Data Literacy for HR: A Practical Guide to Developing Workforce Insights
Demystifying workforce analytics

The largest cost to a business is often its people, and people are also the key to long-term success. So there's little question as to why leaders are increasingly seeking to shape people practices and strategy by making data-driven decisions grounded in accurate, real-time metrics. With enormous volumes of data coming from every direction – legacy systems, productivity metrics, survey results, sales performance and workforce costs – making sense of it all can be overwhelming for HR teams. It's not enough to simply gather data – it also needs to be normalised and translated into reports and insights that help answer key people questions. This is certainly a tall order, but this guide can help you to start improving your organisation's workforce analytics capabilities.

So how can HR teams develop meaningful insights to help shape people practices and drive business value? And how can they distribute those insights to key business partners and collaborate more efficiently? The answer: they must work effectively with people data as both problem solvers and coaches.

As problem solvers, HR teams work with the business to understand which questions to ask about the workforce, and then determine what data is available to help find the answers. As coaches, they help analyse the data and identify patterns, trends or outliers that provide guidance or merit further investigation.

But playing these dual roles to enhance workforce analytics capabilities can be difficult. These six key steps can guide you through the journey and demystify the tools and processes you need to derive insights from your people data. In the first four steps, HR works as the problem solver to create the mechanism for gathering data. In the last two, HR takes on the role of coach to integrate findings into the organisation.

At a glance

- Organisations using people analytics to support HR functions and business decisions see an 82 per cent higher-than-average profit over three years than their low-maturity counterparts.
- The level of basic data literacy skills among the general HR population (excluding people analytics professionals) is one of the single greatest predictors of an organisation’s people analytics maturity.
- HR staff in nearly 60 percent of organisations do not yet have basic data literacy skills.
- Over 50 percent of organisations have at least one HR data analytics role today; 15 percent plan to add one over the next 12 months.
- Data analysts dedicate over 80 percent of their time just to collecting and preparing data for analysis, and only 20 percent of their time on analysis itself.
- 70 per cent of survey respondents integrate HR data with one or more data sets.
- Organisations with cloud solutions report higher percentages of integration with HR data.

There is still room to expand people analytics capabilities at most organisations. HR teams are working to advance these activities across their function, but relatively few respondents rate their organisation as highly effective.

- Human Capital Institute, “Developing People Analytics Capabilities,” October 2018

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1 HCI is the global association for talent management and new economy leadership, and a clearing house for best practices and new ideas. Its network of expert practitioners – Fortune 1000 and Global 2000 corporations, government organisations, global consultants, and business schools – contribute a stream of constantly evolving information, the best of which is organised, analysed and shared with members through HCI communities, research, education, and events.

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Determine your audience

The first step in getting the most out of your data is to figure out who needs it – both inside and outside of your organisation.

**Identify stakeholders.**
Depending on your organisation, the interested stakeholders may include your fellow HR team members, line of business managers, or C-level executives. To maximise the impact of your data, it’s crucial to know the audience you’re supporting.

**Understand the level of need.**
Later in the process, the audience you’re working with will help determine the level of detail to provide to stakeholders. For example, an HR team member may need all the data in order to support the business, whereas a C-level executive may only require the big-picture view. This will also help you understand how to frame the delivery of the data to stakeholders. Will you need a standardised dashboard walk-through for a director, or a highly prepared presentation for an EVP?

**Identifying the right tools**
When assessing the tools you need, keep in mind that your technology should make it easy to support all of your stakeholders. The system you choose should have the flexibility to pull high-level reports while also providing the ability to drill down into more transactional details. You should look for a system that can determine who should and shouldn’t have access to data – you don’t want to be stuck providing information only to C-level executives due to data security issues. Using a single source for your data makes it easier to get the right data to the right people.
Once you’ve determined the audience, you should next decide on the broader business questions your team wants to answer. To prioritise those questions, first identify key strategies that drive your business. Here are three examples of key business drivers and some of their relevant people-related questions:

**High growth.**
If your business is experiencing hyper-growth, you want to attract the highest-quality candidates while still retaining your top talent. You can start to accomplish this by asking questions about top performers, retention, workforce planning and the impact of learning and development initiatives. A few examples:
- What hiring sources tend to provide our top performers?
- Are we filling key roles quickly while maintaining our quality of hire?
- Are the onboarding, learning, and development processes we use enabling new workers to be productive quickly?

