

2019 NAMM Practicum

Paul Dougall

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Company Research Paper
Paul Dougall

Zoom Corporation is a Japanese audio company that was founded in 1983. Based in Tokyo, Zoom designs and creates recording devices, effects processors, effects pedals, drum machines, and samplers.

Mashiro Iijima worked for KORG, a manufacturer of numerous types of musical technologies, for 5 years before he felt he obtained enough skills in engineering, management, and quality control to start his own company. Zoom was originally a contractor of developing music technology products. However in 1987, they began developing their own products. Then, in 1990, they released their first product: the ZOOM 9002. This was a multi-effects processor that was renowned for being ahead of its time. Many guitarists of the time had big bulky effects processors. The ZOOM 9002 however was not only small and compact, but also was designed so that guitarists could attach it to their guitar strap. This would allow guitarists to use all the controls while performing. It was during this same year that Zoom first attempted to form an affiliate. Zoom Corporation of America was formed to expand sales into the United States, however, within four years it had to be dissolved.

It was in 1994 that the Zoom Player series and the Zoom Studio series were both launched. The Zoom Player series is a series of multi-effects guitar processors while the Zoom Studio is a series of studio effects processors. Both were very popular, however both have since gone out of production. In 1995 Zoom started their 500 series of foot pedals and then in 2001 Zoom released their first multitrack recording studio. Then in

2003 they began producing amplifiers, but it was not until 2006 that Zoom changed the world with their products. This was the year that Zoom released the first product in their Handy Recorder series, the H4 Handy Recorder. This handheld audio recorder offered an X/Y stereo microphone, four track recording capabilities in either WAV or MP3 format, a guitar tuner, a metronome, and a USB port. This quickly set the standard for hand held audio recorders and the series has upheld it ever since winning them numerous awards including three MIPA awards and three NAMM TEC awards.

It was then in 2009 they expanded on the success of the Handy Recorders by releasing their first Handy Video Recorder, the Q3. This product and its successors combined the high quality of the Handy Audio recorders with HD video recording. Their latest line of products, the ARQ, is a line of products that are drum machines, sequencers, synthesizers, loop machines, and MIDI controllers all in one. These digital instruments have been praised for their innovativeness and their ability to incorporate electronic musical production into a live performance in way never seen before.

Zoom has not only expanded the breadth of their product line, but the breadth of their international reach as well. After the dissolution of Zoom Corporation of America, Zoom continued expanding. However, instead of expanding into America, they focused their efforts on Europe and Asia. In 2004, Zoom HK LTD was established as a logistics base in Hong Kong. This subsidiary also allowed them to strengthen their presence in China which is notorious for its manufacturing. Then they established Zoom UK Distribution LTD in UK in 2006 as a distribution center and Zoom Donaguan

Corporation in China in 2009 as a quality control center. Then, after receiving more success and becoming more established, they returned to North America and established Zoom North America LLC in the United States as a distribution base. Zoom then went public on the Tokyo Stock Exchange JASDAQ in 2017 to increase funding and allow them to reach further markets. Finally, Zoom's most recent expansion has been their majority share purchase of Mogar Music S.p.A. in Italy in 2018 as another distribution center.

Zoom Corporation is a company that has both increased in magnitude and reputability ever since its incarnation in 1983. The quality of their audio and video recorders has given them a reputation not only amongst musicians, but video producers and journalists as well. Their willingness to take risks on new markets and their ability create new and original products are what have allowed them to thrive and succeed in the way that they have.

Resources

<https://planetbotch.blogspot.com/2014/09/the-zoom-9002-guitar-multi-fx-processor.html>

<https://www.zoom.co.jp/about-zoom>

<https://ir.zoom.co.jp/corp/business.html>

<https://ir.zoom.co.jp/corp/history.html>

<http://blog.dubspot.com/gear-review-zoom-arq/>

Daily Log
Paul Dougall

<u>Activities and Dates</u>	<u>Reflection</u>
<p>Date: Tuesday, January 22, 2019 16.5 hours worked</p> <ul style="list-style-type: none"> • 12:30 am – Met at the Crane School of Music to drive to the Syracuse Hancock International Airport • 3:00 am – Arrived at Syracuse • 6:30 am – Began boarding our flight from Syracuse to Chicago • 7:00 am – Departed from Syracuse • 8:30 am – Arrived at the Chicago O’Hare International Airport and obtained lunch at the Mexican restaurant recommended by Dr. Brooks • 9:30 am – Began boarding our second flight from Chicago to Los Angeles • 10:30 am – Departed from Chicago • 1:30 pm – Arrived at the Los Angeles International Airport • 2:00 pm – Left the airport by bus to Anaheim • 3:00 pm – Arrived at the hotel • 4:00 pm – Everyone met in front of the hotel to head over to the convention center to obtain our badges and tour the convention center. Also met Samuel Greene, my site supervisor, at the convention center • 5:00 pm – Official activities were completed for the day. Me and a few other students then proceeded to get dinner together before turning in for the night. 	<p>Everyone is ready to go and surprisingly enough nobody looks too tired. Excited to start the trip.</p> <p>Here is where we really started to see how tired everyone was. Due to the government shutdown there was a shortage of TSA workers and we were not able to leave the initial airport lobby until around 5:00 am.</p> <p>This is the part I was dreading, the ridiculously long plane rides.</p> <p>Luckily the plane had free movies to watch so I decided to watch Mile 22. I then began falling asleep and got a little bit of shut eye before we arrived in Chicago. I did not want to spend too much on lunch, but McDonalds was only serving breakfast at this time so I decided to try the restaurant Dr. Brooks recommended.</p> <p>Unfortunately the movie services were not functioning properly on the second flight so it was a quiet and tiring trip.</p> <p>Finally in California! The weather is gorgeous and I am looking forward to seeing the hotel and convention center.</p> <p>The hotel was nice</p> <p>The convention center was out of this world. So cool seeing all the booths as they go up. Honestly though, as of right now it looks like there is a lot of work to be done before the show. Samuel also seems very friendly.</p> <p>We finally made it through day 1. We survived the trip and dinner was awesome with everyone. However, Sean, Ryan, and I are all beyond exhausted and are headed to bed early tonight.</p>
<p>Hours: 16.5 (12:30 am – 5:00 pm) 80 – 16.5 = 63.5</p>	

