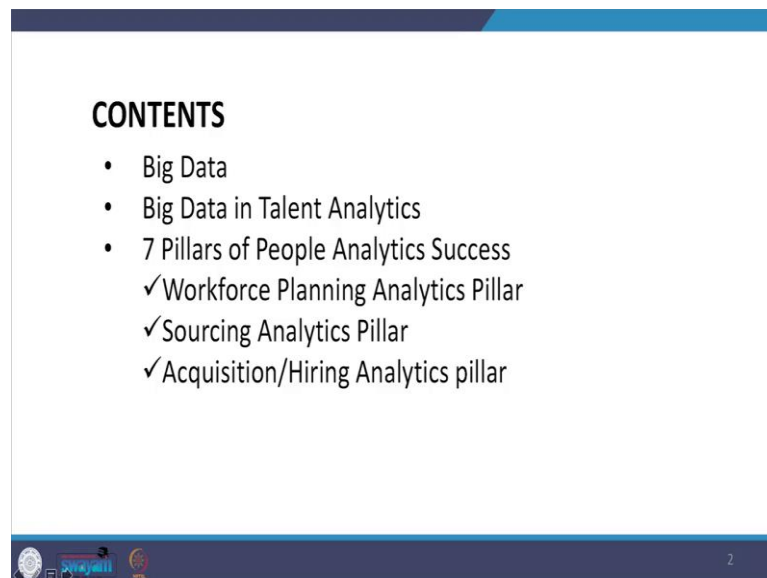


**Talent Acquisition and Management**  
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**Lecture - 52**  
**Big Data – Talent Analytics**

In the previous session of the Automated Screening Application, we have seen how there is a number of applications, and then the screening has been done, and that was the example of the Big Data in Talent Analytics also. So, what is big data in talent analytics?

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So, in this session, we will talk about big data, big data in talent analytics, seven pillars of people analytic success – workforce planning analytics pillar, sourcing analytics pillar, acquisition and hiring analytics pillar. So, these three pillars we will talk about here.

So, what is big data? The term big data is mainly used to describe enormous datasets. Nowadays, everybody is talking about big data analytics, so I have incorporated data in that how these big data will be applicable in talent analytics?

Now, whenever you have use datasets, the question will arise relevantly. A simple example I would like to give is the search, and when you give the search, there will be 1 lakh 37,400, and so and so websites will be there. Now, how to identify the right website? And, to identify the right website from this big data that we have to understand.

Please note that whenever as a manager or executives when you are receiving the applications, then the baby should not be thrown with the bathwater, and that means that whatever applications are there, the most suitable candidate should not be ignored or excluded.

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**Big Data**

The term of **Big Data** is mainly used to describe enormous datasets. Compared with traditional datasets, big data typically includes masses of unstructured data that need more real-time analysis

In addition, big data also brings about new opportunities for discovering new values, helps us to gain an in-depth understanding of the hidden values, and also incurs new challenges, e.g., how to effectively organize and manage such datasets.

(Chen, Mao & Liu, 2014)

Compared with the traditional datasets, big data typically includes masses of unstructured data, and that need more real-time analysis, for example, the unstructured data. So, it means that there is data, data into information, information into knowledge, knowledge into wisdom and wisdom into truth.

So, this sequence or this pyramid has to be clear that how really we need real-time analysis. So, convert that unstructured data into structured data that means into the information that will give us the knowledge. So, here it becomes very important that this unstructured data how in the real-time we are going to make the analysis.

In addition, big data also brings about new opportunities for discovering new values. So, when you have so much data, so, as you see as a researcher, what you would like to see? You will like to see the number of the impacts. For example, the demographic variables will be there, age, then gender and then the geographical locations and the economic status and like these.

