Decision making using financial accounting
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Lecture – 33
Ratios Analysis – Part 1

Hello everybody and good day. And this is the last week of our sessions for this particular course. So, what we will try and do today in the last class if you have last week if you had actually seen what we did was we did that quick recap of whatever we had covered so far that is week 7.

Now, being week 8 what we will try and do is we will try and get to the closure of this entire course out here. So, how are we getting the closure out here, so what I am trying to do is we are trying to look at basic aspects out here we will actually do what we call it as typically the ratios basically.

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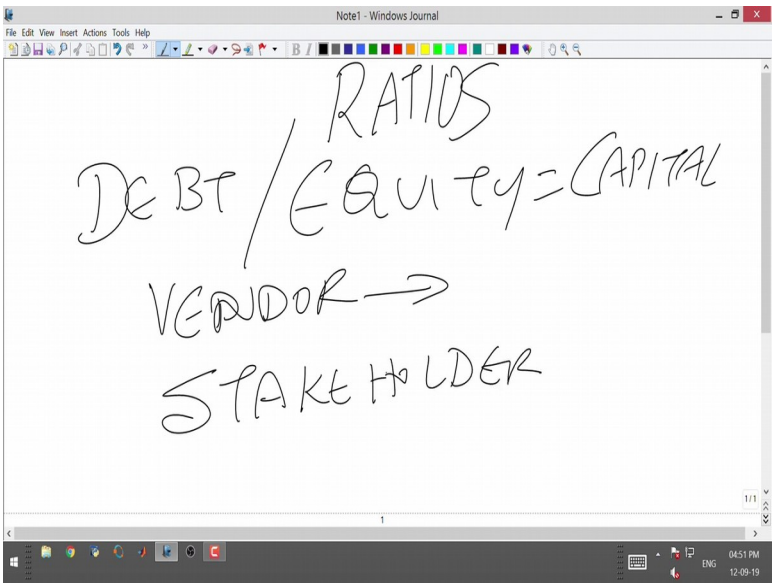

When I say we will do what is called as analysis of the whole thing, we will do what is called as the ratios out here. So, when I say ratios what is what do you mean by ratios, why do we need to do ratios, what is it what is it that we are trying to do? We are trying to look at what you call it as analyzing what you call it as the health of the company from various perspectives. What are those various perspective form with we are analyzing health of the company?

Let us say you look at something like what do you call it as a debt provider or what do you call it as a equity provider, they need to analyze the health of the company to know what is or what is the whether to invest or not invest, I will basically say capital provider. I need to look at what do you call it as a vendor to the company, he needs to analyze the health of the company in order to get his money back.

Now, what do you call it as this is basically what we call it as I mean you know what are the aspects that a vendor will look for. Basically what I am trying to says every stakeholder is looking at analysis of this company's financials out there for various aspects. Let us start with what do you call it as typically let us say if you have to sort of look at it.

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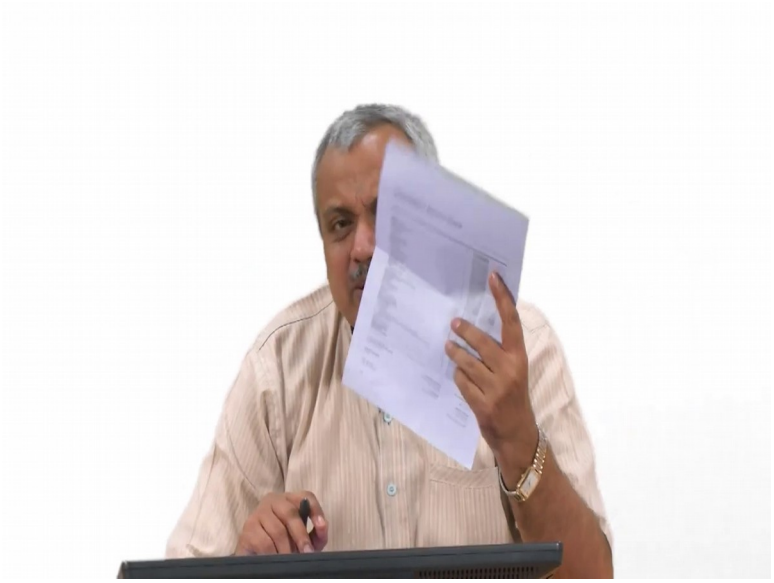

Let us look at this particular annual report that is the consolidated financial statements of Maruti Suzuki what we took for our analysis let us take that. And let us see let us try and see if we can analyze it there. If we look at it from what do you call it as the vendor perspective, I am looking at let us first look at from the vendor perspective. Now, if I have to look at it from the vendor perspective, I am just going to do a, what does a vendor typically look for. A vendor means a supplier, the supplier will always look for one basic aspect that is will he, when will he get his money or whether he will get his money.

