Straits Times, all schools would have to start full home-based learning from 19 May onwards due to the sharp spike of COVID-19 cases in the community. This applies to all primary, secondary, and junior college students, as well as those from Millennia Institute and special education schools. Institutes of higher learning would also convert more to online classes. Before that, there has been home based learning carried out on and off in some schools due to the pandemic.

This would imply that Home-Based Learning would become an inevitable ongoing trend in Singapore in view of the volatile COVID-19 situation. This would mean that it is a good chance for video conferencing services such as Google Meet to promote its services to schools and students to expand their customer base.

Tool that is currently used by target group: Zoom

According to CNA, instead of Skype, Google Hangouts and Meet, Zoom has been the main video conferencing tool widely used by many schools and institutions to carry out the HBL lessons. Against the likes of Skype and Hangouts, the simplicity of the user interface puts it ahead of the competition. You will not need to search for another Skype ID to connect before a call. Just an email address with a call hyperlink would start the video call.

Hence, it met the needs for schools as it was easy to start up for lessons within seconds as it just boots up with a click on a link. And quality is top notch with high-definition (HD) voice and video capabilities, which reduces occurrences of latency or lag.

The software also includes different functions to track student engagement, attendance, in-meeting data, and more. Its features such as collaborative sharing, polling, text chats, and video breakout rooms enable students to participate actively during class sessions.

Zoom is also interoperable with Learning Management Systems (LMSs) from many educational institutions, such as Moodle, Canvas, Desire2Learn, Sakai, and Blackboard.

Why is this industry profitable?

The education industry relies heavily on video conferencing tools. It was impossible for formal education to continue during the pandemic without web conferencing. This is due to the fact that there is significant sharing and discussion of content, as well as interaction between students and teachers. Interaction and communication are the most important factors in making a lecture or class possible. Hence, with web conferencing technology, students can continue learning during the lockdown while staying in contact with their teachers and classmates.

3.5.2.2 Accounting and Finance Industry

Target Audience:

Working Adults working in Banking and Finance Industry

Context:

In every country, the financial sector plays a key role in the functioning of the economy through intermediation. It is indispensable for a healthy society and thriving economy. According to PWC Singapore, the COVID-19 outbreak has caused consumers, businesses, and people of all walks of life to face severe economic hardship. The situation is evolving quickly with widespread consequences.

Many businesses, banks, and financial institutions have to move a lot of financial and business activities online. The operations of business have to be done through video conferencing services.

Why is this industry profitable?

According to Deloitte's article of 2021 banking and capital markets outlook, even though the economic consequences of the pandemic are not as large as those during the Global Financial Crisis of 2008–10 (GFC), they are still quite significant. Additionally, COVID-19 is changing the global banking and finance industry in a number of ways, bringing new competition into the industry, limiting growth in some traditional product areas, spurring unprecedented innovation, reinforcing the role of financial institutions, and accelerating digitalization on almost every front.

According to Finextra's article, "Video conferencing market during COVID-19", even prior to the current crisis, accounting departments in companies were increasingly adopting video conferencing tools. An estimated 800% growth in the use of such tools has occurred in four years, and 70% of the current workforce works remotely at least one day a week. As a result of the current crisis, we can expect this trend to continue. Even if usage spikes over this time, as it has, employers will be able to conduct meetings in a new way and likely begin to use even more tools after the crisis passes.

This would mean that the accounting and finance industry would continue its usage of video conferencing tools before, during and after the crisis. Hence, focusing on this industry would provide a sustainable source of sales for video conferencing companies.

Nevertheless, the current covid and economic crisis has undoubtedly spurred demand and greater adoption of conferencing tools and brought with it both short-term benefits as well as challenges resulting from increased demand. In this current situation, video conferencing is a tool that will increasingly help companies in shaping their operations in order to be future proof. Despite facing some challenges in providing a better experience free of nagging issues, video conferencing remains a robust, cost-effective means of doing so.