**Operational efficiency.**
If your business is humming along and you’re focused on improving processes or increasing revenue and profitability, then you might ask questions about where you can increase productivity, quality, and profitability:
- What is the financial impact of our hiring process, and where is there room for improvement?
- What is our organisation’s absence/time-off policy, and what is the resulting liability?
- Are we operating efficiently from a productivity and labour cost perspective?
- What is our service support model and can we operate more efficiently?

**Cultural transformation.**
Other companies will be planning big adjustments in order to adapt to the changing world of work. That might mean re-evaluating outdated approaches to employee engagement, implementing digital transformation initiatives, or tackling issues such as pay equity, diversity and inclusion. Transformational companies should consider answering questions about culture and the impact of people programs and practices, such as:
- Are our employees happy and engaged?
- Does our current workforce have the skills needed to meet business goals? How are we solving skills gaps?
- What motivates our employees?
- Are our diversity and inclusion initiatives successful?
## Determine the key performance indicators

Once you know what questions you’re trying to answer, you need to establish concrete, measurable, realistic and relevant metrics. Also known as key performance indicators (KPIs), these metrics help provide data points to answer your critical business questions. Here are some examples of how you can break questions down into relevant KPIs (but be sure to get input from partner executives to make sure your KPIs make sense for your organisation):

<table>
<thead>
<tr>
<th>Business Drivers</th>
<th>Big-Picture Questions</th>
<th>Relevant KPIs</th>
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<tbody>
<tr>
<td>High growth</td>
<td>Who are the top performers and where are we hiring them from?</td>
<td>• Top performers by line of business</td>
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<td></td>
<td></td>
<td>• Overall retention rate</td>
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<td></td>
<td></td>
<td>• Retention risk for top performers</td>
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<td>• Hiring source for top performers</td>
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<td>• Percentage of high potentials identified</td>
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<td>Cultural transformation</td>
<td>What is the financial impact of our hiring process, and where is there room for improvement?</td>
<td>• Total cost of workforce</td>
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<tr>
<td></td>
<td></td>
<td>• Time to hire/time to accept offer</td>
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<td>• Cost per hire/cost per internal fill</td>
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<td></td>
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<td>• Average revenue per employee</td>
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<td>• Revenue per full-time employee vs. contingent/contract employee</td>
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<tr>
<td>Operational efficiency</td>
<td>Are our diversity and inclusion initiatives successful?</td>
<td>• Recruiting pipeline demographics</td>
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<td>• New hires by demographics</td>
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<td>• Attrition/retention rates by demographics</td>
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<td>• Advancement by demographics</td>
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<td>• Management level by demographics</td>
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<td>• Rates of employee discrimination/grievance</td>
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<td>• Job satisfaction by demographics</td>
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Establishing these KPIs and locating relevant data means you likely need to partner with other teams that are more hands-on with the data and handle collection and normalisation, including HR data analysts, outside analytics teams or the IT function. Once you’ve identified who you’ll be working with, together you can break down what data you need, where to find it, and how to get it.

Define the data needed.
A great starting point is creating a list of relevant data fields that you might need to get to the overall KPI. Say you want to know the average amount of time off across the business. You’ll need the total number of employees at your business and the total amount of requested time off.

By adding various layers, such as worker type, location, job title, hiring manager, tenure, status, total salary, performance rating and more, you can gain even further insight. But first, make a comprehensive list of the specific data points you need. This helps you gather the correct data more efficiently and enables you to proactively address future questions you may be asked.

Finding the data.
Basic questions about your people and workforce may be answered from data tracked within your human capital management solution. However, more complex business questions concerning productivity performance or cost of workforce require data from multiple parts of the business. Ideally, your business system will be capable of blending all data sources through native reporting. Some organisations may house this data in multiple systems; others might not know where to look or who owns the data needed. Knowing where your data is housed can help solve these types of problems before they crop up.

Accessing the data.
You may need to collaborate with internal teams and departments (beyond your partner in data analysis) to track down where data lives. Your list may also include items that aren’t even trackable, or items that may be trackable but aren’t captured through any of your current systems or processes. Looking for alternative data points or planning for their collection in the future can help you better meet reporting and analytics requirements as your company grows.

Other issues might be preventing you from getting to the data in the first place. Security concerns may cause delays in getting what you need, or limited access or lack of self-service might force you to rely on others. If your company doesn’t have an organisational-level data governance policy, then accessing data might be even more difficult, so plan accordingly.

Reliability of the data.
Once the necessary data is defined and located, you need to get it ready for analysis. The easiest way to ensure data reliability is to use a business system that provides a single source for data.