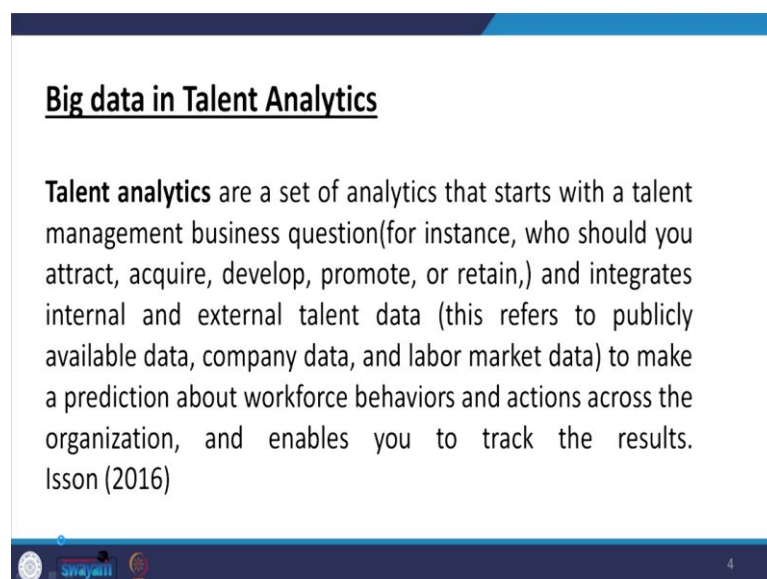
So, because you have the big data, you will like to play with that data and churn that data and come out with very useful information. So, that will create new opportunities for discovering new values, helps us to gain an in-depth understanding of the hidden values. So whatever hidden values are there, they should be extracted.

A simple example the leadership, leadership and gender. So, therefore, whether males are better leaders or females are better leaders. So, you will collect the data, and then you will find that is the, you will compare that whether the male is the better leaders or the females are the better leaders. And that will be the hidden values that you will like to extract, and you will like to do the Manthan.

You also incur new challenges. So, how to effectively organize and manage such datasets? So, many times these people, especially the staff and researchers are having a number of data with them, but some of them are not able to connect that data, some of them they do not use that data, and just the data remain as it is and it has not being used.

So, therefore, in that case, it becomes very important that is how you are going to manage such datasets. If you are going to manage such datasets, then definitely more and more values will be created. To create this, you have to also understand how to connect data into information or how to do the analysis of this big data in an appropriate way. In fact, we will see the application of this big data into our context, that is the talent analytics.

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**Big data in Talent Analytics**

**Talent analytics** are a set of analytics that starts with a talent management business question(for instance, who should you attract, acquire, develop, promote, or retain,) and integrates internal and external talent data (this refers to publicly available data, company data, and labor market data) to make a prediction about workforce behaviors and actions across the organization, and enables you to track the results. Isson (2016)

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So, talent analytics is a set of analytics that starts with a talent management business question; for instance, who should you attract, acquire, develop, promote, or retain? That is talent management. So, here talent management business questions will be that is the potential as we have seen in this automated screening application, that you have to identify the potential candidate.

Integrating internal and external talent data is also very important. If your organization is LEs that is Large Enterprises, then naturally, if it is a global organization with thousands of employees, then you can fill your vacancy from the internal data only, but you are recruiting new persons. So, you are increasing the manpower unnecessary.

The person who is from the inside should get the opportunity as a promotion, so, because you do not know about his strengths, you do not have any datasets where you can immediately give the search and identify that, yes, these are the requirements. So, then and these are the people already existing into.

If you remember, in the previous session, I have given an example in automated screening that there is a requirement of the knowledge of Java language. And then you have the people with you, but you are not aware because it is not noted somewhere, it is not structured, right. So, therefore, it is not entered properly, it might be unstructured, but it is not entered properly.

And, therefore, as a result, even if the next door, next office of your's that employees know the Java, but you are searching, giving the advertisement, investing the money, taking the interviews and then somebody says oh that employee already existed here. So, you have wasted time and money unnecessary.

So, therefore, integrate internal and external talent data; if you integrate that internal and external talent data, this will be referred, so, the publicly available data. Now, here I understand the companies will not make it public. So, the knowledge portal is there, and if the knowledge portal is there, then you can connect. You can connect your requirements with the existing employees, dataset, or this will be available to the company data.

