

Analysis of How Zoom Communications Inc. Became The
Primary Global Communication Tool During The Severe
Acute Respiratory Syndrome Coronavirus 19 (Sars-Cov-19)
Pandemic of 2020

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Abstract:

Aims: The purpose of this paper is to conduct a SWOT (strengths, weaknesses, opportunities, and threats) analysis of Zoom communications Inc. (Zoom) and to examine the impact of the Severe acute respiratory syndrome coronavirus 19 (SARS-CoV-19, AKA Covid-19) pandemic on its business globally. A TOWS (threats vs opportunities and weaknesses vs strengths) crossmatching analysis will then be undertaken.

Methods: Several economic framework theories were used in the analysis of Zoom inc. during the time period of December 2019 to December 2020. This included the PESTEL (political, economic, socio-cultural and technological) model, as defined by Sloman and colleagues in 2016. Porter's 5 Forces (Porter, 1996) and SWOT (Strength, Weakness, Opportunity and Threats) analysis. Analysis was displayed as a strengths and weaknesses matrix.

Results: Zoom inc. demonstrated massive growth during the year December 2019 to December 2020. This growth was a result of solid leadership, sector foresight, customer knowledge, solid business strategy and partly unforeseen circumstances. Key weaknesses include security concerns, issues related to geopolitics of west vs east and risk of underestimating or not anticipating the completion.

Conclusion: Zoom Communications, has become a global video communication phenomenon. All sectors including governments, education and business are accepting it as the unified communication tool of choice. However, Zoom Communications, must devise alternative strategies to be relevant post SARS-CoV-19 and ultimately benefit with further success and profitability in the long run.

Introduction:

The SARS-CoV-19, is the pandemic which brought the global economy to its knees and heralded the start of one of the worst rescissions in history (Baldwin and Mauro, 2020, p.45). The outbreak, which is believed to have originated from Wuhan, Hubei province in China, in December of 2019 spread rapidly across the globe after the declaration of a global health emergency by the World Health Organisation in January of 2020. The impact of the pandemic became rapidly apparent and had far reaching consequences beyond the immediate mortality (death) and morbidity (disability). The virus has caused the worst financial crash since the great depression, but with an unprecedented rate, in part due the strongly connected and integrated nature of the world economy.

China, although initially at the heart of the outbreak, with the majority reported cases either contained within its borders or originating from its travellers, received heavy scrutiny and a rapid fall from grace. The Guardian for example reported, “China appears to have comprehensively lost the international battle for hearts and minds over its handling of coronavirus with most people believing it was responsible for the start of the outbreak and was not transparent about the problem at the outset” (Wintour and Thomas, 2020). As a result of both the pandemic and an economic blow back effect from the perceived lack of Chinese transparency, the Chinese economy suffered.

Unfortunately, the pandemic was not confined to the Chinese border. With the rapid, international dissemination of the virus, countries had to implement strategies to combat both the virus and potential economic ramifications of the pandemic. Countries that fared well included Vietnam and New Zealand, which began implementing strict SARS-CoV-19 plans early in February 2020. These included preparing hospitals for an influx of patients and strict border-control policies to delay the pandemic’s arrival. The above resulted in the some of the last SARS-CoV-19 case numbers (New England Journal of Medicine 2020). Countries that reacted early were able to bounce back economically. China for example saw its manufacturing capacity return to normal relatively quickly (Bostock, 2020). This was in contrast with countries like the United States where a failure in

leadership during the pandemic resulted in a financial crash comparable to the worst economic failures in history. (The World Bank, 2020)

The effects of the pandemic are unprecedented, with devastating consequences for national and international trade. These include mass unemployment globally, volatile stock trends, the introduction of job retention schemes and many countries undergoing a recession or depression. Taking the United Kingdom (UK) as an example, the Bank of England noted that GDP was estimated to have fallen by 20% in the second financial quarter of 2020, one of the largest quarterly falls in the history of the country (The Bank of England, 2020). The slowing down of major world economies such as China, United States and United Kingdom resulted in interruptions to production, distribution and logistics of many multinational firms irrespective of size, not only nation states. However, amidst the uncertainty there have been many successful businesses that have weathered the pandemic and even thrived because of it. This has been the case predominantly within the technology sector, including the likes of Amazon, Tesla, Microsoft, Apple & Zoom.

