The Cost of Turnover: Putting a Price on the Learning Curve

Timothy R. Hinkin  
Cornell University, trh2@cornell.edu

J. Bruce Tracey  
Cornell University, jbt6@cornell.edu

Follow this and additional works at: https://scholarship.sha.cornell.edu/articles

Part of the Hospitality Administration and Management Commons

Recommended Citation

This Article or Chapter is brought to you for free and open access by the School of Hotel Administration Collection at The Scholarly Commons. It has been accepted for inclusion in Articles and Chapters by an authorized administrator of The Scholarly Commons. For more information, please contact hotellibrary@cornell.edu.
The Cost of Turnover: Putting a Price on the Learning Curve

Abstract
Employee turnover does more than reduce service quality and damage employee morale—it hits a hotel's pocketbook.

Keywords
employee turnover, hospitality management, hotel personnel

Disciplines
Hospitality Administration and Management

Comments
Required Publisher Statement
© Cornell University. Reprinted with permission. All rights reserved.
Employee turnover does more than reduce service quality and damage employee morale—it hits a hotel's pocketbook.

Employee turnover has long been a concern of the hospitality industry, and therefore of researchers who examine industry human-resources concerns. One stream of research that arose in the past 20 years was an effort to quantify the cost of employee turnover. Although most managers agreed that turnover was bothersome, calculating a dollar figure for employee departures would provide those managers with information to help them make better human-resources decisions.

One of the earliest comprehensive efforts to quantify turnover was published in 1983, when William Wasmuth and Stanley Davis published in the Cornell Hotel and Restaurant Administration Quarterly the results of a three-year study of voluntary employee turnover. The subjects of the study were from five departments in each of 20 hotels located in North America and
Europe. The five departments were accounting, engineering, food and beverage, front office, and housekeeping. They found that turnover averaged 60 percent for the five departments, but it was disproportionately above that average in food and beverage, front office, and housekeeping. Wasmuth and Davis concluded that turnover resulted primarily from dissatisfaction with the current job rather than attraction to other job opportunities. Pay was often cited as the reason for leaving, but poor quality of supervision and poor working conditions were the more frequent reasons given. Those findings were replicated almost exactly in a study of six restaurant companies and six hotel companies published in Cornell Quarterly in 1989 and by a third study of over 4,000 lodging properties published in 1998 by the American Hotel Foundation.

In short, we know that turnover is high, and we have a good idea of why people leave. First, employees are poorly supervised, and they are often given little responsibility or authority in the work that they perform. Second, many jobs are mundane and repetitive, and working conditions are often unpleasant. Finally, compensation is low for work that can involve intensive interaction with guests. One conclusion of the research is that the hotel industry has been mired in many outdated human-resources (HR) practices for decades, while innovative management has resulted in major organizational and individual improvements in other industries. Practices such as balanced HR scorecards, "smart" HR information systems, and comprehensive diversity initiatives that are being used with increasing frequency in other industry segments are rarely seen in the lodging industry.

That is not to say that there have not been many positive changes in the industry in the last several years. The lodging industry sees fierce competition, with new products and branding strategies vying for the dollars of increasingly demanding consumers. Technologically, the industry has made tremendous progress in revenue-management systems, computerized reservations, and POS systems, and we can only hazard a guess what the internet will eventually mean to the lodging industry. Virtually all jobs have been altered by technology and downsizing, and hotel employees have more to learn and do than they did two decades ago. The demographic characteristics of the workforce have changed, and in many markets most of the people considered employable are already employed. With predictions of labor shortages to come, competition for qualified employees will only increase, making employee retention an important managerial objective.

A recent stream of research has empirically demonstrated a significant relationship between sound human-resources practices and financial performance. For example, a recent study by Delerey and Doty found that three HR practices—namely, results-oriented performance appraisals, employment security, and profit sharing—were strongly related to return on equity and other financial measures of a firm's financial performance.

---


performance.* In addition, companies such as Starbucks and Southwest Airlines have attributed their profitability to good management and overall sound human-resources practices, including an emphasis on employee retention and development.

This research leads to the proposition that employees stay with organizations because effective human-resources practices provide a supportive work environment that affords opportunities to grow and develop. In turn, the organization profits from the service quality provided by competent and loyal employees. These positive outcomes are founded on a philosophy that people are an asset, and that investing in them will bring increased benefits for the entire organization. Reflecting this, it is interesting to note that the importance of human-resources systems has more than doubled in importance in the Baldrige Award criteria from 1997 to 1999. The idea is simple, yet many managers are unconvinced, unwilling, or unable to view employees as an asset to their organizations. Let’s take a look at a real-life situation from another industry to illustrate how effective management encourages employee stability, service quality, and profitability. This scenario is based on newspaper accounts and personal observation.

