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NPTEL ONLINE CERTIFICATION COURSE

Course
On

Human Resource Development

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Lecture 48: Intellectual Capital Management (Contd.)

Okay, so a very good morning to all of you. Now we are running into the 10th week course and we are discussing about intellectual capital management okay.

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So in this week course we have started talking about various issues related to intellectual capital management. And you remember that in the beginning we talked about what is intellectual capital management, what are the various components of intellectual capital management, and how we define it. And in the second session we started talking about that how we are going to measure the value of intellectual capital.

Ideally when we are going to measure the value of someone capital, we have to see that we are going to create some kind of index to see or find out that what is the value of intellectual capital for an organization one. Second whether this value of the index of human capital index is the appreciating or depreciating over a period of time. So it depends a number of factors and how the various components of intellectual capital beat human capital, structural capital, social capital, relational capital are increasing.

Now that is where HRD professionals have a role to play that, they are going to make lot of interventions in terms of training and development, in terms of what you call coaching, mentoring and other activities to ensure that the value of these indexes goes up, whether it is building good relationship at the work place, or whether it is contributing to the growth and development of the organization by increasing and suggesting or advising that how to go about increasing the infrastructural capital.

And then suggest in that how we can increase about social capital and relational capital. Similarly, they are also responsible for improving the competency level of the employees. And this would help to improve overall capital intellectual capital index of an organization. Now with this introduction I am going to see that how it is going to be measured and developed right. And then we will look into some of the measures which we actually talked about creating intellectual capital index.

You remember we talked about this Scandia navigator which basically helps you to find out and measure the value of this. So based on these values probably we are trying to create some kind of index which is going to be good for the organization.

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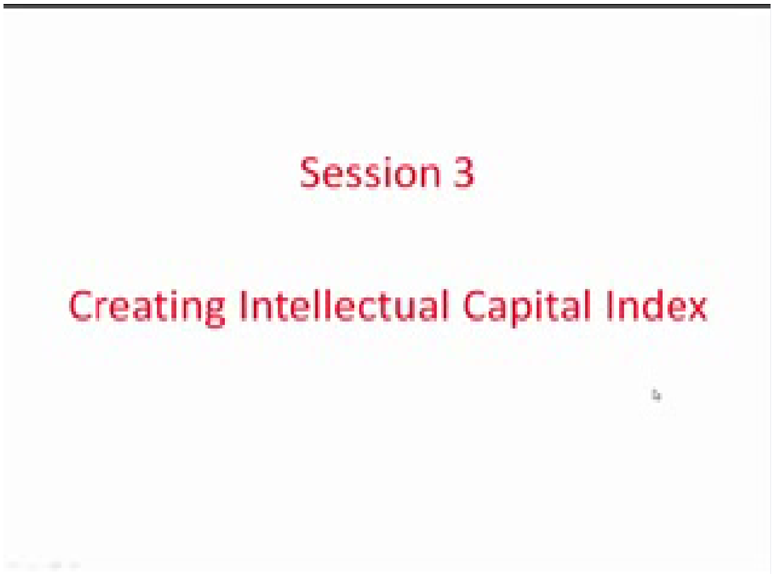

Now when it comes to creating a intellectual capital index there are a lot of developments have taken place and number of people are authors had come out with various suggestions and developed certain models as well. And we will look into some of the important models it is not an exhaustive list, but I have tried to include some of the important models which have been there.

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And we will start with the first one and decide that why there is a need to measure intellectual capital index. Now if you look at intellectual capital index, earlier what used to happen, that we used to have different indexes right. We wanted to calculate the value of human resources separately, we wanted to see the contributions and growth and development index separately okay.

So there was no single consolidated index which was available to the organizations to see what is the index of the total intellectual capital which comprises all the components right. So it is a latest development that is what we call as second generation development and in the second generation development actually we are going to see that how the practices which have been at different, are with the different indicators, so that how they can could be consolidated into one single index.

So the idea was that whatever practices were adopted earlier, you are going to consolidate into in one single index and then you are going to see whether the if there is changes in the intellectual carpet or index how it is being reflected in the market in terms of the market value of the organization not the book value right.

Now with this introduction of creating induction interest capital index we move further and see that what is the why we go about it basically if you are able to create a index respective of using a single model or combination of these models to ensure that tend to series of your intellectual capital index the idea is to see that weather you can see that weather this value creation process is a being managed effectively or not value creation process means when you are going to add value to the propel there competencies weather you are going to add value to the organization first, capital or relational capital or social capital.