<u>Activities and Dates</u>	<u>Reflection</u>
<p>Date: Wednesday, January 23, 2019</p> <p>13.5 hours worked</p> <ul style="list-style-type: none"> • 6:30 am – Woke up to get ready for the day. • 7:15 am – Went downstairs for breakfast • 7:45 am – Met with everyone in front of the hotel and then left for the convention center • 8:00 am – Arrived at the convention center and met with the Zoom NA team • 8:00 am – 12:00 pm – Picked up and delivered various items to and from the Zoom booth, the suite in the Hilton being used as a private meeting room, and the ballroom in the Marriot which is to be used for the national and international business meetings • 12:00 pm – Got lunch with Dennis, one of the product specialists at Zoom NA • 1:00 pm – 3:30 pm – More moving of materials amongst our various locations • 3:30 pm – Excused to change into professional dress • 4:30 pm – National sales meeting in the ballroom • 6:00 pm – International business meeting 	<p>Excited to start the first real day of getting some work done.</p> <p>Team seems very nice and inviting. Got to meet Scott Goodman, CEO of Zoom NA!</p> <p>I definitely have gotten in my exercise for the week. They had me running between the various locations throughout the entire day. Unfortunately the booth construction was behind schedule so we could not set anything up at the booth yet.</p> <p>Dennis is really nice and I appreciate him going out to get food with me so I would not have to go alone on my first day.</p> <p>Finally get to dress up and see the professional side of the business world. Sales were discussed, changes in policy, and future plans for the company.</p> <p>Lots of similar things were discussed as in the national sales meeting. However, there were a lot more product reveals and plans for the future being discussed. There was also a dinner, an open bar, and a performance starring Grégoire Maret.</p>
<p>Hours: 13.5 (6:30 am – 9:30 pm) 63.5 – 13.5 = 50.0</p>	

<p><u>Activities and Dates</u> Date: Thursday, January 24, 2019 12.5 hours worked</p> <ul style="list-style-type: none"> • 6:30 am – Woke up to prepare for the day • 7:00 am – Went down for breakfast • 7:30 am – Arrived at the convention center early to prepare the booth • 10:00 am – The show began and we were able to complete booth setup just in time • 10:00 am – 2:00 pm – I explained and showcased various Zoom products • 2:00 pm – Went out for lunch • 3:00 pm returned to the show • 3:00 – 6:00 pm – Continued to explain and showcase products • 6:00 pm – The show ended and we began packing up the products. • 6:10 pm – We left the show and I went to see the NAMM Foundation Celebration for Music Education featuring Black Violin • 6:30 pm – Went to the NAMM Young Professionals Social Gathering at the Hilton pool deck • 8:00 pm – Returned to the hotel and turned in for the night 	<p><u>Reflection</u></p> <p>Began to set up the booth for another day. Feet and legs are already sore, but I am excited for another day. I have gotten much more familiar with the products already and am becoming more comfortable approaching people visiting the booth. Lots of the same things from the first day just approaching people and talking about products.</p> <p>The portion of the concert I got to see was good, but I wanted to network with other students attending the show.</p> <p>There were not as many “professionals” there as I would have hoped. Lots of singer-songwriter and people who make YouTube videos and what not. However, I did run into Ben Myers, Jack Dring, and Jordan Olinsky at the event which was nice seeing some familiar faces. I also got to meet someone who apparently is on American Idol this semester.</p>
<p>Hours: 12.5 (7:30 am – 8:00 pm) 50 – 12.5 = 37.5</p>	

<p><u>Activities and Dates</u> Date: Friday, January 25, 2019 15.0 hours worked</p> <ul style="list-style-type: none"> • 6:30 am – Woke up to prepare for the day • 7:30 am – Went down for breakfast • 8:30 am – Arrived at the convention center to prepare the booth • 10:00 am – The show began and we were able to complete booth setup just in time • 10:00 am – 2:00 pm – I explained and showcased various Zoom products • 1:00 pm – Went out for lunch • 2:00 pm returned to the show • 3:00 – 6:00 pm – Continued to explain and showcase products • 6:00 pm – The show ended and we began packing up the products. • 6:10 pm – We left the show and I went to see the Yamaha All-Star Concert on the Grand • 7:10 pm – Met with the Zoom NA team in front of the Hilton to head to Carolina’s Italian Restaurant for dinner 	<p><u>Reflection</u></p> <p>Another day of the same stuff. I have started spending a lot more time around the hand held recorders and especially the H3-VR because those are the products I have been able to learn the most about. Dean Sitton, John Wicke, and Marc Ernesti also all visited the booth today which was nice. The Zoom NA team asked if I would like to join them for dinner and the food was fantastic. Also happened to run into Declan Lynch while walking to Carolina’s for dinner. Exhausted again after a long day. I got in bed and went to sleep as soon as I got home.</p>
<p>Hours: 15.0 (6:30 am – 9:30 pm) 37.5 – 15.0 = 22.5</p>	