Three Similar Stores

In a large city in upstate New York there are three large building-supply and home-improvement stores, all of them well-known national franchises that offer virtually the same products at similar prices. Two of them focus on holding down labor costs by minimizing staffing levels and the hourly wages paid to employees. They also provide little training because it is expensive and tasks are simple and easy to learn. Employees are given little discretion in decision making, and jobs consist primarily of restocking shelves since the store’s emphasis is on self-service for the “do-it-yourselfer.” Often it is difficult for customers to find someone to assist them, and their questions are frequently answered with the response “I don’t know.” Employee turnover is high at both of these stores.

The third store invests considerable time in the recruitment and selection process, often hiring skilled tradespeople who are able to provide the do-it-yourselfer with helpful advice. All new employees are given substantial training and taught the physical layout of the store so that they can direct customers to the products they seek. Employees are encouraged to be creative in displaying products and are allowed to offer instructional workshops and to take their time with individual customers. Often it seems as though the store is overstaffed, for there is always an employee available to assist a customer. This store has low employee turnover. It also has higher labor rates than the other two stores, but much lower labor costs. How can that be?

The answer is simple: the third store provides a high level of service that attracts and retains the customers who provide a greater sales volume, which results in reduced labor costs as a percentage of revenues.4 Having knowledge, skill, and experience, each employee in this store is much more productive than are employees in the other two stores. The company is paying wages well above those offered by the competition and providing a work environment that encourages employees to be innovative and provides them with autonomy. At the time of this writing, the first two stores are having “going out of business” sales while the third is thriving.

In the first two stores, employees are viewed as unskilled, replaceable commodities. The work is viewed as boring and routine—and is designed to be that way by managers, who provide employees with little discretion or control over their work. The emphasis is on minimizing labor costs, which to most managers means minimizing labor rates and minimizing staffing. As a result, there is continuous turnover. Service quality continues to decline, customers begin to stay away in droves, and the stores continue in their “death spiral” by cutting costs until they are forced to close the doors. Keep in mind that all three of these businesses have comparable locations adjacent to major shopping centers, similar physical facilities, the exact same products, and virtually identical prices. The only appreciable differences among them are in the service emphasis they provide and the way their employees are managed.

Even though the scenario described above involves retail operations, one could easily substitute hotels or restaurants for the building-goods stores, with similar outcomes. In a world where lodging facilities are becoming more and more a commodity at most price points, there will be two ways to compete and differentiate the products. The first is by competing on price and minimizing costs. We argue, however, that the long-term prospects for that strategy are not

---


good, and we are not alone in this contention.6

The second is to compete by providing exceptional service. If this approach is taken, it is necessary to appreciate the importance of the line employees who actually do the work. They will not provide exceptional service if they are poorly managed and undercompensated.

The question then becomes, "Why do many managers choose the strategy of the first two stores?" We believe there are three fundamental reasons. First, many managers do not understand the productivity increases that can be obtained by maintaining a stable workforce by providing employees with meaningful work and a pleasant workplace. Second, some managers do not understand the additional costs that accompany high levels of turnover. Finally, there are managers who do not understand the relationship between employee retention and profitability. In this article we do not delve too deeply into the issues of management skills and working conditions, other than to later discuss how turnover affects the entire organization. Instead, our focus is on the cost of turnover.

The Cost of Turnover

Although many operations still accept turnover as a "necessary evil," some progressive hotel operators are attempting to reduce turnover. The question for those operators is, what level of resources should they commit to managing turnover, as compared to other operating priorities?

Knowing how much turnover costs would provide a firm with some indication of how much to spend on alleviating it. Indeed, human-resources departments face the difficulty of measuring the results of an intervention or program. Formulas developed to measure turnover costs in the 1970s and 1980s have been refined in the last decade.7 Most formulas include separation costs, replacement costs, training costs, and an estimate of lost productivity.

Wasmuth and Davis found that while most managers they interviewed understood that turnover was costly, few had strategies in place for managing turnover, primarily because managers felt they had no way to determine the impact of turnover on the bottom line. Using a model adapted from Cascio,8 Wasmuth and Davis estimated that the average cost of replacing an hourly line employee was $1,500, while that amount jumped to $3,000 for a salaried staff member. In the late '80s a study estimated turnover costs to be about $2,500 for an hourly employee.9 Neither of those estimates focused on specific positions, however. Instead the researchers developed averages across managerial (salaried) and hourly staff members. We thought that although this was a good start, more could be done to increase the accuracy of measurement and usefulness of the collected data.