Needs of the target group:

As they are handling confidential and important data, the main concern of this target group is security. As a result, it is crucial to have the appropriate levels of security, privacy, and transparency between the company and its clients, employees, and business partners. To ensure privacy and security, video conferencing tools must use industry-standard security protocols and encryption technologies.

Tools used by this target group:

This target group doesn't use a specific video conferencing tool. (There are no supporting statistics) However, based on research, the best five video conferencing tools that suits this target group is Pexip, Click Meeting, Microsoft Teams, Signal and Wire, according to the five most secure and encrypted video conferencing tools compiled by Windows Report

4. Customer Segmentation

Customer Segment 1:

Target Audience: Students in primary and secondary schools, as well as JC/MI and Institutes of Higher Learning

Age group: 15 to 25

Industry: Education

Video Conferencing Tools used: Zoom, Discord.

Needs: Ease of use, Multiple fun, and interactive features

Reason for choosing customer segment 1:

-Industry is profitable [explained in previous section]

I would be splitting this customer segment into 2 groups. They are student using Zoom and student using Discord. This is because it was found that the students use Zoom for school purpose, and they quite satisfied with the application itself but would prefer Discord for projects and socializing activity as it is a very fun and interactive app for younger people. Both perspectives would come to form quite meaningful insights for Google to take into consideration.

Persona 1:

Jane is a 17-year-old student in Nanyang Polytechnic. She is studying in Information Technology in the School of Information and Technology.

Experience 1: Using Zoom for school

When the COVID-19 pandemic first hit, her school requested her to use the Zoom application for her Home-Based Learning (HBL). Her first experience when using it for her online 1-hour lecture was quite smooth and easy. She only needed to copy-paste a Zoom link sent by her teacher to get access to the online Zoom meeting. When she first used the Zoom interface, she felt it was quite easy to configure as the user interface was simple and professional. The basic buttons, such as the audio and video button, were located at a clear spot where she could easily locate. She also found out there was a reaction emoji feature that allows her to acknowledge her teacher without having to unmute, which can be awkward in a class environment. She also realized there was a feature that allowed her to chat directly with her teacher without having to unmute.

She thought Zoom was easy to use and had multiple features that satisfied her basic needs in a meeting. Thus, she decided to use it to organize her own group projects, meetings, and social activities with her friends. However, soon enough she realized that there was a time limit of 40 minutes which was not enough for her group discussion which needed at least one and a half hour or more. She realized that she needed to get a Zoom Pro package which costs \$149.90 per year in order to have 30hours worth of Zoom timing. This was clearly unaffordable for her as a student.

Experience 2: Using Discord for Personal Use

Recently, Jane's friends introduced a fun web application called Discord. Jane was happy to find out that Discord provides fun and engaging video conferencing solutions also able to serve project-based needs and social interaction between friends. In Discord, Jane can create different servers for different groups of friends. In one server, she can create 2 types of channels- Voice and Text channels. For text channels, she can send different types of documents ranging from links to images. For voice channels, she can choose to audio or video call her group friends. They can share screens and go on live streaming if they are gaming together or streaming movies together. Jane also likes the music bot that can stream music for all of the people on the call when they are studying together and need a calm background music. Jane appreciates Discord's pretty and fun user interface as it is designed in a way that gives off a youthful vibe. Essentially, Jane is content to be able to use it for anything she wants, from setting up group discussions to streaming games to sending documents via Discord.

Customer Segment 2:

Target Audience: Working adults in accounting and finance industry or department.

Age group: 36 to 45

Industry: Accounting and Finance

Video Conferencing Tools used: Microsoft Teams

Needs: Security, Ease of use

Persona 2:

Experience of using Microsoft Teams for work:

Sally is a 44-year-old Accountant cum HR Executive working at HLB Altrede, which is one of the top 15 firms in Singapore. HLB serves over 700 clients, and it strives to deliver top-notch advisory,

compliance, and assurance services. She is under the Business Outsourcing Process department where she does Payroll and Outsourcing services for the client companies.

Microsoft Teams for Work:

When the COVID-19 pandemic hit, her company requested her to use Microsoft Teams. When she was first at the main page of the Microsoft Teams application, she was quite surprised as there were many features and channels on the main page such as activity, chat, teams, meetings, calls and files.