<u>Activities and Dates</u>	<u>Reflection</u>
<p>Date: Saturday, January 26, 2019</p> <p>16.5 hours worked</p> <ul style="list-style-type: none"> • 7:30 am – Woke up • 8:00 am – Went down to breakfast • 9:00 am – Showed up at the convention center to help set the booth up • 10:00 am – Once the convention started, they decided to surprise me and give me the day to enjoy the show • 4:00 pm – Careers in Music Summit • 7:00 pm – Departed for the Los Angeles International Airport • 9:00 pm – We arrived at the Airport and went through security • 10:30 pm – Began boarding our flight to Chicago • 11:30 pm – Departed for Chicago • 5:20 am – Arrived in Chicago • 6:00 am – Began boarding for Los Angeles • 6:30 am – Departed for Syracuse • 9:30 am – Arrived in Syracuse and began the trek to Potsdam • 11:30 am – We arrived in Potsdam 	<p>Having the day to myself was amazing. I got to see one of the Earth Harp performances, eat from the food trucks, get one of the free shirts, and obviously see the show for myself. I got to see performances at booths like the Roland booth, play on various different guitars and pianos, and look at a bunch of new and cool products. I got to buy some souvenirs from the NAMM store as well.</p> <p>Experiencing the Summit and seeing the Crane School of Music up on display at the show right alongside Dean Sitton and CEO Joe Lamond. Obtained some great insight into the industry. I also finally get to sit down and rest my legs during the day.</p> <p>We stopped at an In-N-Out Burger on the way. It was a bit of an adventure, but the food was pretty good.</p> <p>Then we began the adventure back home to the snow and the cold. Watched some presaved Netflix videos on the flights back and the van ride. Already missing the sun, but so glad I got to experience this amazing opportunity.</p>
<p>Hours: 28.0 (7:30 am – 11:30 am) 22.5 – 28.0 = -5.5</p>	

Career Profile Paper
Paul Dougall

Every year the National Association of Music Merchants (NAMM) put on a music products trade shows where thousands of music products companies come to display and showcase their latest and greatest products as well as the products that turned them into the company they are today. In the winter of 2019 I was given the unique opportunity through the Crane School of Music's unique partnership with NAMM to intern for a company at the show. Being a student interested in both math and music, I wanted to be able to intern for a company that would allow me to not only utilize my unique skill set, but also allow me to learn about the various options that are available for a student such as myself looking to combine both math and music into my career. When considering companies, I decided that my best options would most likely be technology based companies and eventually decided on Zoom.

Zoom is a company that is most known for the high quality of their handheld recorders, however, in recent years they have begun designing and developing other products including video recorders, live track boards, guitar effects pedals, and even digital instruments. It is because of the ingenuity and innovative of this company and their products that I decided to intern for them and I was not disappointed. Before the show I was in communication with product specialist Samuel Greene who was my site supervisor. We discussed which products I should focus my research on, what I should expect from the show, and what the schedule was going to look like for the weekend. With this I began my research, focusing on the products that we were going to be

bringing to the show seeing as we could not fit our entire catalog into our small booth. The vast majority of products on display were handheld audio recorders as well as the latest video recorder which was the first Zoom product to have 4K video capabilities. I learned a lot about the handheld recorders, however, once I got to the show and began working and learning more through experience I realized I was much more comfortable talking specifically about the booth dedicated to the brand new H3-VR which was an audio recorder for audio used in virtual reality videos and experiences.

Once we arrived in Anaheim, one of the first things we did was go to pick up our badges for the show. While in line, we were approached by a gentleman who asked if we were from the Crane School of Music. After we replied that we were he introduced himself as Samuel Greene and this was my first interaction with my site supervisor as well as some of the other Zoom employees who would be working the booth. They all seemed quite friendly and I was looking forward to working with them and getting to know them better.

Finally, the real work began... or so I thought. Unfortunately day one was quite slow. Normally the first day is spent setting up the booth and making sure everything is set for the show. However, due to unforeseen complications with the construction of the booth, we were not able to set up the booth at all that Wednesday. However, they did still have some work for me. The first day I mostly got to deliver products between the various different locations where meetings were occurring and the booth itself. However, it was later this evening that I got to experience the first part of the show that really

influenced my knowledge of the music product industry as well as helped guide my career decisions.

Being an intern of Zoom for the duration of the show, I was invited to attend both Zoom's National Sales Meeting and the Zoom International Business Meeting. The first was a smaller meeting with the various distributors within North America and focused mostly on what the sales figures looked like over the past year and quarter, how distributors could improve sales, and presenting awards to the most successful distributors under various different categories. To me, this was my very first "real world business experience" for lack of a better term. I get to see what a non-academic based presentation looked like. I got to interact with professionals as a professional rather than as a student and I got to see how information is presented. However, it was the following meeting that made me feel like an important and essential part of the team. Although I was not treated any special way during the meeting, simply being present during an "international business meeting" gave me a sense of importance and value. The Zoom Japan was in charge of most of the presentation seeing as Zoom is a Japanese company. New products were unveiled, future plans for the company were discussed, dinner was served, and there was a performance featuring Grégoire Maret. This was by far one of my favorite parts of the entire trip and the show had not even begun yet.

