HR ANALYTICS & WORKPLACE INVESTIGATIONS

Towards a More Data Centric Approach

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Overview

The human resource profession plays an essential role in driving business success. Due to technological advancements, changing political climates, and globalization, the role continues to evolve. Today's organizations are equipped with HR analysts, capable of using data to support strategic decision-making. This white paper discusses how the HR analyst role has evolved, its core competencies, and how data analytics are contributing to organizational success. We also touch on the importance of benchmarking, psychological safety, and the manner in which data analytics can support workplace investigations. The purpose of this paper is to discuss strategies enabling HR departments and employee relations personnel to take a more data centric approach to operations. At the end of the document, you will find a reference list serving as a rich resource of peer-reviewed articles.

EVOLUTION OF THE HR ANALYST ROLE

Competition, globalization, and technology continue to act as driving forces of change for the HR role (Beer, 1997; Obedgiu, 2017). From its administrative origins in the early twentieth century to a core strategic business partner, the HR role continues to evolve (Ulrich & Dulebohn, 2015). One of the most recent evolutions in HR is the HR analyst role (Margherita, 2022). The HR analyst role is essentially a hybrid position requiring skills traditionally found in both HR (i.e., business acumen, staffing, compensation) and IT domains (i.e., software proficiency, data modeling), thus requiring interdisciplinary competencies (Chen et al., 2012). Given this complexity, researchers and practitioners have noted that the skills, competencies, and responsibilities required for success in the HR analyst role are unclear (Huselid, 2018; De Mauro et al., 2018; McCartney et al., 2021). At the same time, demand for competencies related to HR analytics is increasing (Edwards & Edwards, 2019). In response to this increasing demand, academic institutions are including HR analytics modules in their MBA programs, professional organizations (i.e., CPHR, SHRM) now cover analytics, and in more cases, organizations are addressing the competency gap internally (i.e., through training and development programs). However, given the somewhat recent evolution of the HR analyst role, very few HR professionals in today's workplace have the relevant competencies to carry out sophisticated data analysis (McCartney et al., 2021). Often IT professionals (i.e., without HR backgrounds) are employed to support HR departments with data analysis. This approach to divisional labor is fine, but also comes with inherent inefficiencies. Tomorrow's HR professionals need basic analytic skills.

WHAT IS HR ANALYTICS?

HR analytics involves using HR data (i.e., attendance records, promotion rates, engagements scores) and business analytic techniques to produce metrics that report company performance relative to goals. HR analytics can be used to serve various HR functions including predicting success, strategic workforce planning, people analytics, HR costing, talent intelligence, human capital investments, etc. HR analytics has ranges in terms of its level of sophistication and utility for decision making. For example, HR analytics can be basic (i.e., descriptive) or advanced (i.e., predictive). Regardless of the level of sophistication, conducting analytics requires rich sources of employee data (i.e., skills & qualifications, pulse survey responses, performance evaluations). If an organization is not properly recording and managing their employee data, then interpreting meaningful results from any form of analytics can be trivial. It is for this reason that effectively using data spreadsheets (i.e., Excel) and HR software (i.e., Workday, Case IQ) to help employees with data management is an essential practice, and core skill of HR analysts. Some recommended data management practices include:

      1. Build strong file naming and cataloging conventions
      2. Carefully consider metadata for data sets
      3. Data storage (backup device, hardware location)
      4. Documentation (project level, software used)
      5. Data quality trust in security and privacy
      6. Invest in quality software

