



Big Data and Human Capital Management

By Sean McGuire and Bill Ladd, Workday, Inc.

Interested in big data, but not sure why? Wondering how you can utilize big data in your organization? At a high level, this column will explore the questions you should be asking when thinking about big data in the context of human capital management (HCM). As it relates to this article, it is important not to get caught up in the traditional technical definition of big data, which includes the collection and use of high volume, high velocity, and wide variety of data – widely known as the 3Vs model. For our purposes, we'll keep things short and simple.

In the context of human capital management – what is big data?

Our explanation is actually pretty simple. In the broadest terms, big data is simply the ability to combine structured and unstructured data from both internal and external data sources. This capability will allow you to analyze your traditional HCM data with a much wider variety of data sets – potentially providing useful analysis for decision-making activities.

What are the differences between big data and my current HCM reporting and analytics?

There are two main differences: Generally speaking, HCM reporting and analytics use historical data sets being sourced from internally managed HCM systems. Big data is the practice of bringing structured and unstructured data together from multiple sources, i.e., benchmarking, surveys, application tracking, financial data, sales data, user input, and grouping that data in a meaningful way so that it can be married with your HCM system data (transactional and/or master data). Addi-

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tionally, while HCM reporting paints a picture of historical events, big data gives you the opportunity to apply predictive analytics to better understand potential future outcomes.

What business questions can I answer with big data?

As far as we're concerned, the sky is the limit. Start with an idea or business problem and generate some basic questions. When you get the results, you can start asking more detailed questions. This iterative process will help you understand the data you have and give you a better sense of what questions can be answered; it will also let you know if additional data is required to meet your needs.

Some example questions include:

- ➔ How will our attrition rates impact our head count plans?
- ➔ How many new hires will the South Region need to onboard this fiscal year? What will the cost be per new hire?
- ➔ How long will it take to fill my open positions based on the average time to fill?
- ➔ Do we need to change our campus recruiting strategy?

What data do I have?

Chances are, you have more data than you know what to do with. Depending on your organization, it is very likely you have data that is being stored outside your company's standard internal systems, e.g., SAP, Oracle, Workday. And, when you start to peel back the onion, more often than not you will find many additional home-grown systems such as SharePoint sites, individuals storing folders on their own desktop/laptops, legacy systems that have been long forgotten and external partner data-

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bases. We suggest reaching out across your organization to get a feel for what data is being stored and where. Try to understand if the data is worth acquiring. Remember, not all data is good data.

Understand that you have tons of data that can be useful. The challenge will be getting your hands on the data (especially if it is sensitive in nature) and ensuring you have the proper security measures in place.

Does my data set need to be large for it to be big data?

By definition, it should be, but it doesn't need to be. In HCM, you do not typically have "big data" sets, but that doesn't take away the ability to derive sense out of nonsense. Relevant data can come from public, private, internal and/or external sources. In fact, big data doesn't even have to have external data; it can consist strictly, or primarily, of internal data sets. Cases where this is true include succession planning and employee retention. In both, the main source of data is internal, yet it can benefit your business just as much as leveraging both internal and external data. The challenge is getting your hands on the data that is more sensitive in nature and ensuring that you have the security measures in place so that only certain users have permission to view or edit the information. And remember, data can be desensitized through grouping and aggregation.

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Final thoughts...

Chances are, big data can benefit your organization in one way or another. It has the potential of digging out answers in a sea of data to bring out new insights for your business. Exploring the possibilities and capabilities of big data doesn't take much effort due to the number of solutions you can pilot. If big data is something you want to pursue – start by asking questions and engaging the proper HR and IT resources.

Please feel free to reach out if you have any questions or comments.

About the Authors



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