



Organizational Intelligence Institute

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EMPLOYEE DATA LAKE: SINK OR SWIM!

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The concept of an “employee data lake” with respect to Big Data movement represents the aggregation of a variety of data sources both structured and unstructured in one place such as email, chats, financial records, etc. Using a number of mathematical algorithms and business intelligence tools, companies are organizing and making sense of these disparate data sources through advanced analytics to make smarter business decisions.

The human resource function is also delving into the employee data lake. Some leading companies dove right in and are swimming nicely, while others are struggling to remain afloat and in some cases, sinking into the abyss. For example, well-known companies such as Google, IBM, Morgan Stanley, and Intel have taken the plunge and are mining and modeling their disparate data sources and have established HR analytics as a core capability (Falletta, 2014; Davenport, Harris, & Shapiro, 2010; Hansel, 2007). For the vast majority of companies however – measuring and managing their workforce through analytics is an emerging practice. Irrespective to a company’s analytical maturity, knowing precisely what attracts, motivates, engages, and retains a 21st century workforce is the Holy Grail for any organization serious about making smarter workforce decisions.

Recently, the Organizational Intelligence Institute conducted the largest research study to date to learn more about how HR analytics practices are being conducted in Fortune 1000 and select global companies (Falletta, 2014). 220 distinct companies representing 47 different industries participated in the study and the results are clear – leading companies are indeed performing a wide range of HR research and analytics related practices that extend beyond simple HR metrics and indicators, for example:

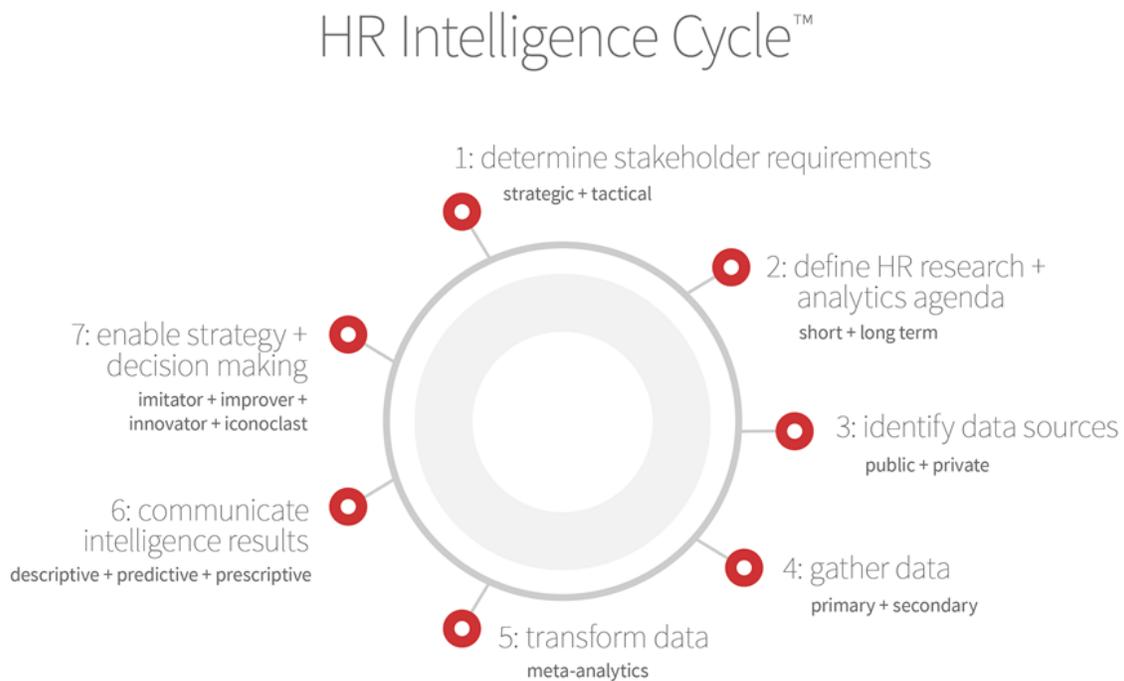
- Employee and organizational surveys
- Employee/talent profiling
- Partnership or outsourced research including membership-based research consortia
- HR scorecards and dashboards
- Workforce forecasting
- Ad hoc HRIS data mining and analysis
- HR benchmarking
- Training and HR program evaluation
- Labor market, talent pool and site/location identification research
- Talent supply chain
- Advanced organizational behavior (OB) research and modeling
- Selection research (e.g., personality instruments that measure various employee traits, states, characteristics, attributes, attitudes, beliefs, and/or values)
- Return-on-investment (ROI) studies