So when you are going to create value through various interventions at individual group and organization level weather just being reflected in the intellectual capital index or not that is your going to tell you about the index but weather this value creation process is work taking it up or not that can also be identified provided the value of intellectual capital index closer right so if you find that the value is going up probably you would be able to realize that is the value creation process is effective and you are able to manage it very effectively right.

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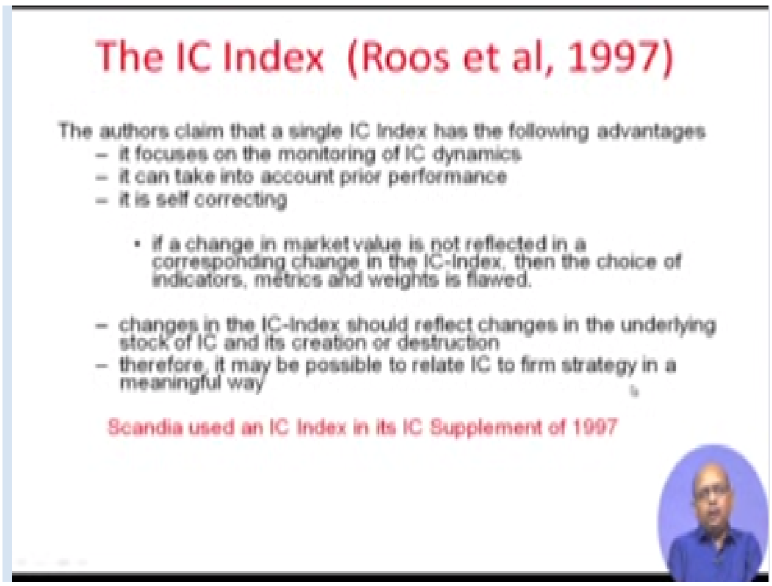

Now we will discuss some of the indexes that I have been created and the most important is that is developed is by Ross et al and what back almost 20 years back 2009 1997 now if you look at this he says that if you are going to create a single intellectual capital index it has lot of advantages in terms of probably you will be able to monitor how you are progressing on different indicators right.

Weather there is a change in human capital strictly capital, social capital and relational capital or not and it also looks into your prior performance and after the change that happens weather there is significant improvement in the performance or not so you can also compare pre and post to ensure weather there is going to be a change or not okay.

And you can it is self correcting I means that the once the value of the various capital which is a part of human capital intellectual capital changes weather it moves upward or downward similarity the value of intellectual capital all index will also keep on changing when it is so it is a self correcting measure I mean where ever that is then change in the market value it is not actually reflected in the book value but if there is a change in the market value it means that is going to be change a in the other has been change in the intellectual capital index okay.

So lot of indicators matrix and see weights are used to identify what is the intellectual capital index basically we are going to use this book value we are using various indicators which are basically components of what you call intellectual capital right now you can also say that weather this value is going up or not depending up on the changes in the market value as I told you and then you can go about changing your intellectual capital index management strategy because if your able to better manage.

Your strategy probably you will be able to have more significant improvement in your various indices of the human capital sorry intellectual capital now the question is that based on the feedback that you get about your intellectual capital index what kinds of a strategy you are going to adopt to ensure that this index moves up not downwards or it does not becomes static right.

So this is the this is your top management has a role to play and through which HR professionals through there interventions are going to ensure that they are going to develop their strategy related to learning and development and other things to ensure that this index goes up right if you look at Skandia measure he used it has a supplement but if you look at this other measures you will find that they have slightly different measures okay.

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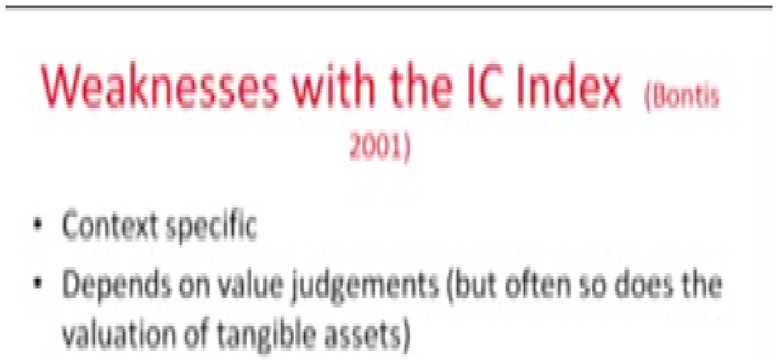

So the weakness if you look at this kind of indexes because it is context specific it is related to particular organization depends upon the kind of environment it is going to work right then similarly you will find that how you things are being judged and weather you are able to judge all assets probably are not so it depends upon the process of making judgments about the value of different capitals okay weather it is human capital as structural capital astral capital rational capital.