So, the CEO is sitting in New York, and the requirement is of the Uttarakhand regional head and on the desktop, on the desktop of the CEO at New York, the USA you will find

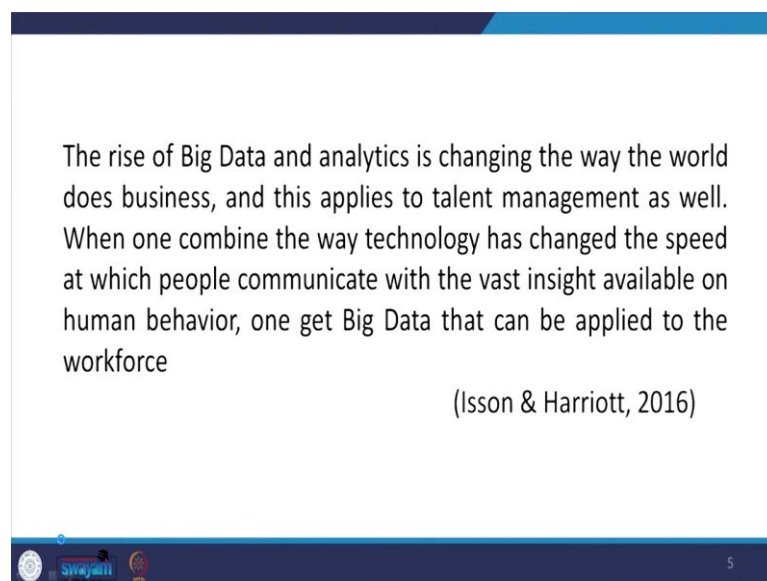
that is he is able to screen that is yes, these are the people those who are already existing, I am talking about internal data. So, already existing and they can be given a charge of the Uttarakhand regional head.

So, therefore, the company data make the publicly available to the company and labour market data – demand and supply. Whether these particular employees now you see you may have the internal employees they may not be interested, then what you will do, right. So, therefore, it becomes the labour market data that is also there, those who are interested.

Those who are not into the market, how you can buy or sell them. So, therefore, there is market data. To make a prediction about workforce behaviours: so, big data also predicts the behaviour of employees that what will be the behaviour of employees and actions across the organizations, and you take the actions across the organization.

That enables you to track the results, and therefore, you will find that is you can give an opportunity to the talented internal employees on the basis of their knowledge, skills, attitude, habits and that was your requirement. And, therefore, you pick the person internally; that is, yes, you are the person we were looking for, and then that person will be kept in that particular position. So, it enables you to track the results that you will keep doing the posting for a particular talented employee in this position.

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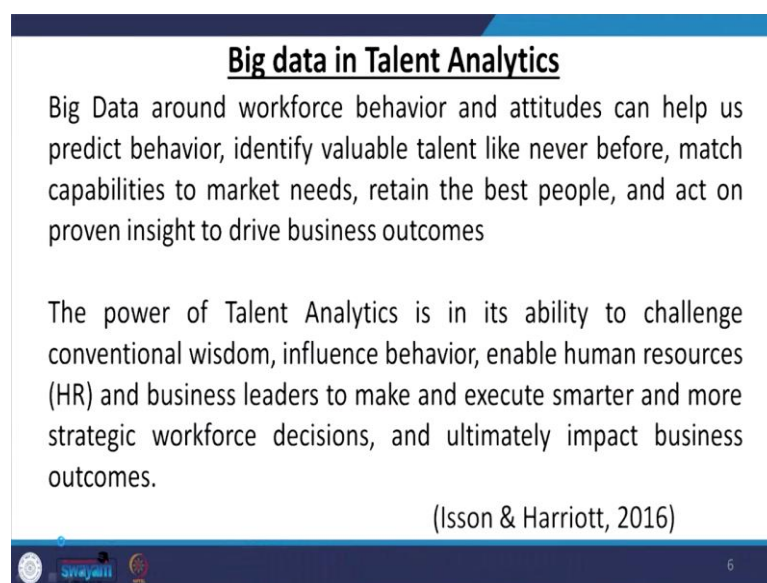
The rise of big data analytics is changing the way the world did business, and this applies to talent management as well. So, far you have understood that is acquisition, deployment and development of talented people is there and therefore, the application of technology and identifying in the talent analytics this become very, very important, that is, you are using that particular data to apply in talent management area also.