Zoom, a moderately well-known video communication company founded by an ex-Cisco employee, has transformed the way we live and work. It has saved jobs across multiple sectors globally, introduced greater flexibility in communication allowing employees to work from virtually anywhere on the planet, students of all grades to undertake classes or exams, and it has allowed friends and family to socialise safely. As a company Zoom has had, its fair share of ups and downs, but this report will demonstrate why they are the video conferencing company that has come to symbolize the way we work and given rise to the work-from-home boom of the year 2020. (Financial Times, 2020)

Aims:

The aim of this report is to critically assess the position of Zoom communications currently in the global business environment on a macro and microeconomic level and to examine the impact of the SARS-CoV-19 pandemic on the overall performance of the firm.

Methods:

Several economic framework theories were used in the analysis of Zoom inc. during the time period of December 2019 to December 2020. This included;

PESTEL (political, economic, socio-cultural and technological) model, as defined by Sloman and colleagues in 2016. This framework relates to the analysis of external factors that influenced the activities and strategic development in a business or organization.

Porter's 5 Forces examine a company's competitiveness and were also used in this analysis (Porter, 1996) This model proposes that there are five factors that decide a firm's profitability; competitive rivalry, new entrants, supplier power, buyer power and substitutes, all of which may shape a firm's strategy.

Finally, a SWOT (Strength, Weakness, Opportunity and Threats) analysis was undertaken (Johnson et al, 2016). SWOT is the model most widely used by practice managers to analyze where a business stands within the global business environment, its overall decision-making process set out an analysis of the organisation on a macroeconomic and microeconomic level. SWOT allows for further examination of company opportunities and/or threats, identify points of failure, areas that require further development, what the competition is doing that Zoom and see what possible actions can be taken based on the findings, to keep the company profitable in a post SARS-CoV-19 world.

Results:

Strengths:

Beginning with strengths, Zoom Video Communications, Inc. (Zoom) has become the market leader in videotelephony and online chat in the technology sector, currently the video conferencing platform of choice for governments and businesses worldwide.

Factors which influenced the company's success include having leadership which sets out clear objectives and a plan for the means of achieving them. Zoom inc. CEO (Chief Executive Officer) Eric Yuan belongs to an engineering background, which may have allowed him to understand his customer base explicitly. Zoom leadership aimed to create something new, specifically an ecosystem designed to integrate with third party hardware with the aim of contributing to business workflow, not just another video communication software platform.

A history of employment with some of the world's largest and most influential communication companies including Cisco Systems, and as the Vice president of WebEx would have contributed Mr Yuans understanding of the deficits in the market. In particular his roles dealing with customer complaints, dissatisfaction and being front of house in assisting with issues related to system troubleshooting (The Economic Times, 2020).

Company cohesion and teamwork is key to success not only in the business world in all sectors and was undoubtedly a contributing factor to the company's success. Happy, healthy employees are more productive. As one study from Oxford University, found workers were 13% more productive when happy, they worked faster, make more calls per hour worked than their disgruntled colleagues and most importantly, convert those calls to sales (Bellet, 2019). Zoom inc. has made an effort to translate this research into practice by deciding to focus on employee welling, as can be evidenced by their being voted the second-best place to work in 2019 (Glassdoor, 2019).

The most noticeable strategy that has given Zoom inc. a competitive edge, is the type of business models employed.