How we are going to try transform the value of these capital into a monitory form to decide about the values okay and it depends upon the experts the mechanism and the process that they are using for making values judgments and say to it that they are going to more objective okay in the assessments of values okay, so if there is any change in the system and the mechanism our process of value judgments then it is going to change right.

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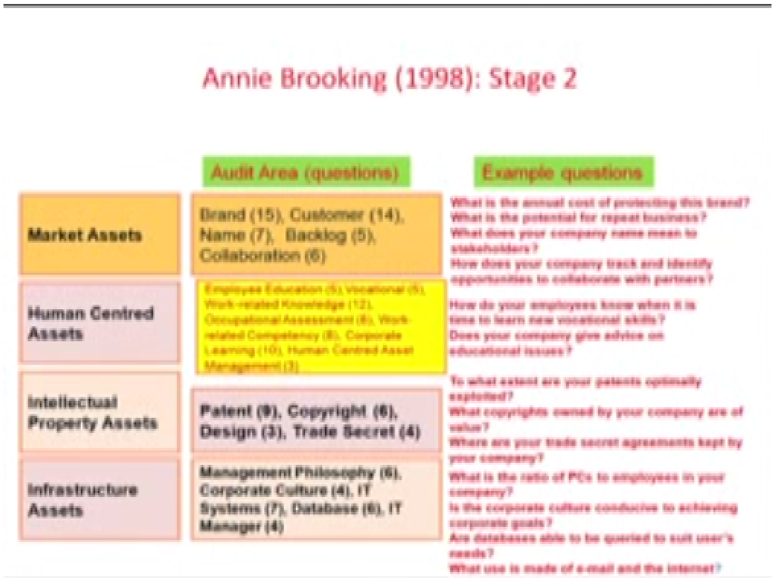

Then the 3rd part is that if you look at some of the important indices the first one is created by Annie Brooking and in 98 he came out with concept known as technology broker and this technology broker has 3 major stages okay so the idea is to measure the intellectual capital using certain indicators okay so at first stage so actually what happens he has certain questions which is basically a part of intellectual capital indicators okay.

It could relate to different kind of capital that we have and then if you look at these 20 questions one by one it says that weather you know about your job well how it contributes to goals and objectives it means that weather the individual goals are clear to the individual or not and then weather it is aligned with the goals and objectives of the organization and how people are being treated in the organization okay.

Weather they are treated in assets or whether they are treated in capital we have already talked about it okay and weather they are management see to it that is every people is into a job which better fits them it means that there is a better match between the individual and the job or the person and the job okay and the you allow to everyone to have opportunity for career development okay.

And this is possible only when you go through HR interventions it means that role when you are talking about strategic HRM or how you are going to deploy stagey to deal with the people and that is where you have these kind of roles to ensure that this indicators are measured well and are effective for example it the responsibility of the HR professionals to ensure that there goals and objectives of the individual is aligned similar they are going to see that you have philosophy chart a philosophy.

To treat people as there is asset in the organization and ensure that growth and development opportunity are available to them and for that you are going to offer various interventions to them in terms of course mentoring developing and these kind of things right and then you measure the effectiveness of this using financial measures like written on investments that has been made in RND activities.

And the research and the investments and our written on investments that you have make on learning and development interventions so whatever investments you make and then you see that weather the RY on these activities or good or not right then weather your able to retain your costumers are not depends up on how well you have trend on inter person and authorize skills to your sales people right.

So based on these various indicators at the first stage you will be able to create something which is going to be a value to the organization right and then from this stage you are going to move to the next stage.

That is the second stage now if you look at this that he is going to measure this in four different areas that is market assets human centered assets intellectual property assets right infrastructure assets that is the thing else but relational capital human capital okay infrastructural capital and say relational capital so if you look at this what he did that he actually has four these four criteria based upon which this is going to be measure and if you look at the audit area question that means the number of questions.

Which belong to each of these areas like in market assets we want to measure a relational capital customer capital you have questions and branding customers questions related to the customers in terms of the commitment, loyalty retain, retaining customers are being repeat customers okay and your brand well your reputation in means in his organization okay what is your back log in terms of inventories and these kinds of things what is your collaboration with different organizations.

