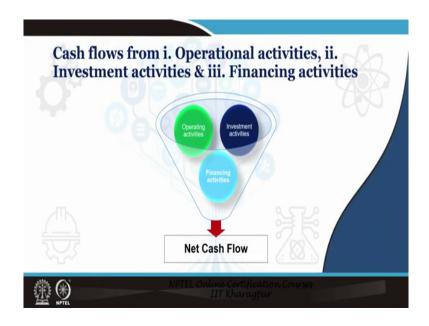
Entrepreneurship Essentials Prof. Manoj Kumar Mandal Rajendra Mishra School of Engineering Entrepreneurship Indian Institute of Technology, Kharagpur

Module - 07 Lecture – 32 Introduction to Financial Statements (Contd.)

Hello and welcome, we will continue our discussion on Introduction to Financial Statements and we have seen that cash flow happens from operational activities and financing activities and investment activities.

(Refer Slide Time: 00:44)



So, this three from these three activities cash goes out, cash comes in and eventually whatever is the net amount that is the net cash flow. We have seen this in our previous session.

(Refer Slide Time: 00:53)

Use of Cash Flow Statement for Startups

- Money gets used up in assets, dividend, investment, and accounts receivables, some of which becomes sticky and illiquid.
- Cash flow shows how liquid the business is and projected cash flow reveals if the company is likely to fall short of cash to make essential payments in the future.
- If cash shortage is imminent, the founders can take preempt action to arrange fund.



Now, cash flow actually gives a clear understanding as to how the cash position is at the end of the operation. How much of cash we are consuming and how much we are generating. And money gets used up in assets meaning that you acquire new asset during the year you pay dividend you make some investments and your account receivable may go up or down. It may so happen that you have improved the recovery process of your receivable.

So, in the process, you are receivable may go down, meaning that your cash flow is improving. Then many of this receivables may even become sticky meaning that some of the; some of the buyers may not pay back meaning they bought stock from you bought finished goods from you, but perhaps their performance is not that good for whatever reason they may not pay back, pay up. So, eventually you may have to write off some of this; some of this receivables.

So, let us make this two points very clear. Receivable is when you sell some goods, you are supposed to receipt the payment from your buyer. So, as long as you do not receipt the payment, the amount that you are supposed to receive remains in your books of accounts as receivable. So, you are supposed to receive some payment from the buyers of your goods or services, that is what is receivable. On the other side the payables as the term means meaning you have to pay.

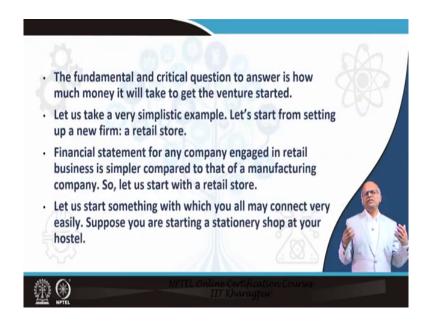
So, you bought raw material and you have to make payment at some point of time. If you are paying in cash payable is not affected. Suppose, you buy raw material for say 10000 rupees and you do not pay anything. So, your payable goes up by 10000. You have to pay this 10000 at some point of time moving forward as per the agreement with the supplier. Suppose, the agreement is that you have to pay after three months. So, for three months this amount remains in your books of accounts as payable.

So, suppliers generates payable, buyers generates receivables. And if you can increase the payable, that is good for you. Because, you are getting goods on credit; that means, you are doing business with somebody else is money. The example of Adani that I gave in the previous session, Adani is doing exactly that. They are recovering their sales proceed faster, then they are making payment to their suppliers. So, there is an accumulation of more than 3500 crore rupees worth of cash with them.

So, they are actually doing business with the money of the suppliers. Because suppliers is supplying the goods and do not net they not insisting on payment and they are selling the goods to the buyers and recovering the money and after some time they are paying back to the suppliers. So, this is a wonderful and attractive proposition to do business. You do not have to pay any interest. Now, if you are cash positive and you do not really need this money, you can make bargain with the supplier make a trade off that you supply at a lower rate. I am going to pay you in advance or early earlier compared to what about we are doing today.