**Study 1: Building a Turnover Model**

We envisioned developing a software program that would allow us to quickly and accurately calculate the cost of turnover for any given position. First we needed to develop comprehensive formulas and algorithms to complete a model that was accurate as well as credible to

---


7 Wayne F. Cascio, _Costing Human Resources_ (Boston: Kent Publishing Company, 1982).

8 Ibid.

9 Woods and Macaulay, _op. cit._
practicing managers. Based primarily on the recent work of Cascio, and also of Wasmuth and Davis, we developed an expanded model consisting of five major cost categories—namely, separation, recruitment, selection, hiring, and productivity loss. Each category comprises several cost categories (i.e., formulas) that when combined would provide a reasonable estimate of the total cost of turnover.

We wanted feedback on the model from practicing managers. Through the corporate human-resources office of a major hotel corporation, we contacted the human-resources directors of four full-service hotels, two in Boston and two in Chicago. With their agreement we sent them a summary of the project and copies of the formulas to the HR directors, and they distributed our information to the general manager, several department managers, and a number of supervisory employees. We then visited each property and conducted interviews to critique our model. In all, we spoke with 27 employees. Based on this feedback, we made several modifications to the model and began to work on developing the software program, resulting in the categories presented in Exhibit 1.

Using the managers’ advice, we completed the software program and then returned to the same hotel corporation to test it. This time we made arrangements to visit two full-service hotels in Miami to collect data. At one hotel we collected data for four positions: front-office clerk, sales-department administrative assistant, gift-shop clerk, and room-service waitstaff. From the other hotel we examined three positions—front-office clerk, line cook, and loss-prevention (security) associate—in interviews that took approximately 30 minutes each. We asked each interviewee to describe the time involved with various stages of the employment process, from recruitment to exit interviews. We also collected information regarding compensation, duration of training, length of time to assume competency, and disruption caused by new hires. Where needed, the human-resources department provided additional information about wages, time associated with recruiting, interviewing, orientation, and administrative tasks at each hotel. We believed that we needed to interview at least three individuals from each department—one of them a supervisor—to ensure that our data were reasonably accurate and reliable. We then aggregated the responses for each position to arrive at an average cost of turnover for that position.

After completing the interviews we analyzed the data, with the following results. The numbers provided show the average cost of turnover by position at each hotel.

| Hotel A | Front-office associate | $5,688.03  
| Loss-prevention associate | $3,025.78  
| Line cook | $2,076.91  
| Hotel B | Front-office associate | $5,965.06  
| Administrative assistant, sales and catering | $7,658.01  
| Gift-shop clerk | $3,383.26  
| Room-service waitstaff | $1,332.05  

As this was the first true test of the computer software, we attempted during the interview process to be as conservative as possible to prevent overstating the figures. We noted a great deal of consistency in responses from individuals within departments, and of particular interest is the similarity in results for the front-office-associate position at both hotels.

These preliminary findings suggest that the costs associated with turnover are much higher than previous estimates, even for entry-level
positions (and even allowing for inflation). By contrast, this company had been using a figure of $800 as its standard estimate for the cost of replacing an hourly employee. Much of the cost associated with the more expensive positions arose from training costs and lost productivity due to a steep learning curve. It takes a long time to learn a new job, and productivity is lost when someone unfamiliar with the tasks replaces a seasoned employee. The work of peers and supervisors is also disrupted as they pick up the slack until the new hire learns the job. Those costs are usually not calculated, but they have a substantial effect on both internal and external customers. Moreover, this disruption may last longer than most managers realize. In almost all cases, the hourly employees whom we interviewed gave longer estimates of the time it takes to become proficient at a task than did their supervisors. The employees also noted the considerable difference between competency at the basics of a task and mastery of the task.

Based on our analysis of the data, we modified our computer model to be more accurate and user friendly. The next stage of the research involved replicating the data collection and analysis to allow comparisons and to permit greater confidence in the results.

