

NPTEL
NPTEL ONLINE CERTIFICATION COURSE
Course
On
Human Resource Development
by
Prof. K. B. L. Srivastava
Department of Humanities and Social Sciences
IIT Kharagpur
Lecture 50: Intellectual Capital Management
(Contd.)

Welcome to the final session.

(Refer Slide Time: 00:23)



That is the last session of this week that is where we are discussing about intellectual capital. Now remember we have been talking about lot of things related to intellectual capital and I also told you the process through which you can measure and develop a index for intellectual capital considering three type of assets, tangible, intangible and invisible assets which is the part of the capabilities of the individual as well as the organization growth.

Similarly, we also talked about book value and market value, and how we are going to measure it to have an aggregate, what you call an integrated measure of intellectual capital right. Now finally what we are going to discuss is that how these measures have been used by organizations okay, and will then we will take up an example to show you that how we are going to measure the intellectual capital for the organization right.

(Refer Slide Time: 01:22)

An Analysis of IC disclosure of Nifty 50 Firms

S.No.	Name of Company	No. of Items disclosed
1.	Infosys	9
2.	Tata Consultancy Services	8
3.	ITC	6
4.	ICICI Bank	5
5.	Bharti Airtel	5
6.	Reliance Industries	5
7.	Wipro	5
8.	Dr.Reddy's Laboratories	5
9.	BHEL	5
10.	Tech Mahindra	4



So we start with some of the statements that is actually about Indian organizations that how Indian organizations are going to do this, I mean if you look at the disclosures intellectual capital reporting by Indian forms, I could get some information through various sources. And if you look at the kind of disclosures that have been made by Indian companies it is not very encouraging in a sense, that very few companies are using them first, second very few measures have been reported so far.

So it is not an exhaustive and integrated measure of intellectual capital by the Indian firms. So what the survey suggests if you look at some of the points that is made first major point that have been made after the research about the Indian companies and their disclosure of intellectual capital is that there is a limited disclosure of intellectual capital related items. You remember in the previous lecture I talked about a number of intellectual capital items around 45, 50 items which could be a part of intellectual capital belonging to different forms of capital right.

Now what Indian companies are doing that they are using only few of them. So and there is a limited disclosure it means that they are not disclosing in firms related to their intellectual capital related to especially intangible and individual assets. For tangible assets they have balance sheet which is reflecting the capability of the firm in terms of their book value right. And second part which is more important is that whatever intellectual capital disclosure information that is being provided by Indian companies is based on voluntary disclosures.

What do you mean by voluntary disclosures that it is for the organizations for them to provide this kind of information as a part of their annual reporting or as a part of their balance sheets right. Now few companies voluntarily have this idea to include some of the measures of intellectual capital as a part of their annual reports and the balance sheets right. If you look at the book value most of the companies do provide information about their assets and liabilities in their balance sheets right which is mandatory by the government also right.

So all companies have to when they are going to submit their annual reports they have to see what is the assets and their liabilities in these kind of things. But since it is a new development that is happening in terms of measuring the value of intellectual capital of an organization, in an aggregate and holistic way to see that how as an organization you are performing and moving ahead or not okay in terms of a capital base or capital index.

The state of phase in Indian companies is not very encouraging that is what I wanted to tell you okay. Because neither they are disclosing very few items okay, the information is very, very limited and it is on our voluntary basis right. So very few Indian companies which are very progressive in nature are going for these kind of things. Moving to the second part most cases you will find that the kind of intangible assets that is being reported and financial statements it is basically related to the intellectual capital okay.

It basically related to their intellectual property like trademarks pertains and goodwill. So goodwill is one thing that is being used and it has been used since long, but in addition to that only few measures of intellectual property which shows basically the nature of the intellectual property like patents, trademarks okay.

And these kind of things have been reflected in their financial statements okay beyond that they have not gone for anything else which could be a part of what you call intellectual capital

reporting of the organization now if you look at the relationship between the tangible assets okay and intangible assets that you have been talking about if you look at the state of space in Indian companies okay.

When they are going to show their book value tangible assets actually they did not explain the gap what is the gap between the market value or the book value of the firm the book value may be say x but the market value may not be x it could be y also so they could be a difference between the book value of a company of the market value of the company okay and most of the disclosures do not so this that what is the gap between whether the book value and the market value as firm or not.

And what is the they may not showing when the hat is the market value of the 4 okay except few disclosures that they make related to intellectual property, so in unit cell if you look at the state of space for the Indian firms this is the data but this is not so discouraging because now more and more companies coming forward and there are many companies which are doing well so for this intellectual capital management is concerned.

