Welcome students, the name of the

program is Bachelor of Commerce Career.

The name of the subject is business

management.

the title causes

your financial management.

The title of the unit is capital budgeting.

Today we're covering the topic

payback period method and the

accounting rate of return.

So the outline for today is to

study the payback period method,

an accounting rate of return capital

budgeting, so learning outcomes

on completion of the module,

students will be able to explain the

concept of payback period method,

an accounting rate of return method

solve problems on payback period method.

An accounting rate of return method.

So understanding the concept

of your payment period method.

Baby represents the time required

for cash receipts.

That means your cash inflows to pay

the original cost of the investment,

normally disregarding salvage value.

It is the time taken to recover

the investment or the initial

investment of the project.

So in this case we are not

considering the salvage value.

We only concern in how much

time the time required to cover

recovered the initial investment.

Cash received represents cash flows after 10,

so we are required to calculate

your cash flows after tax.

Thus your payment period measures the

number of years it will take to recover

their cash flows after text to pay

the origonal outlay on the invested amount.

So your answer for your payback

period is the nose number of years,

those number of years where it will take

exactly to recover the initial outlay.

The payback period time is the

time required to recover the

initial cost of an investment.

It is the number of years it will

take to get back to the initial

investment made for a project,

therefore has a technique

of capital budgeting.

The payback period will be used to

compare various projects and derive

the number of years it will take to

take back the initial investment.

So those projects which will give you

the lowest possible years to recover the.

Investment that particular project

will be selected in case of your

payback period method again,

your payback period method

is unsophisticated.

Your traditional techniques it does not

take into account the time value of money.

The project with least number

of years usually is selected.

So here is the formula in how

to compute your payback period.

So there are two matters.

Basically the first one.

The first method can be applied when

the cash flow stream is an inverted

of each of the projects life.

So yeah, the cash inflow is same every year.

The cash inflows does not change

your bio if it's 20,000 this year.

Similarly it will be 20,000 next year also.

So cash flow after taxes,

uniform in this case.

In such a situation,

the initial cost of the investment is

divided by the constant annual gas flow.

The payback period will be calculated

using the following formula.

Payback period is the initial

investment divided by the constant

amount that you're getting

hands your cash inflow.

So here's one problem to be

solved using the previous method,

the previous condition.

Suppose if an investment of rupees

one leg in a machine is expected

to generate cash inflow of rupees

20,000 per annum for 10 years.

Calculate the payback period.

So the question is saying

then the invested amount,

the cash outflow is rupees one leg

and every 10 year it is generating

rupees 20,000 of cash inflow.

So what will be the payback period?

So in this case use the Formula Payback

period is equal to cash investment.

I did my constant annual cash inflow.

So your one leg divided by your

20,000 and gives you five years.

So it will take five years to recover

one Lac rupees and that later of 1220

thousand becomes the entire of revenue.

The second method is used when projects

cash flows after tags are a mixed team,

so that means the cash inflows,

the revenue earnings from the

investment made is different.

Suppose is 20,001 year second

year it will be some other amount

30 or be some other amount,

so cash inflows are not equal,

but they would be far from year to year.

In such a situation,

payback period is calculated by the process

of humiliating cashflows after tax.

So you need to add on the cash flows which

are generated within that given time.

Till the time when the community cashflows

becomes equal to the original investment.

So take the time on the cash inflows becomes

equal after adding all the cash in the pros,

it becomes equal to the original investment.

So here's an illustration to determine

the payback period for project,

which requires a cash outflow

or outlay of rupees 10,000.

That means the money that is invested

in this particular project is rupees

10,000 and generates cash inflow of rupees.

2000 rupees 4000 rupees 3000 and release

2000 in the first year second year,

third year and the 4th year respectively.

So here's the solution,

the cash outlay.

It means the money that you have invested in

this particular project is rupees 10,000.

So you need to calculate the cumulative

cash inflows because the cash inflow

in different years are different,

they are not the same as we have

seen in the previous example.

