The Effect of Employee Turnover on Hotel Profits

A Test Across Multiple Hotels

We know that employee turnover costs money. Here's one way to estimate that cost.

BY TONY SIMONS AND TIMOTHY HINKIN

Many hospitality managers are convinced that excessive turnover is a costly phenomenon, but it is difficult to develop specific turnover-cost numbers. That is not to say that researchers have not attempted to nail down the cost of turnover, but the fact remains that specific cost figures can be elusive.[1] Because turnover costs are hard to calculate, it is equally difficult to assess the bottom-line financial value of turnover-reduction programs.

The matter of determining a cost of turnover (or, more to the point, the value of preventing turnover) is also complicated by the industry's ambivalence toward the matter. Despite the disruption and cost of turnover, many managers still view employees as replaceable commodities—especially hourly employees. The "warm body" syndrome of hir-ing unselectively to fill a position remains in place, even though the results of this practice can have devastating effects on both internal and external customers.

We have seen the industry make strides in this area in recent years, especially given low unemployment and increased competition for quality employees. Some hospitality organizations have begun to focus on retaining their employees. Companies such as ARAMARK, Morton's of Chicago, and South-west Airlines, to name just three, have developed specific programs to emphasize the importance of employee retention and development. This article provides a tool to help managers objectively estimate the cost of turnover, so that they can measure the dollar benefits of employee-retention programs and compare those benefits to the program costs.

Researchers have built a case for the benefits to be gained from employee retention. In a recent article Huselid examined a sample of 968 firms from a wide range of industries and found a strong link between a decrease in employee turn-

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[1] Perhaps the most noble, though inconclusive, attempts were by: William J. Wasmuth and Stanley W. Davis, "Managing Employee Turnover: Why Employees Leave," *Cornell Hotel and Restaurant Administration Quarterly,* Vol. 24, No. 1 (May 1983), pp. 10–18; and William J. Wasmuth and Stanley W. Davis, "Strategies for Managing Employee Turnover," *Cornell Hotel and Restaurant Administration Quarterly,* Vol. 24, No. 2 (August 1983), pp. 65–75.

over and an increase in sales, market value, and profitability.[2] Similarly, Heskett, Sasser, and Schlesinger in their work on the service–profit chain demonstrated relationships between employee retention and increased productivity in a wide range of industries.[3] Examining 76 hotels, Simons and McLean Parks found that employee turnover was a clear driver of hotel profitability.[4]

Turnover costs I. Hinkin and Tracey identified and examined many of the hidden costs associated with employee turnover at hotels.[5] In that work, the authors interviewed over 40 employees and human-resources professionals connected with two hotel companies and used the

> Many companies are making concerted efforts to control employee turnover through enhanced pay, benefits, or incentive systems, as well as by training managers.

information to develop a computer program to calculate the costs associated with a voluntary departure of a single employee in a variety of positions. That model considered the separation costs; the costs of recruiting, selection, hiring; and lost productivity. As an example, they found that for front-desk associates the cost of individual turnover was approximately 30 percent of the annual salary. For a front desk with 30 employees, an hourly wage of $12.00, and 50 percent turnover, the total annual cost of turnover for that position would exceed $150,000. Based on this information, they proposed that increases in employee wages (to encourage retention) may ironically reduce payroll costs at most hotels.

Turnover costs II. Let's look at two primary concerns regarding the results laid out in the Hinkin and Tracey article. First, many of the costs associated with employee turnover are drawn from the fixed-cost pool of salaried-employee time. For example, the human-resources manager who spends several hours each day interviewing prospective employees is salaried and would be on the premises anyway. Second, though the original work drew on many informants and so has reasonable validity, many of the specified costs derive from productivity losses that are difficult to estimate reliably. One cannot say, for example, that a new employee will be exactly 50 percent as productive as the employee he or she replaces, and one cannot know precisely how long it will take to get to a prescribed level of competence. While the model provides valuable information, Hinkin and Tracey's research focuses on hidden costs and does not directly examine the relationship between employee turnover and overall hotel profitability.

We seek to fill that gap by offering in this article a complementary approach to estimating turnover costs. We examine operational and financial records across a large sample of hotels. The current work examines actual financial performance and employee-turnover information at 98 hotels during the first half of 1999. We also examine the possible differences in turnover effects for different price tiers of hotels and the relationship between hotel size and turnover.

A Different Estimate

We drew data from 105 hotels throughout the United States as part of a larger study. The hotels ranged from 72 to 652 rooms, employed between 14 and 505 employees, and ranged in ADR from $46.73 to $165.53. We secured financial-performance information about all but one of the hotels, and six of the hotels experienced increases or decreases in total personnel counts greater than 50 percent during the period studied. We excluded those seven properties from further analysis, and analyzed full information

[2] Mark A. Huselid, "The Impact of Human-resource-management Practices on Turnover, Productivity, and Corporate Financial Performance," *Academy of Management Journal,* Vol. 38 (1995), pp. 647–672.