Creating a data management culture that follows best practices lays the foundation for valuable insights. When HR professionals are equipped with rich employee data, a strong business acumen, and statistical analytic skills, they can better make statistically informed decisions. Statistically informed decisions take emotion and "gut instinct" out of decision making. Research demonstrates that sophisticated analytical models can help steer, adjust, and even drive business strategy. When managers are equipped with metrics that are properly designed and easy to interpret, they can better make decisions that will improve operations, and create competitive industry advantages. The best way of leveraging employee data is by conducting predictive HR

analytics, to help with future decision making. In contrast to predictive analytics, descriptive analytics only give a "snapshot" of what happened within our organization at a historical point in time. Figure 1 illustrates four levels of organizational analytics that HR managers may conduct to gain insights from their internal data. Each level of analytics represents increasing competencies required, with increasing organizational value. For example, the base level includes descriptive analytics. This is where data can show "what happened" in an organization. For example, the average age of employees who left the organization last year. This level of analytics offers minimal organizational value and is relatively easy to complete. It doesn't explain "why" employees of a specific age most frequently left the organization last year. Diagnostic analytics can offer this explanation.
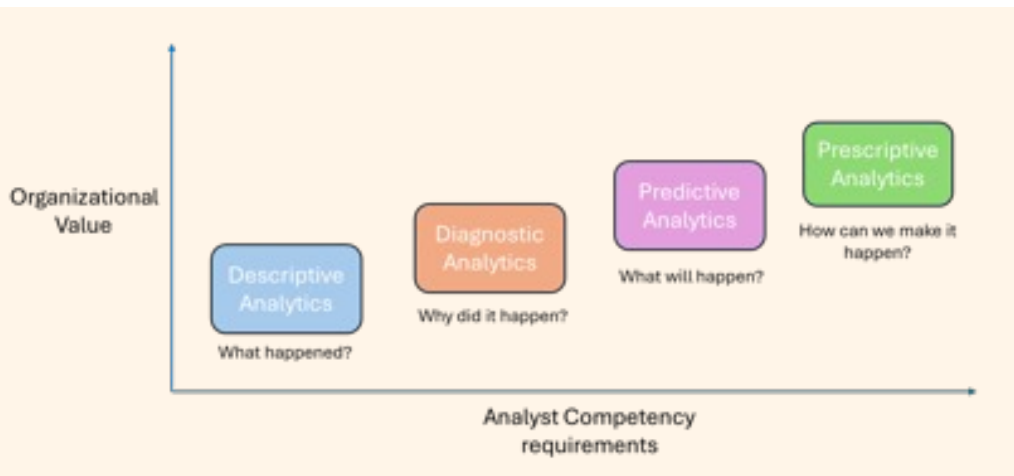

Figure 1. Four levels of HR analytics

Diagnostic analytics provides more organizational value by moving beyond the mere 'snapshot' of descriptive analytics and describing why employees of a certain age were most likely to leave the organization last year. For example, a closer look at employee data may reveal that employees of the most frequent age who left the organization last year were interns, working part-time contracts. The following level is predictive analytics. Predictive analytics seeks to answer "what will happen" and is therefore, future outward looking. For example, if we want to predict what type of employees are most likely to leave our organization, why can include several variables (i.e., age, educational background, performance evaluations, etc.,) and develop a predictive model. This level of analytics adds high organizational value and requires more sophisticated competencies relative to the previous two levels. The final level is prescriptive analytics, which seeks to use data to answer the question "how can we make this happen". Prescriptive analytics is similar to predictive analytics in that advanced models are developed based on organizational data. For example, how much money should we invest in learning and development programs, psychological safety training, or to optimize a reduction in workplace investigations? Predictive analytics can help in answering these types of questions.

In sum, HR analytics consists of varying difficulty levels that require increasing skills and competencies. Some competencies may be more relevant for conducting advanced analytics than others. What competencies are most relevant for conducting HR analytics? Luckily, researchers and practitioners have debated this question and developed competency wheels for the HR analyst role. Such competency wheels may serve recruiters (and trainers) in making sure their workforce consists of employees with the necessary skills to conduct each level of HR analytics. We will explore this 'wheel' in the following section.