Look for a system that combines data sources natively, which makes it simple and user-friendly to tie reports to transactions. If your data is housed in multiple systems, you’ll need to make sure it’s standardised across those systems, potentially causing quite a lot of additional work. For example, does FTE mean the same in one system as in another? Does a head-count report exclude contingent workers in one system but include them in another? You might need to consider these questions when consolidating data across multiple disparate systems. However, with a single source for data - and when data is already standardised, and definitions and processes are consistent - stakeholders can quickly begin to access insights.
Interpret the data

Now that you have found the data required to address the critical business questions for your various audiences, how can you determine what the data really means and turn it into valuable insight?

**Synthesise the data.**
Leverage tools available within your organisation to begin exploring the data. These tools may vary from simple spreadsheet analysis to more sophisticated discovery and business intelligence tools. In some cases, the tools you use can help uncover and expose data accuracy or quality issues.

**Analyse the data.**
As you compile the data, refer back to the questions you’re trying to answer, and then consider points such as scale and timeframe to add context to the data. On its own, a single data point or KPI might not be particularly meaningful, and you might need additional metrics to provide further context.

For example, say you’re interested in figuring out your organisation’s optimal workforce mix. Don’t just examine data about contingent versus full-time employees – factor in points such as location, line of business, attrition rates, and current worker skills so you can accurately answer the overarching business question. It’s within those comparisons that you’ll find more value.

**Evaluate impact.**
Once you have context for your KPIs, you can begin to evaluate the impact of various business initiatives. For people initiatives in particular, measuring impact can be difficult. In fact, according to one study from Human Capital Institute, only 17 per cent of respondents rated their employers as highly effective in measuring the impact of talent management programmes.

However, this changes when HR teams are empowered with contextualised data. For example, after employees have participated in a particular leadership and development course, did productivity improve? Did changes in total rewards programs lead to higher retention rates? By comparing KPIs and looking for trends and outliers, HR functions can begin to evaluate the impact their people practices have on the business as a whole.

**Distribution of data and insights.**
Next, prepare thoughtful business recommendations and communicate insights to your stakeholders. Consider how much detail your audience needs. Some may want to know the finer points behind the data, while others would prefer an aggregate view. The level of detail required will help dictate the best format for sharing the findings (for example, reports, graphs, or scorecards).

As additional business questions arise, it’s even more important to ensure that the insights you provide are actionable. Stakeholders should be able to leverage a visualisation or a report to further drill down into the transactional-level details. Adhering to compliance with data privacy regulations as you prepare the data for distribution is also imperative. Be sure to refer to any data governance policies your organisation may have in place, and make sure people only have access to data that is relevant to them.

“**The real impact of people analytics is seen when it addresses questions with genuine value to the business and to its people.**

– Human Capital Institute, “Developing People Analytics Capabilities,” October 2018

The role of HR

Use a library of out-of-the-box reports, dashboards, and scorecards available within your HR technology solution to surface the data in more meaningful ways. Start with a simple row-and-column format, and use native visualisation options such as pie charts, or column or line graphs. Visualisations help more readily spotlight trends, outliers and inconsistencies.
Develop an action plan

Now that you have the insights, try to measure progress and hold stakeholders accountable.

**Get priorities aligned.**
Always agree on your broader priorities before putting an action plan into place. Results and recommendations may be viewed differently by stakeholders with alternative perspectives, and additional data or insights, even if only anecdotal, can be added from outside groups that could impact the results. Make sure you all agree on the analysis before moving forward.

**Set targets and goals.**
Once the team has agreed on the priorities and overall plan, establish targets and goals with check-ins to hold teams accountable. The ability to map incremental progress against your baseline data will be key when making the case for expanded initiatives and securing executive buy-in. Setting tangible milestones along the way will give you the ability to easily identify the need to course correct.

**Plan to measure success.**
Assessing your progress accurately and comprehensively requires you to analyse a dynamic data set. The frequency with which you collect the data will impact how well you are able to measure progress and success to date. The benefits of having instant visibility into data include enabling a more proactive approach to addressing business challenges. Don’t wait until next year’s audit or review to find out whether or not you made the right decisions.

**Connect and collaborate.**
Schedule necessary check-ins with stakeholders to discuss progress and monitor the effectiveness of the plan. Ensure the meetings are productive and insightful; decision-makers tend to be overloaded with data and an effective partner can help separate signal from noise. Participants in analytics initiatives can easily become overwhelmed by or hyper-focused on the data. Keep an eye on the original business questions and focus on delivering value to the stakeholders by supplementing recommendations with data instead of basing them solely on it.