[3] James L. Heskett, W. Earl Sasser, Jr., and Leonard A. Schlesinger, *The Service Profit Chain* (New York: The Free Press, 1997).

[4] Tony Simons and Judi McLean Parks, "Beyond the Service–Profit Chain: The Impact of Managerial Integrity on Customers and Profits," paper presented at the CU^2 Asian Hospitality Conference, Hong Kong, 2001.

[5] Timothy Hinkin and J. Bruce Tracey, "The Cost of Turnover: Putting a Price on the Learning Curve," *Cornell Hotel and Restaurant Administration Quarterly,* Vol. 41, No. 3 (June 2000), pp. 14–21.

EXHIBIT 1

Descriptive statistics and correlation matrix of variables

Variable	Mean	St. Dev.	1	2	3	4	5
1. Hotel size (number of rooms)	269.16	123.49	–				
2. Number of employees	118.71	83.51	.75**	–			
3. Six-month employee turnover	47.35%	23.33%	-.36**	-.37**	–		
4. Average daily rate	$76.94	$21.65	.42**	.55**	-.48**	–	
5. Six-month gross operating profit	N.A.*	$1,252,548	.71**	.69**	-.46**	.73**	–

* Mean GOP is not disclosed due to a confidentiality agreement.
** $p < .01$

on 98 hotels. For each hotel we collected the following information: the number of rooms, the number of employees, the employee-turnover rate (combined voluntary and involuntary), gross operating profits (GOP), and ADR for the period between January 1 and June 30, 1999.

We analyzed the data using a correlation matrix and continuous moderated linear regression techniques as described by Aiken and West.[6] This combination of approaches allows for examination of both simple, direct effects—in this case, the relationship between turnover rate and GOP—and of the extent to which the expense of turnover varies with a hotel's price point.

Turnover Drives Out Profits

The correlation matrix (Exhibit 1) reveals interesting relationships. It is clear, for example, that employee turnover is strongly associated with decreased hotel profits (r = -.46, $p < .01$). Note also that employee turnover is substantially lower at large properties (r = -.36, $p < .01$) and at properties with high room rates (r = -.48, $p < .01$). Those correlations can be illustrated by comparing the extremes in the sample. Hotels with fewer than 150 rooms (n = 15), for example, had average six-month employee turnover of roughly 63 percent. Hotels with 350 or more rooms (n = 24) had average six-month employee turnover of roughly 37 percent. Looking at the room-rate extremes, hotels with an ADR below $60

[6] Leona S. Aiken and Stephen G. West, *Multiple Regression: Testing and Interpreting Interactions* (Newbury Park, CA: Sage Publications, 1991).

Given that turnover-reduction programs cost money, managers must know whether the payoff in reduced turnover actually outweighs the cost of the program.

(n = 15) had an average six-month employee turnover of roughly 59 percent. Hotels with an ADR above $100 ($n$ = 14) had an average six-month employee turnover of roughly 27 percent.

Contingency model. Moderated regression is a form of analysis that explores whether the impact of a predictor (in this case, employee turnover) on an outcome (in this case, GOP) depends on a contingency (in this case, ADR). That is, is employee turnover more costly at luxury hotels than at economy hotels? Examining this contingency will allow for a more precise estimate of the cost of turnover at a given hotel. The first step in the analysis is to adjust GOP to account for the effects of hotel size and ADR. Large hotels generally have a relatively high GOP, for instance, and we show that large hotels also tend to have lower employee turnover as compared to smaller properties.

It would be a mistake, however, to attribute a large hotel's high GOP strictly to lower employee turnover, given that large hotels simply have more rooms to sell than do smaller ones. To correct this problem, we used statistics to hold constant

the effects of a hotel's size and ADR. Essentially, we allow ADR and hotel size to explain as much of GOP as they can, and then leave employee turnover to explain whatever changes remain in GOP.

The analysis in Exhibit 2 shows the effect of turnover at the sample's average ADR, and it also shows that turnover is more costly at high-price hotels than at moderate-tier properties. This point is made by the highly significant interaction term that looks at the product of employee turnover and ADR. For each dollar increase in ADR, each percentage point of employee turnover costs an additional $525 in annual GOP. Thus, while a typical hotel in the sample (with an ADR of $77) might face a cost of $7,550 GOP per percentage point of employee turnover (represented by the b-statistic in Exhibit 2), a hotel with an ADR of $125 can be estimated to face a cost over four times that amount [$7,550 + ($525 × 48) = $32,750 annual GOP] for each percentage point of turnover. Conversely, the results suggest that a property with an ADR of $65 would face a relatively small annual cost for each point of turnover [$7,550 − ($525 × 12) = $1,250].