These include the Software as a service (SaaS) model, whereby software and/or applications are licensed on a subscription fee basis (Lucchetti, 2019). This is favoured by most large organizations including Amazon, Cisco, Morgan Stanley, and Nokia to name a few, though these firms have the resources and are more than capable of housing software on premises without any sort of budget constraint, they choose to obtain their software on demand. Software providers can now supply and bundle applications, into new and existing IT infrastructure, delivering them to end-users across networks as required, whilst also supporting the supplied package remotely (Ma and Seidmann, 2008). Providers such as Zoom can host and store user data with this model, in a central cloud-based location and oversee daily software maintenance, backup data, upgrade software, and manage security giving clients peace of mind under a monthly or annual fee.

The SaaS model also mitigates the need for the usual costly upfront costs associated with the traditional software installation and deployment, known as commercial off-the-shelf (COTS) products (Albert and Brownsword, 2002). In the past the provider would sell a software application or package to an end user, commercial or otherwise designed to easily deploy and integrate with existing hardware. Almost all software bought by the average computer user fits into the COTS category, such as operating systems, office product suites, word processing, and e-mail programs designed to be installed on personal computers. The ease of deployment and the overall customer experience reflects why the SaaS model continues to be the more attractive option over the COTS for business in 2020.

The second business model that Zoom has in place, which greatly complements SaaS model, is the Freemium Business Model. This as a model that relies on users to try products or services beforehand for free, giving “basic functionality”, before committing customers to purchase or upgrade to a premium or paid version with “advanced functionality” (Pujol, 2010). Founded by venture capitalist Fred Wilson in 2006, the results of this model have been astronomical in the technology sector & has become one of the most dominant models to date (Holm and Günzel-Jensen, 2017).

With the above models and opening their application to a world of non-paying costumers including businesses and educational institutions, in addition to the massive brand exposure and awareness, Zoom was able to ensure a self-sustained demand for its product.

High demand alone is insufficient for the gains seen in Zoom inc. and so the company needed easy accessibility. The ability to download the application on virtually any device meant the company amassed several loyal freemium customers that would eventually pay for premium services including longer call periods, unlimited chat and messaging services. Testament to this are Zooms first quarter April 2020, revenue returns of 328.2 million dollars, up 169% year on year [Fig 1] (Zoom, 2020). In addition, a recent report notes that Zoom Communications is now worth more than the world's largest Airlines combined, including Delta, Southwest, United, IAG, Lufthansa, American Airlines and KLM Group (Ghosh, 2020). One could argue however that that such a comparison is unfair or even slightly skewed given the fact that the SARS-CoV-19 pandemic has been profitable to some, while others have not been fortunate with huge economic blows. Transport in general and the aviation sector in particular for example, have seen revenues falling by over 50% across the board, as seen in [Fig 2].

ZM Financials

INCOME STATEMENT

BALANCE SHEET

CASH FLOW

FINANCIAL RATIOS

IN USD THOUSANDS

QUARTERLY ▾

Quarterly Ending:	10/31/2020	7/31/2020	4/30/2020	1/31/2020
Total Revenue	\$777,196	\$663,520	\$328,167	\$188,251
Cost of Revenue	\$258,727	\$192,271	\$103,707	\$32,547
Gross Profit	\$518,469	\$471,249	\$224,460	\$155,704
Operating Expenses				
Research and Development	\$42,582	\$42,734	\$26,389	\$20,669
Sales, General and Admin.	\$283,645	\$240,411	\$174,686	\$124,482
Non-Recurring Items	\$0	\$0	\$0	\$0
Other Operating Items	\$0	\$0	\$0	\$0
Operating Income	\$192,242	\$188,104	\$23,385	\$10,553
Add'l income/expense items	\$1,779	\$2,081	\$5,790	\$3,992
Earnings Before Interest and Tax	\$194,021	\$190,185	\$29,175	\$14,545
Interest Expense	\$0	\$0	\$0	\$0
Earnings Before Tax	\$194,021	\$190,185	\$29,175	\$14,545
Income Tax	-\$4,621	\$4,196	\$2,100	-\$794
Minority Interest	\$0	\$0	\$0	\$0
Equity Earnings/Loss Unconsolidated Subsidiary	\$0	\$0	\$0	\$0
Net Income-Cont. Operations	\$198,642	\$185,989	\$27,075	\$15,339
Net Income	\$198,642	\$185,989	\$27,075	\$15,339
Net Income Applicable to Common Shareholders	\$198,416	\$185,723	\$27,036	\$14,277