Next was the show and to say I learned a lot would be a large understatement. As Zoom's booth was relatively small compared to the booths some of the other Crane

students were working at, I got to play a pretty large role at the booth. Rather than being in charge of the check in desk or being restricted to one area of products, I was expected to be able to talk about all the products we had on display and was given the freedom to move around the booth as I saw fit. Having done my research, I knew a good amount about the products, however, no amount of research would have prepared me for some of the question I would be asked. Being a quick study though, I listened as the other employees explained the products and quickly learned what I needed to incase I was asked the same question by someone else later which definitely ended up paying off. By listening to the other employees talk about the products, I probably learned twice as much if not more than I did from my research before the show. However, just because I did not know the answers to some questions does not mean I held back from talking to the show attendees.

Scott Goodman, CEO of Zoom North America, commented that he was impressed with my knowledge of the products after minimal background experience and my eagerness to engage the attendees with energy and enthusiasm. I thoroughly enjoyed talking with people and being able to explain and talk about our products. It also made it a lot easier to talk about the products seeing as the products were interesting, impressive, and peaked my interest. I not only learned about the products, but how to talk about technological music products and how to keep people interested in and impressed by the products. Every person I was able to impress with a fun or interesting fact is one more

person who might buy Zoom products. Not only did I have to answer questions correctly, but I had to be able to answer questions in a way that also showcased our products.

Obviously going to California and experiencing the NAMM show was an amazing experience that was enjoyable, but then adding on the fact that I learned a lot and was able to obtain business experience it made this trip a once in a lifetime experience that I will not forget. Seeing how big the music products industry is and learning about the various positions available within the industry. Once being a computer science major and currently being a math major, I was able to understand the technical jargon that was used to describe the products and translate into something the attendees could understand. I feel I learned valuable information about the industry and also made connections that I could only benefit from one day. I am beyond grateful the experience and hope that I am able to take advantage of it again next year.

SWOT Analysis
Paul Dougall

Zoom Corporation

Overview: Zoom is a Japanese company who creates numerous technological music products, but is best known for their handheld audio recorders. Founded in 1983, Zoom first made its name off of the effects pedals they created. However, it was when the company released the H4 handy recorder that they became a name known by almost any serious musician.

Strengths	Weaknesses
<ul style="list-style-type: none"> • <u>High Quality Audio</u> – More than anything else, Zoom is known for the high quality of their handheld audio recorders. This is the backbone of the company and was the beginning foundation of the company. • <u>Innovation</u> – Zoom’s ability to create unique and innovative products keeps them relevant in not just the field of audio recording, but the entire field of technology based music products. • <u>Large Price/Quality Range</u> – As opposed to many other companies who either focus on affordable products or high quality products, Zoom has a large number of products ranging in both price and quality. 	<ul style="list-style-type: none"> • <u>Complexity</u> – A large number of Zoom products are often stated as being overly complex and difficult to use. • <u>Bulky</u> – As opposed to their competition, many of Zoom’s higher end products are noted as being quite bulky for a “handheld portable recorder.” • <u>Internationally Based</u> – While being a company that has locations in numerous countries is definitely a strength, being based in a company outside of the United States gives them a disadvantage within the United States (a large market) as opposed to other companies that are based within the United States.
Opportunities	Threats
<ul style="list-style-type: none"> • <u>Virtual Reality</u> – With the increasing number of applications and the growing number of companies in the field, the opportunities for 360° audio are extensive. • <u>Podcasting</u> – As podcasting continues to explode in popularity, the number of people looking for high quality microphones outside of the musician market is increasing. If Zoom markets to this audience, they will see a large increase in sales. • <u>Expansion into New Fields/Products</u> – As Zoom continues to grow as a company, they continue expanding into new product lines so that they can be known for being a great music product company and not just a great audio recording company. 	<p><u>Smart Phones</u> – As smart phones continue to get more and more advanced, many people may not be willing to pay hundreds of dollars for a fantastic recording when they could just use the phone they already have and get a good one that some people may not even be able to tell the difference between.</p> <p><u>Size</u> – More and more you hear about large companies buying out the competition to form massive companies that cannot be competed with. As Zoom is quite small in comparison to almost all of their competition, those in charge will have to decide whether or not it is worth it to keep producing their own products, or to allow themselves to become part of a bigger company.</p>

TEAC Corporation (TASCAM Subsidiary)

Overview: TEAC is also a Japanese company who creates numerous technological music products. However, TEAC has been around for a lot longer than Zoom has, being founded in 1953. TEAC has numerous subsidiaries and creates many different types of products, however, it is TEACs subsidiary TASCAM that proves to be the largest competitor of Zoom.