Now this is a data base of Nifty 500 50 firms okay nifty is basically the index of stock okay and some companies that you see here which include basically the top 10 companies basically data bases around 10 years old 5 and for 2005 and this shows some of the companies and the number of intellectual capital idea that they are disclosing in the report okay.

So if look at these companies like Infosys Tata consultancy services ITC, ICICI bank Bharat Airtel, reliance, Wipro Dr. Reddy's Lab, BHEL, Tech Mahindra so these are the companies which have been in the forth front of you can say of intellectual capital reporting disclosures but if you look at the number of items that they are disclosing is very negotiable like for example it is not I mean in two digits say forces the maximum number of item that your disclosing in 9 only like TCS is 8 then ITC 6.

And then if you come down to the list you will find that BHEL and Reddy's lab and even reliance which have at the 4 front of the you can say these kind of reporting out would reporting only 4 to 5 items and there are number of companies which I mean reporting less than that.

(Refer Slide Time: 07:39)

Analysis of IC disclosure of Nifty 50 Firms

11.	Larsen & Toubro	4
12.	State Bank of India	4
13.	GAIL	4
14.	Indusind bank	3
15.	Tata Motors	3
16.	Tata Steel	3
17.	Punjab National Bank	3
18.	Tata Power	3
19.	Lupin	3
20.	Hero Motorcorp	3
21.	Sun Pharmaceuticals	2
22.	ACC	2
23.	Hindalco	2
24.	Grasim Cements	2
25.	NTPC	2
26.	Mahindra & Mahindra	2



Now if you look at this you will find that most of these disclosures are very less for example if you see that intellectual capital disclosures of other companies like which have good companies okay which have a brand value and another kind of things like L&T, FBI, gas authority in this bank Tata motors, Tata steel PNB, Tata power, lupin, hero sun ACC, Hindalco, gasana, NTPC, Mahindra and Mahindra now if you look at the list if companies you will find that they are India top companies they may they could be belonging to services they could be belong to say oil sector they could be IT companies they could be also manufacturing okay.

I mean banking also okay so you will find there is a diversity of companies which have started the process of intellectual capital disclosure but the only problem with this kind of disclosure is that the number of items that they are disclosing or the number of capital intellectual capital items which they are disclosing is very less okay you can see 4, 4, 3, 3, 2, 2 something like that which is not very encouraging may be in the future that this company is would hope more and more disclosure and they would include more and more number items.

So far as disclosure of intellectual capital and they would include more and more number of items so far as disclosure of intellectual capital is concerned now two things that we have seen that what the state of affairs of intellectual capital so far as Indian concerns are come Indian companies are concerned and similarly we have also say that what is the number of intellectual capital item that is being disclose by top companies so these are the top 25 26 companies of NEFT 50 from that I have included but I am not given the data about other companies.

(Refer Slide Time: 09:28)

Content wise disclosure of IC

S.No.	Items of Intellectual capital	Number of Disclosures
1.	Intellectual Property	24
2.	Human Capital	21
3.	Employee Productivity	11
4.	Employee skills	10
5.	Information Systems	9
6.	Organizational Culture	5
7.	Corporate reputation	4
8.	Employee Expertise	3
9.	Cultural diversity	3
10.	Organisational learning	3
11.	Knowledge Management	3
12.	Knowledge Sharing	3
13.	Intellectual capital	3
14.	Intellectual assets	1
15.	Management Quality	1



Now this another way to look at it right so what are they disclosing if you look these are basically related to that items of intellectual capital okay now if you look at the intellectual capitals items that so if you look at the top 4 things that is being reported by most of the companies okay is intellectual sorry intellectual property human capital their productivity and their skills that somehow that is being quantified right, so that total number of discloses that have been meet by the companies rate to intellectual properties 24.

Only 22 companies report about human capital and 11 about the productivity and 10 about their skills and that is goes down okay, it means the number of companies that have been made disclose as related to various items now what we are trying to say here is that if you look at the content wise that means, so what they are disclosing okay you will find that most of them could be quantified expect one or two that is bring reported other things are not being reported like culture.

Now culture is being reported by only 5 companies okay diversities reported by 3 company how organizations learn only 3 companies right, intellectual capital 3 assets management quality only 1 companies disclosing it means that one suggestion that can be given or it has implications the organizations that they should try to disclose has many items of intellectual capital as possible because if you are not going to include as many items for intellectual capital then what will happen that you will not be able to create a good index for intellectual capital.