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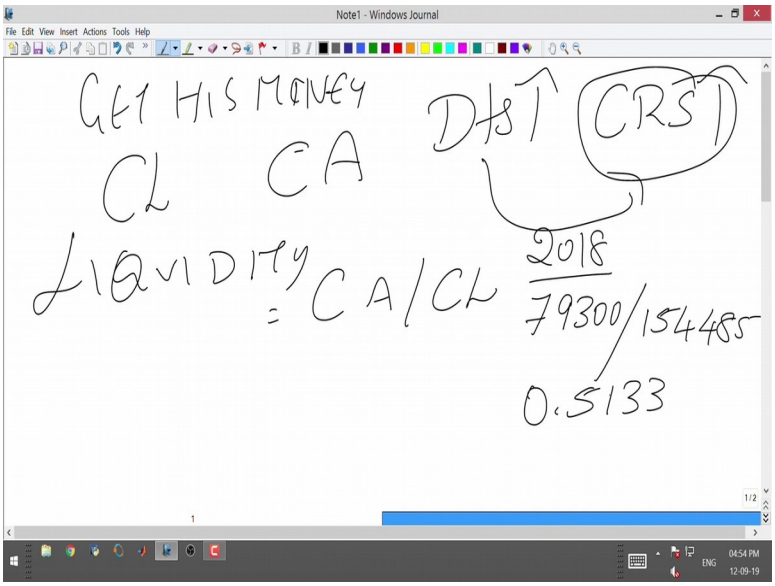

Now, what are the aspects do they look for, how does a vendor get, now what happens when you buy goods and credit what happens there is a creditors in the balance sheet with increases. When you sell goods on credit what happens, there is a debtors balance and I mean the balance sheet which will also increase out there. Now, how do you pay these fellows, the creditor fellows? I pay the creditor fellows from basically my what do you call it as the when I collect money from the debtors I basically pay. Basically what happens I am taking care of what do you call it as my current liabilities with the help of my current assets out there that is my current liabilities will be paid up by my current assets out there.

Now, I need to know basically this is what we call it typically as the liquidity of the company liquidity, liquidity, how liquid is there enough amount of liquidity in the company for the company to take care of what do you call it as the current liabilities. I repeat either enough liquidity in the company to take care of what do you call it as current liabilities. So, what do you do? You normally do what is called as current assets by current liabilities will tell me that.

Now, let us look for Maruti Udyog for the year 2018, what are the list of current assets out there the current assets for Maruti out here, the balance sheet what we took was about 79300. What are the current liabilities out here? The current liabilities what 154485, (Refer Time: 05:03). Now, if that is the case, now what is what does it lead to? It leads to

basically a current ratio of zero point what do you call it as 5133. I meant to say that your current liabilities are more than your current assets out there.

Now, do you want to say, oh, is it good, is it bad, etcetera. I am not going to give you a number of what is a good number or what is a bad number etcetera out here. It depends on the policy of the company, which we will see as we go along we will see that further. In this particular case the current liabilities might be more because for the simple reason that you might be selling goods on cash, and whereas you might be purchasing on credit whereas, then what happens your creditors balance in the balance sheet liable to say that the balance sheet will be very high, whereas there will be no debtors out there.

One can argue if there are no debtors there will be cash, because you are selling on cash, no company tries to keep cash liquid cash what they will do they will move to the next level that is they will move to one level above in the in the balance sheet, and they will basically park the money somewhere or invest the money. And then what happens your cash balance is normally your debtors will not be there and basically cash is invested out there. So, your current assets per say might be low also. Now, normally it varies from industry to industry, it varies basically depending on the policy of the company also.