**Plan for the future with technology and innovation.**
Advancements in AI and machine learning have enabled the automation of many manual tasks associated with data analysis. This is great news for organisations that are strapped for resources, or those that want to expand their analytics capabilities at scale. Dedicating teams of data scientists and analysts to slice and dice data sets is no longer necessary for organisations to develop a more mature analytics strategy. Newer technologies, such as augmented analytics, can help deliver insights without the need for additional head count or hyper-specialised skill sets.
Unum’s approach to pay equity analytics

As the head of a three-person People Analytics team, Cory Edmonds needed a way to automate resource-intensive analytics processes to get insights into the hands of decision-makers. “A common misconception is that models can’t be used if they can’t take into account everything,” he says. “However, there is a value for models to simplify a lot of the variation and only surface where human intervention is needed.”

Before Workday, Unum was able to determine whether an employee’s compensation differed significantly from the average, but not much else, which required significant manual review of external data. There are a number of important contextual factors (experience, education, performance, and so on) that could potentially affect an employee’s compensation, but there are additional insights and relevant context that a statistical model doesn’t capture (i.e. previous work history, customer feedback, etc.). Leveraging Workday Prism Analytics, Cory’s team can automate a variety of manual processes, which in turn frees up their time so their compensation partners can focus on adding in those key contextual points that only a person – and not an algorithm – can provide. And as employee data security is critical, all of Unum’s processes are under the direction of the law department, and are privileged and confidential.” Cory’s team now focuses on how to combine analytics and human expertise to give stakeholders actionable insights into pay equity, moving beyond just identifying the “who” and the “what” to answer the question of “why” there were employees being paid above or below the average.

Unum’s approach.

Using various reports, Cory’s People Analytics team assembled a data set containing all the fields in Workday they would need in order to answer the compensation questions regarding worker, pay range progression, education, performance, potential, experience, job profile, location, and so on.

Next, the reports were exported into a data science tool, where the team built a statistical model that correlates pay range progression with education, performance, potential, experience, and location. Individuals were then scored and compared to others, and flagged for further review if their scores differ significantly. These flagged individuals and pay gaps were then brought back into Workday using Workday Prism Analytics. Once stored in Workday Prism Analytics, security is applied to the new data set, which is then published as a new data source in Workday.

Unum then created and distributed a plan showing the full population and identifying those with an issue, giving Unum’s compensation analysts the data they need to confirm an issue and make recommendations. Unum plans to provide those recommendations to managers using dashboards that include external market and internal ranges so that managers can take action based on relevant data. Budgets can then be adjusted accordingly, whether relating to a pay equity change, promotion, job restructure, merit increase, or other actions. Live data is also used in the plan to track actuals versus targets.

Going forward, Cory’s team is exploring what it would take for each organisation within Unum to have a Workday Livepage (updated regularly, and with business context added as needed) containing their performance against goals in key areas including diversity and inclusion, turnover, talent and succession planning, compensation, and so on. In addition, the compensation team will be able to use data discovery for enterprise monitoring. The team will be able to review each organisation’s progress, how quickly issues are being addressed, and if recommendations are being followed.

Benefits.

By using Workday to resolve its compensation issues, Unum has achieved:

**Improved decision-making:**
Each stakeholder now has the data they need to make fast and valuable decisions.

**Increased accuracy:**
Analytics enable managers to make decisions based on expertise as well as relevant and accurate data, which is especially important when dealing with the sensitive subject of pay equity.

**More efficient scalability:**
By automating resource-intensive tasks, and combining analytics with human expertise, Unum can deliver more value using fewer resources.

**Continuous innovation:**
Workday updates are delivered automatically in the cloud. As Workday continues to add new features to Recruiting and Talent Management to better capture additional data points (such as further context around work history), Unum will be able to free up even more of their analysts’ time.

Unum is a *Fortune* 500 insurance company and a market leader in group and individual disability, group life, and voluntary insurance in the US and UK, with over 9,000 employees.
Looking toward tomorrow

HR at any organisation must adapt to a new age of digital transformation. With a technology partner to support the business, your HR team can integrate data from multiple sources, make it accessible within the same platform where your transactions live, provide meaningful insight and enable collaboration to answer critical business questions.

As you go forward on your path to empowering the organisation through data, it's also important to build a roadmap for supporting growth and demands for a more data-driven HR function.

As you scale your team, make sure to establish priorities and provide advanced analytics while leveraging security to enable more self-service capabilities. Whatever the size of your team, technology investments in AI and ML help maximise your resources. You can then deliver meaningful data and proactive insights, freeing up personnel to be more analytics-driven and better strategic partners to the business.