So, you may actually end up making more profit. You can translate that cash into profit. So, you can see that you can improve even competitive advantage. You can buy at a lower rate if you can manage these two wonderfully well.

(Refer Slide Time: 05:05)



Even if you can delay payment of electricity payment of anything. Most of the companies try to do that you can actually increase your margin, whether it translates into profit or not, but you increase the margin you reduce the cost and eventually you will improve the margin.

The fundamental and critical question to answer is how much money it will take to get the venture started. Suppose, you want to start a new business. So, when you start a new business, you ask this question; how much money it is necessary. You have an wonderful idea. Now, you think that this idea is going to translate into a profitable business. So, you start working

on that. After working for a few months you realize that this business requires an investment of say 50 crore rupees. You may not be able to arrange that 50 crore rupees.

So, even before investing anything in the business model in developing the product or doing some market research, you need to have some idea about the scale of investment that you need to make to start this business. If you see that that is affordable suppose for example, for an example you want to start a mini rice mill a mini rice mill requires an investment of something like 50 lakh rupees.

So, you know 50 lakh rupees you get a technology from somebody, some new technology innovative technology that reduces the fuel cost and improves the say polishing or something and maybe it is brown rice that you want to manufacture and brown rice price is high and there is a specific demand for brown rice, because brown rice is very healthy.

So, now you have an idea that it is going to require 50 lakh rupees of investment. So, mean you to put a mini steel plant; a mini steel plant on the other hand may require something like 10 crore rupees. If you are to put up a small say a spark ignition furnace, it is called arch ignition front furnace then, you need more than 10 crore rupees of investment a small furnace, blast furnace normally is very big.

Or see, you want to put up a grinding plant for cement. Cement grinding unit, meaning you buy clinker from somebody and then you grind it and package it and sell. Here also you need nothing short of 10 crore rupees of investment. So, if you cannot really think of arranging 10 crore rupees, you will never ever embark on that. So, first thing you need to know is how much money you need to invest. Now, before we really discuss all of this nitty gritty, let us start a very simple business and that is easy for you to perceive to understand what happens inside the business.

Suppose you start a stationery shop in your hostel room. Suppose, you are a student and you are residing in a hostel and you see that majority of the students go to market place, maybe in the evening time to buy stationery. So, you think that this is a wonderful business proposition, because they have a pain they have to go too market place to buy and market is not always

open and some day it is closed. So, you can maintain some inventory that they can come running and buy and just start without disrupting their studies, they can they can continue the business, continue their studies.

So, you think that this is going to be a wonderful business. Now let us see this is a small business, this just keeping a stationary in your room. So, what do you think? You may need to start this business. At the very minimum you need the inventory. Inventory means; the goods that you are going to sell which will remain in stock with you when customer will come students will come and buy. So, inventory is nothing but, this movable assets that you have the assets that you buy with objective of translating into finished goods and sell.

If you are a retailer, then you do not convert that into anything you buy from one hand you sell on the other hand. So, you buy maybe pencil maybe pen maybe books and other say notebooks etcetera and then you want to sell that you do not want to manufacture anything. So, whatever you buy, these are your inventory. So, you need to buy inventory, because you need to maintain some amount of, some number of pens, some variety of pens and pencils and then sharpener and then whatever you see normally in a stationery shop maybe some books as well. Some high moving books meaning books which are normally textbooks and students normally buy them.

Now, what else do you need? You may actually think of buying a counter meaning there will be a counter where you will place the items before the buy they can inspect it there and then they can make the payment they can put the money on there and then there will be a drawer from where you will bring the change and then pay and then put the cash that the customers are going to give you. So, you need a cash kind of a cash counter where you can keep the things you also need some kind of a rack to you know place it in a very orderly manner.

