

Valuable information about employees that improves retention

By Dr. Wendell Williams

Ever suspect there might be undiscovered gold hidden in applicant and employee files? Do people who complete three years of college actually stay on the job longer than people who graduate? Does someone who has held two jobs in the past five years actually stay longer than someone who held one?

This is the kind of information contained in every application blank, but it often languishes in dusty old files instead of being thoroughly examined for underlying patterns. Let's consider turnover, for example.

Turnover

Turnover is exceedingly expensive. A short Google search cited figures of 150% of each person's annual salary, \$10,000 per employee, or 200% of total compensation. The International Journal of Newspaper Technology points out:

Hay Group estimates employers lose 40% of annual profits due to turnover. Center for Creative Leadership estimates 40% of new hires leave within the first 18 months. World at Work estimates turnover costs ranged from 100-700% of a staffer's annual salary. Whatever the calculation, turnover can drain the bottom line. But, did you know that savvy employers can reduce this expense by doing a little research into data they already have at hand?

But first, let me explain why to use retention data. Retention is concrete and seldom subject to the "no one in our company is perfect," "everyone here is above average," "forced ranked," or "supervisory favorites" syndrome, which makes every employee look alike to an outsider. Retention is clear. The reasons for termination might vary, but there is no doubt about whether the employee is either here or gone.

Biographical Data

We all know intuitively that an applicant's biographical data (the information often included in an application blank) probably contains clues that indicate a potential for turnover.

Biographical data (or "biodata," for short) represents the sum of our past experiences, job history, education, and a host of other factors that give vital clues to the potential for turnover and productivity. The secret is discovering what these clues are and how they combine.

Think of biodata as another form of an interview. A well-conducted interview includes: 1) pre-determined job standards; 2) carefully crafted questions that gather examples of past job-related skills; 3) a standardized scoring guide; and 4) multiple interviewers who arrive at a hiring consensus.

Research shows professional behavioral interviews predict as much as 10-20% of the variance in job performance.

Biodata produces similar results. Like behavioral interviews, biodata uses examples of past information; but unlike interviews, biodata questionnaires take less time and actually add to the effectiveness of other methods. So, why aren't they used more?

I think it is because 1) it takes hundreds of people to provide enough data to identify meaningful patterns; and 2) it takes powerful statistics and expert knowledge to sort out relationships between biodata and turnover data.

Fancy Statistics

Imagine a large company with thousands of employees performing a similar job. It could be a call center servicing inbound or selling outbound customers, an operation that employs a nationwide network of unsupervised field representatives stocking retail shelves, or a service company that finds underground wires and pipes. The products or services are unimportant. The key words are "big numbers," "similar jobs," and "unacceptable turnover."

Now suppose we have biographical data on current and past employees hidden away in an HR database that contains gobs of data accumulated from the Internet, scanned application blanks, performance reports, and retention records. This is the mother lode!

All we have to do is find the relationships. Where do you start? First find someone who:

- Has a sound background in exploratory statistics.
- Knows how to operate highly sophisticated exploratory analytical software.
- Can recognize the clues between trustworthy models and bogus ones.
- Is well-versed in the intricacies of psychometrics.

Now, we begin by defining the kind of retention we want to control. For example, there is early career retention (which often has to do with the ability to learn job requirements or discovering what the recruiter never told you); middle-career retention (usually associated with having skills to perform the position); and late-career retention (generally associated with job dissatisfaction). As you can imagine, each category of turnover will have different causes.

We next pick and choose the most likely biodata causing the turnover. It could be frequency of jobs held, level of formal or informal education, driving distance from work, or even prior experience with a similar job. Like turnover, we have to carefully sort through each piece of information looking for clues that differentiate between terminations and retentions. We might even run a few trials to narrow down our choices.

This gives us a clear target and a starter-set of causal factors (or at least we think so). What's next? Power up the software, analyze and examine, analyze and examine, and repeat until a robust model evolves. What does it look like? Well, it's seldom as simple as looking at one factor. In fact, it is often a combination of several "ifs, ands, and ors."

Here's an example of a turnover-prediction rule we built for a client recently (there are six rules for retention and eight rules for termination):

Rule three of six (retention at six months):

- If the employee had prior experience using his car as an office;
- And he had more than five years' prior work experience;
- And he scored 65 or above on generating new ideas;
- And his interpersonal skills were maximum;
- And his competitive drive on our hiring test was 25 or lower;
- Then, there is a 95% chance he will be employed.

Or this: Rule two of eight (termination at six months):

- If the employee had average experience in maintaining accounts;
- And had more than five years' prior work experience using her car as an office;
- And her total work experience is four or five years;
- And her competitive drive on our hiring test was 25 or lower;
- And she scored 72 or above on a teamwork scale;
- Then, there is an 83% chance she would be terminated.

Of course, a smart organizational HR manager can immediately grasp how this data could be used: 1) as a special application form; 2) as part of a web-based screening questionnaire; or, 3) to predict an applicant's probability of early termination. Assuming the analysis was done right, employers can have a significant impact on turnover by hiring only people with a high probability of retention.

Danger, Will Robinson, Danger!

As you can imagine, this kind of analysis is not for the faint of heart.

Warning one: Backward-looking data analysis must always be scrutinized to eliminate information that does not cause turnover. For example, if we included weight among our turnover predictors, we might conclude that an employee's weight affected retention rates. Perhaps fat people didn't stay as long. That could have been true, but may not have been causal – it may have been coincidence. Bottom line? The data in the analysis must be thought through and not just dumped into the statistical blender.

The second warning has to do with numbers. Making assumptions based on small numbers can lead to big mistakes. Take for example "terminated" or "employed." Those are two categories. Now add "education," "prior experience," "job tenure," and "driving distance from work." These are four categories, making a total of eight cells. Trustworthy analysis mandates having at least 25 people in each cell or $8 \times 25 = 200$ people bare-minimum (more if there are more things to measure).

The third warning includes the wrong-headed idea of only looking at one outcome (e.g., including only people who are terminated). A one-sided analysis only tells us about one group. That's nice, but, essentially worthless unless we know that the people who did not terminate were different from those who did. Trustworthy analysis requires knowing about both groups.

The last warning is personal. It takes a courageous HR person to mount the charge to do things differently. There are plenty of risks imagined. But, how many HR departments can take credit for easily making a true and measurable bottom-line improvement?

Think about it. HR might actually be viewed as a revenue center.

Dr. Wendell Williams is a bottom-line consultant with a message: how to avoid nonsense HR practices, how to identify employees in the top 20%, and how to manage their performance effectively.