How? When one combines the way technology has changed the speed at which people communicate with the vast insight available on human behaviour. So, that will be very important. And one gets big data that can be applied to the workforce. Naturally, whenever we are combining technology and communicating with our internal sources, we will get a lot of input on human behaviour.

You can find the trend, trend of the human behaviour that this particular person will behave like this. So, you are putting the data, and then I identify the trend analysis, and in the trend analysis, we will find yes, this is the way the person will behave. So, vast insight is available on human behaviour.

One get big data that can be applied to the workforce. So, therefore, in that case, this will be only applicable to this workforce when you find that big data and you are using the technology that has a change which we have seen earlier also in the automated screening applications.

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**Big data in Talent Analytics**

Big Data around workforce behavior and attitudes can help us predict behavior, identify valuable talent like never before, match capabilities to market needs, retain the best people, and act on proven insight to drive business outcomes

The power of Talent Analytics is in its ability to challenge conventional wisdom, influence behavior, enable human resources (HR) and business leaders to make and execute smarter and more strategic workforce decisions, and ultimately impact business outcomes.

(Isson & Harriott, 2016)

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Big data around workforce behaviour attitude can help us predict behaviour, identify valuable talent. So, therefore, those who are useful that those that will be identified like never before, match capabilities to market needs, that what are the different market needs are there, retain the best people they. So, therefore, those capabilities will be identified to market needs are there as I mentioned that is the, what is the demand?

So, many candidates from a young generation are ready. They are ready with their qualifications, but the market needs says that a particular skill is required the technical skills especially when we talk about. So whether, are you able to match the capabilities to market needs? If you are able to match the capabilities to market needs, you will be able to successful.

Retain the best people. So, therefore, you will be able to retain the best people also because you know and whatever is their requirement that the organization is going to fulfil. So, for those who are the innovative drivers, leaders in the organization, their database is available. So, you can identify this employee is innovative and therefore, this is the best person in the organization [FL] creative and innovative and risk-taking and new product development and all.

So, therefore, what is required? You have to make the business outcomes. And what is the business outcome? To Retain those talented employees because in the market needs there is a lot of requirement of this type of the employees that are called the entrepreneurs. Entrepreneurs mean they are permanent employees who are going for the entrepreneurship and, therefore, that will be the entrepreneurs.

The power of talent analytics is in its ability to challenge conventional wisdom. So, it is the ability of that particular employee, and then identifying with the help of technology to challenge the conventional wisdom, influence behaviour. So, enable human resources and business leaders to make and execute smarter and more strategic workforce decisions.

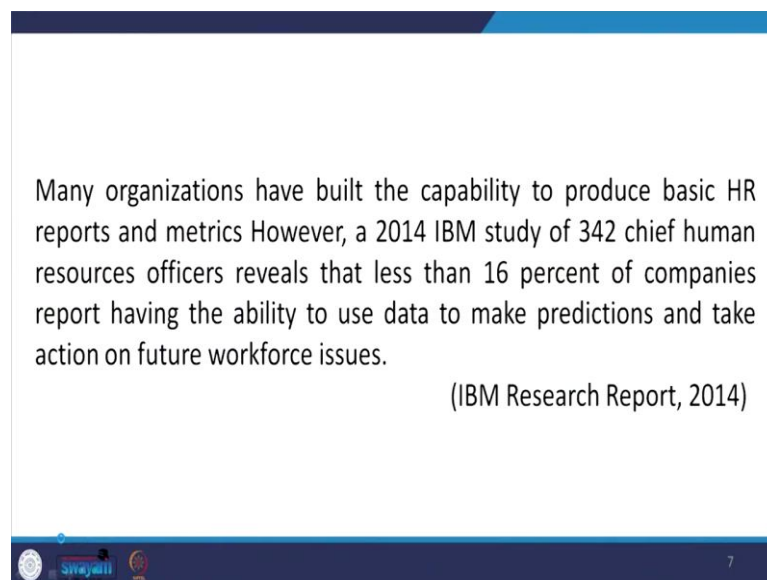
So, that is a pyramid, and in the pyramid, you go one step by step, and then you find that you can make the conventional wisdom, but conventional wisdom is based on their assumptions, and normally that is also found to be most of the time successful, but it is somewhat risky.