So, that you can place the pens at one place pencil at another then some loose sheets at some other place so that is easily accessible etcetera. So, you need to make some investment on the racks, you need to make some investment on the on the cash counter. If you think that you need some kind of a calculator for creating an invoice some nowadays some machines are

available just punch, some the buttons and a bill comes out you can give that printed bill to your customer. So, you may need that machine as well.

It is a very simple context. Now, out of all these that I said you need inventory of stationaries and you need these racks and all that. Try to make a distinction between distinction here. See the racks that we that we buy or say fabricate with the help of a carpenter is not for sell on a daily basis. You do not sell racks, you do not sell your counter, you do not sell your computer that you use for generating the invoice or receipt, money receipt.

These are to facilitate your business. These are not really for sale. You may sell that at some point of time when you no longer are interested to do the business or maybe you want to replace them with a better one, but that is a very special case. That is not a regular business of your business. Your business is to sell the stationaries. So, these items that are not for sell, but that you have created as part of your business is these are part of your business, these are part of your total assets, these are long term assets, they are called fixed assets, these are not for sale.

Whereas the inventory of things that you have pro, procured like pen, pencil, notebooks and other things, these are meant for sale. You want to buy them today and then you want to sell them immediately or day after. The sooner you can sell you can convert your goods into money along with some profit so, you make more profit. So, for any businessman their priorities to sell as quickly as possible. They will buy it now even if, even it before it is hitting your store if it can go to somebody else's a store and money comes in is the best option. So, you want to sell them. That is why they are not long term asset they are short term asset.

But their asset nevertheless, because they remain as inventory with you, you have invested money anything that you have invested money remains as an asset for you in that sense even a loss is an asset because you have already invested to create loss lot is losses to be a funded so, you have funded that. So, as long as that loss remains in your balance sheet, it remains as an asset. We will discuss that more some other time, but for the time being you try to make a distinction between liquid asset or current asset.

These are the technical term is current asset, the inventory is part of the current assets. The racks and computers are part of the fixed asset. Fixed assets are not meant for selling on a day to day basis whereas current assets are to be converted into money, into cash as quickly as possible. Inventory is one of the form of current asset the other form of current asset is receivable. Meaning that you have sold the goods somebody has to yet to pay your money.

So, somebody has to pay your money, you are going to receive money so, that is another asset, another part of the current asset. Because, you are expecting the money any day may be within 3 months, 1 month, 2 months and some of the payments are already mature due because you sold 3 months back and today, you are supposed to receive the money these are all assets because, their money is going to come in. But more importantly these are current asset meaning is they have current in nature. They are liquid almost semi liquid in nature. So, these are part of current asset.

Even the cash that you have is also a form of investment in cash. So, cash also is an asset and it is the most liquid asset. So, it is part of current asset. Payable on the other hand is a liability, current liability because you have to pay it within 3 months or less than 3 months.

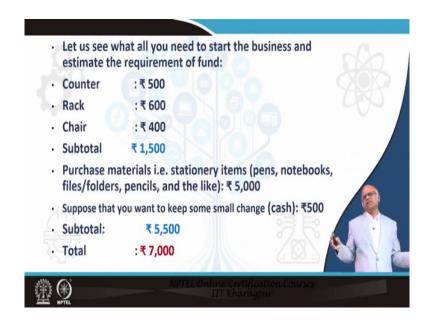
So, whatever you have to pay back immediately current liabilities. Like, suppose you borrow money from bank to purchase this computer or desk or racks. If you borrow money this is called term loan, meaning; the loan given for creating long term assets or fixed asset is given on a long term basis. You borrow money today, the bank will say you repay in 3 years time. Do not repay everything tomorrow or in a month or in a year. You pay on equated month instalmenting scheme every month you pay something, next month you pay something at the end of the quarter you pay the interest accrued on your loan.

So, gradually your money will get repaid. But as long as or the amount that you are not that you are yet to pay back to the bank remains as a long term liability. It is long term because it is not immediately payable. Liability because you have to pay it, then there are bank loan which is short term in nature. Suppose for maintaining or receivable maintaining your raw

material stock everything suppose your suppliers are not willing to give you on credit. So, you need the money from some source suppose you borrow money from bank to buy raw material.