Okay so this creates asset which is known as market assets okay so some of the questions so that has been given as example it is like a what is the cost of protecting the brand and what is the what whether you have repeat business or not okay, what does your companies name into stakeholders it is in some one of branding and emergent reputation okay what are opportunities that you have to collaborate with your partner okay now moving to either as said that is human centered asset and in this case.

You will find that there is a number of measures that have been used and that questions that is been asked it could be related to education vocation work related knowledge okay occupational assessment then worker related to competencies that you have what is the corporate learning opportunity that is provided okay, and then how this human capital is being managed so the number of questions related to this and this is basically related to, identify the competencies the skills and behavior that is required.

To perform well okay and what is your learning development activities okay moving to the third one that is your intellectual property assets like IP so you know that IP is very important career today and IP is create it I maintained and then you for pretending it okay so not only there is not only include patents but include right and copy rights, designs, state secrets so what is the status of these kinds of things okay how many patents you have how many actually exploited commercially that is where important okay what is the copyright, and that you have created okay and how many trade secretes you have a an how many trade secrete agreements you have made with other companies right.

And then looking into the infrastructural capital or organizational capital and this basically related to a culture value systems process data bases and these kinds of things right so you are going to see that what is the ratio of PC2 your employees in the company or what is your corporate culture whether it is enables facilitates better organizational and see meant or not okay what kind of data bases is you are might having would data bases right, but whether you're using data analytics technique to identify patents and then whether you are using.

Them for the growth and development of the organizational so simply having data base is not enough but hoe these data bases are used using certain analytical techniques to identify a patents trains in these kinds of things right, and how we using communication technology right so these are various questions that could be ask and the idea is that asking these questions probably we are trying find out our measure or create index for profit and capital the nest stage.

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So these are the different kind of categories and then recusal capital index as I told you it should relationship, human capital infrastructure and innovation capital okay, so if you look at relationship capital it means how you develop your relationship, trust, retention okay, what is your distribution channel in terms of productivity and quality and how product and quality wise this distribution channel works then human capital basically that deals with competencies of the people okay.

What is the factors for success, how much value is created by the employees and that you are going to calculate valuation per employ okay, and how effective about training and development activities are in terms of infrastructural capital you have, you are going to measure how efficiently you use, what is the effectiveness weight okay, what are the key success factors, affiliation of various facilities systems and structure that you have.

And then innovation capital what is your R and D okay, what your R and D is doing basically in terms of creating a new products processes okay, and these kind of things. So now if you look at this probably if you are able to measure it which is going to provide you some kind of index okay, which is going to be very, very quantitative in its assessment to see that how we are going to develop it. Moving to the next part the third stage of this technology broker.

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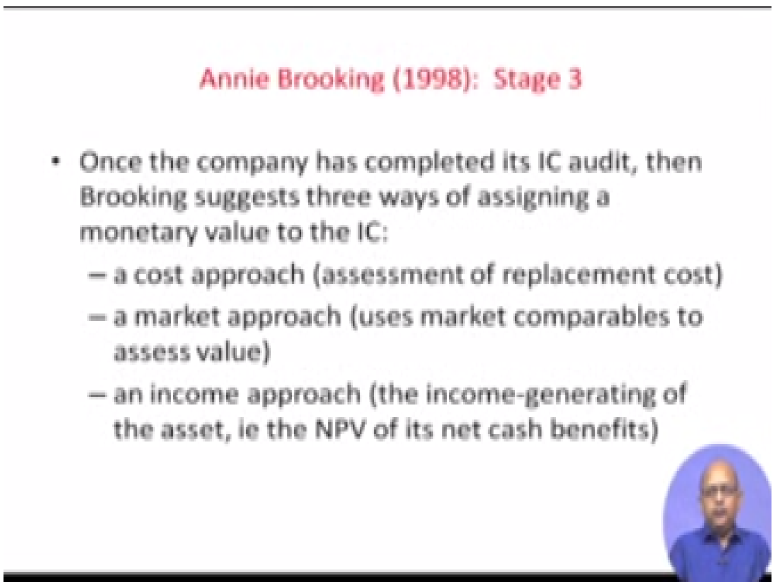

And at this stage what you do once you have done the audit for this your intellectual capital then you are going to assign monitory value to each one of them for example, at the first stage what we are going to do, we are going to identify what are the indicators that you are going to use. Second stage how you are going to measure the value, measure these indicators okay, using questionnaires survey or these kind of things and at third stage once you have identified various measures and you have already measured it then you are going to provide some kind of value assessment, right.