But, when you are using these particular data analytics with the help of technology, and that will enable the human resource and business leaders to be concrete whatever the conventional wisdom is there that you will be applying, applying on the dataset, and there will be the hypothesis assumptions. And, on the basis of those assumptions, if you are getting the results, you are successful.

If you are not getting the results in more strategic workforce decisions, if it is not there, then definitely there will be an issue. And ultimately impact business outcomes. So, here it is becoming an important aspect that is these talent data talent analytics is with the combination of conventional wisdom. So, whenever there is a challenge to conventional wisdom, they accept.

Accept with the help of these all dimensions, behavioural dimensions and identifying the leadership application so that you can take the smarter and more strategic realistic this close to realistic. Reality is infinite. I know I understand also, but it will be making you upgraded; upgraded application with the logics. So, the quality of your decision will improve.

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Many organizations have built the capability to produce basic HR reports and metrics, and therefore, in that case, here it becomes a wonderful application whether you are using the dashboard, you are using the excel, you are using the SPSS, you are using these

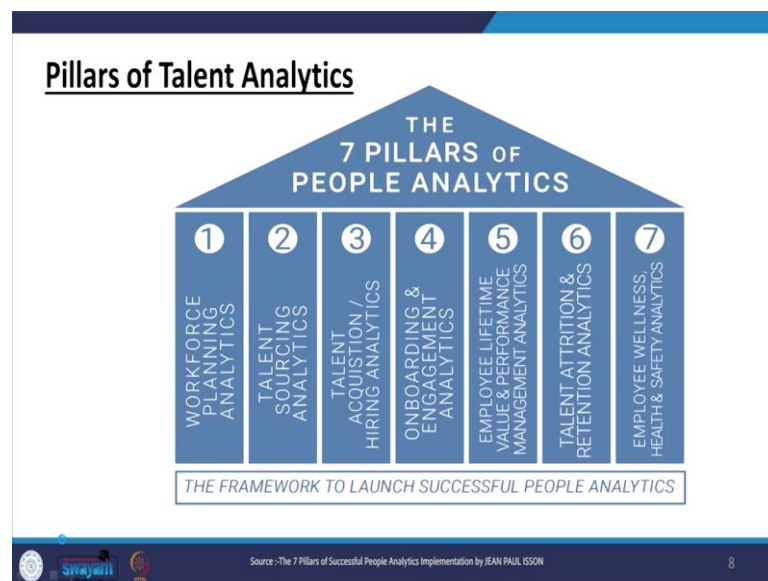


recruitment software's, you are using the potential appraisal software's, and therefore, in that case, you will find that the HR reports are prepared.

And, however, in 2014, an IBM study of 342 chief human resource officers revealed that less than 16 per cent of companies report having the ability to use data to make predictions and take action on future workforce issues. This is a technical issue, basically, and the percentage of HR is very less who are using these particular talent analytic methods.

So, this is on the future workforce issues. It is a 2014 report, but now we will see that is most of the organizations and especially with the help of social media, are making the use of this prediction of workforce issues by the HR people with the help of talent analytics.

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So, basically, how the talent analytics works? Talent analytics works with the seven pillars. Workforce planning analysis and talent sourcing analytics, talent acquisition and hiring analytics, onboarding and engagement analytics, the employee lifetime value and the performance management analysis, talent attrition and the retention analytics and finally, we talk about employee wellness health and the safety analysis. So, these seven pillars, by the way, we can do the talent analytics.