Now look at it look for 2017 what does this ratio out there. If you look at 2017, my current assets was 87980 was my current assets. My current liability in this particular case is 132368, I am sorry 368 that basically gives me what you call it as 0.664. So, what I we are trying to do out here in this particular case we saw that last year the current asset current ratio was liquidity was about 0.68 this year my liquidity is become 0.51. So, what does it signify, more or less the company is maintaining what do you call it as a negative current I mean what you call it as a negative working capital requirement in this particular case.

What do you mean by working capital? Work you mean by working capital, what do you mean by negative working capital etcetera. Let us start up, spend a minute on that.

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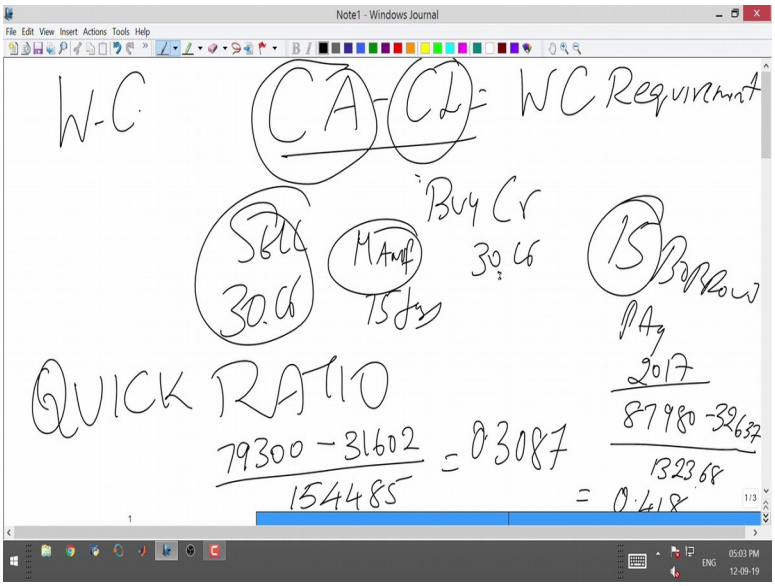

When we say working capital, working capital is nothing but the money that is required for the day-to-day operations of the particular company. Now, what is it, how do you manage that? The difference between what is called as my current assets and the current liability is what is called we call it as a working capital requirement. Now, what is why is this current assets and current liabilities out here. Please note all your current assets out there basically what I have what it has to be financed that is uses and what you call it as sources and utilization of fund go back and then recall that.

Now, if all these has to be funded out there, basically how it is funded, it is basically funded by my current liabilities very simple. I buy on credit 30 day credit, I do what is called as manufacturing, and then I sell on 15 day credit. How am I able to sell and 15 day credit, I am able to give the goods not receive the money because I do not have to pay this fellow this fellow, imagine the processing time is another 15 days.

So, what happened 30 day credit I have bought, 15 days I spent on manufacture, I am selling on a 15 day credit. So, what happened the day on which I get the money back here, I will I am going to go to pay this fellow out here. So, in that sense I am basically taking care of it that is the day on which I am getting the money on this sale, I will pay what do you call it as the buyer out there. So, what is called it this, this require it.

Supposing, it says instead of 15 day credit, you are also selling on a 30 day credit out there. Then what happens, once you buy the goods, you need 15 days to manufacturing,

you need 30 days to get the money, you need about 45 days whereas, you money falls due for 30 days out there, at the end of it 30 days, you have to pay for the buyer. So, what happens for 15 days you need to borrow money that money out there to pay out there for 15 days out here. Now, that is what we typically call it as a working capital requirement out there.

In this case, because the current liabilities are higher than the current assets what you have, you have what is called as a negative working capital in this particular case out there. Now, to move further in the liquidity ratio itself what we sort of looked at out here there is what is called as further refinement of this liquidity that further refinement of this liquidity is basically called as quick ratio. What is this quick ratio that is all the current assets are liquid are easily converted to cash perfectly all right, but there are certain current assets which can be relatively more stickier.

When I say relatively more sticky, I mean to say that the ease of that conversion may not be very, very, very, very high. Now, what did we see we said that in the last I think in the in the week 6 also somebody had ask me this doubt. And I had tried to clarify this. Normally, I will say inventory is the most sticky form of asset. Somebody argued no, no, it should be accounts receivable because I am not receiving the money.

