The Relationship of Sales and Marketing Expenses to Hotel Performance in the United States

by JOHN W. O’NEILL, BJORN HANSON, and ANNA S. MATTILA

While hotel organizations are investing considerable sums of money for marketing at the unit level, research investigating the relative benefits of the different areas where those funds can be invested is lacking. This exploratory study endeavors to fill that void. Since different types of hotels have differing operating characteristics, this study examines marketing expenditures for various hotel tiers, using the Smith Travel Research chain scale categorizations. The study finds that marketing expenditures have differential effects according to the type of hotel and the particular type of marketing expenditure. These analyses explore implications of various types of marketing expenses on both hotel unit revenue and profitability.

Keywords: hotel marketing; marketing expenditures; loyalty programs

Customer equity is now believed to be the key driver of a firm’s bottom line (Rust, Zeithaml, and Lemon 2000; Shah et al. 2006). Not only has research demonstrated that a marketing orientation...
promotes company performance (e.g., Rust, Moorman, and Dickson 2002), but service firms have increasingly turned away from short-term, transaction-based marketing in favor of customer-centered approaches, notably loyalty programs (Rust et al. 2004). As a consequence, hospitality operators are interested in determining the return on investment of such marketing initiatives and the effects of marketing expenditures on the firm’s bottom line (e.g., Crosby 1979).

Given the importance of marketing in driving customer demand, it is not surprising that sales and marketing expenses represent the largest nondepartmental costs for U.S. hotels, averaging 7.4 percent of revenues for full-service hotels and 7.9 percent of revenues for limited-service hotels (The Host Study 2006), based on the expense definition in accordance with the Uniform System of Accounts for the Lodging Industry (Hotel Association of New York City 2006).

Research has demonstrated the link between marketing expenditures and a firm’s brand equity, but it is not clear how marketing expenses relate to individual hotels’ performance. The purpose of this exploratory research is to determine whether there are significant differences in the relationship between sales and marketing expenditures and hotel performance for properties in the different hotel segments, as identified by Smith Travel Research. To account for both the revenue and cost aspects of marketing (Rust et al. 2004), we investigated the effect of marketing expenses on room revenue and then on net operating income (NOI). We were surprised by some of the findings. Furthermore, we believe that not only will these findings provide insight for developers, owners, and managers, but they will also reveal issues for future study.

Background

Advertising and marketing expenses (including franchise fees and loyalty programs) are among the largest in hotels, second only to payroll. Expenditures by lodging firms on loyalty reward programs have grown along with their popularity (Kumar and Shah 2004; Sharp and Sharp 1997; Mattila 2006). One study found that nearly two in five customers of ten major hotel brands considered the attractiveness of the loyalty program a key factor in deciding where to stay (Barsky and Nash 2002). Advertising, on the other hand, is used to enhance brand and hotel recognition and to differentiate a brand or hotel from its competitors. In many industries, including the hospitality industry, product differentiation and the value of brand names are the product of advertising effectiveness. In other words, a high rate of advertising may be closely linked to the brand equity (Chauvin and Hirschey 1993; Reilly, McGann, and Marquardrat 1977; Ho, Keh, and Ong 2005).

Once basic decisions have been made about a hotel, such as whether to affiliate with a brand through a franchise or a management agreement, some costs are nondiscretionary, such as franchise fees, loyalty program expenses, and franchise and affiliation advertising expenses. However, the nondiscretionary nature of these costs does not necessarily mean they should not be evaluated relative to hotel performance. Managers have greater discretion over other marketing-related decisions, including staffing levels, other advertising, travel, and complimentary services and gifts.

Study of 2,815 Hotels

In our study, we conducted analyses using calendar year 2005 data provided by Smith Travel Research for 2,815 hotels (using SPSS version 15.0). For each hotel, we tallied the number of guest rooms and hotel segment, as denoted by chain scale (i.e., luxury, upper upscale, upscale, midscale with food and beverage [F&B], midscale without F&B, economy, and independent). In addition, we
were provided with 2005 performance figures (occupancy percentage, average daily rate [ADR], room revenue, total revenue, NOI in dollars, NOI percentage of total revenue, marketing payroll and related expenditures, marketing other expenses, and franchise fee expenses).