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So, first, we will talk about the framework as an essential guide to help staffing managers, HR managers, business partners, or human capital managers to be competitive using Talent analytics. As we have seen in the beginning, also that is how these big data analytics was helping to take the human behavioural aspect and predict that is the what will be; what will be the behavioural trend.

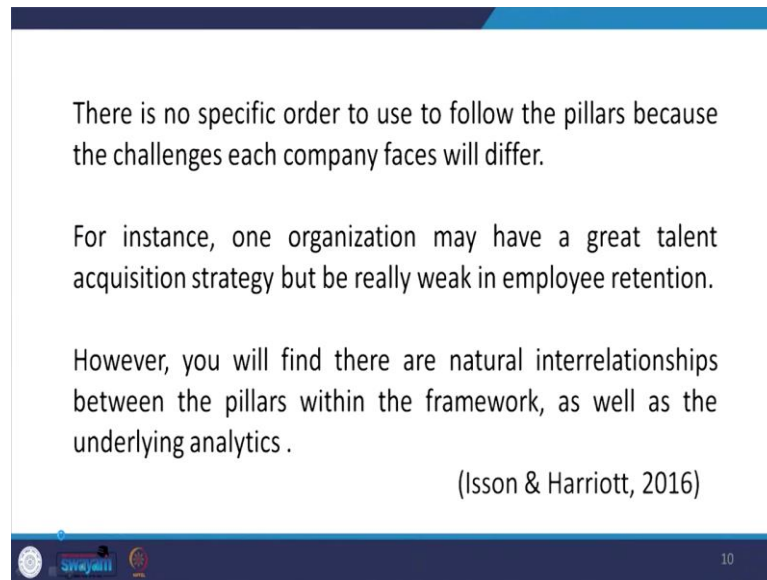
It could be very helpful to organizations that have expressed an interest in harnessing their talent data whatever they have the talent data leveraging analytics across the entire cycle of talent management. So, we find that HR people are taking a lot of interest, and they have expressed their interest in the talent data leveraging – how to make the analysis, how to get the results, how to predict the behaviour, how to identify the internal talent, how to attract the external talent.

And therefore, these leveraging analytics across the entire cycle of talent management to drive better outcomes are there. There is no specific order to use to follow the pillars. So, we are having those seven pillars, but normally it goes from the acquisition, acquisition to the deployment, deployment to the development, development to the separation, right. So, therefore, in that case, there are no specific sequences there because you can apply any particular key problem in the organization.

For example, the key problem may be employee commitment. If the key problem is employee commitment, then definitely they will be looking for that is how to make this

application of the software only for the ex issues – maybe for the behavioural issues, maybe for the acquisition issues, maybe for the deployment issues, maybe for the development issues, maybe for the compensation and rewards issues.

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There is no specific order to use to follow the pillars because the challenges each company faces will differ.

For instance, one organization may have a great talent acquisition strategy but be really weak in employee retention.

However, you will find there are natural interrelationships between the pillars within the framework, as well as the underlying analytics .

(Isson & Harriott, 2016)

Here the example is given. For instance, one organization may have a great talent acquisition strategy but is really weak in employee retention. This is also a real problem that many of the top-level companies have wonderful acquisition practices, the right person at the right job, with the right talent and right skill and right knowledge with the right attitude.

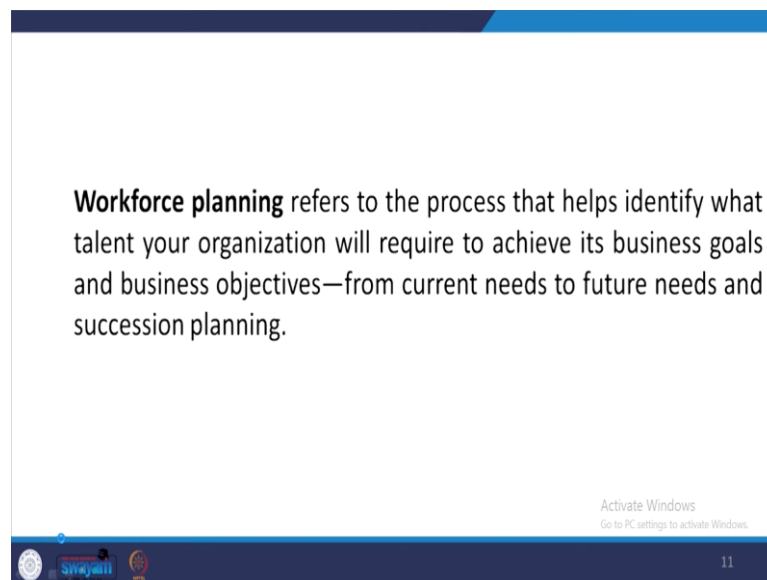
So, all dimensions are covered and then they are having the acquisition of that particular talented employees, but employee's time period to work in the organization is not too long it is forgotten about the permanent, but even it is not too long. So, they are failing in employee retention. They are weak in employee retention.