Please understand when you have sold goods on credit and when you have to receive the money, you can always do what is called as discounting which I explained, you can always do what is called as factoring also which I basically explained in the courses that is factoring. What is factoring out there? Factoring is nothing, but I can sell all the receivables that I have out there. There are (Refer Time: 11:06) factors, there is a SPA factor nothing.

Imagine situation where you ought to receive about 10000 crores. Now, I need to receive on an average 10000 crores 3 months down the line now but whereas I need money as of today. So, what do I do I will sell all the receivables from the books to a factoring agent, my factory will give me 9500 crores out there the other 500 crores you might keep for his cost because of the 3 months later only he is going to get and as well as factoring cost and everything nine point 9500, 9700 crores I will get, so that money I am getting as of now, then once I get the money the receivables are not there in my books anymore. The

receivables are not there in my books anymore, and then what is there in my books is cash I have sold a.

Question supposing the person was bought the receivables he is not able to collect the money, then what happens? Please note in India what we have is only recourse factoring, when we say recourse factoring if he is not able to collect a money within the reasonable period, we will come back to you, collect give the bills out there, collect 10000 crores, not 9500 and 9700 what he gave because 10000 crores plus what is called as damages for his effort out there that is what he will collect and that is what recourse factoring is out there. And, in India what we have is we have recourse factoring and let us stick to that out.

So, what happens that is easier asset out here for you is receivables inventory is normally the most stickiest form of asset what do you basically have out there. So, now, let us look at what is the quick ratio in this particular case, quick ratio in this particular case is nothing but 79300 minus what is called as the inventory out here, in this particular case it is 31602, and then whatever is your current liabilities whatever what does your current liability current liabilities 154485.

So, it is nothing but 154485 out here. So, that will that is equal to basically in this particular case that is about 0.3087 out for two thousand say eighteen. And for 2017 it is nothing but I am just going to do it again that is about 87980 minus 32637 637 divided by my current liabilities which is about 132368 that gives me a current ratio of about 0.418.

So, what am I trying to do out here? In this particular case, it was 0.41, it has move to 0.30, all these things does not make much of significance out here, because your requirement per say is a working capital per say what you call it is you have a negative working capital in this particular company so not much of an issue. So, you need not really bother much about it in the process. I will explain this as we go along further out here. Now, the next thing what he is worried about in the liquidity of the company is fine.

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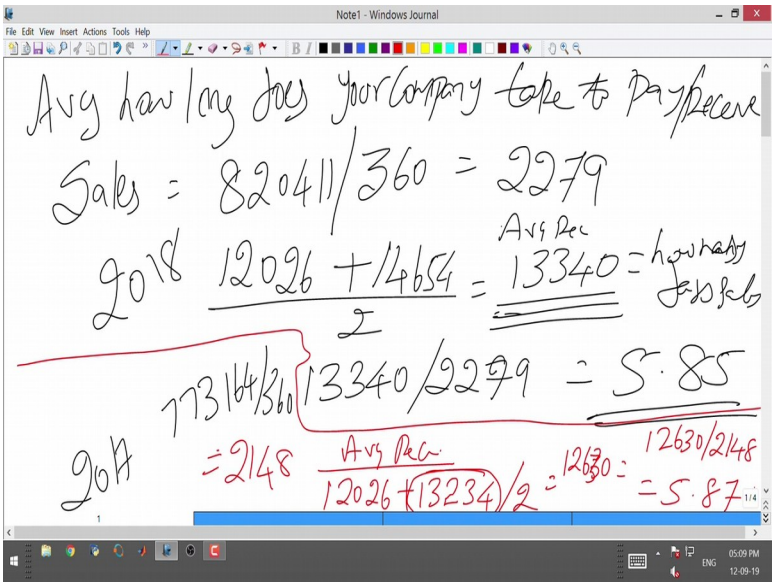

But he is also worried about on an average how long does your company take to pay or even receive.

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Why? Because, only if you receive you will pay; so, on an average how long does it take for it to receive, on an average how long does it take for you to pay, a company is normally worried about these kind of things also. So, what do you do for that? How do I know on an average, what is the how long do you take to receive or how long do you take to pay etcetera. Look at a very very simple aspect out here look at what do you call it as a very very simple aspect out here.