So, you are borrowing money to buy current assets raw material is current asset. So, any money that you borrow to create current assets they are short term liability. So, bank gives two kinds of loans; one is long term loan, they call it term loan, another is short term loan normally, they call working capital loan. This operative whole operating cycle management requires working capital loan or short term loan that is it will bank says this is working capital loan.

(Refer Slide Time: 17:17)



Now, let us consider that your counter that you need computer or say cash counter is 500 rupees worth and the rack where you keep all your goods is 600 rupees. You want to have a chair because suppose you want to hire somebody some less educated guy and he is eager to

work in your shop. So, you can buy a chair for him. So, these are all the assets that you need to pro long term assets that you need to procure to start the business. You can start without them, but you want to be a formal businessman. So, add them up and you have 500 plus 2000 and 1000, 3000 rupees.

So, your total investment in creating fixed asset is 500 plus 600 plus 400 is total 1500 rupees sorry, this is sub total. So, 1500 rupees is a total requirement to create fixed asset. Now suppose you want to purchase material of a stationary item like pen, notebook etcetera etcetera and you want to invest 5000 rupees before start up the business. Now there is no receivable there is no goods in process for a retailer there is no goods in process. So, you have, you need 5000 rupees worth of stock to be maintained so that somebody comes in and asks for something you should be able to give him sell it to him.

So, you need 500 rupees 5000 rupees. You also think that if somebody comes and gives me a 5000 rupees note I should not tell him that I do not have change at least 500, 5, 500 rupee note. So, what do you want is you want to maintain some change of 500 rupees maybe 1, 2, 3, 100 rupees note, 1, 2, 50 rupees note etcetera etcetera. So, you need 500 rupees worth of cash. So, you need fixed assets of 1500 rupees, you need current assets of 5000 plus 500 rupees. So, 5500 rupees, 5000 rupees of inventory, 500 rupees of cash, 5500.

So, total requirement of money to start this business is 7000 rupees. Though this example is so simple, you should get a fair idea how any entrepreneur should estimate or how much money they need to start this business. You need some money to create fixed asset, some money to create current assets or working capital money. So, long term or fixed asset short term or current assets.

(Refer Slide Time: 19:48)



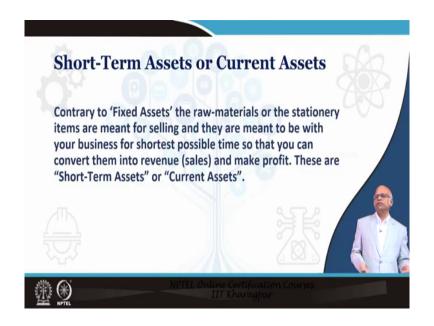
(Refer Slide Time: 19:55)



Fixed assets are long term. The assets that you have procured like rack like come cash counter and the chair are fixed assets. So, give a sharp look at all these items to make a distinction between current assets and fixed asset. Because, many for understanding balance sheet or for preparing balance sheet making this distinction is absolutely necessary. And if you cannot do that you would not be able to prepare a balance sheet.

So, remember that fixed assets are procured for a long term with the long term perspective, that they will remain in the business for a long term period, current assets are procured for a short term on a short term perspective and they are supposed to be sold as quickly as possible. So, these are current assets or short term assets.

(Refer Slide Time: 20:47)



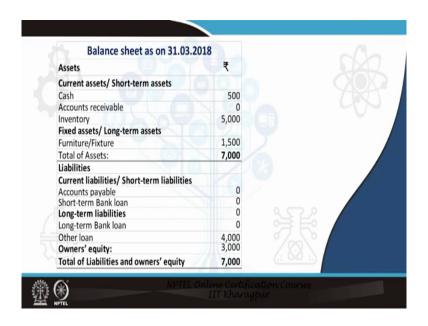
(Refer Slide Time: 20:50)



Now, you need 7000 rupees, you have seen that. So, you look into your purse or maybe bank and then you find that you have 3000 rupees in your bank and you do not need this money immediately for paying mess bill or anything immediately. This 3000 rupees is surplus money, but then you need 7000 rupees. So, you approach to a friend can you give me 4000 rupees I will pay you back in some manner whatever you was tell him that I will pay you back where in monthly instalment of say 100 rupees or 500 rupees every month.