- Qualitative research methods (e.g., case studies, focus groups, and content or thematic analysis)
- 360 degree or multi-rater feedback
- Literature review
- Operations research and management science

The HR research and analytics practices identified in the study, more often than not, are treated as very specific and narrow methodological specialties and typically reside within functional HR silos. To address this issue, the larger, high performing companies tend to have a group or function dedicated to HR research and analytics. These groups or ad-hoc project teams typically comprise a handful of HR analysts, data scientists, or Ph.Ds. who are responsible for codifying and making sense of their organization’s disparate data sources for human capital strategy, planning, and decision making (Falletta, 2014). Not all companies, however, have the luxury nor the time, resources, and know-how to establish a dedicated function to drive HR analytics initiatives – whether descriptive, predictive, or prescriptive. Therefore, it’s time come up with a proactive, yet practical approach with which to cast a wide net. Big and little data (i.e., fish) are welcome!

GETTING STARTED

Over a decade ago during the hot-market, Falletta introduced the *HR Intelligence Cycle* which involves seven steps to help companies develop HR research and analytics capabilities (Falletta 2014). The HR intelligence cycle serves as a useful framework to begin your HR analytics journey.



Step 1: Determine Stakeholder Requirements

Determining stakeholder requirements is vital to the overall success of any HR analytic initiative. It is much more than meeting with a few influential or vocal stakeholders each year to formulate the annual HR research and analytics agenda. It's about establishing and cultivating a partnership and becoming a legitimate player by adding value to the business. With respect to the HR intelligence cycle, an ongoing and proactive partnership with key stakeholders is an essential

role to ensure up-front legitimacy and trusted credibility and to obtain an accurate picture of the most pressing organizational problems and expected outcomes. In short, determining stakeholders' requirements is important to:

- Identify strategic and tactical research, data and informational needs, expectations and priorities;
- Secure involvement, commitment and support of the HR research and analytics effort to increase ownership of the intelligence results, both positive and negative;
- Provide communication on the ongoing progress of the overall HR intelligence cycle; and,
- Ensure utilization of the intelligence results and recommendations.

Step 2: Define HR Research & Analytics Agenda

Once stakeholder requirements are obtained, it's time to define the HR research and analytics agenda. An HR research agenda in organizational settings may be long-term or short-term. The constantly changing and evolving nature of business and the external environment are redefining the notion of time in terms of what is considered long-term versus short-term. In our age of real-time technologies and on-demand data visualization, long-term is no longer three to five years out. One year is considered the long-term norm today in virtually all industries. Conversely, short-term requirements tend to coincide with a company's quarterly results, sometimes monthly. It is important to note that short-term doesn't necessarily mean tactical or reactive, nor is long-term equated with strategic. Short-term and long-term research requirements can be both strategic and tactical in nature. For example, a short-term project can yield strategic results (e.g., market adjustments to employee salaries that could potentially have strategic and long-term implications).

Consider the following when establishing the HR analytics and research agenda:

- Organize the general stakeholder requirements by theme or major topic;
- Pose broad research questions for each theme or major topic and use stakeholders' language and terminology to the extent possible;
- Under each of the broad research questions, begin generating targeted research questions, which lend themselves to measurement;
- Identify both the long-term and short-term requirements of the overall research agenda; and
- Share the research agenda with your key stakeholders and go through an iterative process of refinement.

Step 3: Identifying Data Sources

Once the HR research and analytics agenda is established, you need to identify the sources of data that will help to answer the research questions. Data sources may be either public or private. Public data resides in university libraries, knowledge repositories and governmental databases (e.g., U.S. Department of Labor Statistics). Examples of private data include a company's internal employee data through HRIS as well as external benchmarking data from "best-in-class" companies. Research reports and results gathered by credible membership-based consortia (e.g., Organizational Intelligence Institute, CEB, The Conference Board, and the i4CP) and academic think tanks (e.g., Cornell's Center for Advanced Human Resource Studies, University of Southern California's Center for Effective Organizations) are excellent sources of private data and information. Sources of data may or may not exist depending on your organization's current HR research and analytics practices. While reviewing data sources, questions may arise as to whether your organization's HR research and analytics practices are still valid and useful to the business (e.g., some practices may have become institutionalized or ritualized over the years).

Therefore, some tough decisions may need to be made with respect to modifying existing practices, starting new ones, and in some cases, discontinuing outmoded or symbolic practices.

Step 4: Gather Data

This step of the HR intelligence cycle involves the actual collection of data through primary research, secondary research, or mining your HRIS. Primary research is new or original research that addresses a specific research question or set of questions (e.g., a study to identify which factors enable or inhibit employee engagement and performance). Secondary research is data and information available through existing research sources; it may involve examining existing literature or research reports. Mining and modeling data from your HRIS is another way to gather, query, and analyze data about your workforce, provided it's done responsibly and ethically.