So it is a part of value assessment where you are going to quantify the value of various and this is of the intellectual capital that you have used right. So three kinds of approaches is used okay, that is the cost approach that is if you are going to replace this particular capital but would whether replacement costs right. So replacement cost plus some bring if you are going to have in what you look at the difference and then you can see it then the market approaches that probably you have to see that what is the value of these kind of capital in the market okay, and accordingly you are going to assign value to this and third one is income approach, so income approach suggest that how much income can be generated using these capital, right.

So that basically you are going to calculate then NP with that, that is net present value of its net cash benefited it means that you are going to see that what is the value of each capital that you have in mandatory's right, and how much value it is likely to generate I mean these values we are going to have actually and mandatory terms right, so these are various measures that could be used to quantify various capital indexes and then we are going to sum it up and find out what is the value, right. Now if you look at this that how this assessment goes on.

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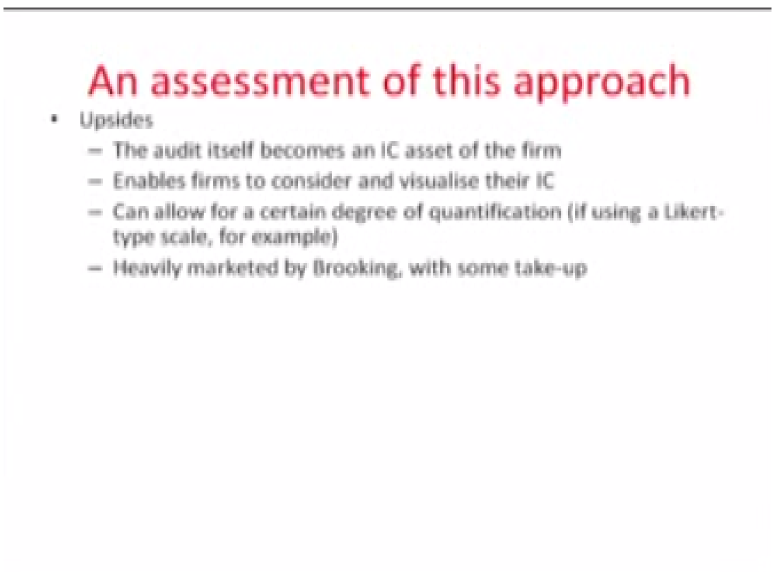

Basically if you look at this kind of assessment for creating intellectual capital index so it basically this audit itself become an intellectual capital asset because this is the process that you have developed to create a intellectual capital for therefore right, and that would help you to see they and visualize what is your intellectual capital, the only thing is that you make sure that all the capitals which are significant and contributing are included in the process.

Otherwise if you are going to leave out certain capital, certain indexes then probably you will not be able to correct it its value properly, right you can use where it is not possible to go for quantification you can use for qualitative scales like using a like scale or reciting a scale and then use some subject matter experts to quantify the you know monitory terms right so this is a very good approach and that has been basically marketed by its inventor brooking and he is says that if you are going to use it probably you will be able to create intellectual capital index for your organization and see that how it is working and what is the base of your intellectual capital belong in to various components.

Now there some down slides, down slides means that some weakness also one problem that happens that they are certain capitals which can be really quantify in to monitory terms but they could be some qualitative capitals right like who you are going to quantify the relationship capital or the social capital in to monitory terms.

So this kind of problems happen and that is where you are going to use vertical scales and then use subject matters experts to quantify it but this kind of judgment is very subjective in nature and that is why sometime it will come very difficult to measure it right. So it is not as a regress as Skandia and as navigated that we have talked about early.