Strengths	Weaknesses
<ul style="list-style-type: none"> • <u>Experience</u> – Having been around since 1953, TEAC has had a lot longer to learn how to succeed in the music market. • <u>Wide Product Range</u> – TEAC is a very large company that has a history and reputation within numerous fields of music technology including microphones, speakers, and media playback devices. • <u>Somewhat Nationally Based</u> – Although TEAC is a Japanese company, TASCAM is actually an American based subsidiary. This means there is less international communication and travel required to get decisions made. • <u>Price</u> – Purely in regards to audio quality, TASCAM is known for outputting products of similar audio quality to that of Zoom for a much lower price. 	<ul style="list-style-type: none"> • <u>Fragile</u> – A common complaint of TASCAM audio recorders is that they quite fragile and made from cheaper materials. • <u>Bulky</u> – Same as Zoom, TASCAMs recorders are also on the bulkier side making them a little more difficult to keep on your person. • <u>Internationally Based</u> – While being a company that has locations in numerous countries is definitely a strength, being based in a company outside of the United States gives them a disadvantage within the United States (a large market) as opposed to other companies that are based within the United States.
Opportunities	Threats
<ul style="list-style-type: none"> • <u>Podcasting</u> – As podcasting continues to explode in popularity, the number of people looking for high quality microphones outside of the musician market is increasing. If Zoom markets to this audience, they will see a large increase in sales. 	<p><u>Smart Phones</u> – As smart phones continue to get more and more advanced, many people may not be willing to pay hundreds of dollars for a fantastic recording when they could just use the phone they already have and get a good one that some people may not even be able to tell the difference between.</p> <p><u>Dying Technology</u> – As TEAC is an older company, a lot of their products that were once very relevant in music and society are slowly becoming relics. Entire product lines such as media playback devices (cd players, turntables, and stereo systems) are almost completely disappearing from the market which means TEAC will need to continue to create new and relevant product lines if they wish to stay relevant in the industry.</p>

Worksite Evaluation
Paul Dougall

I was quite satisfied with my coworkers, superiors, and the work site in general at Zoom. I felt like I was being treated as a part of the team and not just as an intern there to do the things everyone else did not want to. I got along great with the Zoom employees and always felt comfortable and respected. Samuel, my site supervisor, made sure that I was constantly on top of things and as long as I was asking questions everyone was more than willing to teach me and truly allow me to learn as much as I could.

I was expected to know an extensive amount of information, however, I was never reprimanded for not knowing something. I found the high expectations very useful and helper to prepare me for the show in the best way possible.

Knowing that I am student looking for all different kinds of experience, Samuel gave me the final day off to go and enjoy the show which I found to be beyond rewarding. Thus I was able to able not only work experience, but a once in a lifetime experience as an attendee of the NAMM show. They also gave me the amazing experience of being allowed to attend both the national sales meeting as well as the international business meeting. These were one of my favorite parts of the entire show, seeing how the company works and what the numbers and methodologies are behind the products and marketing campaigns.

Samuel and the rest of the team made sure that I felt important and relevant while also not overloading me with responsibilities I would not be able to handle. I would

highly recommend the company to anyone interested in recording technology and was glad to have worked with them during the 2019 NAMM show.

Financial Statement Analysis
Paul Dougall

BALANCE SHEET INFORMATION					
COMPANY NAME: _____		ZOOM			
YOUR NAME: _____		PAUL DOUGALL			
Account Name	2017	2016	% Change	% Common Size 2017	Common Size RMA
Accounts Receivable	6,199,225	7,438,098	-16.7	10.3	21.4
Inventory	12,722,056	8,475,362	50.1	21.2	33.2
Total Current Assets	54,414,170	47,307,194	15.0	90.8	68.3
Net Fixed Assets (PP&E + Land)	1,369,378	1,304,636	5.0	2.3	17.0
Goodwill and Intangibles	255,481	33,308	667.0	0.4	9.7
Total Assets	59,963,527	52,551,987	14.1	100%	100%
Accounts Payable (AKA Trade Payables)	11,010,716	9,384,479	17.3	18.4	10.5
Total Current Liabilities	20,124,216	17,832,612	12.9	33.6	35.9
Total Liabilities	20,124,216	17,832,612	12.9	33.6	49.8
Total Net Worth	39,839,311	34,719,375	14.7	66.4	50.2
Total Liabilities & Net Worth	59,963,527	52,551,987	14.1	100%	100%

INCOME STATEMENT INFORMATION

COMPANY NAME: ZOOM
 YOUR NAME: PAUL DOUGALL

Account Name	2017	2016	% Change ⁵	% Common Size 2017 ⁴	Common Size RMA
Revenue (Sales)	55,522,303	51,242,982	8.4	100%	100%
Cost of Goods Sold (or Cost of Sales) (If Available)	36,265,210	34,464,074	5.2	65.3	63.4
Gross Profit (If Available)	19,257,085	16,778,908	14.8	34.7	36.6
Interest Expense	95,506	44,321	115.5	0.2	
Net Income	2,543,585	1,539,025	65.3	4.6	
Tax Expense	670,885	215,890	210.8	1.2	
Pre Tax Income	3,214,478	1,754,923	83.2	5.8	6.1

MAIN SOURCES AND USES OF CASH FROM THE CASH FLOW STATEMENT

COMPANY NAME: ZOOM
 YOUR NAME: PAUL DOUGALL

	AMOUNT OF SOURCE	AMOUNT OF USE
TOP 4 SOURCES:	USE THE FOUR LARGEST POSITIVE NUMBERS	
Depreciation	1,954,750	
Increase in notes and accounts payable	1,638,632	
Proceeds from issuance of common shares	2,999,207	
Profit before income taxes	3,214,478	
TOP 4 USES:		USE THE FOUR LARGEST NEGATIVE NUMBERS¹
Increase in inventories	 	-4,029,115
Purchase of plant, property, & equipment	 	-2,205,190
Payments of loans receivable	 	-1,519,942
Share of profit of entities accounted for using equity method	 	-1,292,096