HR ANALYST ROLE

As mentioned above, HR analytics requires a sophisticated understanding of both the "people" side and the "technical" side of business. HR analysts need to have excellent statistics and number skills, robust data management skills, and the ability to create data visualizations and be captivating storytellers (Andersen, 2017). HR analysts also need to have a strong business focus (Van der Togt & Rasmussen, 2017), problem-solving capabilities (Durai et al., 2019), data mining (Liu et al., 2020) and familiarity with statistical software packages (McIver et al., 2018; Pessach et al., 2020). And the list goes on. Academics and practitioners have debated which skills/competencies HR analysts should prioritize. McCartney and colleagues (2021) significantly advanced the skills debate by developing a competency model for the HR analyst role (see figure 2). They narrowed down the specific KSAOs required to succeed in the HR analyst role to six competencies, namely, storytelling and communication, research and discovery, HR and business acumen, consulting, technical knowledge, and data fluency and data analysis. Their research also summarizes approximate "weightings" for each competency including technical knowledge (TK) competency represented 31%, followed by consulting (CON) 27%, data fluency and data analysis (DATA) 25%, storytelling and communication (SC) 12%, and HR and business acumen (HRB) 5%. The sixth competency research and discovery (RD) was later added to their model, and therefore no weighting percentage exists. Therefore, recruiters (and trainers) looking to equip their organization with HR analysts who can perform varying levels of HR analytics should design job postings, seek out candidates, and develop training programs that focus on these six core competencies.

Figure 2. HR Analyst Core Competencies (McCartney et al., 2021)

However, it is important to acknowledge that this competency wheel is a "guideline", and a simple internet job search of "HR analysts" will return several variations of the HR analyst role. Each role may emphasize some of the six competencies more than others. For example, HRIS analysts will require more IT-focused skill sets, whereas HR business analysts will require more business acumen-related competencies (i.e., consulting). Although most of the relevant academic literature discusses HR analysts as a single, "general role", it is likely that HR analysts come in different "shapes and sizes". Once equipped with the skills to conduct advanced analytics and rich data sources, analysts are ready to extract valuable information that can be communicated to their decision-making teams. However, "qualifying" the results found within analytic reports as good, or bad, requires effective benchmarking.

EFFECTIVE BENCHMARKING

HR benchmarking refers to the process of comparing an organization's human resources practices and performance metrics against industry standards or best practices (Hiltrop & Despres, 1994). HR benchmarking provides valuable insights that support strategic decision-making, enhance organizational performance, and contribute to the overall success of an organization. Benchmarking is an essential tool for companies to position and distinguish themselves in the marketplace (Krishnamoorthy & D'Lima, 2014), and can positively impact employee job satisfaction (Al-Zoubi, 2012). Evaluating data in "context" impacts the conclusions you draw. Data contextualization is accomplished through:

• Internal benchmarking: gathering and applying data and metrics in a broader context (i.e., cross-departmental comparisons, longitudinal analysis)
• External benchmarking: looking outside the organization (i.e., macro trends, high/average/low)

While benchmarking is more commonly associated with broader HR practices, little attention has been paid to workplace investigations. Benchmarking in the context of workplace investigations involves comparing an organization's investigation processes, procedures, and outcomes against industry standards or best practices. Some examples of where data may be collected to establish benchmarking and make informed decisions include: Efficiency & Timeliness, Compliance & Legal Standards, Quality of Investigations, Documentation & Reporting, Employee Satisfaction, Preventative Measures, and Confidentiality & Privacy.

Through benchmarking, software companies like Case IQ have the potential to distinguish themselves in the human resource information systems (HRIS) industry. HRIS facilitate the effectiveness of the HR function and represent a performance-critical key element of contemporary human resource management (Ostermann et al., 2009). Benchmarking activities show the potential to generate valuable information for the management of HRIS. This information derived from the process of comparison to other business information systems or functions may support customer buying decisions for a new HRIS. While benchmarking in the context of workplace investigations may not be as common as in some other HR areas, it can provide valuable insights for organizations looking to enhance the effectiveness and fairness of their investigation processes. Organizations may choose to participate in industry surveys, seek external expertise, or collaborate with professional associations to gather benchmarking data related to workplace investigations. When looking to develop benchmark metrics internally, here are some important considerations to take:

> When considering what metrics to use for your workplace investigations, ask yourself the following questions:
> a) What additional data could you be collecting within your organization?
> b) How might you collect this new data?
> c) How resource intensive would it be to collect the data?
> d) How valuable would this data be to address current challenges?

