

## Store talent drives profitability: The value of tenure at a large U.S. retailer

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### Business Problem

The directors of the most lucrative business unit of a US-based retailer sensed that in-store talent was a key driver of profitability. More importantly they suspected that new hires were on a steep learning curve – it took them a while to get trained, to get to know fellow team-members, and to build relationships with customers. Consequently, they feared that the rising employee turnover rates would jeopardize profitability.

In order to figure out how to sensibly handle the increasing turnover, they needed to confirm their suspicion and quantify this learning curve. To design tactical talent management policies, they needed answers to questions like *Do employees learn on the job? How long does it take to get a new hire up to speed? What is the true value of retaining an experienced employee?*

But they were not sure how to measure the learning curve in the absence of robust individual productivity metrics: sales data was tracked only at the store-level, and the employee performance evaluations were subjective and lacked global standardization.

### TalenTeck Solution

There were two types of relevant data available: (1) monthly store-level sales data from the operations team, and (2) employee data from the HRIS software (*Figure 1*). TalenTeck requested three years of data from each source.

Store Number	Total Revenue		Total Revenue		Total Revenue		Total Revenue		Total Revenue		Total Revenue				
	June 2017	July 2017	August 2017	September 2017	October 2017	November 2017	December 2017	Employee ID	Effective Date	Store Number	Job Code	Full/Part	Hire Date	Termination Date	Hourly Wage
868	\$ 32,667.64	\$ 33,139.65	\$ 43,823.75	\$ 30,553.42	\$ 28,336.45	\$ 40,473.43	\$ 30,528.42								
869	\$ 18,512.13	\$ 20,240.40	\$ 23,260.10	\$ 16,877.20	\$ 21,645.80	\$ 23,521.74	\$ 24,120.31								
870	\$ 13,943.30	\$ 16,200.41	\$ 21,645.51	\$ 16,410.80	\$ 18,408.86	\$ 19,290.16	\$ 14,870.02								
871	\$ 31,943.36	\$ 34,067.81	\$ 40,123.63	\$ 33,692.43	\$ 27,604.63	\$ 34,715.31	\$ 30,063.47								
873	\$ 68,473.04	\$ 68,987.67	\$ 98,019.55	\$ 67,550.00	\$ 46,060.67	\$ 79,509.07	\$ 62,399.41								
874	\$ 29,190.04	\$ 33,874.32	\$ 47,566.71												
875	\$ 28,470.08	\$ 44,369.38	\$ 50,471.11												
876	\$ 46,596.77	\$ 42,372.65	\$ 41,799.11												
877	\$ 17,959.09	\$ 20,350.19	\$ 23,217.11	1630246	09/22/2013	1648	990054	P	01/15/2012	08/23/2014	\$8.82				
878	\$ 23,254.72	\$ 27,684.42	\$ 30,772.11	1630246	11/13/2013	1648	990054	P	01/15/2012	08/23/2014	\$8.82				
879	\$ 13,460.79	\$ 15,860.56	\$ 20,006.11	1630246	01/05/2014	1648	990054	P	01/15/2012	08/23/2014	\$9.82				
880	\$ 20,697.13	\$ 23,092.21	\$ 45,933.11	1630246	01/19/2014	1648	990053	P	01/15/2012	08/23/2014	\$9.82				
881	\$ 14,886.45	\$ 16,166.12	\$ 18,725.11	1630246	06/01/2014	1648	990058	P	01/15/2012	08/23/2014	\$10.95				
882	\$ 25,521.55	\$ 29,389.82	\$ 35,978.11	1630246	08/03/2014	1648	990058	P	01/15/2012	08/23/2014	\$11.42				
884	\$ 17,157.54	\$ 20,694.58	\$ 27,114.11	1002702	09/01/2013	8	990061	F	09/01/2013	NULL	\$13.00				
				1002702	10/01/2013	8	990070	F	09/01/2013	NULL	\$13.58				
				1002702	09/05/2013	8	990070	F	09/01/2013	NULL	\$14.02				

By marrying the two data sources, we created a Smart Dataset linking information about the monthly revenue of any given store to the human capital composition in that store in that month.

