HR Metrics & Analytics
MSB21T2001

Index-Session 24

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Module 3-Contents
Session 24- Topics to be discussed

- Concepts of value propositions and HR decisions

- Sustainability in HR decisions

- HR analytics and HR value propositions

- HR optimization through HR analytics

- HR forecasting, HR plan and HR analytics

- Predictive HR analytics

PROBLEM

- Organo India currently has 50 farmers, farming organic products for the company. In order to efficiently and successfully carry out the various new projects in hand, it requires more number of farmers to produce so as to meet the increasing demands for organic products. Due to cost constraints, it is not in a position to hire all skilled farmers. Hence, the decision is to hire some of **skilled,** some **semi skilled** and some **unskilled farmers**.

- The total cultivated organic vegetables by a farmer in terms of its value in Rupees are such that a skilled farmer contributes vegetables worth **Rs 1000 per day**, similarly a semi skilled farmer contributes **Rs 700** and an unskilled farmer contributes **Rs 400**.

- The organization has decided to hire not more than **8** skilled farmers, **5** semi skilled farmers and **10** unskilled farmers.

- Also, the total production by skilled and semi-skilled farmers should not be more than **Rs 12,000** and the total production by unskilled farmers should not cross **Rs 3200** due to lack of cold storage.

What Problems HR Analytics Solves ?

1. How
   - To Increase / Decrease...
   - Would "X" Impact...
   - "X" is Related to
2. Why...
3. What
   - Was...
   - Is...
   - Would be...
   - Impacts
4. When
   - Did...
   - Would...
5. Who
   - Is ...
   - Was...
   - Would...
6. If...

How to Solve

- Variables
- Outliers
- Mean
- Median
- Mode
- Normal Probability Curve
- Hypothesis
- Reliability, Validity
- Item Analysis
- Factor Analysis
- Normalization
- Correlations – Mapping
- T-Test
- Variance
- Regression

- The core of HR Analytics is the "Metric"

- **Metrics can be said as data that conveys meaning**

- Example:

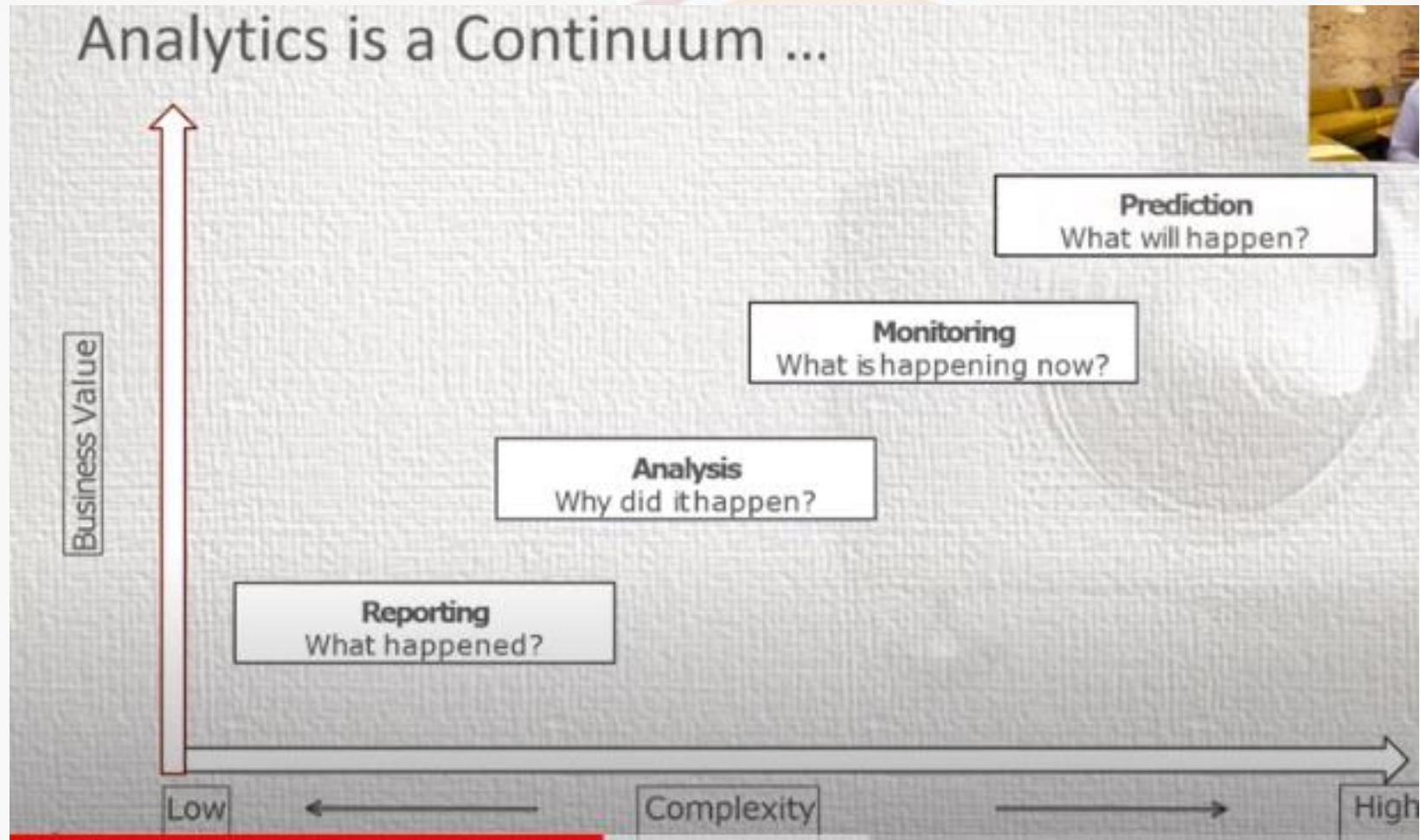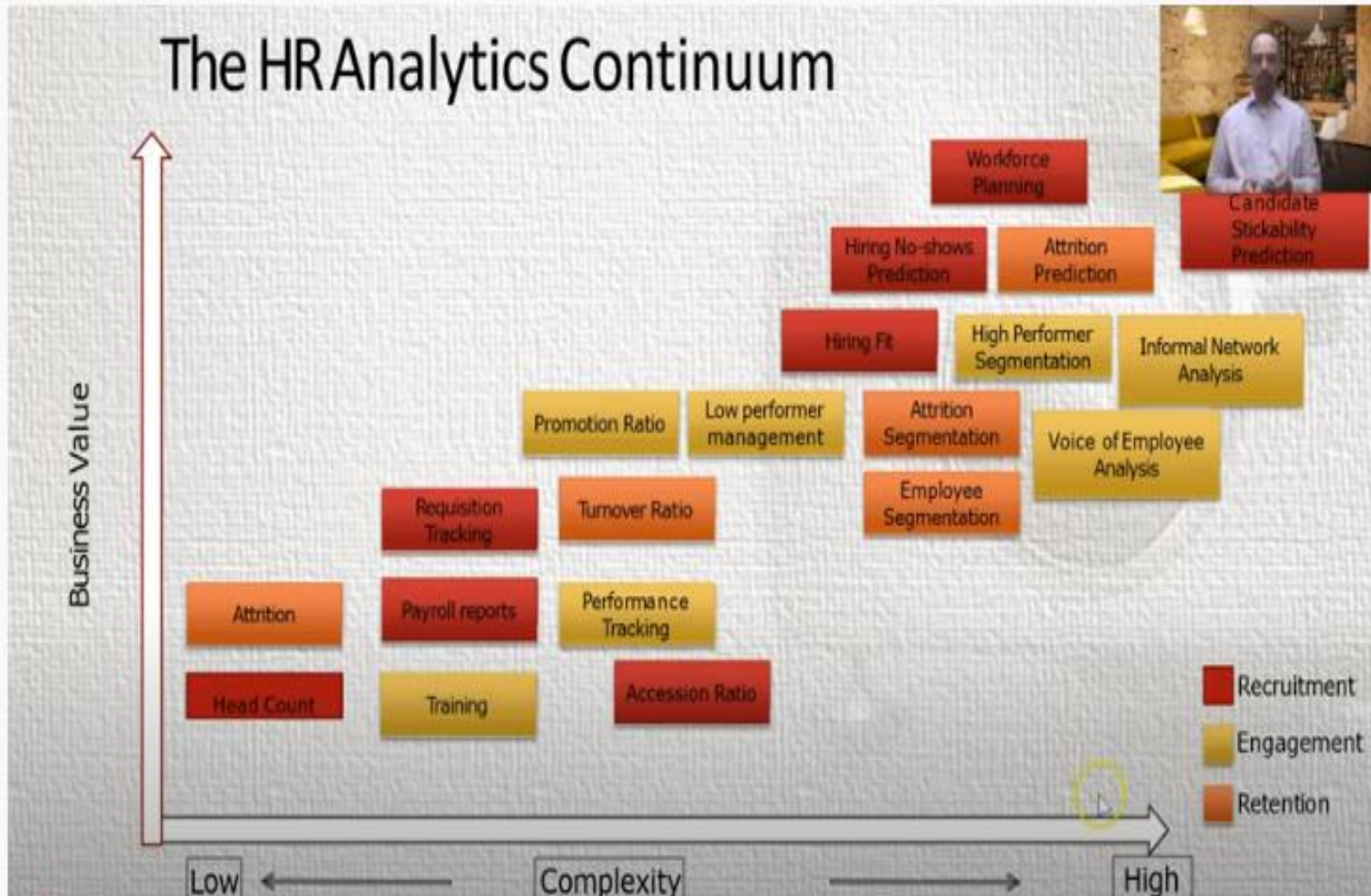|	
-Employee turnover is 13.5% this year	Data
There is a 4 percent point rise in attrition rate this year	Metric
Inappropriate Leadership styles of select managers resulted in higher attrition of 4% on a YtoY comparable basis	Analytic