Self-reflective tips

FOSTERING A CULTURE OF PSYCHOLOGICAL SAFETY

There is a need and opportunity for HR managers to become more actively involved in creating and maintaining cultures that promote psychological safety in the workplace. A global survey of employees revealed that less than half characterized their workplace as "a psychologically safe and healthy environment to work in" (Ipsos, 2012). Clearly, more organizations should be paying attention to this issue. A systematic review of the psychological safety literature (Newman et al., 2017) found that psychological safety is more meaningful at the team level, as opposed to the organizational level, unless the organization is small. Psychological safety consists of supportive environments (i.e., supportive leadership, supportive relationships with colleagues, and supportive organizational practices), and leads to several desirable outcomes, such as increased knowledge sharing, engagement, creativity, innovation, and performance (Edmondson, 2018).

There is also an opportunity for HR managers to improve psychological safety starting from the recruitment phase. For example, research shows that some employee personality traits are positively related to psychological safety (Frazier et al., 2017). Specifically, selecting applicants that are initiative-taking and open to learning, can lead to work groups that share psychological safety values. To encourage such personnel traits, HR managers could focus on designing interview questions that capture proactive personality and learning orientations (Frazier et al., 2017). It is important to highlight that cultural differences exist, in terms of when it is appropriate to speak up about issues in the workplace. For example, in some cultures speaking out or experimenting with new ideas is less common (i.e., Nigeria, Philippines), as engaging in such behavior leads to more social costs than in Western cultures and causes individuals to lose face and risk being ostracized by other group members (Liu et al., 2010). In countries like Canada, where EDI initiatives are prioritized, HR managers may need to take a closer look at how their "speak-up" practices are perceived cross-culturally. Even the U.S. and Canada have different laws governing internal reporting systems. Such differences, whether they be at an individual or institutional level, can lead to reporting barriers.

REPORTING BARRIERS

Although internal reporting systems (i.e., whistleblowing) have been required for public firms in the U.S. since 2002, such systems are not mandatory in Canada.

Some organizations offer incentives for reporting internal misconduct. Research on this area suggests that offering workers a financial reward for internal whistleblowing can significantly increase the rate at which they report internal misconduct. The net economic benefit of employing such practices is wage dependent - employers who pay relatively high wages obtain little or no significant improvement in organisational welfare from offering rewards (Stikeleather, 2016).

Research examining the use and efficacy of internal whistleblowing systems found that employees who report potential problems within their firm to management, are widely viewed as an important resource in identifying and bringing to light wrongdoing within firms (Stubben & Welch, 2020). Highlighting that anonymous systems are key; by providing employees a secure, anonymous means to report issues, an internal WB system enables management to identify problems difficult to discover via traditional reporting and monitoring systems. Specific findings:
- 10% increase in WB reports is associated with a 2.0% decrease in the dollar amount of government fines

received and a 1.0% decrease in legal settlement amounts in subsequent years
- reports are accessed more frequently and take longer to close when they relate to accounting issues, alleged retaliation by management, contain more information about the alleged activity, allege management involvement in the inappropriate activity, and relate to activities that have been occurring for a longer period of time.

In today's complex working environment, it is important for HR departments to have the skills, competencies, and resources (i.e., software) necessary to stay competitive. The HR analyst role continues to evolve, and HR analytics when conducted at a sophisticated level can provide valuable insights. Such insights are dependent on quality data sources, and effectiveness benchmarking. If employee data is poorly recorded, or comparative benchmarking metrics are absent, HR analysts' contributions are limited. Within the context of workplace investigations, HR analysts are beginning to understand the value of incorporating data analytics into day-to-day operations. We hope that some of the resources in this document can help to serve your organization in taking a more data centric approach to driving business performance.

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