Now, let us say what is the sales you have. Let us look at how long do you take to receive, how long do you take to receive. Let us look at what is the sales out there. Here when I say sales I mean only what do you call it as I am not looking at the other income I am looking at only what is called as revenue from operations, revenue from operations is 820411 out there for what do you call it as 2018.

So, my immediate question out here in this particular case out here is on an average if this is what is your sales what is your sales per day let us consider 360 days in a year out there. As of now you can consider 365 that is up to you or you can consider two three hundred and what do you call it as 350 also, so that is not a problem, I leave it to you. So,

normally it is about consider at 360 that is we find that on an average you have about your sales is about twenty two thousand 2279 million dollars is a sales per day.

Now, on an average, what is the kind of receivables you have, on an average through the year what is the kind of receivables you have, what is the kind of receivables you have through the year. On an average I am just looking at the average out there. When I say average out there how do you know, so you might immediately argue oh I do not have the data for everyday, so I cannot find the average receivable.

Now, let us look at it let us look at even a simple average, let us look at what is the receivables at the beginning of the year and at the end of the year, let us take that. Beginning of the year is receivable will be what is the receivable in 2016 obviously, that is the 2016 end of the year 2016 is beginning of the year 2017-18, so 16-17. So, we have taken what is the beginning and then what is the closing inventory closing inventory is about trade receivables I think yeah trade receivable I think I am just going yeah 1226 and then 14654 divided by 2 that is 122 not 12026 plus 14654 divided by 2 basically average is over my average, average receivables is about 13340.

I want to know this average receivable what I have average receivable what I have is equal to how many day sales. All that I do is I will say 13340 is the average receivable what I have per day, my receivable is 2279, so that is that is what I will just do it I am looking at normally I take about 5.85 days to receive money on the sales that I have made as far as 2018 is concerned.

As far as 2017 is concerned let us see that what is the sales in 2017 if I have to look at what is the sales in 2017 I am just comparing out there. If I am looking at sales in 2017 it is triple seven double seven three, sorry, it is double seven three one six four divided by about 360, I am sorry I am just going to color it differently out here ok, 773164 toward 5 360 that is about your per for per day sale on an average is about 2148 million out there.

And, let us look at your average what is called as receivables out there, your average receivables opening figures you will have to go to 2016 figures also, because 2016 figures also I looked at one more years balance sheet and then this is the closing figure and then opening figure I have 133 so 234 is what I have that is this I am getting this getting this number basically from 2016 balance sheet. I am getting this number from

2016 balance sheet 1206 plus 13234 divided by 2 that is basically is about my average is about one thousand 12630 is my average out here.

So, I all I am going to do is 12630 divided by what is called as 2148 is, what I am going to do to get this I will say my average was about 5.887 days out here average time take that it takes for me to receive is 5.87 days. This year, current year, it is 5.85 days, last year it is 8.57 days. As I say told you earlier itself you are not selling much on credit you are selling more and more on cash that is where your receivables are so low out there. Let us look at the receivables are fine then now let us look at what is called as the payables out. There the number of average days it takes to pay.

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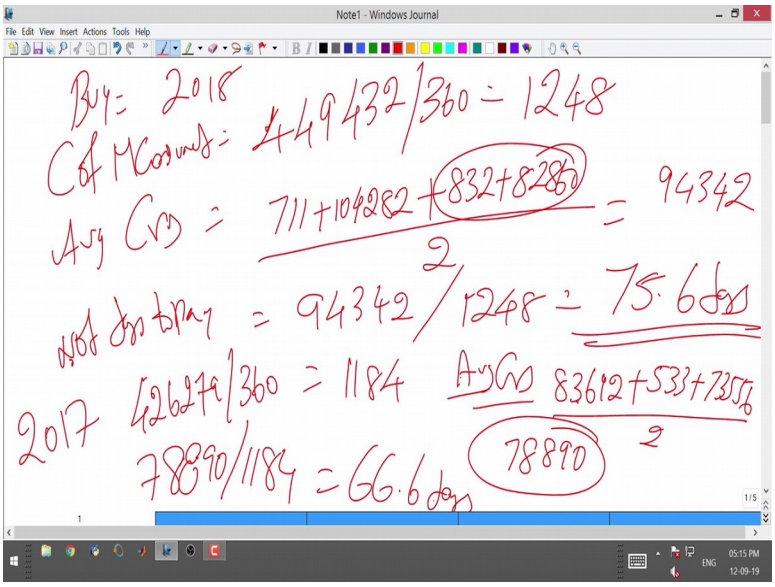