Study 2: The Front Office

Next, we focused on the position of front-office associate. We chose this position because the front-office staff in most full-service hotels comprises a large number of people, and turnover is frequently high. Additionally, the job is sufficiently complex that the cost of turnover is likewise high, as shown in our preliminary results. We received the assistance of a second major hotel corporation, which gave us access to two of its full-service hotels located in New York City, one of which is a luxury property. To ensure the accuracy of our calculations we collected data from several hourly employees, a front-office supervisor, and the human-resources director at each of the hotels. Our figures had to take into account the fact that some of the human-resources functions were shared between the hotels, particularly the exit interviews, recruiting, and preliminary employee screening. Our interview protocol was the same as in the Miami study, and we again aggregated responses from the individuals at each hotel and computed an average cost of turnover for front-office associates. That figure was $11,609.46 for Hotel “C” and $12,881.82 for Hotel “D” (the luxury property).

Comparing Results

A comparison of the four hotels that we studied reveals some interesting findings, as shown in Exhibit 2.

The overall difference in costs between the hotels in Miami (A and B) and those in New York (C and D) is largely due to the differences in salary levels prevailing in each city. Hourly salary and benefits for a new employee totaled approximately $10.00 per hour in Miami and slightly more than $20.00 per hour in New York. Separation and recruiting costs are relatively low for this position because all hotels had active files of applicants for front-office positions. Selection costs were much higher for the New York hotels, as they had an extensive interview process that involved several managers. Hiring costs, consisting primarily of orientation and training costs, were substantial in each case, ranging from 27 percent of total costs in Hotel D to 38 percent in Hotel B. All of those costs would be considered “hard costs,” where actual dollars are spent that can be accounted for. In all cases lost productivity constituted over half of the total cost, ranging from 55 percent in Hotel D to 69 percent in Hotel A. These are the hidden “soft” costs that are almost never formally accounted for and consist primarily of inefficiency while the employee is learning the job and disruption of others caused by the new employees’ inexperience.

To gauge inefficiency relating to the learning curve, we asked, “On a scale from 1 to 100, how proficient is a new employee relative to someone who is competent at their task?” Responses ranged from 50 percent in Hotel C to 65 percent in Hotel B. Then we asked, “How long does it take the average new employee to reach an acceptable level of competence?” Aggregate responses ranged from 54 workdays in Hotel C to 80 workdays in Hotels A and D. We computed the actual cost of learning by multiplying the daily wage by the number of workdays required to achieve compe-
tency while at the same time increasing the level of productivity in a linear manner over the time period. We calculated peer disruption as the percentage of decrease in productivity of an experienced worker caused by a new employee during the time when a new employee would have a question, need to be shown something, or have work assisted or corrected. The percentage of disruption ranged from 15 percent to 50 percent over a period of workdays ranging from 19 to 74. We applied the same formula for supervisor disruption, and found a range of disruption from 25 percent to 29 percent for a period of time ranging from 14 to 27 workdays.

Cost of turnover as a percentage of total salary ranged from only 27 percent in Hotel C to 30 percent in Hotel A. Those figures are summarized in Exhibit 3.

A Detailed Estimate
To date we have not seen such a precise and detailed account of turnover costs in the hotel industry. We have learned a number of important things in developing our formula. Most important, hotel companies underestimate the costs associated with turnover. The costs are substantial even in entry-level positions for relatively simple jobs. Moreover, turnover costs vary substantially from position to position, based primarily on the complexity of the task. For instance, the overall average cost of turnover for a front-desk associate for the hotels in our sample was nearly one-third of the position's annual salary.

The direct, easily measurable hard costs associated with turnover account for less than half of total costs. Many of these are administrative and routine, but reducing turnover should result in concomitant reductions in administrative overhead. When line managers are involved in selection, hiring, and training activities, the costs of hiring new employees increases substantially. Although it may be part of supervisors' jobs, hiring usually interrupts other activities that might add more value to the guest experience and increases the time that managers must be at work.

Although over half of turnover's costs are indirect and difficult to measure, they still exist and are felt by the organization. With respect to the learning curve, job incumbents in all samples frequently reported that it took much longer to become competent at a task than what supervisors or managers reported. In many cases they suggested that it took a relatively short period of time to learn 75 to 80 percent of a job, through orientation, formal training, and on-the-job training. The remainder took much longer, and it was that piece that really made the difference in providing great service. That extra percentage comes only with experience from handling exceptions, understanding the hotel systems, and gaining confidence and efficiency in day-to-day tasks. It appears the learning curve has two stages, one to gain proficiency and one to gain mastery, as shown in Exhibit 4.

Work groups that experience less turnover are more productive than those that have higher turnover. This cost of lost productivity has a direct effect on co-workers and guests. The issue of peer and supervisor disruption is something that has not been considered in other turnover models, and yet those factors proved to be a sensitive issue with many of the interviewees, particularly for complex positions (e.g., front-desk clerk). This disruption means that the experienced employees are doing some of the work of the new employees, often neglecting their own responsibilities to the guest while doing so.