Employees came and went over the course of the 39-month

*Figure 1: Two types of data included monthly store revenue, and employment information.*

sample period, and any given store might have operated each month with a more or less experienced workforce. The question is: *Did the store make more money in the months with more experienced employees, all else equal?*

Using this dataset and advanced fixed-effects models, we are able to answer this question – with a resounding *Yes*.

In fact, we uncovered the relationship between productivity and employee tenure, quantifying the hourly contribution to revenue of rookie employees compared to senior employees. *Figure 2* shows these results. Over the first year of the employee lifecycle, productivity grows by nearly a factor of ten: employees in their first month generate less than \$5 per hour, while employees with more than one year of tenure generate nearly \$50 per hour.



**Results**

The learning curve was even steeper than the business leaders imagined.

These analytic results gave them valuable insight about how to proceed with talent management.

First, they discovered that they were managing a *skilled and learning* workforce, despite the low wage bracket and high turnover environment. A completely misguided human capital strategy would be to allow turnover rates to soar while focusing on generating a sustainable pipeline of replaceable employees. Rather, cultivating and retaining talent would be crucial to success.

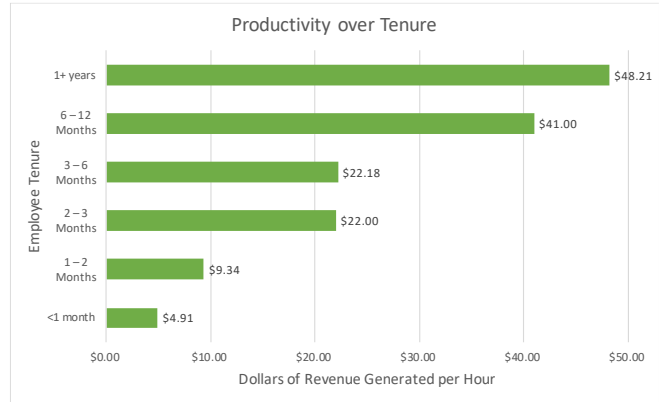


Figure 2: This graph shows dollars per hour of revenue generation for employees at different tenures. There is almost a ten-fold difference in productivity between employees in the first month on the job and employees who have been working for more than one year.

Second, given how steep the learning curve was, especially in the first three months of tenure, they realized that they were losing money on new hires who did not stay long enough to become fully productive. Through further analysis of hiring, training, and compensation costs, TalenTeck determined that in fact the break-even point was four months – new hires had to survive at least that long in order to generate enough revenue to offset the costs of hiring, training, and paying them (Figure 3).

In the last year, only half of new hires had survived past this breakeven point.

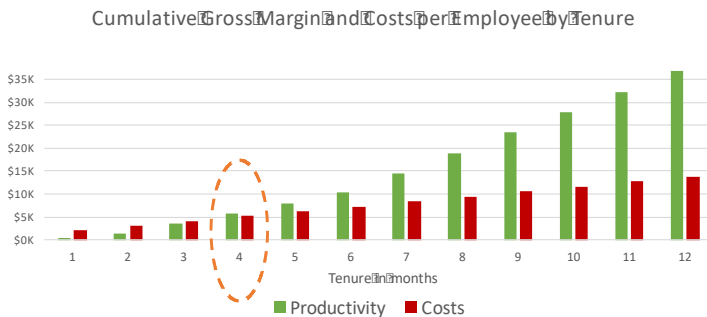


Figure 3: This graph shows the cumulative Gross Margin (revenue less the costs of goods and services), and cumulative costs (including hiring, training, and compensation costs) over the employee lifecycle. The net profit per employee becomes positive only in their fourth month of tenure.

Thus, a critical part of talent management centered around improving selection. If they plan to cultivate and train employees, the managers should be sure to hire the applicants who are likely to stay around long enough for the investment to payoff. In order to achieve this goal, they decided to improve data collection processes, so they could introduce analytics-driven hiring policies.

Measuring employee productivity over the lifecycle can produce powerful insights and enable strategic talent management in almost any company. And indeed, the TalenTeck tools

in this case study are not specific to the retail industry, nor to any specific talent characteristic like tenure. They can be applied to any company that tracks aggregate measures of productivity or profitability in order to identify the human capital characteristics that drive company productivity.

For more information about TalenTeck’s suite of human capital analytics tools contact us at [info@talenteck.com](mailto:info@talenteck.com).