Fund money what do you pay you what you buy that is on what you buy only you have to pay, what is it that you buy that is I look at what are the bar some material that is consumed out there. In 2018 sorry, in 2018 if I look at what are the cost of materials consumed, cost of materials consumed, cost of materials consumed I is about 449432 is a cost of material that is consume. On an average how much do you consume per day, on an average I consume about 1248 million rupees worth of material out there.

Now, on an average what is my what is called as average, what is the creditors out there; again I just do the same thing average creditors I take the last year creditors, I take the current year creditors, I just divided by 2. If I have to look at what is the last year creditors out there, I will have to look at current liabilities, current liabilities total

payables and total outstanding out there, total payables in this particular cases. Yeah, for the current year is 711 plus 104282 is the current years payables, last year's payables is 832 plus there are two parts payables are split into two parts here, there is where you have number 82860 by 2, because these two pertain to one year, these two pertain to the other year.

So, if I look at 711 plus 104282 plus 832 plus 82860 that is on average I my cost of average, my creditors is about 94342 is what I have. Now, all that I do is number of days it takes to pay, number of days to pay on an average I take is 94342 divided by 1248 that is basically equals to you take about 75.6 days to pay out there; as I told you earlier itself that is where you have a negative working capital.

What do you do, you buy on credit; when you sell you are not selling on credit, you are buying on credit and basically you are selling on cash out there. So, number of goods on the amount you have to receive on the sale is only 5 days; whereas amount you have to pay on purchases is about 75 days what you see that is where you have, what is called as a current asset and current liabilities current ratio less than 1, because your current asset is very, very low.

Now, is it a policy of the company or is it good, is it bad, etcetera, you might ask me 100 questions out there, I will come back to all these questions out there. Let me calculate the same thing for 2007, I have some data of the old data what I basically have of the days payables also that is previous years data I will have. So, what I am just doing here is in this particular case, I am looking at what is the cost of material consumed the cost of material that is consumed as a the cost of materials that is consumed in this particular case is 426279, 426279 divided by 360 that is equal to 426279 divided by 360 that is per day, on an average you consider about 1184 million dollars worth of material.

What is my average inventory my sorry, my average creditors out there my average creditors is about I have some figures of the previous year also that is 120 yeah I am sorry, yeah. These two put together I have got a total out here, 83692 these two put together 83692 plus the previous year figure 533 plus what you call it as 73556, 73556 sorry, oh 556 out here divided by 2. This basically out here, this is these two figures put together is the same thing out here; so it is 836 83692 plus 533 plus about seventy 73556,

73556 equal to divided by 2 that is basically average creditors is about 78890 is the average creditors out there.

How many days does it take to pay 78890 divided by 1184, 78890 divided by that is equal to you take on an average about 66.6 days to pay out here. You can see this very clearly in this particular case, you take you are taking 66 days last year to pay, this year you are taking 75 days to pay, you have increased your payment time whereas, when your collection is on 5 days out there. So, what happens your current ratio will be low, your working capital requirement is low.

Policy of the company yes it could be, for example very simple how do you look at Amazon. You buy purchase make a purchase on Amazon, Flipkart, Snapdeal, whatever it is what do you do, you first pay by your credit card or bank transfer and then the goods come to you; and whereas you do or the other option you do you do cash on delivery, so when the goods are delivered at the goods at sold payment is made to the company.

Now, when does Amazon or Flipkart pay their supplier if you actually look at on an average, the days now you look at who pays one of the cases what you look for the Amazon, it on an average takes about close to about on an average take to close to about 200 days to make payment for it suppliers. Whereas, they are getting money on the per sale immediately, whether a cash on delivery or purchase and pay and order. Whereas, the payment that takes place basically is about on an average about 150 to 200 days out there, so what do you do with the money, you are parking it somewhere.