Okay and that is going to affect your market value while you are there for my asset because the value of firm include both the book values as market value so book value is everybody is reporting but when it comes to market value not many of the many of them reporting, so now the idea is that to encourage these companies to go and disclose has many items as possible so that when they are talked about intellectual capital index of the market value of the company or the value of a form they are in a better position to do it.

(Refer Slide Time: 11:41)

**IC reporting in Annual reports of the Indian Companies
(Paramashivaiah & Puttaswamy,2013)**

Sl.No	Attributes Of Intellectual Capital	No. of Companies Reporting	% DISCLOSURE
	1. Human Capital		
1	Employees		
2	-number	37	20
3	-gender	13	7.027
4	-professional qualifications& experience	12	23.78
5	-compensation	44	23.78
6	Training & Development	43	23.24
7	Work knowledge	11	5.94
8	Entrepreneurial spirit	22	11.89
9	Human Resource accounting	3	1.62
	TOTAL	185	100

Okay so this is the data base especially try to look at another research which was done by Paramashivaiah and Puttaswamy in 2013 what he did basically h looked into at the annual report of the various companies okay especially problems is looked into more than 100 companies or more than that now and then he says that how many intellectual IC reporting is done by the Indian companies in the annual reports right, which could be related to different form of capital right now if you look at a human capital there is no reporting about the employees number is being reported.

Number of companies that report what the numbers in the professional qualification that means they employed it away is reported by some companies right, they related to the professional

qualification experience, compensation training development activities knowledge and skill entrepreneurial spirit right and accounting also okay and if you look at were percent of disclosure we will know that them to most of them are good in reporting their strength employee strength are okay what is the knowledge and skill.

Based how much compensation they have to adding how much they spending on training and development in these kinds of things right beyond that there is not much reporting on especially in to first component of intellectual capital that is what you call human capital.

(Refer Slide Time: 13:09)

**IC reporting in Annual reports of the Indian Companies
(Paramashivaiah & Puttaswamy,2013)**

Sl.No	Attributes Of Intellectual Capital	No. of Companies Reporting	% DISCLOSURE
	2.External capital		
10	Brands and their description	20	12.26
11	Brand valuation	4	2.45
12	Distribution network	14	8.58
13	Market information	29	17.79
14	Business collaboration	22	13.49
15	Customer satisfaction	15	9.20
16	Customer information	13	7.97
17	Social activities	46	28.22
	TOTAL	163	100

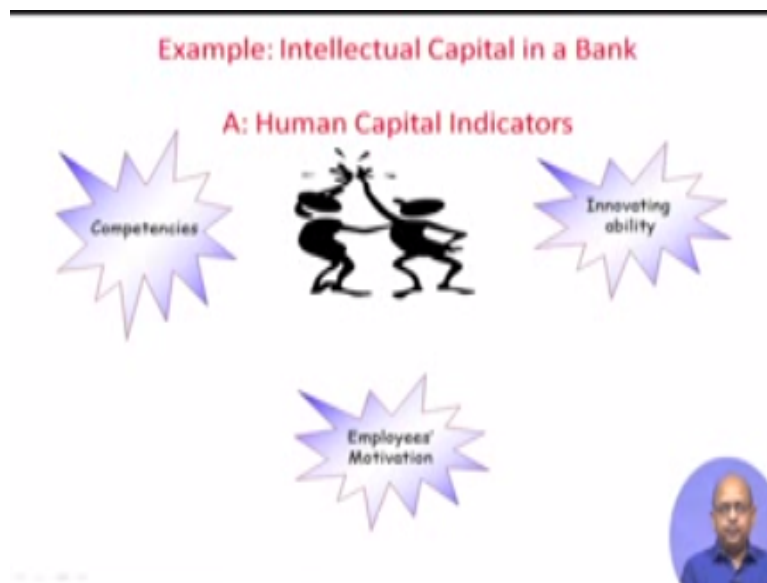
Moving to the second part that is actually the external capital that is related to customer and these kind of things, you will find that the number of components that is reporting out of 163 you will find that most of them report about the brand okay, not many of them are talking about the evaluation okay, most of them talk about the market information, distribution network or the kind of collaborations that they have made and some of them are also talking about the customer satisfaction and information okay and the kind of social activities okay.

Now you will find that most of the companies are talking about social activities it means that they, how much they spending on CSR activities that is being reported by most of the components okay, and if you look at it in them so percentage 28% companies are reporting about the social activities I mean how in what with their contribution the social activities in terms of CSR activities and other things that they are doing for the society, right.