	<u>2017</u>	<u>2016</u>
Current Ratio = CA/CL	54,414,170/20,124,216 = 2.7	47,307,194/17,832,612 = 2.7
Average Collection Period = (Sales/AR)	$\frac{360 \text{ days}}{(55,522,303/6,199,225)} = 40.2 = 41$	$\frac{360 \text{ days}}{(51,242,982/7,438,098)} = 52.3 = 53$
Days Inventory on Hand = (COS/ Inv)	$\frac{360 \text{ days}}{(36,265,210/12,722,056)} = 126.3 = 127$	$\frac{360 \text{ days}}{(34,464,074/8,475,362)} = 88.5 = 89$
Fixed Asset Turnover = $\frac{\text{Sales}}{\text{Net Fixed Assets}}$	$\frac{55,522,303}{1,369,378} = 40.6$	$\frac{51,242,982}{1,304,636} = 39.3$
Total Asset Turnover = $\frac{\text{Sales}}{\text{Total Assets}}$	$\frac{55,522,303}{59,963,527} = 0.9$	$\frac{51,242,982}{52,551,987} = 1.0$
Debt/Worth Ratio = $\frac{\text{Total Liabilities}}{\text{Net Worth}}$	$\frac{20,124,216}{39,839,311} = 0.5$	$\frac{17,832,612}{34,719,375} = 0.5$
TIE Ratio = $\frac{\text{NI} + \text{IE} + \text{TE}}{\text{IE}}$	$\frac{2,543,585 + 95,506 + 670,885}{95,506} = \frac{3,309,976}{95,506} = 34.7$	$\frac{1,539,025 + 44,321 + 215,890}{44,321} = \frac{1,799,236}{44,321} = 40.6$
Days Payable = (COS/AP)	$\frac{360 \text{ days}}{(36,265,210/11,010,716)} = 109.3 = 110$	$\frac{360 \text{ days}}{(34,464,074/9,384,479)} = 98.0 = 98$
Profit Margin = $\frac{\text{Pre Tax Net Income}}{\text{Sales}} \times 100$	$\frac{3,214,478}{(55,522,303 \times 100)} = 5.8\%$	$\frac{1,754,923}{(51,242,982 \times 100)} = 3.4\%$
Pre Tax ROE = $\frac{\text{Pre Tax Net Income}}{\text{Total Net Worth}} \times 100$	$\frac{3,214,478}{(39,839,311 \times 100)} = 8.1\%$	$\frac{1,754,923}{(34,719,375 \times 100)} = 5.1\%$
Pre Tax ROA = $\frac{\text{Pre Tax Net Income}}{\text{Total Assets}} \times 100$	$\frac{3,214,478}{(59,963,527 \times 100)} = 5.4\%$	$\frac{1,754,923}{(52,551,987 \times 100)} = 3.3\%$

RATIO	2017	2016	% Change	Best RMA	Av. RMA	Worst RMA	Compare to Av.	Compare to Best/Worst
Current Ratio	2.7	2.7	0%	2.7	2.0	1.1	35%	0% Best
Av. Coll. Period	41	53	-22.6%	25	38	56	7.9%	-26.8% Worst
Days Inv. On Hand	127	89	42.7%	60	91	140	39.6%	-9.3% Worst
Fixed Asset Turnover	40.6	39.3	3.3%	45.5	18.6	9.4	118.3%	-10.8% Best
Total Asset Turnover	0.9	1.0	-10%	2.6	2.2	1.4	-59.1%	-35.7% Worst
Debt/Worth Ratio	0.5	0.5	0%	0.6	0.8	2.4	-37.5%	-16.7% Best
TIE Ratio	34.7	40.6	-14.5%	57.6	13.8	2.1	151.5%	-40.0% Best
Days Payable	110	98	12.2%	15	24	32	-358.3%	-243.8% Worst
Pre Tax Profit Margin	5.8%	3.4%	70.6%	X	6.1%	X	-4.9%	X
Pre Tax ROE	8.1%	5.1%	58.8%	48.4%	21.8%	10.7%	-62.8%	-24.3% Worst
Pre Tax ROA	5.4%	3.3%	63.6%	27.8%	11.5%	4.8%	-53.0%	12.5% Worst

Introduction

The company is ZOOM Corporation, they develop and distribute electronic musical devices including recording devices, digital mixers, and digital instruments. They are a Japanese company established in 1983 with North American and United Kingdom affiliates.

Liquidity Analysis

Current Ratio

'17	'16	% Change	Best	Average	Worst
2.7	2.7	0%	2.7	2.0	1.1

ZOOM's current ratio remained the same at 2.7. This is due to a 15% increase in current assets and a 12.9% increase in current liabilities. It's current ratio of 2.7 is 35% above the industry's average of 2.0 and the same as the industry's best of 2.7. This is because ZOOM's common sized current assets of 90.8% are 32.9% higher than the industry average of 68.3%, while ZOOM's common size of current liabilities is 33.6% are 6.4% below the common size RMA of 35.9%.

Average Collection Period

'17	'16	% Change	Best	Average	Worst
41	53	-22.6%	25	38	56

ZOOM's average collection shrunk 22.6% from 53 days to 41 days. This is due to both a 16.7% decrease in accounts receivables and a 8.4% increase in sales. At 41 days, ZOOM is 7.9% worse than the industry average of 38 days but 26.8% better than the industry worst of 56 days. It is worse than average even though the common size of ZOOM's accounts receivables is only 10.3%, which is 51.9% lower than the common size RMA of 21.4%. This indicates that ZOOM probably has proportionately less in credit sales but is slower in collecting them.