If you are rotating the money you are parking it somewhere out there, you are making some investment and that is also yielding a substantial amount of revenue for these companies out there. Is it good well, if they are able to operate that way that is the best way to operate that is all, because ideally you run the business with somebody elses money that is what they do and that is what that is the best way to do it do business also. But is it always possible that depends on your policy and your muscle, your power to in the market to sort of take care of all these kind of issues out there right, we are not getting into that.

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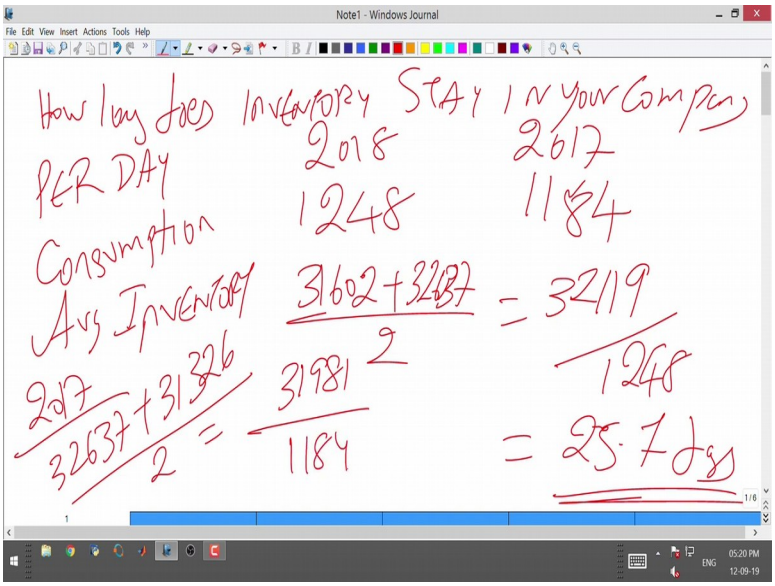

Next the third part of liquidity part of it, what we look at is what you call it is how long does inventory stay in your company, how long does inventory stay in your company, same thing not much of difference. What do you do? Well, that is you get raw material, I mean I presume I when I am talking about inventory, I am talking about raw material out here. You get raw material how long does it take for you to stay, when an inventory enters your godown, how many times does the inventory get turned over or how long does the inventory stay in your godown out there.

Simple, the same way average or what do you call it as what is the what is the normally that is what is the per day consumption of material, we calculate it for 2018, we calculate it for 2017 also. I will just go and then get the figures from here, 2018 is about 1248 and then 2017 is 1184; 1248 and 1184 it is basically the average consumption. What is your average inventory in your go company; please note I am presuming everything to be what do you call it as raw material inventory.

What is the average inventory? Let me look at my inventories out there. My inventory is about in this particular case is 31602, average inventory 32637 that is basically I am talking about average inventory in this particular case. My average inventory in only is about 32119 out there; if this is the average inventory and this is the kind of consumption what I have per day, then how long does it take for me to consume or consume this out

they consume these inventory. If this is the average rate for which I am converting I am I am consuming out there, I am basically looking at consumption out there that is 32119.

So, on an average how long does the inventory stay in my company, on an average my inventory stay at for 27.5 days out here, is what we basically see as far as 2018 concerned, I have done the same thing for 2017; I have the average data, average material, inventory data, I will have that is 32637 plus 2016 figures I have 31326 divided by 2. I am sorry, divided by 2 that is basically give me an gives me an average of about what do you call it as 32637 plus 31326 divided by 2 that gives me an average of about 31981. And, then what is the consumption per day, consumption per day is 1184 that is your normally taking about 27 days.

Every the inventory that comes into your company, basically the inventory that comes in your company basically it takes about what do you call it as 27 days last year and this year it takes about 25 days for you to consume, what do you call it as the inventory it get consumed out there that is the time off. See what happens, what is idea what is the advantage of this, if the inventory holding period is long that means what is happening, there is a money that is getting blocked out there. You are purchasing inventory, and then it is not getting converted to finish goods and so.

If the money is blocked, then that needs you need more and more working capital requirement out there. So, the (Refer Time: 32:30) the as less amount period of time as possible there was the money is bought that is good for you, because the inventory holding is low. You are receive you are you are selling on cash your receivables are low, whereas your payables are high that is the best kind of situation where you will have all the money for yourself out there. Am I with you? Fine. Now, from here we move on to the next stage out there.