Now apart from this internal, external if you look at the internal capital right, in terms of organization infrastructure capital okay, now out of 98 companies data that was there with them, they could find that most of them are reporting about how much they are going to spend on R and D activities right, then developing in IT system, structure then culture and then battings and copyrights and trademarks right.

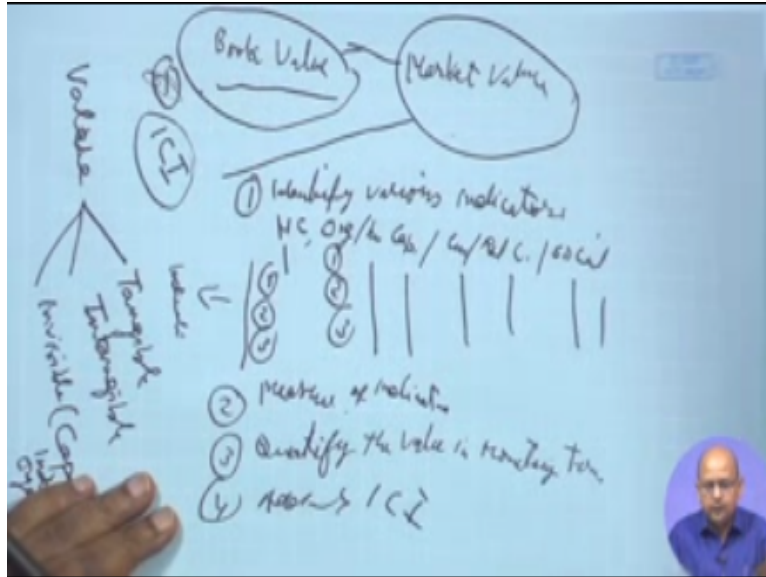
So that is how different kind of see what you call infrastructural organizational related capital in terms of the intellectual properties being reported are being disclosed by the companies, okay. Now what does this data suggest, now we have seen information about the number of items that is being disclosed how many items each companies are disclosing out especially out of the next 500 or if you look at this research results that okay, how many companies are going to intellectual capital are being reported by how many companies you will find that this is not very interesting though they are trying to include more and more items in the process but still it is in a very infancies stage when it comes to intellectual capital reporting in their annual reopts.

(Refer Slide Time: 15:23)



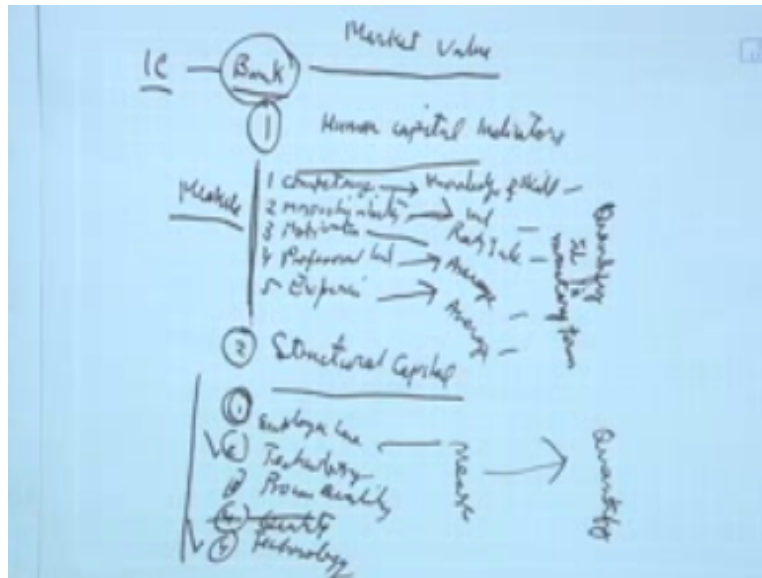
Now what I am going to do further is that I am going to take an example that if you have to create an intellectual capital index of a bank right, we are going to follow the same process that we have discussed earlier. Now if you look at this, this is not an exhaustive list but here I have taken an example and I am going to use the same slide again here.

(Refer Slide Time: 15:45)



Now you remember that when we are talking about understanding the value of firm we try to include both the book value as well as the market value right. Now this is going to be done suppose for example for a bank so what we need to do is, we need to see book value is not a problem.