Figure 1: Zoom, Nasdaq Stock Financials. Available at: <https://www.nasdaq.com/market-activity/stocks/zm/financials> (Accessed 07 December 2020)

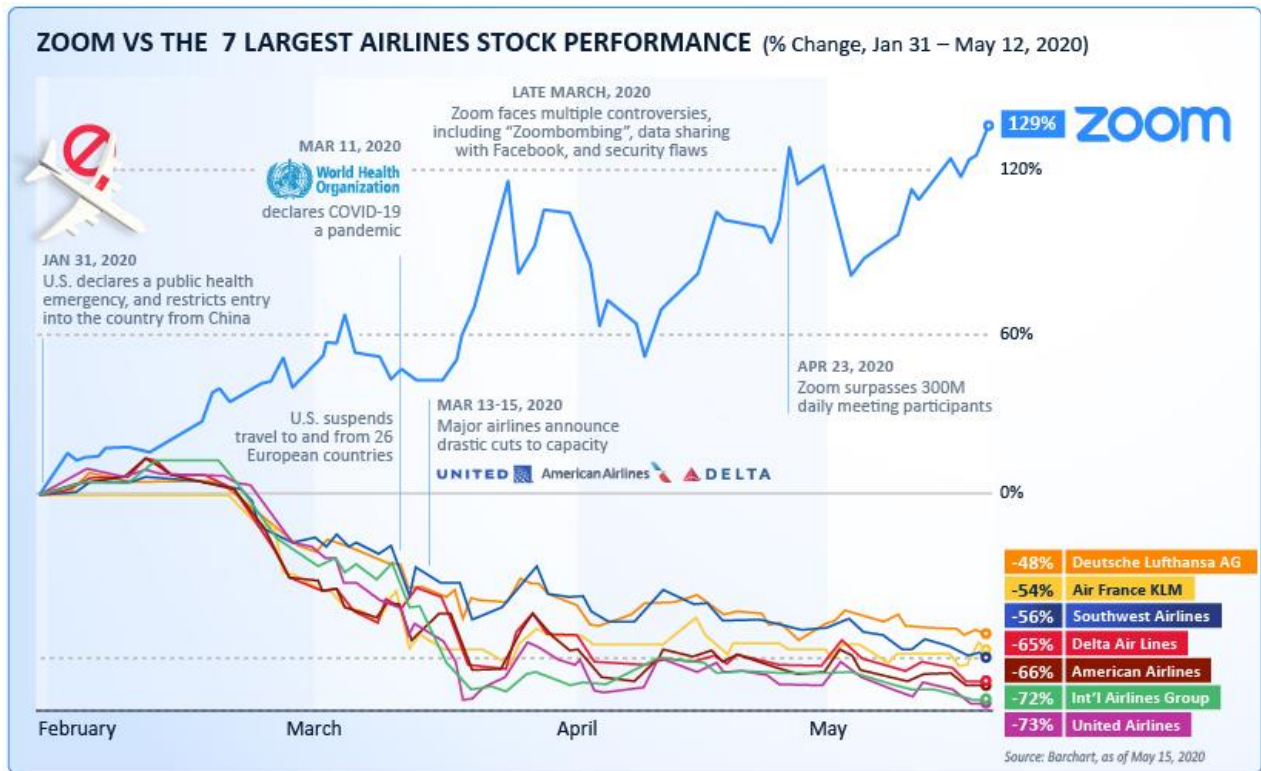


Figure 2: Zoom vs The Largest Airlines Stock Performance. Available at: <https://www.visualcapitalist.com/zoom-boom-biggest-airlines/> (Accessed 07 December 2020)