We therefore were able to evaluate sales and marketing expenses in three categories:

- payroll and related expenses (which we term marketing payroll);
- franchise fees including royalty fees (termed franchise fees); and
- all other marketing expenses, primarily including loyalty program costs and advertising costs (termed marketing other).

Summary statistics are presented as Exhibit 1.

### Analyzing Marketing Expenditures and Room Revenue

In our first analysis, we used room revenue as the dependent variable. Because there is a correlation between the number of rooms in each hotel and each hotel’s room revenue \((r = .863)\), all analyses were multilevel regressions in which we first controlled for the number of rooms and then, in step 2, analyzed the effects on room revenue of marketing payroll, marketing other expenses, and franchise fees. By controlling for the number of guest rooms in this fashion, we avoided finding unwarranted positive results simply because larger hotels tend to have higher revenues and expenditures. All changes in the adjusted \(R\)-squared were statistically significant when step 2 was added to the model.

**Luxury hotels.** For the luxury chain scale segment (including such hotel brands as Four Seasons and Ritz-Carlton), the number of guest rooms was a significant, positive predictor of room revenue, as would be expected (standardized \(B = .177, p < .001\)). After controlling for this factor, we also found significant positive relationships between room revenue and both marketing payroll (standardized \(B = .372, p < .001\) and marketing other (standardized \(B = .604, p < .001\)). Interestingly, we found no significant relationship between franchise fees and room revenue (after controlling for ADR) for luxury

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**Exhibit 1:** Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Percentage of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Franchise fees</td>
<td>$83,071</td>
<td>$171,313</td>
<td>10.6</td>
</tr>
<tr>
<td>Marketing payroll</td>
<td>$236,646</td>
<td>$383,731</td>
<td>30.2</td>
</tr>
<tr>
<td>Marketing other</td>
<td>$463,520</td>
<td>$793,333</td>
<td>59.2</td>
</tr>
<tr>
<td>Total marketing</td>
<td>$783,237</td>
<td>$1,104,883</td>
<td>100.0</td>
</tr>
<tr>
<td>Rooms</td>
<td>221</td>
<td>205</td>
<td></td>
</tr>
<tr>
<td>Occupancy</td>
<td>70.7%</td>
<td>9.7%</td>
<td></td>
</tr>
<tr>
<td>Average daily rate (ADR)</td>
<td>$103.78</td>
<td>$56.19</td>
<td></td>
</tr>
<tr>
<td>Total revenue</td>
<td>$10,450,096</td>
<td>$18,975,329</td>
<td></td>
</tr>
<tr>
<td>Rooms revenue</td>
<td>$7,138,352</td>
<td>$11,507,731</td>
<td></td>
</tr>
<tr>
<td>Gross operating profit (GOP)</td>
<td>$3,775,349</td>
<td>$6,985,711</td>
<td></td>
</tr>
<tr>
<td>GOP %</td>
<td>41.7</td>
<td>13.3</td>
<td></td>
</tr>
<tr>
<td>Net operating income (NOI)</td>
<td>$3,346,848</td>
<td>$6,395,083</td>
<td></td>
</tr>
<tr>
<td>NOI %</td>
<td>37.0</td>
<td>13.7</td>
<td></td>
</tr>
</tbody>
</table>

\(N = 2,815\)
hotels. Marketing other generated the highest beta weight, indicating it had the relatively highest correlation with room revenue (higher than marketing payroll and franchise fees).

**Upper upscale.** For upper upscale hotels (including such brands as Hyatt and Westin), results were similar to those of luxury hotels. The number of guest rooms was once again a significant, positive predictor of room revenue (standardized $B = .321, p < .001$). We found significant, positive relationships between both marketing payroll (standardized $B = .074, p < .05$) and marketing other (standardized $B = .589, p < .001$) and room revenue. We found no significant relationship between franchise fees and room revenue (after controlling for ADR). Again, the marketing other category generated the highest beta weight.