(Refer Slide Time: 16:11)



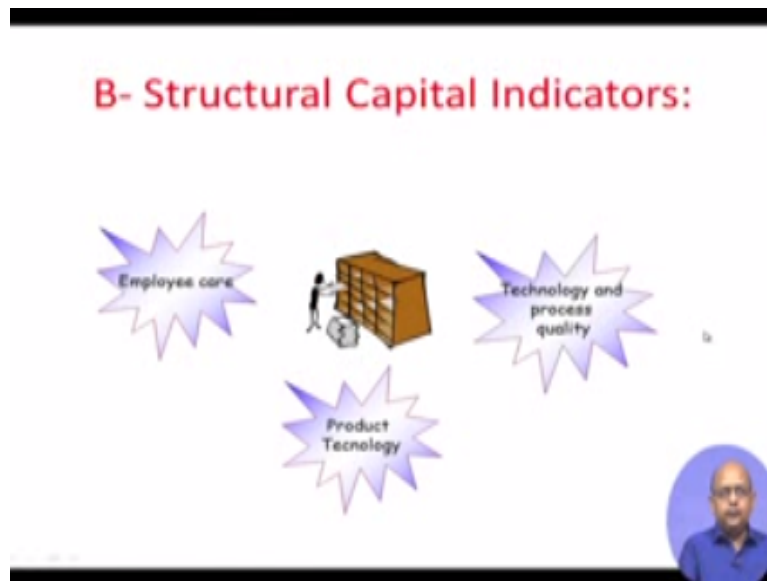
So what we are going to do is that we are going to create the market value of a company, suppose it is a bank okay, so what could be the various type of intellectual capital IC for a bank which is to be classified into three different categories that is say first is human capital, so you remember human capital includes number of indicators okay, so if you look at a human capital indicators which include knowledge, experience, skill and these kind of things the competencies which form the human capital.

So you need to create once you know that okay, 1,2,3,4,5 these are the different indicators okay, so first stage what you are going to do identify the human capital indicators of the bank okay, right. So you take certain indicators and say for example competency it could be a one indicator okay their innovation ability could be another indicator right motivation could be under in indicator professional experience that could be here the professional level could be enter indicator right experience of the average experience of the employee could be enter indicator.

So you are going to take a number of indicators of human capital right now once have this human capital indicator okay and it is identified by you for a bank and must see that it is relevant okay in the context of the banking system because that is very important okay once you have identified this human capital indicators what is your next task you are going to measure it so how you are going to measure these indicators competency innovating abilities motivation how we are going to measure the level of motivation of employee what is the professional level what is the experience of the employees okay.

So you are going to create an indicator for these things; it could be in terms of percentage, it could be in terms of quantity, or whatever it is, okay, or level, whatever it is, so you are going to use certain measures, either quantity or qualitative, to measure these indicators. Now if you look at this, here, now look at the figure, the first resource, for these are the three indicators, right.

(Refer Slide Time: 18:39)



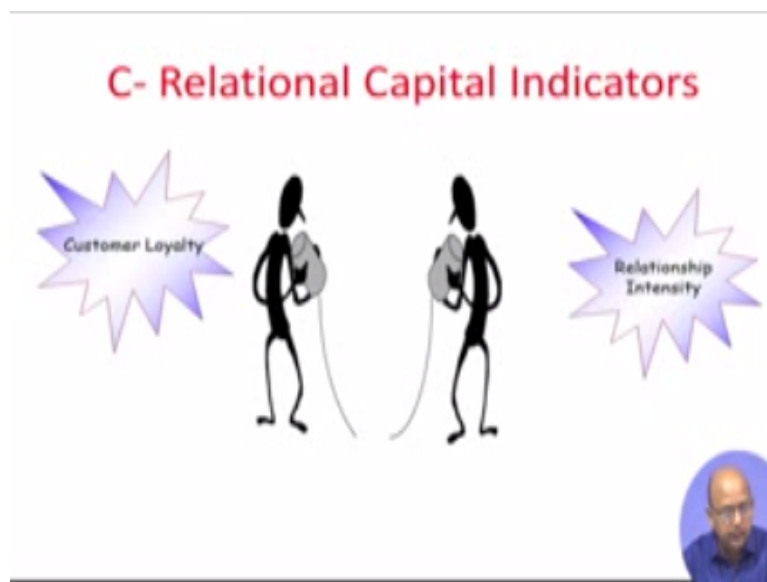
The innovating ability, employing motivation, in competencies, correct, so these are the human capital indicators in the context of the bank, so who you are going to measure the competency, okay, in terms of their skill and knowledge, then you have to quantify it in terms of their innovative ability, what is the level of how innovative they are, also given a rating, a scale, motivation is to say, using a rating, a scale, on a 5-point scale, we have, say, it, what is the proficiency level, what is the average professional experience that people have, you are going to use average, okay, experience, we are going to use average, right.