Communication: Meetings and Chat

Next, she was asked to join a meeting and she realised that before entering the meeting it allows her to know the host and attendees of the scheduled meeting. It also showed her who was in the meeting space to have a gauge if she is late or not. She joined the meeting with more than 30 attendees and realised that the presentation was lag and had poor resolution. That annoyed her as it caused a disruption in the smoothness of the presentation. She then realised that Teams was an electron-based app which causes high CPU usage and lag in performance.

There was once she missed an important meeting and she realised that the meeting was recorded with subtitles. There was also a search function to search for her name in the meeting to know the respective tasks she was assigned.

In addition, she realised that there was a feature called chat where there was a group chat and one-on-one chat feature. She wanted to retrieve a document related to the E-payslip processing system and could not remember when she sent it in the chat. There were thousands of chats and replies and she decided to use it for the search function. However, it could only search for one of the content related E-payslip processing system.

File sharing and management: Easy collaboration with security

The best feature she liked was Teams as it was where all the collaboration magic happened. It is currently in 2 Teams- HR Team (department level) and Mark8 project (project level) Team. She liked how every team had a set of channels which allowed her to discuss a particular topic and share relevant files and documents on that channel. Also, recently she is working with external clients on the processing of E-pay slips for that office employees. She wants to send something that is for her own colleagues. Since the channel has her internal colleagues and 3rd party clients, she effectively turns on Team Secure Guest Access to prevent the 3rd party client from seeing some confidential information of her company's staff.

She also discovered that when she uploaded a file to the Account Team's Channel-File section, it would be added to her SharePoint, ensuring compliance with the company's security policies, and preventing data loss. As a result, her confidential data has never been compromised.

She also realised that the structure of the file repository was very confusing. This was because everything that is uploaded to conversations is dumped in the channel root folder. If she tries to organize the files and move them into properly named folders, the file links in the conversations break.

Project Management:

She was also surprised to discover that there were other different features in a channel such as Planning, Power BI, meeting notes and news. She utilized Planner to plan her To-Dos, while Power BI allowed her to connect excel files from other sources to see her department's performance at one glance. There was also a feature to add 3rd party apps to the channel. However, she personally felt that there were many tools on Microsoft Teams which made the UI clouded and confusing and some were unnecessary.

5. Customer journey map

[Attached as .png]

6. Suggestion

Based on the primary, secondary data and customer journey maps, the strategy Google Meet should use is that

6.1 Improving Google Meet

6.1.1 Overall Strategy: Integration of Features from other video conferencing tools to Google Meet

Discord and Zoom are more suitable for Customer Segment 1.

MS Teams is more suitable for Customer Segment 2.

As for Google Meet, the free version of Google Meet is suitable for Customer Segment 1. Meanwhile, Google Workspace essential and Google Enterprise is more suitable for Customer Segment.

Hence, Google Meet (Free Version) can incorporate the features of Discord and Zoom and Google Workspace Essential and Enterprise can incorporate features of Microsoft Teams.

By doing this, Google Meet would be able to expand its customer base to target customers outside of its existing customers (such as customers from Discord, Zoom and Microsoft Teams) and keep its existing customers, especially those with high churn risk.

6.1.2 To attract Customer Segment 1: Integrate Zoom's and Discord's features with Google Meet (Free Version)

Based on the primary data, Discord and Zoom had the highest usage frequency and customer satisfaction in this age group. Hence, we would be incorporating Discord and Zoom features to what is currently lacking in Google Meet. I propose that Google Meet can have 2 modes - School mode and social mode.

6.1.2.1 Social Mode: Features to be integrated from Discord

Based on primary data and the customer journey map, Discord has interesting features that suit the young people's preference which successfully attracts their attention. Most of them use Discord willingly out of their own motive such as social activity instead of school purposes. Hence, Google Meet should incorporate features from Discord to allow users to better socialize and enjoy their time virtually with their friends.