Given that data and information are gathered from multiple sources at different points in time, it is recommended that you coordinate and monitor all aspects of HR research and analytics activities at your company. For example, if your company uses multiple customized employee surveys within business units rather than a single corporate-wide or global employee survey effort, you should assess and consider the implications and potential impact of such an approach. Companies that are serious about Big Data in HR and a driving cohesive HR strategy should arguably conduct a company-wide employee survey to ensure consistency, ease of analysis across the entire company, and minimize the impact of over surveying their employee base.

Step 5: Transform Data (Meta-Analysis)

Transforming data into useful and insightful intelligence is arguably the most important yet most challenging step. While a number of advancements and innovations have been made by leading edge software firms (e.g., Oracle, SAP, and Workday) that have incorporated workforce analytical capabilities within their suite of products, none of these SaaS-based tools can magically codify, analyze, and interpret all of the disparate "Big Data" at our disposal.

When it comes to a company's annual HR strategy and planning cycle, however, much of this work is still done manually by HR professionals – usually with some outside assistance from social and behavioral scientists, statisticians, and data scientists. It is recommended that you start small and build your HR analytical capability overtime. Perform a meta-analysis (i.e., an analysis of analysis) across your disparate data sources. For example, to what extent are the results from individual 360 degree assessments consistent with your employee survey data, exit survey data, or actual turnover? Are high-potential, emerging leaders leaving the company for same reasons year over year (e.g., little to no advancement and promotion opportunities, lack of decision rights, low base pay relative to the market)? Performing a meta-analysis enables you to answer these questions and more importantly organize and codify information in order to glean critical workforce insights. Performing the meta-analysis can be simple or complex. This largely depends on the nature of the data gathered, sophistication and competency of the HR research or analyst, and the amount of time one has to actually conduct the analysis.

Step 6: Communicate Intelligence Results

The sixth step of the HR intelligence cycle involves communicating intelligence results. The *gestalt* of HR intelligence places more effort and emphasis on telling a story about the data in relation to the organization's most pressing problems and successes. This goes beyond traditional HR research and analytics reporting processes and presentations, which can be characterized as the "proverbial data dump," as it involves strategic insights and interpretation by you – the HR professional.

Step 7: Enable Strategy & Decision-Making

The final step of the HR intelligence cycle is strategy creation and decision making. We all have heard the proverbial mantra that behind every successful company is a strategy that works. But what exactly is strategy? Strategy is a multidimensional concept that can be defined in a number of different ways. It involves asking intelligent questions, identifying strengths, weaknesses,

opportunities and threats (SWOT), knowing the right things at the right time, game theory, scenario planning, decision-making, establishing priorities and goals, and effectively managing execution, and so on. Despite these various methods and approaches, strategy can be simply viewed as the means by which an organization intends on achieving its overall mission and goals, and creating value for its stakeholders.

Proactive HR analytics arms strategists and decision-makers with pertinent knowledge and insight to make critical decisions pertaining to human capital. Moreover, establishing effective HR research and analytics practices can ameliorate ad hoc 'data fishing and fetching' by providing HR leaders with real intelligence and predictive insight. While this undoubtedly can be a slippery slope in terms of organizational politics and data ownership across your company's HR functional silos, data analyzed and interpreted in the context of the business and in relation to other factors and variables are hard to ignore, particularly when it's predictive in nature.

Closing Remarks

It is incumbent on HR to play a central role in delving into the employee data lake before someone else does. In fact there are a handful of "Big Data" hawks, annoyingly, calling for IT and Finance to lead the way. Indeed, an IT and/or financial professional might possess the technological and statistical chops to mine and model data, but we believe that it takes an applied HR researcher, analyst, and/or data scientist with the right disciplinary background and experience to accurately interpret the workforce data and predictive insights in the context of individual, group, and organizational behavior. This is not to say that we shouldn't collaborate with IT and Finance – but HR should be leading the human capital analytics charge while leveraging IT and Finance's expertise as appropriate. The business case is clear to jump into the employee data lake now. Sink or swim – the choice is ours!

Reference

Davenport, T., Harris, J., & Shapiro, J. (2010). Competing on talent analytics. *Harvard Business Review*, 52-58.

Falletta, S. (2014). In search of HR intelligence: Evidence-based HR practices in high performing companies. *People & Strategy*, 36, 4, 28-37.

Hansell, S., (2007, January 3rd). Google's answer to filling jobs is an algorithm. *The New York Times Online*.

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