So all the employees that you have, and that will give you an idea about your human capital indicators in the organization, right, and once you have done this, the next stage you are going to quantify it in monetary terms, right, so apart from human capital indicators, you also have a second stage, second type of indicator, which is known as structural capital, right, and when we are talking about structural capital, you could take number of things, like I am giving some examples, like employee care, second, technology, process, quality, right, process, quality, sorry, process, quality, and technology, quality.

In the context of banking it is very important because everything depends upon the relationship with the employee care the customers or not what is that technology that you are using to process various activities what is your product technology okay what kind of software and that thing you are using for transaction and different kind of activity so they become a part it. Now this gain has to be quantified this is to measured and at the next level you are going to quantify them right.

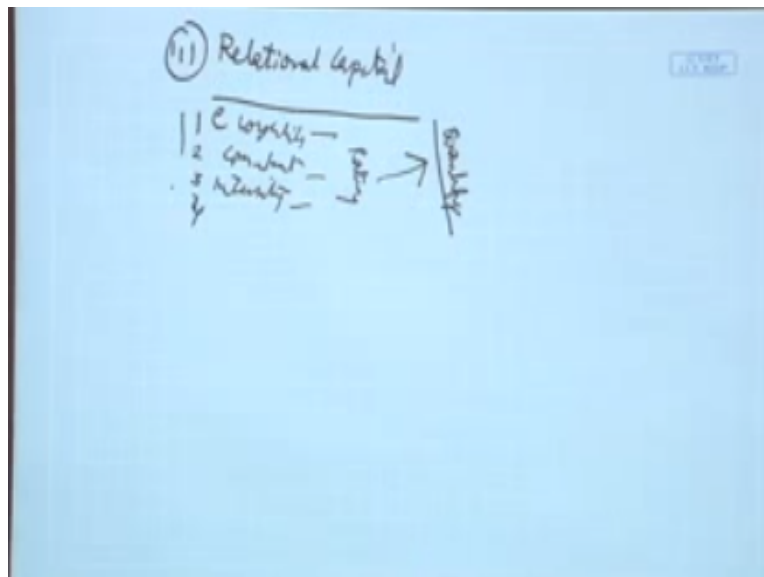
So if you look at the figure it shows this one. Employee care, product technology, technology in process and quality, so these are some of the measures, so these indicators you have to identify how you want to measure it and then quantify just like you have done it for human capital.

(Refer Slide Time: 21:24)



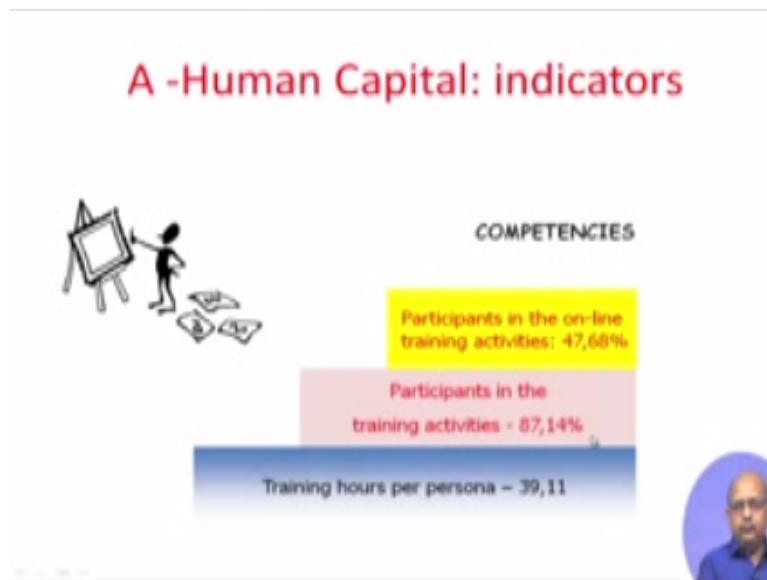
Moving next you have relational capital.

(Refer Slide Time: 21:31)



3rd that is relational capital, here again you are going to use certain indicators like customer loyalty, commitment okay, intensity of the relationship with the customers okay, so you can take a lot of measures and then make sure that it is relevant context of the bank. Then how are to measure these customer loyalty and commitment, you are using certain rating scales okay. and then you are going to quantify it right, and it could be in terms of % and the average can be taken and you can quantify if it is possible.

