Culture Amp

Using predictive analytics to forecast employee turnover

The tools to tell you who's going to leave, and why

The days of employees racking up enough years for a gold watch and several months of holidays seem a distant memory. The gig economy is thriving and tenures are dropping. While in some (few) industries a healthy turnover is welcomed, for most organizations, regretful turnover causes financial and productivity pain.

Why do people really leave?

Belonging
A sense of belonging is crucial for people when they join a company. People who had an early sense that they don't belong were three times more likely to leave within the first six months.

Company leadership
Despite the common myth that people leave managers not companies, we continue to find in our data that although some people will leave because of a manager, they are much more likely to leave because they don't have confidence in the overall leadership of the company.

Leaving early
More and more we are seeing people make decisions about leaving companies early in their tenure. In recent Culture Amp research we found that around 10% of people were leaving within six months of starting a new job. Many people have decided if they're going to leave a job in their first six weeks.
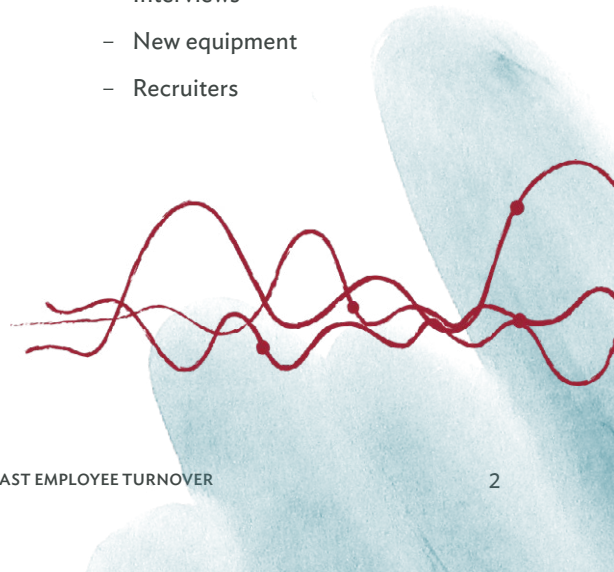
The cost of employee turnover

The cost of employee turnover is widely debated. At the higher end of estimates is 100% – 150% of the incumbent's salary; while other estimates sit at around 30% of the incumbent's salary. The entire figure, taking into account advertising the openings, interviewing, testing, placing, and onboarding a new employee, the impact on productivity and morale of the team and errors during ramping up to competency can be as much as 200% of an employee's annual salary.

The impact of an executive or star salesperson leaving your organization differs from an individual contributor leaving, so you are best placed to choose most appropriate percentages for different employee types, or find the median for all employees.

Additionally, your goals may come into play. If you're planning to expand in a particular region but lose half the team, that goal is next to unachievable. Similarly, if you're planning to raise investment but have a spike in resignations with no clear succession plan, it won't inspire confidence.

When you're considering how to calculate the cost of turnover to your organization, consider the costs of:

- Advertising on job boards
- Candidate testing
- Impact on the engagement of other employees
- Impact on other employees' intention to leave
- Impact on productivity

- Impact on your organization's ability to reach current goals and resource future goals
- Increase in the potential for errors
- Interviews
- New equipment
- Recruiters

Calculate your annual cost of turnover:

Number of employees leaving	X	average salary	X	cost of turnover as % of salary	=	turnover cost estimate

$$10 \times \$100k \times 30\% = \$300,000$$

Imagine the money you could save, and the goodwill, productivity and engagement you could retain, if you could see into the future and understand which employees are going to leave — and why *— and take action to avoid turnover.*

Forecasting and reducing employee turnover in your organization

We know that waiting for people to resign and chasing them out the door with a better offer doesn't work; at least not for long. Smart practitioners have always flagged turnover risks – but many haven't known what to do to avoid regrettable turnover. Instead, they've invested in succession planning (or hoping for the best). One practical application of predictive analytics is using machine learning to identify the people who will leave in the future and why they'll leave. Knowing what's driving turnover arms HR professionals and people leaders with the keys to turning turnover around.

Chances are you already have many of the data points you need to identify who's likely to leave your organization. The next step is to bring these data together to surface the insights you need when you need them.

Just as finance, sales and marketing can bring data to bear on:

– performance to date

– pipeline

– predictions for upcoming wins and losses; and

– ability to meet future goals

so can mature HR practitioners.