So, you will get your payment back in 8 months or something. If you say that that becomes a long term borrowing even if it is normally borrowing for more than 1 year is long term. So, let us not confuse that. So, 1 year and above will be long term borrowing, below 1 year or 1 year will be short term. I will I will make some amendment. More than 1 year is long term, 1 year and less than 1 year is short term.

(Refer Slide Time: 21:53)



Suppose before starting the. Now that you know that you have to borrow some 4000 rupees from a friend and you have 3000 rupees of your own money, you need 5000 rupees worth of stationaries and you need 500 rupees worth of cash. Now, you can actually start the business. So, before you start the business you can prepare a balance sheet. The balance sheet actually has two sides; assets and liabilities. Liability sides have two distinct major items; one is liabilities another is owners equity.

Owners equity comes under liabilities because you have to view owners from the perspective of the business from business point of view owners are outsider. So, whatever money the owners are paying to the company in the form of equity, the business has to pay back to the owners something like that they do not really have to pay back because, any business is a going concern meaning that it will run perpetually for endless period.

So, owners will normally not ask the company to pay back the money, but they will get the dividend nevertheless. Now you know that sorry, the liability side has two major components; one is liabilities, another is owners equity. Whereas, asset is asset, but then there are some sub items. Asset has current assets or short term assets. At the same time asset as fixed assets or long term assets. So, assets has two components; current assets, fixed assets.

Liabilities as I said there are two components; one is liabilities and owners equity liabilities per say have took has two components; one is current liabilities another is long term liabilities it is not fixed liabilities what they normally call long term liabilities. Now with this money let us see how they are placed in this balance sheet. Normally, balance sheet starts with asset fast nowadays. Earlier it was different, earlier it was a teak T shaped balance sheet with the assets remaining on the right hand side liabilities on the left hand side.

But nowadays it has taken the form of a column and assets are mentioned first liabilities are mentioned later and the most liquid items are at the top and gradually the lower or less liquid items appear. So, first item cash is the most liquid as I said that is why cash comes first. So, balance sheet starts with cash. Balance sheet starts with asset under asset it starts with current asset it under current asset cash is the first item.

So, your cash is 500 because, you started the business with some money of your own, some money of your friend, but you have actually spend money to buy the rack to buy your chair by computing device and you bought some inventory also. So, whatever is left with you in the cash form is only 500 rupees of cash that you are left with.

Of course, you brought everything in cash, but then you bought that. Now there is the cash is no longer there it has been consumed only 500 rupees worth of cash is there. How much if then comes in the current asset comes account receivable these are the items under current assets. Account receivable arises when you sell something and that that buyer is yet to pay. But now, that you are yet to start the business you have just procured everything and you are going to just start the business. So, before you start the business there will be no receivable.

But then you have inventory, you have already bought 5000 worth of goods. So, inventory is 5000 remember inventory means the stock of all the current assets that you have procured to run the business. It does not include the fixed assets. The racks or any other fixed asset for that matter. Now we go to the fixed asset part. Under fixed asset you have furniture fixture you have all that you have bought is furniture fixed so you do not have a machine you do not have anything else. And we have seen that the subtotal of the furniture and fixture is 1500 rupees.

Of course writing them separately would have made sense like whatever is for chair for cash counter and for racks. Because, all of furniture so, we have clubbed them together. So, total of asset is 7000 rupees. Now liabilities; under liabilities as I said we have current liabilities and long term liabilities. Current liabilities are those which are to be paid immediately. Long term liabilities are those which are to be paid gradually moving forward.

