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"Is Employment Duration a Good Measure of Productivity?"

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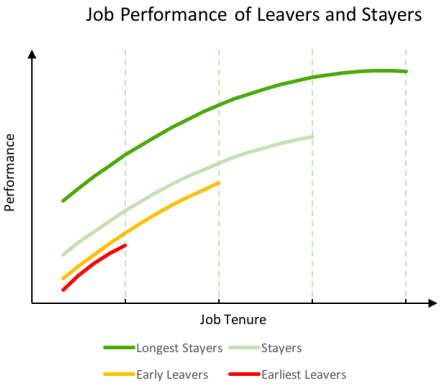
Companies want to hire high productivity people. But how do we define productivity? How do we measure it? Chances are, different companies, and even different people within the same company will have different answers to these questions, despite possibly agreeing on who the best employees are, or what qualities they have. Isolating individual performance, especially in a team environment can be difficult, and recording accurate measures of productivity even harder. If we can't measure it, there is little hope of modelling productivity to support hiring managers in selecting the right people.

What we can easily measure, however, is how long an employee stays with a company. Companies tend to agree that lower turnover (or the other side of the same coin, longer duration of employment) is better from a cost perspective, but the question is whether it is also better from a productivity perspective. In other words, if we select hires based on how likely they are to last in the job, will we also be selecting the high productivity people? If so, we can model one key variable to identify the right hires: turnover.

It is certainly a legitimate question to ask whether employee turnover is of the high productivity or low productivity employees. Intuition tells us that bad matches don't tend to last, and good matches don't tend to end in quick separation, but does this hold up to further scrutiny?

A case-study using data from a large, multinational, customer-services company provides robust evidence in the affirmative[1]. This company is in the rare position of having accurately recorded, clearly defined, objective performance measures for a large sample of employees that are all performing essentially the same job. Using this data, and the readily available data needed to define duration of employment (simply hire date and termination date), we test if indeed our intuition holds: whether the more productive employees are the ones who stick around longer.



We measure productivity and plot it on the y-axis against time on the x-axis. The four lines show the productivity over time for employees who have different durations of employment. Employees who remain at the job longer perform better at the beginning, and continue to outperform the earlier leavers. Clearly, it would be advantageous (and profitable) to have more of the stayers (who are top performers), or *good matches,* and fewer of the leavers (who are poor performers), or *bad matches*. If we can better identify the stayers among the applicants before the hiring decision is made, then we can do precisely that.

To be sure, when suitable objective productivity measures are available, they should be used. But this is rarely the case. Fortunately, however, almost every company collects the two most basic pieces of information about employment: hire and termination date. By modeling an accurate and readily available variable like turnover, and confirming that employment duration is linked to productivity, we generate a simple, robust way to identify the good and bad matches up front, so you can make the right hires.

See how TalenTeck can improve your labor force with minimal data requirements at www.talenteck.com.

[1] Gautier, K. and Munasinghe, L. "Match-Specific Compensation: Evidence from a Customer Service Company." Working Paper. Barnard College, Columbia University 2017.