Analytics is a Continuum ...

The HR Analytics Continuum

Employee Engagement

Almost every company we've studied says it values employee engagement, but some can precisely identify the value of a **0.1%** increase in engagement among employees at a particular store. At Best Buy, for example, that value is more than **$100,000** in the store's annual operating income.

Academic Records

Many companies favor job candidates with stellar academic records from prestigious schools—but **AT&T** and **Google** have established through quantitative analysis that a demonstrated **ability to take initiative** is a far better predictor of high performance on the job.

Contracts Development

Professional spo teams, with their outsize expenditures on talent, have been leading users of analytics. To protect its investments, the soccer team AC Milan created its own biomedical research unit. Drawing on some 60,000 data points for each player, the unit helps the team gauge players' health and fitness and make contract decisions.

Datafication of HR
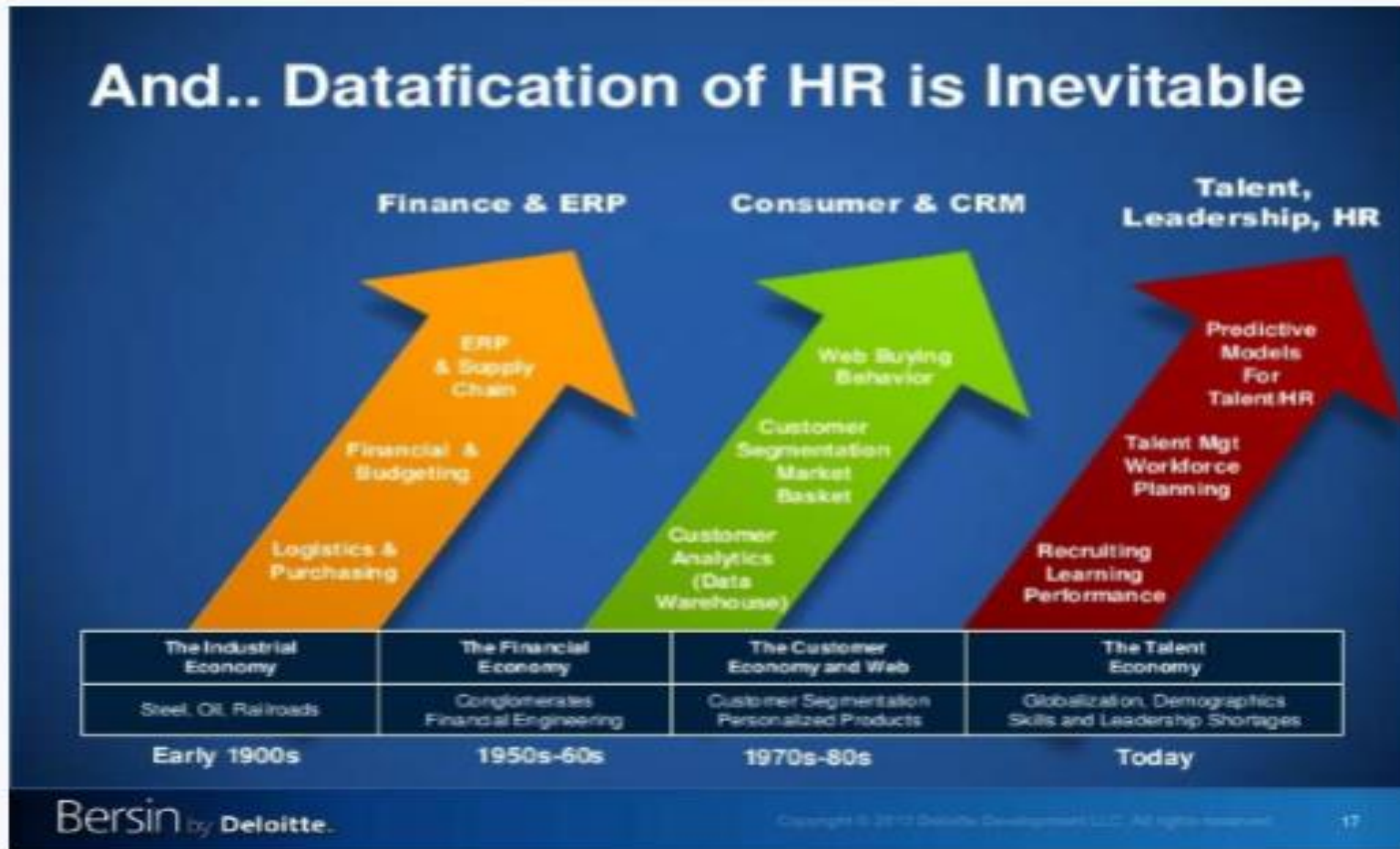
What Data Does an HR Analytics Tool Need?

- Broadly, the data required by an HR analytics tool is classified into internal and external data. One of the biggest challenges in data collection is the collection of the right data and quality data.
- **Common data sources HR analytics solutions**
- **I. Internal data**
-
  Internal data specifically refers to data obtained from the HR department of an organization. The core HR system contains several data points that can be used for an HR analytics tool. Some of the metrics that an HRIS system contains includes:
- 1. Employee tenure
  2. Employee compensation
  3. Employee training records
  4. Performance appraisal data
  5. Reporting structure
  6. Details on high-value, high-potential employees
  7. Details on any disciplinary action taken against an employee
- The only challenge here is that sometimes, this data is disconnected and so may not serve as a reliable measure. This is where the data scientist can play a meaningful role. They can organize this scattered data and create buckets of relevant data points, which can then be used for the analytics tool.

II. External data

External data is obtained by establishing working relationships with other departments of the organization. Data from outside the organization is also essential, as it offers a global perspective that working with data from within the organization cannot.

1. Financial data: Organization-wide financial data is key in any HR analysis to calculate, for instance, the revenue per employee or the cost of hire.

2. Organization-specific data: Depending on the type of organization and its core offering (product or service), the type of data that HR needs to supplement analytics will vary.

For example, says Collins, "HR leaders at a global retailer should power their analytics engine with store revenue and costs and customer experience data, whereas HR at a construction company might pursue operational – health and safety – data and data related to contingent labor costs."

3. Passive data from employees: Employees continually provide data that is stored in the HRIS from the moment they are approached for a job. Additionally, data from their social media posts and shares and from feedback surveys can be used to guide HR data analysis.

4. Historical data: Several global economic, political, or environmental events determine patterns in employee behavior. Such data can offer insights that limited internal data cannot.

For example, the recession in 2008 was a global event that changed the way employees perceived jobs or "work." The freelance, start-up and gig economies took off as people continued to lose their jobs. Data from such a critical historical event can help predict how the workforce may react to similar shifts in the future. It can then be used to identify trends in the current workforce and predict voluntary and involuntary turnover.

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In case, you find any difficulty in understanding the concepts of lecture, please feel free to contact.

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Thanks