Traditionally, most employee engagement metrics have indicated what's happened in the past, but there's now an opportunity to predict what might happen in the future. This is important, because underneath every business challenge, there's a people challenge. For example, if the Head of Sales is setting an ambitious strategy for the year, but you have the foresight to see 30% of the sales team are going to leave; suddenly the conversation changes. People problems can disrupt your organisation's overall strategy. If you can predict people problems, you can circumvent business problems.
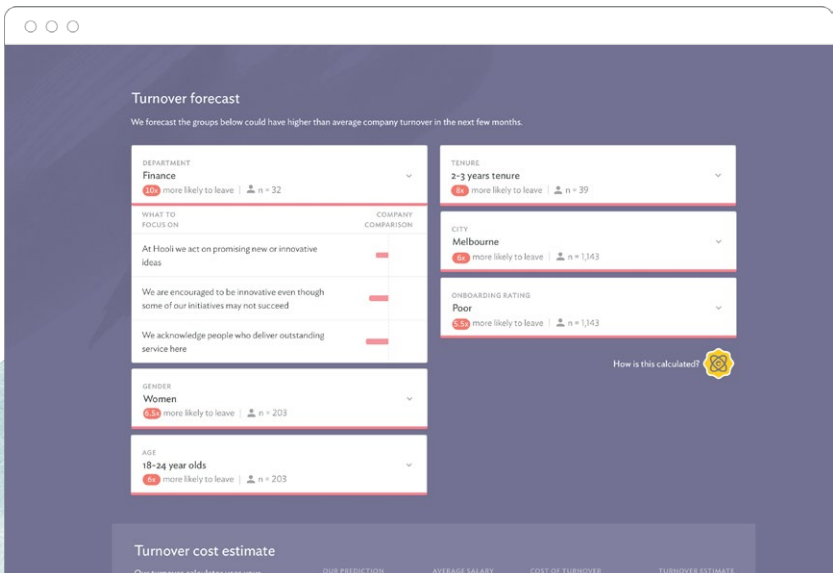
The Culture Amp platform highlights the groups of employees with the highest risk of turnover, and shows the reasons why.

So how can you predict future turnover?

The obvious place to start understanding potential future turnover is employee engagement results. Combined with actual exit data and patterns from our thousands of Culture Amp customers, we've built analytics which senses when people are likely to leave an organization.

We look at whether people are positive, negative, neutral or skip certain employee engagement questions. We take into account whether they're generally positive or negative across all questions. Demographics, like gender and tenure, are also taken into consideration. Some cohorts, for example, women in technology, traditionally have a higher turnover rate.

Our algorithm takes into account a range of obvious and less obvious signals. There are some signals that are well-known and as you might expect. For example, answers to the question "I see myself at [company] in two years time" have proven to be reliable indicators of whether a person stays at or leaves an organization. Subtler signals — like shifting patterns over several engagement surveys — act together in a more sophisticated way to indicate whether people may leave.

"Beyond the exit interview, little is known or documented around why an employee, or groups of employees, are choosing to leave an organization at various stages of their tenure. Our proprietary algorithms sense when an employee is going to leave an organization and uncover the reasons why."

Dr. Jason McPherson, Chief Scientist, Culture Amp

Prior exits from your organization form a strong basis for analyzing potential future exits. This is valuable data and should always be considered when available. However, turnover predictive analytics should not only be available to organizations large enough (or rich enough) to access it. By comparing your organization's data to a large data set, you can access valuable insights.

As soon as an organization's data is uploaded to Culture Amp, the platform can analyze your workforce – identifying which benchmark might be right for you, based on tenure distribution and turnover risks.

Collect

Act
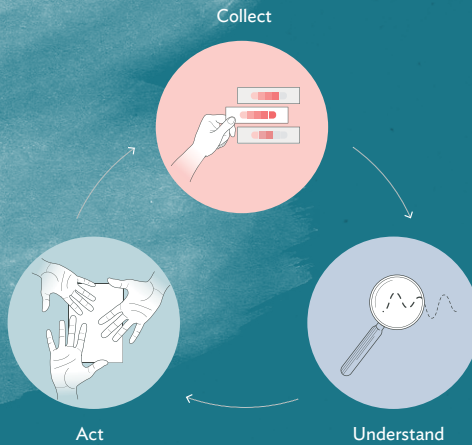
Understand

As with all of our Culture Amp offerings, you can follow a collect, understand, and act process to deliver valuable results for your organization.

Collect

If you have existing employee engagement survey results, these can be combined with your organisation's exit data. Or if you're new to Culture Amp, simply upload your employee data including as many demographics as you'd like to include. You can include historic exit data from your organisation which will be included in the analysis.

Understand

At Culture Amp, we've been collecting data since 2011 and have insights from millions of people from the time they join an organization, to the time they leave. We use modern machine learning algorithms to sense when people are likely to leave, and apply those insights to every company's unique data. You'll receive a forecast identifying the cohorts with the highest turnover risk – which is valuable in itself, but where the analytics excels is allowing you to understand why people are high turnover risks.

Act

For each high turnover risk cohort, you'll have a list of drivers. Once you understand what's driving turnover, you can work to address these areas for improvement. Not only will Culture Amp identify each area for improvement to reduce turnover, the Culture Amp Inspiration Engine intelligently suggests approaches to improve. The Inspiration Engine is made up of suggestions for actions from hundreds of organisations and practitioners – empowering HR practitioners and people leaders to take immediate action on results.

Aligning people leaders and HR practitioners to reduce employee turnover

At Culture Amp our mission is to make the world of work better for at least 100 million people. We believe that HR practitioners, people leaders (and even teams and individuals) can address the drivers of employee turnover. We believe that addressing the reasons why people are thinking about leaving organizations will increase everyone's satisfaction with work.

Each organization will have its own individuals who contribute to improving employee retention. We've designed the platform so that:

– HR leaders can easily identify cohorts at high risk of turnover.

– People leaders can understand why people are at high risk of turnover and easily find ideas to reduce this risk in their teams.

> "We're giving any company—no matter their size—the ability to benefit from the patterns we've detected from three million employees globally. Traditionally, this was reserved to companies with in-house people analytics and data science teams, and even then they couldn't tap into a dataset of our size. We're really bringing predictive technology to everyone."
>
> **Dr. Jason McPherson**, Chief Scientist, Culture Amp