However, you will find there are natural interrelationships between the pillars within the framework, as well as the underlying analytics. But, basically, these are the seven pillars for talent management only, and the applications of analytic are talent analytics. So, these verticals are there, and you can apply the talent analytics on any vertical not into the 1, 2, 3, 4, right, but not necessarily that is they are into a hierarchy.

So, fine, but can it work without anyone pillar? No, all seven pillars are required, and therefore, that is the interrelationships between the pillar within the framework. So, if there are, these seven pillars and their interrelationships have been very strong, as well as the underlying analytics is there. So, they are interconnected.

So, the first analytic pillar we will talk about, workforce planning, refers to the process that helps identify what talent your organization will require? Now, the first and for most is that the HR manual should be ready. HR manual is that which talks about what type of people you require to perform particular roles and responsibilities and duties.

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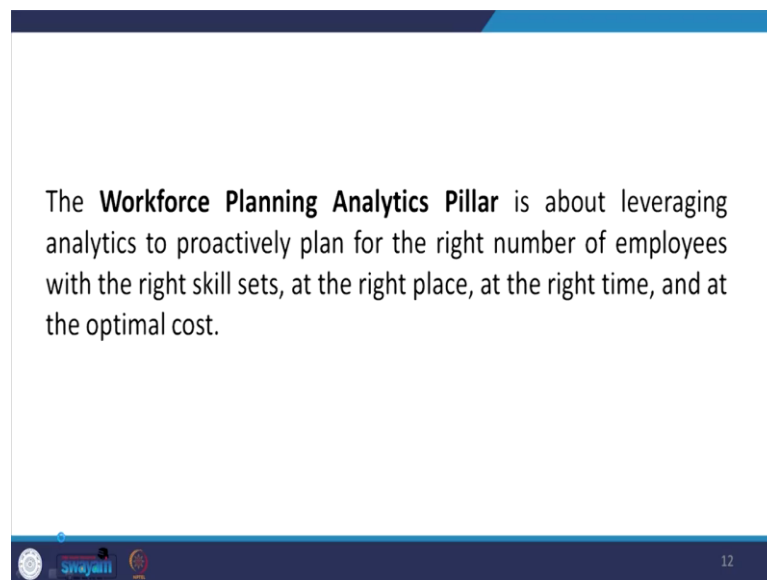


So, therefore, that helps identify what talent your organization require. So, there will be a particular profile, and that type of talent is required to achieve its business goals and business objectives. So, when you are having this type of talent specifications, the requirement specifications, then definitely you will select the employee according to the automated screening applications and the right person.

And the organization will achieve its business goals and business objectives. That is, from current needs to future needs in the succession planning is there. So, in workforce planning, manpower planning, what we do? We fill the current vacancies we look forward to future vacancies.

And we also see the potential employees who can lead when the leader retires, or the senior position managers are retired; then there will be the replacement that is the succession planning. So, that type of these the recruitment and filling the vacancies and the succession planning that will be done with the help of workforce planning.

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The workforce planning analytics pillar is about leveraging the analytics to proactively plan for the right number of employees and the right skill sets, at the right place, at the right time and at the optimal cost. This is very much important; that is, you are making the investments of the technology, the software's, and then are you getting the ROI on that.