Feature	Reason	Does it meet the needs of these age groups?
Has different type of channels for different purpose - text and voice channel	Allow users to send documents and voice call at the same time	Yes, meets the needs of multiple feature and ease of use
Music bot-can play music without the trouble of opening tabs from external sources, can stream music together.	Allow users to play music from Discord itself without opening external tabs	Yes, meets the needs of multiple feature and ease of use
Live streaming of games and movies while video/voice calling	Allow user to play games and movies at the same time while communicating, discussing, and coordinating through discord	Yes, meets the needs of multiple feature and ease of use

Attractive and trendy UI	Gives off the youthful vibe that will attract young people's attention	Yes, meets the needs of multiple feature
--------------------------	--	--

Table 26: Feature to be integrated from Discord

6.1.2.2 School mode: Features to be incorporated from Zoom

Feature	Reason	Does it meet the needs of these age groups?
Simple and easy UI, Professional for school purpose	Allow user to configure and user to use the tool easily	Yes, meets the needs of ease of use
Reaction feature	Allow user, especially those who are socially awkward to acknowledge teachers' instructions and questions without having to unmute	Yes, meets the needs of multiple features

Table 27: Feature to be integrated from Zoom

6.1.2.3 Problems of Google Meet that needs to be resolved

Google Meet user interface is too simplistic and there are not as many features and functions as Zoom and Discord.

6.1.2.4 Features of Google Meet that should be advertised more

Google Meet should advertise more on the features it offers over its competitors. Based on the primary data, it shows that Zoom does not have enough time limit and may be too pricey for extension of time limit. Hence, Google

Feature	Reason
Time limit	Zoom only has a short time limit of 40minutes while Google Meet has 60 minutes which is enough for most meetings. Particularly when it comes to group projects and meetings, 1 hour may suffice to run an effective meeting. This potential selling point can be considered by Google Meet.
Pricing of Premium Version	\$8 which is cheaper than Zoom which is \$149.90 per year which is around \$12 per month. Especially for students, they may not have enough money to spare, hence, this can be a great selling point for Google Meet to attract more students and young people.

Table 28: Features of Google Meet that should be advertised

Therefore, by offering two modes - school and social - which can be made possible by integrating Zoom features and social mode features from Discord, Google Meet is able to expand its customer base to the fullest extent. This is because many customers from like Zoom for its school purpose and Discord for socializing purposes. It would allow Google Meet to provide full convenience for the customers as they do not have to keep switching between 2 platforms for different purposes. Additionally, by addressing the problems with Google Meet and highlighting the advantages it offers over its competitors, Google Meet can retain its existing customers and gain new ones.

6.1.3 To attract Customer Segment 2: Integrate Microsoft Teams' features with Google Meet Workspace and Essential

	Google Meet Workspace	Google Meet Essential	MS Teams
File sharing and Collaboration	Yes	Yes	Yes
Project Management Tools	No	No	Yes
Participant limit	150 participants	250 participants	300 participants
Pricing Schemes	\$6-18USD per active user/month	Custom	\$5USD-\$12USD per active user/month
Storage	100GB per user	Unlimited	1TB (more with purchase)

Table 29: Comparison of Video Conferencing Tools

6.1.3.1 Features to be integrated from Microsoft Teams

	Google Workspace	MS Teams	What can Google Meet integrate?
Seamless integration of chat, video in a single platform	<p>No, have different platform for different purpose.</p> <p>Chat: Google Hangout Meeting: Google Meet Files: Google Drives, Slides, Docs etc</p>	<p>Yes</p> <p>Everything is integrated in a single platform, ranging from chats to video platform.</p>	<p>Need that can be fulfilled: Allow users to work on everything on a single platform, ranging from meeting, file sharing to project management</p> <p>Google Meet can try to provide an integrated experience across chat, video, files storage and sending on a single platform. This will provide users full convenience and allow them to access their meetings, files, and chat on a single platform.</p>
Ease of Use	<p>-simple admin control panel -Simplicity of UI</p>	<p>MS Teams have too many features such as Power BI, Planner and Flow for the same purpose of project management.</p> <p>MS Teams has Power BI for sales dashboard across the team.</p> <p>Other project management apps that can be integrated</p>	<p>Need that can be fulfilled: Based on primary data, some may find Microsoft Teams Features a little confusing as there is too much features of similar functions and may be a little confusing for the user.</p>