Weaknesses:

Zoom inc. has seen exponential growth and expansion in a very short period of time which carries the risk of setbacks. The firm's sudden worldwide usage, very quickly brought unwanted attention to clear security lapses, which have been highlighted on several occasions in the media practices (BBC News, 2020). The phenomenon known as 'zoom bombing' is an example of one such security break whereby uninvited guests gain access to restricted video conferences and proceed to relay verbal abuse, share explicit content, or make racist remarks (Setera, Federal Bureau of Investigation, 2020). Indeed, the online security element of any communication video platform has been the biggest difficulty for Zoom inc. This weakness was addressed by the company following numerous examples of such breaches, culminating in an inquiry into the firm's privacy and security (Hakim and Singer, New York Times, 2020).

Zoom CEO, Eric Yuan would publicly apologize to users and vow to rectify the problem with tighter security and encryption methods via software and firmware updates. Mr Yuan spoke candidly about how the usage of Zoom ballooned overnight, increasing from ten million maximum daily meeting participants on the platform in December 2019 to over 200 million participants on the platform by March 2020, an increase of 2000% (Wakefield, BBC News, 2020). This unprecedented increase in usage and demand exceeded the company's ability to rectify these security weaknesses, with Yuan admitting that despite "working around the clock" to support the influx of new users, the service had "fallen short of the community's and Zoom's own privacy and security expectations. The situation for Zoom inc. worsened when issues with security and encryption were found to have potentially compromised governments and their agencies across the globe, given that most were now using the cloud video platform as their preferred method of communication during the SARS-CoV-19 pandemic. This was the trigger which thrust Zoom inc. into the political spotlight, with the biggest concern coming from western governments. Political concerns included issues related to how end user data was being collected and where it was being held. These concerns strayed into nationalistic overtones given that the company's CEO is of Chinese descent. As one piece in the Guardian noted, "Government and parliament were told by the intelligence agencies last week not to use the

videoconferencing service Zoom for confidential business, due to fears it could be vulnerable to Chinese surveillance” (Sabbagh, Guardian UK, 2020).

Zoom having been based in California’s technology hub, Silicon Valley, did not expect this and attempted to distance itself from the political spotlight in addition to making the applications privacy and security concerns top priority (Zaveri, Business Insider, 2020). This response included sending users various firmware updates and implementations. Difficulties were still encountered however, given that the CEO was still heavily reliant on local Chinese owned companies to assist in software development. Political questions remained an issue and western governments concerns were not alleviated given the fact that Zoom inc. was one of the few communication applications that was not banned in China (Goh, 2020).

Other geopolitical circumstances which influenced Zoom Inc. responding to the above included heightened tensions between the United States (U.S) and China due to the recent trade war which started in early August 2018 (Liu and Woo, 2018). The U.S. implemented a 25 percent tariff on all Chinese imported goods amounting to \$34 billion in 2017 and planned to impose an additional 25 percent tariff worth \$16 billion on 23 August 2018 (China Briefing News, 2020). China responding in-kind to the two-part U.S. tariff action, with a 25 percent tariff of their own on all U.S. imports, resulted in many companies with Chinese relations or heritage including that of Zoom inc. being impacted negatively (Business Standard, 2020). In a recent US senate enquiry in December 2020, senators Richard Blumenthal and Josh Hawley urged the U.S. Justice Department to probe the likes of Zoom Communications and Chinese-owned social media company TikTok (another global pandemic success story, launching in 2017, has become a huge hit during isolation periods and is the second most downloaded application in the United Kingdom and United States after Zoom), (Omnicores, 2020). As reported by Thomson Reuters the senators wrote “We believe that it is imperative that the Department of Justice investigate and determine whether Zoom and TikTok’s business relationships, data handling practices, and operational connections to China pose a risk to Americans” (Bartz, 2020).