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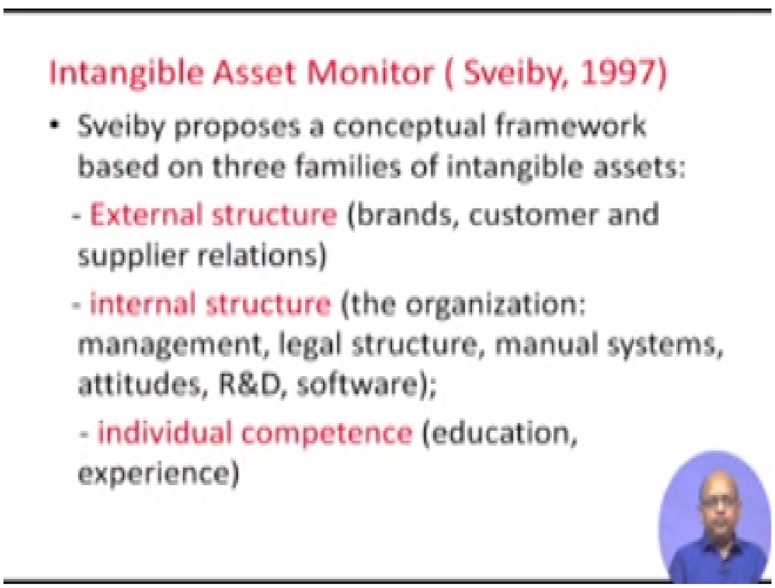

Now apart from this approach there is either measure development that have taken place and this is known as intangible asset monitor which is developed by Sveiby and he has developed very good measure actually to see that how you are going to develop and create a monitor intellect intangible assets probably he say that if you when it comes to measuring tangible assets it is easy to quantify them but when it comes to measuring intangible assets it will becomes very difficult to quantify them because most of them are qualitative in nature right.

So when we are talking about this kind of things so he proposed a frame work which is known as external structures three type of internal intangible asset actually which relates to external structure like brands, customers, supply relations then internal structures like management, legal structures, attitudes okay R &D, software and this kind of thing then third level we have individual competence that is education experience.

So he say that if you are going to use these three in to a system probably you would be able to create that the extent to which it is going to help you to relate with growth development and efficiency right. So this is the different kind of measure that is develop; by Sveiby it is different from his Skandia navigator or what we have just discuss this technology broker which is developed by brooking.

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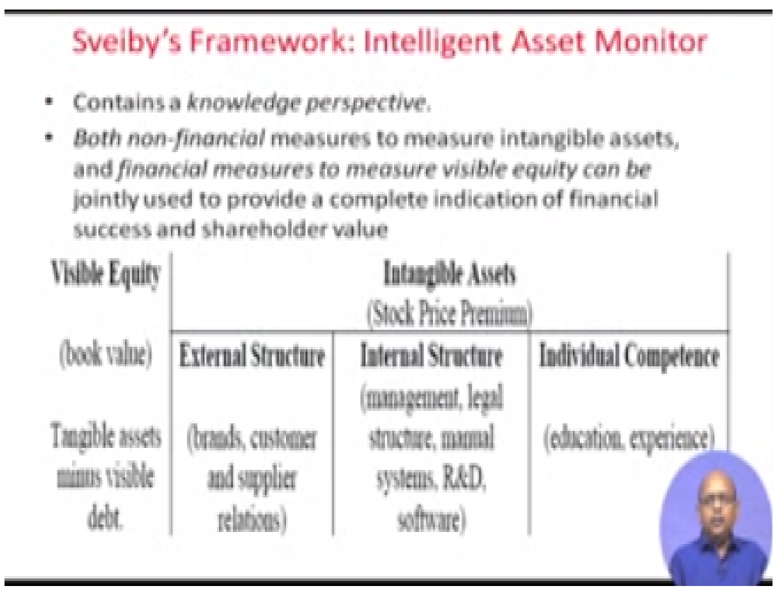

Now if you look at this see what you are going to create basically two things that is book value and the market value this helps you to create market value and then this is the book value which basically tangible assets manages the visible dates okay it means the assets and availability right so that is how create your book value which is the part of what you call visible equity, now if you look at intangible assets okay which is related to market value and based on which is the price in the stock market may go up or down.

So that is where we are going to calculate the value of these three type of competencies that is external structure and internal structure and individual competence right now so it has a different perspective because it is based on knowledge perspective which says that okay you must be good enough to understand the value of this factors and quantify them properly because they are qualitative in nature okay.

So you have basically you have both financial as well as in non financial measures to create equity and then you use it is not that you are going to only use intangible assets but if you are going to also use tangible assets okay so use both because if you are going to use both probably it is going to you create a better indicator of you success and the way it is going to create value for the shareholders right. So this is a little different in sense that you are going to combine both, the market value and book value of average to see that the extent to which the organization succeeds financially and also how much value it is going to create for the stake holders.