		<p>from 3rd party source to MS Teams</p> <p>Planner that can be used to schedule meetings.</p> <p>Flow to track business workflow</p>	<p>Google Meet could even further improve this by integrating different project management tools and have a chatbot and help support to clarify of the different features as users may get confused when there is too many features and functions serving similar functions on the single platform.</p>
Security	<p>-Automatic detection of phishing attempts, suspicious activity, and other hacking attempts.</p> <p>-Two-Factor authentication to secure their accounts.</p> <p>-built-in spam, malware and virus detection which constantly scans all files and attachments.</p> <p>-Data Leak Prevention</p>	<p>-Multiple Factor Authentication for all user passwords.</p> <p>-AI tools keep track of the user activities and raises a flag if it detects suspicious activity.</p> <p>-Data Leak Prevention</p> <p>-Team Secure Guest Access which allow setting of permission such that 3rd party client working on the same project as company employees cannot see and access documents</p> <p>- MS Teams have more flexibility where companies can set their own security policies based on standards companies need to comply to.</p> <p>-This is because Teams enforces team-wide and organization-wide two-factor authentication, single sign-on through Active Directory, and encryption of data in transit and at rest. Files are stored in SharePoint and are backed by SharePoint encryption, according to https://docs.microsoft.com/en-us/microsoftteams/security-compliance-overview .</p>	<p>Need that can be fulfilled: Protecting Confidentiality of finance documents and ensure security of file sharing</p> <p>Google can integrate Microsoft Team's "Team Secure Guest Access" to allow different levels of access for different people.</p> <p>Google can also implement flexibility in the security area where companies can set their own security policies based on standards companies need to comply to.</p>

Table 30: Features to be incorporated to MS Teams

Therefore, by adding the MS Teams feature to Google Meet, which it lacks, it will offer more advantages to Google Meet. Furthermore, it would meet the security and ease-of-use needs of this age group. In this way, it would be easier for the customers from this industry to handle data that is more secure and track and manage the workflow of their team more effectively.

*Note** Exclusion of Google Hangouts and Duo*

I would not be giving any suggestions for Google Hangout as based on Cnet's article "Google to shut down Hangouts, migrate users to Google Chat", Google is no longer providing Google Hangout as a

Video Conferencing application. It will shift to Google Chat which is a messaging application for business purposes.

I would not be giving any suggestions for Google Duo as a Google platform. Based on Tech Radar's article," Google is reportedly replacing Duo with Meet for video calling", Google Duo is going to be replaced by Google Meet since both apps serve the same purpose as video calling apps.

[REFERENCES]

<https://skillscout.com/video-conferencing-statistics/>

<https://www.grandviewresearch.com/industry-analysis/video-conferencing-market>

<https://www.channelnewsasia.com/news/commentary/zoom-competition-video-conferencing-hangouts-teams-webex-12770100>

<https://www2.deloitte.com/us/en/insights/industry/financial-services/financial-services-industry-outlooks/banking-industry-outlook.html>

<https://www.finextra.com/blogposting/18649/video-conferencing-market-during-covid-19>

<https://windowsreport.com/encrypted-video-conferencing-tools/>

<https://apps.google.com/meet/pricing/>

<https://docs.microsoft.com/en-us/microsoftteams/security-compliance-overview>

<https://www.cnet.com/news/google-to-shut-down-hangouts-migrate-users-to-google-chat/>

<https://www.techradar.com/news/google-is-reportedly-replacing-duo-with-meet-for-video-calling>

Assignment Breakdown

Components	Marks
Primary Data (including questionnaire and results)	9%
Secondary Data	7%
Customer Segments	7%
Customer Journey Maps	11%
Suggestions & Next Steps	6%
Total:	40%