Here it is different.

Total cash inflow for the first three years.

Each rupees 2000 rupees 4000 plus rupees

3000 is this giving you rupees 9000.

So after the third year?

The total cost is not recovered

because up to third year,

the money that you are getting

is only rupees 9000,

so 1000 is remaining to cover

the cost of the project.

So the payback period lies between

somewhere between the 3rd and the 4th year,

so you need to find out the

payback period so the only amount

to recover is rupees 1000.

So nine 10,000 -- 9000 only amanya

supposed to recover is 1000.

Assuming that cash inflow have

occurred evenly throughout the year,

the timely code to recover

rupees 1000 will be 1000.

That is the money that is left

to be recovered divided by.

The cash inflow of the 4th year

that is rupees 2000 * 12 months.

So only six months within six

months of the four years 4th

year the money is recovered.

So the payback period in this

case is 3 years and six months.

Now coming to your accounting rate

of return method accounting rate

of return method is again the rate

of return on income is expected

by dividing the average capital

expressed by annual percentage.

The accounting rate of return

is a formula used to make the

capital budgeting decision.

It is used in situations where

companies are deciding on whether not

to invest or whether to invest in a

project or a particular byneset or

not based on the future net earnings

expected to be comparing the capital cost.

This method of computing A or an is

known as average investment method and

uses the following formula average

annual profits after tax divided by

average investment multiplied by 100.

Where average profit is equal to total

profits divided by life of the asset,

the average profit after tax are

determined by adding after tax profits

for each year of the projects like and

then dividing it by the number of the years.

So post two years then

to more than two years.

Supposedly three years are

given in three five years.

Cash flows are given,

then five.

In case of renovating the average after

tax profits are equal to any year profits.

So the average investment is calculated

by dividing the net investment by

the number of years that is given,

in which case the book value of the

asset decline enter constant rate

from his purchase price to zero and

the end of his depreciable life.

This means that the average the

form will have on half of the

initial purchase price.

India books this average investment

is equal to net working Capital plus.

Half of the initial cost of the emotional

initial investment in made in the project.

Less stain salvage value.

So here's an example illustration.

One,

a project quiets an investment of

rupees 5 legs and has a scrap value

of rupees 20,000 after five fields.

So scrap values,

given the invested amount,

is given, it is expected to yield

profit after depreciation entails.

During five years amounting to

rupees 40,000 rupees 6000.

20,000 rupees, 50,000 rupees 20,000,

so five years cash employees given to you.

Calculate the average rate of

return on the investment.

So here's the solution.

Total profit is equal to.

You need to Add all the cash inflows which

is given rupees 40,000 + 60,000 + 70,000,

fifty thousand and plus 20,000.

You get to lakepoint ₹1000.

So average profit in these cases

rupees two like 4000 / 5 years

or five years investment.

Five years cash influence given to

you also divided by five years average

profit you get is rupees 48,000 net

investment in the project is

equal to rupees five flags.

Less rupees 20 legs.

So here 20,000 is your scrap values,

rupees 5 playing less rupees.

20,020 thousand is your script

value to get your net investment.

So the net investment is

rupees for like 80,000.

Average rate of return is equal to

average annual profit divided by net

investment in the project multiplied by 100.

The average annual profit is 48,000 divided

by the net investment for like 80,000 * 100.

The rate of return detailed writings 10%,

so here's the conclusion both payback

period method and accounting rate of

return method is short term approach.

Their unsophisticated and traditional

technique easy to calculate.

They are usually used by the form for short

period of time or those projects which

are having lower amount of investment.

Board does not take or.

Emphasis on the time value of the money

in the present value of the money.

It only helps in choosing

the project that will.

Fast returns and cash flow regardless.

In his long term profitability, however,

both matters ignores the time value of money.

It does not measure the probability

of a project.

In actual practice,

funds are invested not only to recover costs,

but to see on profits,

which could be only covered in

your time adjusted methods.

These are the references which

are used to cover all these nodes.

Thanks.