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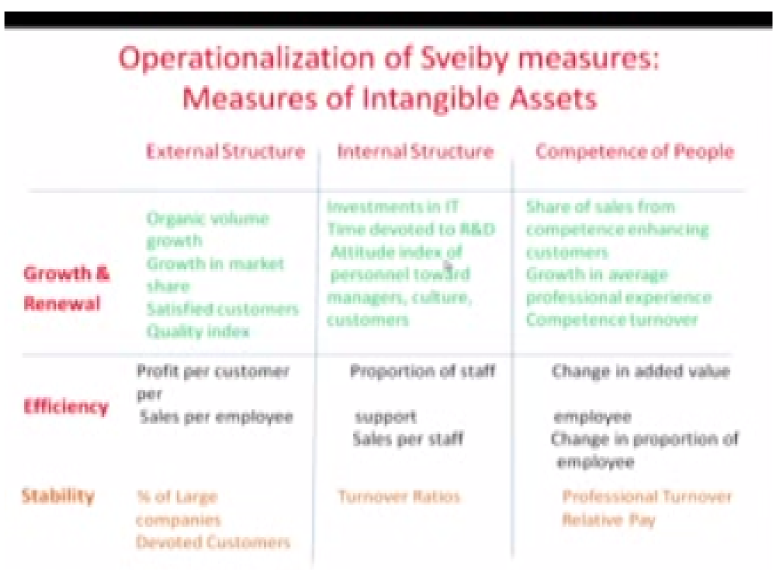

Now if you look at the frame works there are 3 indicators that have been used that are growth and renewal, efficiency and stability. So these are the various indicators that can be used to measure them like in under external structure if you have how much growth has been happening okay, in value, in market and what is the customer quality index okay. now when it comes to efficiency we are going to see that how much profit you are making per customer, what is sales per employee.

So these can be measured quantities and then how the % of large companies that has devoted customers okay, and then if you look at internal structural that includes IT, RND what is the attitude index in terms of culture and these kind of things and then what is the proportional stock suppose, that shows the stability right. Simply if you look at competence you have to see that there are phase from competency enhancing customers.

It means that when you have learning and development intervenes whether it has been able to bring about the change and the fields performance of the company or not. Whether there has been a change in there and increased professional experience for the people and the extent to which it is going to add value okay. It means that employee change in proportional employee right. And then you have professional turn over and relative that there is change in the performance and it is better pair these kinds of things.

Because it is there probably turnover ratio will be less right, you will be able to manage your talent also. So these 3 measures used that includes growth and renewable by the organization efficiency and stability, these are the 3 interface which are related to different kind of structures external internal competence, which is related to various type of capital, intangible assets right.

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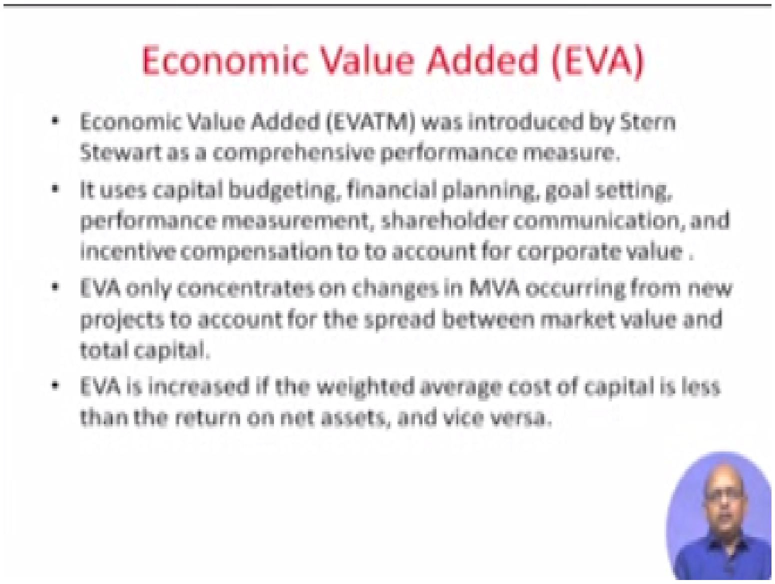

Now moving further another approach that is used by the management or organization is known as Economic value added, economic value added is a very old term, which has been in the literature and the idea is that you are going to use economic value added measures it was developed Stewart, basically the idea was to measure the performance of the organization. So you use both financial measure as well as non financial measures. Like capital, financial planning.