Costs and Benefits

As we said, many large hospitality companies are making concerted efforts to control employee turnover. Companies may enhance pay, benefits, or incentive systems. They may undertake to train managers in how better to respond to the needs expressed by line employees. Companies may systematically survey employee attitudes and reward managers for the extent to which they can foster a satisfied and committed workforce. Properly administered, most of those approaches have a good potential for reducing employee-turnover rates.

Given that such programs cost money, a shrewd manager will ask whether the payoff in reduced turnover actually outweighs the cost of the turnover-reduction program. This article provides a way to calculate the cost–benefit ratio, or the return on investment, for programs designed primarily to reduce employee turnover. An additional regression analysis, using a count of employee terminations rather than a global turnover rate, provides additional insight. After controlling for ADR and total employee base, we found a per-employee dollar cost of approxi-

mately $5,000 for the typical employee at a typical hotel in our sample. That figure would be lower for economy hotels and higher for high-ADR hotels.

Of particular interest is the finding that although large hotels and those with high ADRs may have lower rates of turnover, the cost of each point of turnover for those hotels is considerable. This result is consistent with the findings of Hinkin and Tracey, who noted that as jobs become more complex and more difficult to master, the cost of turnover increases dramatically. High-rate hotels often invest heavily in their employees in the form of training and pay, they typically have complex operating systems, and they attract sophisticated guests who require high levels of service. It makes good business sense for moderate to high-rate hotels especially to invest in retaining their employees. According to our data, a drop in turnover of even 1 or 2 percent would justify a considerable expenditure at this type of hotel. Economy-tier hotels, on the other hand, need to examine turnover-reduction expenditures closely and perhaps focus on finding effective, but inexpensive programs.

A Picture of a Single Company

This study has limitations. For one, it was conducted in a single hotel company, and it is possible that the results would be different with another sample. The magnitude of the relationships lead us to believe that strong relationships would almost certainly be found in another hotel sample, but exact dollar figures would likely vary. This issue is of special concern because our sample tended to cluster in the middle tier, and our estimates for the luxury segment are largely extrapolations from the trends we saw in our data. It would be worthwhile to validate these results in a sample of luxury hotels.

Cross-sectional data like those used in this study makes causal assertion difficult. That is to say, all we really know is that high rates of employee turnover at a given hotel were associated with low GOP during the first six months of 1999, and that this association became stronger as ADR increased. Plausible arguments can be made to assert that external economic conditions drove all the numbers, that people more frequently leave or are terminated from less suc-

cessful hotels, or, as we assert here, that turnover rates affected the hotels' bottom line. Analysis of a "snapshot," as we show here, cannot conclusively determine which number is the cause and which is the effect—though the uncovered moderating role of ADR challenges the reverse-cause argument. It is difficult to assert, for example, that higher-price hotels are more likely than less-expensive hotels to lay off employees in response to low GOP. Instead, the argument presented here—that employee turnover affects GOP, and that it has a greater effect at higher-price hotels than it does at low-price ones—seems more plausible than the reverse direction of cause and effect. Analysis of multiple years of data for multiple hotels can address the question of causal direction with greater confidence, but such data have not yet been made available for study.

All methods of study have limitations, and the wisest path is to draw conclusions based on the results of multiple studies using diverse methods. Thus, Hinkin and Tracey's detailed analysis of single-position turnover at six hotels is complemented by our broader-brush study. Each analysis directs some light into the shadows left by the other. Hinkin and Tracey lay out the mechanisms by which turnover costs hotels money, and the present study finds, across many hotels, that employee turnover really does show up in the hotel's bottom-line profits. The large size of the effect—around $20,000 per percentage point for a hotel with ADR of $100—shows that well-conceived employee-retention programs are likely to pay for themselves for most hotels. The finding that the effect is substantially stronger in high-rate hotels than less-expensive ones shows that hotels in upper-tier segments should be especially concerned about the issue—even where turnover rates may already be comparatively low. ■

EXHIBIT 2

Regression of GOP on turnover and ADR

Variable	b-statistic (standard error)
Hotel size (number of rooms)	4762.87 *** (582.30)
Employee turnover	-7551.53 * (3515.68)
ADR	19880.75 *** (4549.29)
ADR * Turnover	-525.244 *** (143.19)
ΔR^2 for interaction term	.04
Partial F for interaction term	13.46 ***
Total R^2	.76
F	73.40 ***

* $p < .05$ Is "ΔR^2" the correct term?
*** $p < .001$

Note: This table shows the statistics resulting from a moderated linear regression, in which hotel size and ADR first are set to explain as much of the variability in gross operating profit, leaving turnover to explain the rest. The b-statistic above represents the change in GOP resulting from changes in the variables. Then, the regression shows the change in GOP as turnover increases 1 percentage point and ADR increases one dollar (that is, ADR × Turnover). Thus, turnover is far more injurious to GOP for high-rate hotels than it is for economy properties.

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