Now, under current liabilities we have accounts payable the guy who has supplied us material and we have to pay him back him or her back. So, that is very current in nature, because he can demand any point of time so, that is current liability. We are true a start a business we have bought inventory worth of 5000 rupees, but everything we bought on cash. If we would have bought say out of 5000 rupees, say 3000 rupees would be paid in cash and 2000 rupees would be in credit, then account payable will be 2000 rupees in the balance sheet.

Whereas inventory will remain 5000, but then account payable will be 2000 and cash will go up by 3 another 2000 because you have not used the 2000 rupees cash because you have got a credit of 2000 rupees. Short term bank loan also is current liability, but then we have yet to raise any bank loan. Long term liabilities all that we have borrowed is the 4000 rupees from our frame that you that has been borrowed. There is no bank loan long term bank loan. So, your friend gave 4000 rupees that is the long term borrowing.

Owners equity; that means, the money that you have invested. You have actually invested 3000 rupees out of the 7000 rupees that was necessary we have seen that. So, you complete the balance sheet. Your total liability side including that owners equity is 7000 rupees and the

asset side is 7000 rupees. So, the balance sheet is fully balanced. Remember the balance sheet will always be balanced. Why so? Because, the liability sides, side is the sources of money whatever sources money comes from are mentioned in liability side. Look at that account payable accounts payable is you are getting goods on credit. So, that is a source of money.

So, you are getting goods rather than cash. Short term bank loan is a source of money, long term bank loan is a source of money, other loan also source of money, owners equity also source of money, so, these are source of money. And the asset side represents the utilization of the very same money whatever money you receive from whosoever sources where you are keeping this money. So, you bought furniture for 1500 you bought inventory for 5000. So, you bought goods worth of 6500 out of the 7000 rupees of cash. What happened to the rest of the cash? That is still in the form of cash.

So, cash 500 and it is thing so, 7000 plus 7000 meaning; the balance sheet is balanced. If it is not balanced; that means, there will be some sources for which you have not accommodated for utilization or visa vice versa.

(Refer Slide Time: 29:59)



So, you have now started the business on the 1 st of April consider that on 1 st of April you have started the business. Before that you have just completed the purchase. So, when you realize that there is a good demand and that you own your own and guess means that you want to hire a person say with a monthly salary of 5000 rupees.

As I said that you have classes to attend and the sales are good. So, you think that you can afford to pay salary to a person provided somebody means if somebody is sitting all the time in the counter there will be lot of sales with this understanding you actually hired a person.

(Refer Slide Time: 30:35)



So, let us see at the end of the year, what happens that? Moment you start the business on 1 st of April 2018 you will start selling students come and then you sell you get money some people tells you that I will pay tomorrow day after and then you give them on credit because they are all friends and you know them that they are going to not going to run away.

So, your receivables go up and your sales also go up, your cash position also moves up, because every day you are selling or getting some cash. But then cash goes out when you buy a paying cash and sometimes you buy without paying cash also. If you buy without paying cash you are actually generating accounts payable. You have to pay them at some point of time. If you are selling on credit you are supposed to you are actually creating accounts receivable at some point of time you will get back the money.

So, suppose at the end of the year or during the year, these are your transaction. What are they you have sold 5 lakh rupees worth of stationaries and that is meaning that at the end of the year you are looking into the different different general ledgers. So, you have a ledger called sales and you have made a total of the ledger and you find found that you have sold 5 lakh worth of goods then you look into the purchase ledger and you saw that you have bought 250000 worth of purchases then you look into the salary ledger, you found that you have sold 12000 sorry, you have paid 60000 rupees worth of salary. your rent is 12000, your closing stock is 10000.

Meaning that at the end of the period on 31 st of March, what is closing stock? 31 st of March, you take inventory of the entire stock whatever is left at midnight on 31 st of march you think that today is the end of my first year of business. So, let me see how much of the stock that remains unsold. you started with a stock of 5000 rupees that you remembered, but in the end of 1 year of operation during the year you bought lot of a stock you so lot of a stock. So, from one hand is stock came from the other hand you sold.