Supervisors on the Spot
Turnover, perhaps more than any other factor, seems to contribute to a reduction in service quality and a sense of burnout, particularly for front-line supervisors who are constantly involved in firefighting when their departments are staffed with inexperienced employees. The front-line supervisor may be the most important position in the entire hotel operation, but by far the most commonly mentioned reason for line-level voluntary turnover over the past two decades has been poor supervision. Hotels have an opportunity to gain competitive advantage by solidifying supervisors' retention and development.

In one hotel, front-desk associates noted that when training is reduced, new employees become frustrated and leave because they cannot adequately perform their job. That puts consistently more pressure on the seasoned associates, resulting in reduced guest service. Providing

---

**Exhibit 3**

*Comparison of four hotels' learning curves*

<table>
<thead>
<tr>
<th></th>
<th>Hotel A (Miami)</th>
<th>Hotel B</th>
<th>Hotel C (NYC)</th>
<th>Hotel D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning curve (%/days)</td>
<td>55%/80</td>
<td>65%/68</td>
<td>50%/54</td>
<td>58%/80</td>
</tr>
<tr>
<td>Peer disruption (%/days)</td>
<td>50%/19</td>
<td>30%/30</td>
<td>15%/74</td>
<td>23%/83</td>
</tr>
<tr>
<td>Supervisor disruption (%/days)</td>
<td>27%/27</td>
<td>29%/26</td>
<td>25%/14</td>
<td>27%/16</td>
</tr>
<tr>
<td>Cost of turnover (% annual wage)</td>
<td>30%</td>
<td>28%</td>
<td>27%</td>
<td>29%</td>
</tr>
</tbody>
</table>

*Note: Percentages indicate the amount of lost productivity or disruption of experienced employees; "days" are the number of days that lost productivity or disruption.*

---

adequate training and better compensation for supervisors could result in a dramatic reduction in turnover.

Cutting Costs, Improving the Work Life

Turnover is a symptom of underlying problems. While our investigation did not expressly seek to outline the causes of turnover, it became clear in our research that turnover is caused primarily by poor supervision, a poor work environment, and inadequate compensation. If managers believe that finding turnover remedies is too costly, they need a better understanding of the cost of turnover and value of employee retention. A turnover cost of $6,000 equates to about $3.00 per hour in annual wages for an hourly position. If the total number of front-desk personnel is 30 and the turnover rate is 50 percent, then the overall cost of turnover for this position alone is $95,000. By reducing that rate to 25 percent the hotel would save almost $50,000 and improve service quality.

Even though we developed this model with managers and collected the data from employees, we understand that skeptics may still believe that our figures are inflated, because some of these costs are part of people’s normal jobs. For example, activities such as processing paperwork, conducting interviews, and on-the-job training could all be considered part of someone’s job. These are not all tasks that add value to the guest experience, however, and by eliminating some of these activities employees could better use their time in activities that directly improve guests’ experiences. It might also be possible to eliminate or restructure some positions.

Another key, unanticipated finding was that often the people who leave are those who are most talented. Many of our interviewees revealed that frequently the best people left, while the people who remained in their jobs often did so because they had few other options. Our interviews also revealed that, for most positions, the major costs of turnover are incurred in the first three months of employment. If retention of employees is low during their first three to six months of employment, the costs could be extremely high, yet most hotels do not keep track of this type of information. The 1998 American Hotel Foundation study cited earlier found that only 8 percent of respondents kept separate records of length of tenure in their turnover data. This information could be useful in diagnosing the reasons for turnover.

Pay now or pay later. One of the implications of this study has to do with the compensation structure of the lodging industry. Our results suggest that a property could substantially increase its labor rates, yet reduce overall labor costs if it could attract and retain a cadre of employees capable of providing excellent service. Paying increased wages is only part of the picture, however. Perhaps more important is improved managerial practices and being creative in the way work is designed. Turnover rates vary widely from hotel to hotel, even within the same geographic region. Similar hotels experience dissimilar rates of turnover, internal and external customer satisfaction, and profitability. We are certain that such data are not happenstance, but instead result primarily from the differences in managerial practices. Those managers who understand the value of employee retention and structure their organizations’ compensation systems and management practices to reinforce retention will outperform the competition. Large departments with high turnover and high task complexity should immediately draw managers’ attention. Any company that is experiencing a high degree of turnover is incurring unnecessary financial costs as well as decreases in service quality and the quality of work life. CQ