Day's Inventory on Hand

'17	'16	% Change	Best	Average	Worst
127	89	38.3%	60	91	140

ZOOM's days inventory on hand increased 42.7% from 89 days to 127 days. This is due to a 50.1% increase in inventory and despite a 5.2% increase in cost of sales. ZOOM's days inventory on hand is 39.6% worse than the industry average of 91 days, but 9.3% better than the industry worst of 140 days. It is slower than average because ZOOM's cash percentage of total assets of 47.5% is 309.48% higher than the RMA cash percentage of total assets of 11.6% which makes the other assets accounts artificially low. However, it is slower than average despite both ZOOM's common size of inventory of 21.2 being 36.1% lower than the common size RMA of 33.2 and its common size of cost of sales is 65.3 being 3.0% higher than the common size RMA of 63.4.

Asset Analysis

Fixed Asset Turnover

'17	'16	% Change	Best	Average	Worst
40.6	39.3	3.3%	45.5	18.6	9.4

ZOOM's fixed asset turnover increased by 3.3% from 39.3 to 40.6. This is due to a 8.4% increase in sales despite a 5% increase in net fixed assets. At 40.6, ZOOM is 118.3% better than the industry average of 18.6 but 10.8% worse than the industry best of 45.5. It is above the industry average because ZOOM's common size of net fixed assets is 2.3 which is 86.5% below the common size RMA of 17.0.

Total Asset Turnover

'17	'16	% Change	Best	Average	Worst
0.9	1.0	-10.0%	2.6	2.2	1.4

ZOOM's total asset turnover decreased by 10.0% from 1.0 to 0.9. This is because of a 14.1% increase in total assets and despite a 8.4% increase in sales. At 0.9, ZOOM is 59.1% below the industry average of 2.2 and 35.7% below the industry worst of 1.4. The reason the total asset turnover is 59.1% lower than the average but the fixed asset turnover is 118.3% higher than the industry average means that ZOOM is really efficient at turning over their fixed assets but turns over their other assets much less often.

Debt Analysis

Debt/Worth Ratio

'17	'16	% Change	Best	Average	Worst
0.5	0.5	0%	0.6	0.8	2.4

ZOOM's debt to worth ratio remained the same at 0.5. This is due to a 14.7% increase in total net worth and a proportional 12.9% increase in total liabilities. ZOOM's debt to worth ratio is 37.5% better than the average of 0.8 and 16.7% better than the industry best of 0.6. It is better than even the industry best because ZOOM's common size of net worth is 66.4 which is 32.3% higher than the common size RMA of 50.2 and their common size of liabilities is 33.6 which is 32.5% lower than the common size RMA of 49.8.

TIE Ratio

'17	'16	% Change	Best	Average	Worst
34.7	40.6	-14.5%	57.6	13.8	2.1

ZOOM's TIE ratio decreased by 14.5% from 40.6 to 34.7. This is due to a 115.5% increase in interest expense and despite a 65.3% increase in pre-tax net income and a 210.8% increase in tax expense. At 34.7, ZOOM's TIE ratio is 151.5% better than the industry average of 13.8 and 40.0% worse than the industry best of 57.6. ZOOM's common size of pre-tax net income is 4.6, their common size of interest expense is 0.2, and their common size of tax expense is 1.2.

Days Payable

'17	'16	% Change	Best	Average	Worst
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110	98	12.2%	15	24	32
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ZOOM's days payable increased 12.2% from 98 days to 110 days. This is due to a 17.3% increase in accounts payable and despite a 5.2% increase in cost of sales. At 110, ZOOM's days payable is 358.3% slower than the industry average of 24 and 243.8% slower than the industry worst of 32. ZOOM's days payable is significantly slower than even the industry's worst because its common size of accounts payable of 18.4 is 75.2% higher than the common size RMA of 10.5 and despite its common size of cost of sales of 65.3 being 3.0% higher than the common size RMA of 63.4.

Profitability Analysis

PRE TAX Profit Margin

'17	'16	% Change	Best	Average	Worst
5.8	3.4	70.6%	NA	6.1	NA

ZOOM's pre-tax profit margin increased 70.6% from 3.4 to 5.8. This is due to a 83.2% increase in pre-tax net income despite a 8.4% increase in sales. ZOOM's gross profit margin increased 6.1% from 32.7% to 34.7% because gross profit increased by 14.8% despite sales increasing 8.4%. At 5.8, ZOOM is 4.9% below the industry average of 6.1. It thus makes sense that ZOOM's common size of gross profit margin of 34.7 is 5.2% below the common size RMA of 36.6.

PRE TAX ROE

'17	'16	% Change	Best	Average	Worst
8.1	5.1	58.8%	48.4	21.8	10.7

ZOOM's pre-tax ROE increased by 58.8% from 5.1 to 8.1. This is because of a 83.2% increase in pre-tax net income despite a 14.7% increase in total net worth. At 8.1, ZOOM's pre-tax ROE is 62.8% below the industry average of 21.8 and 24.3% below the industry worst of 10.7. ZOOM's pre-tax ROE is even below the worst because ZOOM's common size of pre-tax net income of 5.8 is 4.9% below the common size RMA of 6.1 and their common size of net worth of 66.4 is 32.3% higher than the common size RMA of 50.2.

PRE TAX ROA

'17	'16	% Change	Best	Average	Worst
5.4	3.3	63.6%	27.8	11.5	4.8

ZOOM's pre-tax ROA increased 63.6% from 3.3 to 5.4. This is because of a 83.2% increase in net income and despite a 14.1% increase in total assets. At 5.4, ZOOM is 53% below the industry average of 11.5, but 12.5% above the industry worst of 4.8. ZOOM's pre-tax ROA is below the industry average because the pre-tax net income of 5.8 is 4.9% below the common size RMA of 6.1.