The ongoing probe into Zoom, has allowed competitors such as Microsoft, Google, and Cisco to discredit the firm, whilst bolstering their own interests.

Opportunities;

During his time at Cisco WebEx, CEO Eric Yuan found that the platform was very unstable, had connectivity issues due to the heavy bandwidth requirements, audio and video were constantly out of sync during conferences calls and it was difficult for their clients and information technology (IT) teams to deploy. These experiences shaped the future direction of the company Yuan would later establish, after identifying a gap in the market.

However, the game changer for Zoom would come in the form of the pandemic during 2020, which would see the majority of other businesses around the world suffer while translating into huge opportunities for Zoom. Ousting the competition with ease of deployment, ease of integration with other software and hardware vendors meant the sky became the limit in terms of global expansion. This was reflected in would Zoom share price on the first day of trading and initial public offering (IPO) in 2019. (Novet, 2020).

As an all for video-conferencing tool Zoom made it far less painful for customers to turn from more traditional forms of communication. The SARS-CoV-19 pandemic accelerated its subscribership and saw businesses, schools, individual employees alike, start to use the platform. The use of zoom for interviews offered several advantages to the competition (Gray, 2020). For example, it did not require participants to have dedicated user accounts to use the platform, it generated electronic meeting invitations that could be customized by user's dependent on the type of engagement and came with a single quick click to join the meeting button. The platforms content and screen sharing capabilities for participants were unrivalled at the time, allowing users to display documents, images, video clips and presentations amongst other materials, making it the perfect tool to use during the pandemic.

Threats:

However, with so many competitors in the cloud video and communication software space, threats are inevitable, from companies such as Microsoft, introducing Skype for business to the market in early 2014 just three years after Zoom launched and since then having had better strategic direction, a financial boost into the cloud communication innovation team, the result would be an introduction of a rival video communication software platform called Microsoft Teams (MS Teams), Microsoft's competitor software platform, MS Teams became a tangible alternative cloud communication software for many businesses due to its ability to simultaneously integrate with Office 365, being offered as a bolt on to the subscription, means cost savings for firms and working with all the same hardware vendors, that partner with Zoom, has caused some concern.

Let us not forget Yuan's, old workplace Cisco Systems, introducing their cloud video communication platform Webex Teams into the market also, not to mention being the gate keepers, when it comes to computer-based communication since 1986. Following their invention of the multi-protocol router, Cisco systems became market leaders in routing, switching, wireless communication, and security with a healthy current market value of \$195 billion, (Silicon Valley, 2008), giving them the ability to compete with anyone in the cloud space, including Zoom and with clients becoming more familiar with these software providers, it will soon come down to preference, when deciding which cloud based video communication provider, they will utilize for the business.

Finally, the imminent arrival of the SARS-CoV-19 vaccine, may pose a huge threat to Zoom and it would be wise for the company to look at alternative business strategic directions for new market opportunities because when the business world inevitably goes back to face-to-face meetings, there will be a natural decline in overall requirement for video conferencing and it is likely demand will reduce, resulting in overall reduction of revenue and therefore profits. As covered by the Business Insiders (Fox, 2020), with Zoom Communications current high valuation, JPMorgan still believes there under 10-employee segment of the business could be hit as COVID-19 vaccinations allow for more in-person interaction in the months to come.

Discussion:

Zoom's recent success has been touted by many as the product of circumstance. The question in the mind of many, especially its investors, is how long will it last?

