“Big data” is being used to analyze the strategic direction of organizations, but are organizations using big data for internal decision-making processes? About one-half of HR departments in organizations with 500 or more employees use big data.

Big data is a broad term for data sets that are so large or complex that traditional data processing applications are inadequate. The term often refers to the use of predictive analytics or other advanced methods to extract value from data, and seldom refers to a particular size of data set. Accuracy in big data may lead to more confident decision-making, which can result in greater operational efficiency, cost reductions and reduced risk.

How HR is using analytics to improve its services during each phase of the employee life cycle:

- Identifying training/development needs for employees: 41%
- Identifying causes of turnover/identifying employee retention strategies or trends: 63%
- Identifying top performer/anti-high-potential employees: 39%
- Understanding HR customer needs: 32%
- Sourcing, recruiting or selecting job candidates or applicants: 7% 
- Establishing an employer brand: 10%
- Managing talent and performance: 61%

Big data are analyzed by:

- HR, internally: 88%
- A vendor specifically for the HR function: 29%
- Non-HR group, internally: 22%
- A vendor for the organization in general: 12%

What are the sources of big data used by organizations?

- VRM databases: 76%
- Employee surveys (e.g., job satisfaction or engagement): 73%
- Employee application data (e.g., applicant tracking systems): 59%
- Performance management systems: 59%
- Employee self-service portal (e.g., benefits administration, timecard and attendance tracking software): 49%
- Publicly available datasets from the government or other public sources: 32%
- Customer feedback/satisfaction surveys: 29%
- Website traffic data and trends: 24%
- Social media: 10%
- Other: 10%

Does your organization have policies, standards or procedures in place that are specific to big data? (e.g., a privacy policy, a confidentiality policy)

- Yes: 30%
- No: 25%
- Don’t know: 45%

Big data is still new to many organizations, and not all HR departments are using it as a resource yet. Why are organizations NOT using big data?

- Lack of knowledge/expertise needed to compile, analyze and interpret data
- Not enough data is collected/available
- Concerns about the integrity of the data
- The information provided by big data isn’t significant enough to justify the expense
- Concerns about maintaining privacy or confidentiality

Source: SHRM and Big Data Survey Findings.