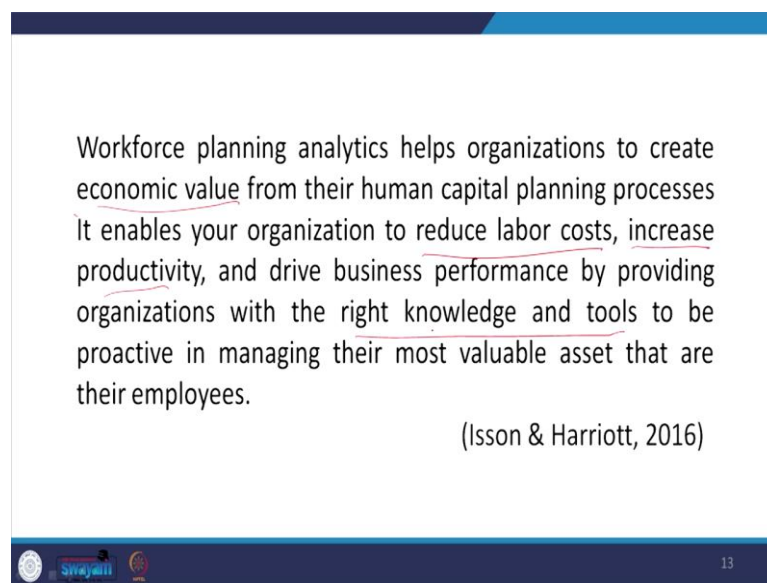
Is it possible for an organization to make these type of investments? So, yes, it is possible because there is an ROI. What is the ROI? That is identifying the right skill sets. If you remember, in the previous session, I have given the example that is the skill sets are very important two examples – one is Java if you remember the example was there that we require an employee with the Java. So, the right skill sets will be there.

At the right place – now, that where wherever in the organization structure it is a front level, middle level, top-level so, you will get the right place. Right time – whenever there is a need, either it is a crisis, or it is the season and at the season time or it is the proactive the recruitment, then also at the right time and at the optimal cost is there.

And for which purpose, like, for example, the conventional wisdom. The conventional wisdom may take hours together to reach a particular decision. But, when you are using the software analytics process, then you are reaching your decision-making process or your requirements very fast, and you are saving time. You are saving the time you are multiplying your activities, and when you are multiplying your activities so that the organization is getting benefited and at the optimal cost.

So, overall cost ROI, which you will be identifying, you will find it is going to help in the case of this particular applying the automated screening or the data analytics or the talent analytics for the purpose of the optimal cost. So, workforce planning analytics helps organizations to create economic value from their human capital planning processes.

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So, what is human capital? Human capital means manpower with the knowledge and skills that are an asset for the organization. So, here when we talk about workforce planning analytics, right, so, it is the creating the economic value. Because when you are talking about HR, so, HR is creating the economic value, from there, human capital planning process. So, whatever the human capital planning is there, that process will be created.

It enables your organization to reduce labour costs. So, whatever the labour cost is there, it enables your organization to reduce labour cost. It increases productivity. So,

therefore, in that case, that productivity has been increased. So, here it is very important that when you are making the economic value so, naturally, the economic value is created when you are reducing the labour cost.

And, another important is the output? Output is that which increases productivity and drive business performance – organizational performance; by providing organizations with the right knowledge and tools. So, these economic values you are getting by reducing cost increasing productivity and driving the business performance with the right knowledge and tools.

The organization is working with the right type of knowledge and tools so that it can be proactive in managing its most valuable assets that are its employees. So, whenever we are using this workforce planning as one of the pillars into the talent analytics, so, the output is that is you make you are reducing the labour cost and increasing the economic values, increase the productivity and then the organizations are going ahead with the right kind of knowledge and tools.

So, they are very proactive. As a result of which you acquire, deploy, develop and retain your manpower or human capital. And, that is the best outcome or the benefit of the talent analytics and in the workforce planning. So, this is all about the first pillar; the rest of the pillars we will talk into the next session.

Thank you.