But you sold 5 lakh rupees worth of stock whereas, you bought for 250000 worth of stock, but then some stock out of this 250000 were not sold. So, wow how much is that? So, you take stock and you see that the closing stock as on 31 st march 2008 19 is 10000 rupees. The year is actually 2018-19. It started on 1 st of April 2018 and it ended on 31 st march 2019.

So, that is your complete financial year. Profit loss account is for a financial year for a quarter for half year not on a date. That is why the year is written as 1, 4, 2018 to 31, 3, 2019. What else you have done? You have incurred transportation cost of 5000 telephone, electricity bill payment, trade license, you have paid some rent and there is another item called depreciation. Depreciation is the contribution of your fixed asset all the fixed assets that you have bought and that is helping you to do the business, they you have invested money in them.

So, some amount of cost has to be allocated against them otherwise at the end of the year you will have a false notion about profit. Because, you have bought suppose aside from the or

maybe in this example suppose you bought something how much fifteen hundred rupees worth of fixed asset.

Now if you do not accommodate any expenses out of the fixed or whatever investment you made you have to recover that. So, depreciation is a process of recovering investment made in fixed asset. Another way of looking at depreciation is it is the wear and tear of fixed asset meaning that value depletion of the fixed asset. Every year some value will be depleted at the end of maybe 5,6, 7 years you will not be able to sell these asset at the procurement price that is there is a depletion of depletion of value.

So, whatever is the notional depletion of value in a year that is allocated as depreciation? There is a method of estimation of depreciation we will see that later, but for the time being we just presume that there is something depreciation which is a part allocation of the investment in fixed asset to the total expenses. Now you started the business with 500 rupees of cash, but in the end of this year you find that there is 800 rupees of cash in your hand.

Remember this is to be estimated. This cash in hand will not be available with you have to really estimate what is the total cash flow you have to estimate the net cash flow during the year and then add it to the previous years balance sheet closing cash balance to get the cash that remains the end of the year. And you have to match that cash with the cash hand to see that there is no accounting annually anywhere. Your cash that you count in the counter and the cash that is that you estimate out from the cash flow statements and the previous cash balance should match.

Then there is accounts payable meaning you have bought something in credit account receivable you are supposed to get the payment so some other time. So, depreciation is estimated like this we will discuss about different methods of depreciation and how to calculate for the time being just know that if for a rate of depreciation for furniture is 5 percent, you have to just allocate 5 percent of that as depreciation there is some mistake in estimation.

So, 1500, say 10 percent do not consider 5 percent for furniture depreciation say it is 10 percent. So, 1 percent of 1500 is 150. So, that is the depreciation that is the allocation from furniture to the expenses. So, at the end of the year you have to reduce that value out of the furnitures total value that was there in the book. In your balance sheet, earlier balance sheet you have seen that furniture value was 1500 rupees. So, that is book value when you mentioned something in the balance sheet that remains has book value, but as this is the value written in the book books of accounts.

Now, after 1 year of operation you are look at my right, after 1 year of operation; your asset furniture has been depreciated by say 10 percent so, depreciation is 150. So, that that value has been depleted. So, what is the value after that? 1500 minus 150; that means, 1350, that is the money that the 1350 is the book value these goes into the balance sheet. It was suppose during the during the year you bought a billing machine because there is an employee you cannot trust the employee to keep the accounts well.

So, you want to keep some kind of a billing machine. So, that at the end of the day you know what is the inventory at the beginning of the day, how much he has sold and what is the value of the inventory at the end of the day and at the end of the year as well. So, you bought a billing machine for 10000 rupees and then for billing machine also suppose depreciation rate is 10 percent. So, you allow 10 percent as depreciation. So, you get the book value of 9000 after depreciation whatever is the depletion of the value.

So, total depreciation becomes 150 rupees plus 1000 rupees for billing machine. So, 1150 rupees. These are the information available using which you have to prepare a profit loss account first and then a balance sheet.

(Refer Slide Time: 38:37)



So, profit losses starts with gross profit calculation will start from here in the next session.

Thank you.