Cloud video communication and collaboration has become the new normal and many businesses opting to allow their employees to work from home may continue this practice permanently for the foreseeable future (Ardill, 2020). Large multinationals such as likes of Google for example aim to keep their employees working from home until at least the second half of 2021 (Paul, 2020). Google is the largest tech firm to commit to such a timeline, however other technology companies are taking a similar approach since the Covid-19 outbreak and publicly expressing their plans to continue such policies indefinitely (Liu, CNBC, 2020). Twitter for example recently announced it would allow employees who work from home indefinitely should they wish to do so, and Facebook said it expects at least half of its employees to work remotely for the next five to 10 years (Koran, The Guardian, 2020). These types of announcements have kept coming due to the fact SARS-CoV-19 and any such future pandemic will make open floor plans and shared workspaces untenable for the foreseeable future, forcing companies across a wide variety of industries to reimagine what office work looks like in the years ahead.

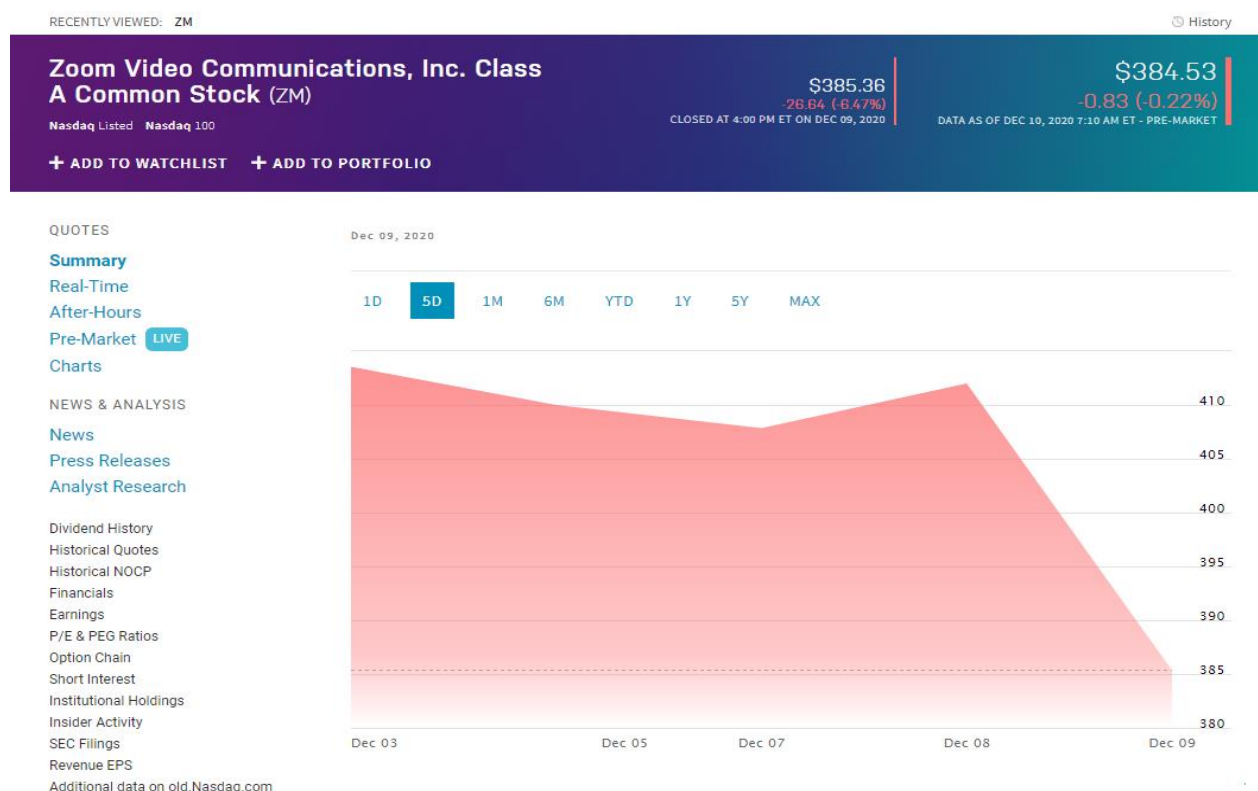


Figure 3: Zoom, Nasdaq Stock Activity. Available at: <https://www.nasdaq.com/market-activity/stocks/zm> (Accessed 07 December 2020)

Although the future is bright for the cloud software communication sector, Zoom inc. should not assume a monopoly in the sector, especially given their ongoing security problems, and the recent enquiry from U.S congress. Large and significant fluctuations in stock value are common with such challenges as can be seen by a recent rapid drop [Fig.3]. Zoom Inc. must maintain a handle on such challenges to ensure a stable performance if not a continued domination of the sector.