How you are going to measure the performance? How to communicate with the shareholders, incentive compensation you have okay. So everything actually add value to the organization, so he has to see that all activities which are going to add value in economic terms must be included there, whether they are qualitative or quantitative, so included both okay. so basically if you look at economic value added, change in the market value added.

So if there is the change in market not is in book value it means it is there is a it is the good thing and it is going to basically for any new project to take up it has to spree within the market value that total capital okay. The idea here is that you also need to understand what is market value added because, the market value added is something that is different from economic value added right. Economic value added is the performance measure when it comes to market it includes other kinds of thing also.

For example economic value is going to added or increased if the cost of capital is less and written as assets and other things are higher right investments are higher okay so next we are going to talk about another important factor that is actually when you going to calculate this net sale is operating expenses-taxes-capital charges and this is the formula for calculating economic value so if you have this these are basically a financial measure.

So if you have a data and net sales early data on net sales expenses taxes and capital how much you have spend on capital you can calculate the economic value so it means that this if I have probably it shows that the performances of the organization is good that is also would be used as a measure of say intellectual capital but it is not as company on sale other measures that we have discussed like can be our technology broker or even also right.

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Then moving to another concept that is there in the literacy which is known as market value added market value added the idea is that how much market value is added by the various activities that you are going to do right so you have to see that starting with the intersection of the organization what is present value of the cash okay so the only one thing that it takes is that it starts with starting of the company okay so when the company as started what is the market value whatever okay and then what is the current market value so the change actually is reflecting at how much value is added okay but it does not a count about the various changes that might happen.

Okay may be in the beginning the market value was very less but not as gone up so one problem with this kind of measure is that it takes history into account history of the form of into account right that is a problem okay because may be sudden historical activities may not be good other profits or losses in the past which is going to reflected in the market value of the organization right so this is one major that has been used in addition to market value.

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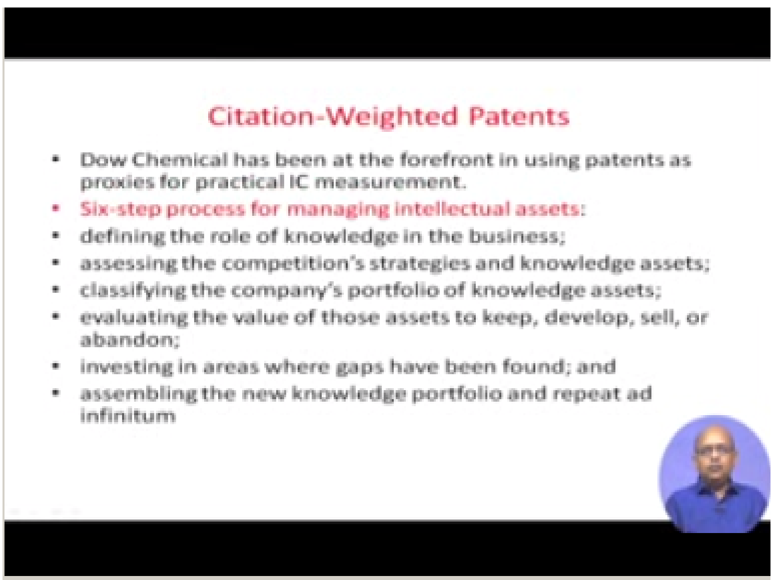

There is another measure that is used by some companies and one example I am going to give you down chemicals which basically used citation weighted patents okay this is related to actually the capital infrastructural capital okay or the intellectual capital intellectual property that is created by the organization so he said that all efforts are calculated into creating intellectual property in terms of copyrights trademarks patents by an organization so if you are going to look into these things probably will be in better position to understand this right so if you look at citation weighted patents that is used by them.

So one example that I have given here is Dow chemical’s okay and they used it as proxy for intellectual capital measurement and you six step process is first is to define the role of knowledge in the business then asses the competitions strategies right and what is their knowledge assets you see that what is your knowledge assists okay in to classifying them into different categories then evaluate the value of these assets to keep develop sell or abandon okay.

And finally you are going to see that how much you are going to invest in those areas where there is a gap with others and your knowledge assists and then finally you are going to hide all of them together okay and see that how it works okay so whatever knowledge is been created across portfolio.

And hence look into it and then you go for identifying them and look and receive how much it is we are giving to each of these factors knowledge assets and then you go for a wet average method to calculate the this basically what you call it terrify capital right so these are the different measures that have been used in literary to identify the intellectual capital index thank you very much.