Cash Flow Analysis

**MAIN SOURCES AND USES OF CASH (2017 Only (Unless doing 2018, then 2018 only.)
FROM THE CASH FLOW STATEMENT**

COMPANY NAME: ZOOM
YOUR NAME: PAUL DOUGALL

	AMOUNT OF SOURCE	AMOUNT OF USE
TOP 4 SOURCES:	USE THE FOUR LARGEST POSITIVE NUMBERS¹	
Profit before income taxes	3,214,478	
Proceeds from issuance of common shares	2,999,207	
Depreciation	1,954,750	
Increase in notes and accounts payable	1,638,632	
TOP 4 USES:		USE THE FOUR LARGEST NEGATIVE NUMBERS¹
Increase in inventories	 	-4,029,115
Purchase of plant, property, & equipment	 	-2,205,190
Payments of loans receivable	 	-1,519,942
Share of profit of entities accounted for using equity method	 	-1,292,096

ZOOM's highest cash inflow came from profit before income taxes in the amount of \$3.2 million. The best source of cash is income from continuing operations which consists of net income (net profit) and related cash receipts so profit before income taxes is a great highest cash inflow. The second highest cash inflow came from proceeds from issuance of common stock in the amount of \$3.0 million which

makes sense since ZOOM went public on the Tokyo Stock Exchange in March of 2017. The third highest inflow came from depreciation in the amount of \$2.0 million. This is not a great third highest source of cash because ZOOM only has a small investment in PP&E as compared to their total assets. This means ZOOM's depreciation expenses should not be as large as they are. The fourth highest inflow came from increase in notes and accounts payable in the amount of \$1.6 million. This would be a good source of cash considering the large investment the company just made in increasing their inventory, however, ZOOM's days payable of 110 days is 243.8% slower than even the industry worst days payable of 32. This then means it will take a long time for ZOOM to pay off their debt. However, if it is not creating any problems with their creditors then this very high days payable allows ZOOM to have that cash available for longer periods of time which could allow them to use the cash for an opportunity that arises during the time between the sale and payment to the seller.

ZOOM's highest cash outflow came from increase in inventories in the amount of \$4.0 million. This will be a bad highest cash outflow if sales do not increase in the upcoming years. Sales increased marginally this year as opposed to how much ZOOM increased their inventory and if sales do not increase by a large amount soon, then ZOOM will end up with a large amount of inventory that they will not be able to sell as it becomes more and more outdated. The second highest cash outflow came from purchase of plant, property, & equipment in the amount of \$2.2 million. This would normally be an understandable use of cash for an expanding business, however, it is a little concerning that such a large investment was made in PP&E and yet ZOOM's common size of net fixed assets of 2.3 are relatively small when compared to their total assets and the RMA common size net fixed assets of 17.0. The third highest cash outflow came from payments of loans receivable in the amount of \$1.5 million. This is an expense that cannot be avoided and is understandable for an expanding company that recently invested a lot in both PP&E and inventory. The fourth highest cash outflow came from share of profit entities accounted for using equity method in the amount of \$1.3 million. This means ZOOM has a decent sized investment in a company (20-50% usually) which has made a profit and this profit is being distributed to ZOOM, however this amount is already included in Net Income which is why it has to be deducted.

Conclusion

Our loan decision on ZOOM will be evaluated based on its primary strengths and weaknesses, starting with weaknesses.

ZOOM's largest weakness is by far their days payable which is 243.8% worse than the industry worst. Which is a result of ZOOM having a common size of accounts payable 75.2% higher than the common size RMA. This either suggests that ZOOM is struggling to pay back its creditors or that ZOOM receives really good credit terms. ZOOM's total asset turnover is 35.7% worse than the industry worst. This probably means that ZOOM either has a large amount of old inventory in storage or is overproducing. Since total assets increased 50.1% from the previous year, it is probable that ZOOM overproduced in the past year and that sales are not what they expected them to be. All three of ZOOM's profitability ratios are below the industry average and their ROE is even worse than the industry worst by 24.3%. These tell us that the company is not creating as large a profit as the industry average, however, ZOOM is still a relatively young company compared to some of their larger competitors and ZOOM recently went through some changes including going public on the stock market as well as making a decent sized investment in PP&E and a large investment in inventory. These changes and large investments help to explain and justify ZOOM's smaller profits as compared to the industry. ZOOM's average collection period and days inventory on hand are both below average. The days inventory on hand is a result of cash being 47.5% of total assets as opposed to the RMA of 11.6.

It should be taken into consideration that Japan is known for having slightly more lenient credit terms as a nation than average, however, this does not make up for such a large difference between the industry average days payable of 24 and ZOOM's days payable of 110 and the industry average day's inventory on hand of 91 and ZOOM's days inventory on hand of 127.

ZOOM's strengths are their fixed asset turnover, their debt/worth, and their TIE. Their fixed asset turnover is 118.3% above the industry average which means the company effectively uses their fixed assets such as plant, property, & equipment. ZOOM's debt to worth ratio is 16.7% better than even the industry best due to their below average liabilities and above average net worth. ZOOM's TIE ratio is also 151.5% above the common size RMA for the industry. ZOOM's largest source of cash was their

profit before income tax and their largest costs were on increasing inventory and purchasing fixed assets which will most likely lead to increased value in the company and increased productivity.

Based on this information, I would recommend finding out if ZOOM is struggling to pay their creditors or if they are just receiving really good credit terms. If they are struggling to pay I would recommend against lending to ZOOM, however, if this is not the case then I would recommend in favor of lending to ZOOM.