With fierce competition ramping up in the cloud collaboration and video communications space, Zoom inc. may have cause for concern, with new market entrants such as Salesforce, a leading Customer Relationship Management (CRM) software developer which delivers custom client experiences by using their integrated CRM platform, provides powerful connected products for improved marketing, sales, commerce, service and IT amongst others; have recently acquiring the workplace messaging company Slack, one of Zooms direct competitors for \$27.7bn (Salesforce, 2020).

Slack is a channel-based software provider with a messaging platform, allowing people to work more collaboratively by connecting all their software tools, services and information required to do their best work all within a secure enterprise-grade environment (Slack, 2020).

Cisco System have also been pushing into the cloud communication space and are looking for methods to improve the video communication platform WebEx (WebEx, 2020). Cisco has been successful in dominating the communication market since 1984 via acquisitions (Hubbard, 1999), whereby the bidders negotiate terms directly with the target company for the purchase of their firm in a cash, stocks or a combination of both transactions. With the deal usually going through shareholders and the board of directors of the purchasing company for approval (an agreed bid) or with the support of the target board (a contested bid), (Kenton, Investopedia, 2020). Cisco Systems have acquired over 200 firms, approximately six per year using this strategy to dominate their way into a specific marketplace or field (Nicklas, Investopedia, 2020). A trend that will surely be continued into Zoom's territory.

With businesses and consumers alike slowly becoming more "tech savvy", they are starting to see that there is no obvious answer when it comes to selecting video communication and collaboration platform, with the final choice usually dependent on individual or organizational needs.

Organizations are also starting to deploy combinations of software solutions such as Microsoft Teams, Cisco and Zoom due to specific working scenarios, providing flexibility, rather than forcing an either-or situation upon users (Unify Square, 2020). This type of flexibility is also being seen amongst hardware vendors that are utilizing more than one software provider, commonly MS Teams and Zoom with providers such as Crestron with the Flex unified collaboration kit (AVNetwork, 2020).

This shift comes about because many users have reported that Microsoft Teams is an excellent tool for internal collaboration, whereas Zoom is preferred for external workflows. This sort of mix and match setup allows communication with external customers, guests, or vendors seamless and has resulted in more software vendors partnering with hardware vendors giving IT departments the ability

to go down the route of mixing and matching endpoints, to create the best working scenarios for their users. In response, Zoom has opted to start partnering with hardware/endpoint vendors, in order to make sure their software platform remain the preferred option on video conferencing endpoints, when organizations return to business as usual following the victory against the pandemic (Zoom, 2020).

Conclusion:

Offering their application to users whilst using the freemium business model during the early stages of the SARS-CoV-19 pandemic in 2020 saw Zoom's shares skyrocket and resulted in great success.

However, with stiff competition mounting from multiple angles, including from the likes of Cisco making their way into the sector via acquisitions, Microsoft with their competitor platform MS Teams being offered as a part of Microsoft office 365 package and rivalling Zoom for security, the Salesforces acquisition of Slack, the future does not look so clear-cut for Zoom.

Zoom Communications has a strong foothold in the video conferencing and collaboration market. Since its launch in 2011 the company have been resilient despite the fair criticism of their security and privacy measures. It is currently the best software provider for video communication and collaboration in the market since the SARS-CoV-19 pandemic, however the company needs to start looking at alternative business strategies to be ready for life post pandemic.

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