(Refer Slide Time: 22:22)

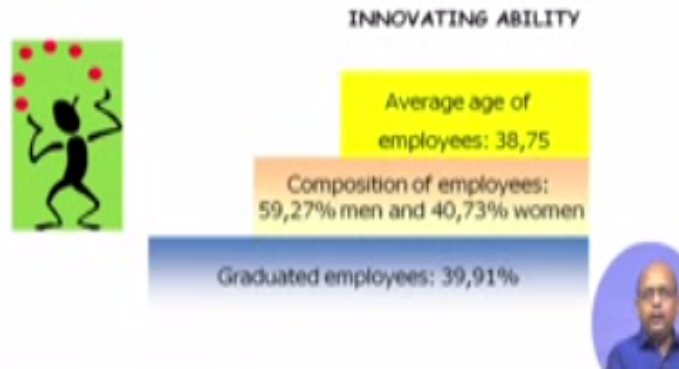


Now if you look at this once you have identified this you are going to do here, as I showed you that you need to identify them are using certain indicators okay. So here if you look at the indicators that have been used to measure them, for human capital indicators competence indicators, how many of them participate in online training in terms of %.

Participating in training activities, training hours per person right, so this will give you an idea and then you can identify and once you identify these indicators in these % terms what next you are going to do is calculate the monitor value.

(Refer Slide Time: 22:56)

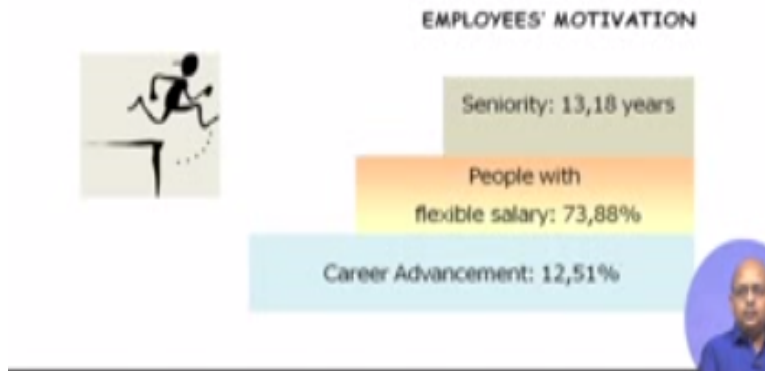
Human Capital: indicators



Look at some of other indicators like innovative ability, average of the employees' okay, what is the composition of the employee in terms of men and women okay. How many them having professional qualification? Similarly if you look at the other indicators.

(Refer Slide Time: 23:12)

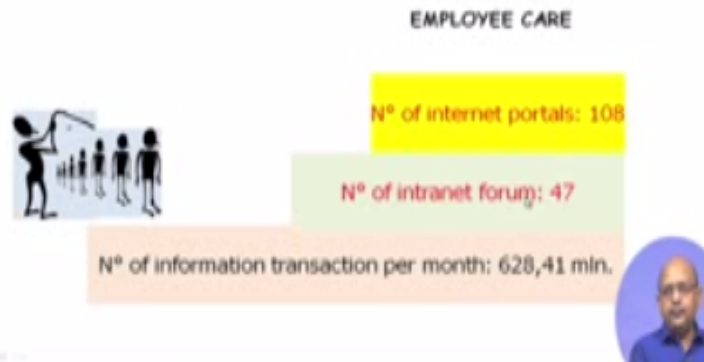
Human Capital: indicators



Like motivation okay look at the seniority people who are flexible salary how many have been able to advance in their career, so you are going to use certain measures as I told you which will give you an idea about the human capital of the organization. Now the next stage what we are going to do is, once you have identified these indicators term of % quantify them into monitor terms right.

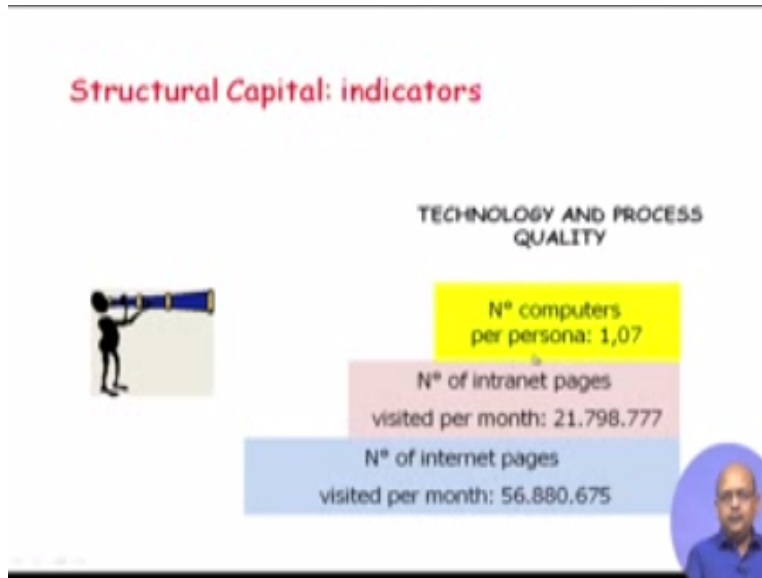
(Refer Slide Time: 23:35)

B - Structural capital: indicators



Similarly structural capital indicators right, number of internet portals you have, number of internet forums, number of information transaction per month, so you have got the time using different, as absolute numbers right. What we are going to do is? That you need to find out how you are going to transform that into monitor form? That is very important okay.

(Refer Slide Time: 24:02)



So similarly for example technology and process quality, number of computer per person, number of internet pages visited by the customers, number of internet pages visited per month right. So this will give you an idea about structural capital.

(Refer Slide Time: 24:19)

Structural Capital: indicators

PRODUCT TECHNOLOGY



N° of products and services: 4.199

New product release: 325




Similarly if you look at the 3rd one that is what is what is the number of product and services that you are using? How many new products released in the market? Because as bank to offer product services depending upon the requirement of the customers. So these are the important things, the idea here is that you identify various capitals related to intellectual may be human capital, the relationship capital. Identify the indicators measure these indicators in whatever it is possible in whatever units you want.

In terms of percentage monetary terms whatever editing scales if it is possible and then finally you are going to quantify right.

(Refer Slide Time: 25:04)


Relational Capital: indicators

CUSTOMER LOYALTY



Average duration of customers relationship: 5,79 years

Number of complaints to the proper office: 18,064



Now if look at relationship capital and their indicators like customer loyalty average duration of customer relationship what is that number of complaints that you are going to have in the given time frame that is how you are going to measure customer loyalty similarly if you look at relationship intensity and if you look at relationship intensity say the number of exist customers by phone banking number of internet customers that you have number of banking transitions that happen by bank through phone okay so this will give an idea about the intensity of the relationship with the customer in the context of the banking right.

(Refer Slide Time: 25:44)

Conclusions

As with any paradigm shift, the main obstacles to change aren't physical. They lie in traditional comfort zones: mindsets that are happier with 'hard' quantifications of physical capabilities and utilizations than 'soft' measurements of intangibles.

(CIPD, 2001:12-13)



Similarly if you look at finally intellectual capital management I am going to give a cote here because what we have discussed basically is that what is more important for a organization it is book value or a market value what is more important for a market it is targetable assists or intangible and individual assist right now the question that is been asked is that when you go intellectual capital management as such you have to see that you are not going to look at only the book value of a company.

Okay it means you are not going to look at the physical assists then the financial assist of the company you also look at certain soft measure which are more important for example you are going to look at the tangible assists individuals assist in the form of human capital in terms of the competitors relationship aspects both customers in the society social aspects also look at the kind of intellectual property that you have created because if you are not able to utilize these soft measures probably not in a better position to create a good index of intellectual capital in your organization so it comes to measuring.

And managing intellectual capital organization with the changes that is happening okay it is happening in the real these in tangible causes it is not in the real what we call assist right so what needs to be done that if you want to do things traditionally and only measure your say index through book while you probably you will not be able to move ahead and transform also as an organization what is more important that you want to be competitive then you need to focus more market value right so I am not saying that you do not go for the hard measures you do look

at it because it gives an idea about the strength of the company but at the same time you must also look at some of the soft issues like relationship.

And another things which are equally important for organization to create a better market while you themselves because you know that today people are not driven by the book value may be less for an organization but if the market value of an organization is good people will go for these kinds of company people will invest in the kinds of companies okay and that is why measuring and managing intellectual capital of an organization and creating index is good and many Indian organization have started for this kind of things slowly they are responding to this kind of activities.

And trying to include as many item as possible for reporting so that they are able to create and aggregate value and indicate it measure of intellectual capital essences right and here HRD professions have very important role not only identifying the various forms of capital but also plan intervention to improve them and see that how it can be measured especially when it comes to measuring the quantitative form of various capitals.

And that is where HRD professional have to see that how they can provide they expertise in the process to ensure that this things are measured so that organization is able to create a better induce of the form and which will basically reflect the value of the firm as such including both the market value as well as book value thank you very much.