**Upscale.** Franchise fees appeared as a significant factor for upscale hotels (including such brands as Courtyard by Marriott and Radisson). Other than that finding, results for upscale chains were similar to those of upper upscale hotels. The significant, positive relationship between franchise fees and room revenue (standardized $B = .101, p < .001$) stands in contrast to the finding of no significant relationship between marketing payroll and room revenue for hotels in this tier. However, marketing other still generated the highest beta weight (standardized $B = .758, p < .001$), indicating that it had the relatively highest correlation with room revenue.

**Midscale, full service.** For midscale hotels with F&B (including such brands as Holiday Inn and Ramada Inn), all marketing expenditures were significantly and positively correlated with room revenue, although the standardized beta coefficient for marketing other was only $.23 (p < .001). At that, marketing other still showed a higher beta coefficient than did marketing payroll (standardized $B = .298, p < .001$) and franchise fees (standardized $B = .075, p < .05$).

**Midscale, limited service.** For midscale hotels without F&B (including such brands as Hampton Inns and Fairfield Inns), results were similar to those of upscale hotels, although the standardized beta coefficient for marketing other again was small, at .362 ($p < .001$), and the beta coefficient for franchise fees was also small, at only .332 ($p < .001$).

**Economy.** For economy hotels (including such brands as Motel 6 and Super 8), we found no significant relationship between franchise fees and room revenue. Furthermore, we found a significant and negative relationship between marketing other and room revenue (standardized $B = -.225, p < .001$) but a marginal positive relationship between marketing payroll and room revenue (standardized $B = .149, p < .10$). Marketing other had the highest beta. As was also true of the other hotel tiers, there was a significant, positive relationship between the number of guest rooms and room revenue (in the first step) as expected (standardized $B = .581, p < .001$).

**Independents.** Independent hotels showed a significant positive relationship between marketing other expenses and room revenue (standardized $B = .427, p < .001$). Indeed, marketing other had the highest beta weight of all three variables. Moreover, we found no significant relationship between franchise fees and room revenue. (In this instance, franchise fees represent the expense of affiliation with referral groups such as Preferred Hotels.) Nor was there a significant relationship for marketing payroll and room revenue. Oddly, unlike all other chain scale segments, independent hotels showed no significant relationship between the number of guest rooms and room revenue (in the first step).

In summary, our study reveals several significant relationships between some elements of marketing expenditures and room revenue, as follows.
1. Except for economy hotels, we found a significant and positive relationship between marketing other expenses and room revenue for all scale segments, including independent hotels. Higher marketing other expenses are consistent with higher room revenue.

2. There is a significant and positive relationship between marketing payroll and room revenue for the luxury, upper upscale, and midscale with F&B chain scale segments. For these segments, higher marketing payroll is consistent with higher room revenue. However, no such a relationship was found for upscale, midscale without F&B, and independent hotels. Moreover, only a marginal positive relationship was found for economy hotels.

3. There is a significant and positive relationship between franchise fees and room revenue for the upscale, midscale with F&B, and midscale without F&B chain scale segments. Higher franchise fees are consistent with higher room revenue for these three chain scale segments.

4. There is a significant but negative relationship between marketing other expenses and room revenue for economy hotels. Higher marketing other expenditures are consistent with lower room revenue for economy hotels.

These results are summarized in Exhibit 2.

### Exhibit 2:
Room Revenue as Dependent Variable, Controlled for Size

<table>
<thead>
<tr>
<th></th>
<th>Luxury</th>
<th>Upper</th>
<th>Luxury</th>
<th>Upper</th>
<th>Midscale with Food and Beverage (F&amp;B)</th>
<th>Midscale without F&amp;B</th>
<th>Economy</th>
<th>Independent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted R-Square</td>
<td>.78</td>
<td>.87</td>
<td>.85</td>
<td>.78</td>
<td>.72</td>
<td>.37</td>
<td>.81</td>
<td></td>
</tr>
<tr>
<td>Franchise fees</td>
<td>+.044</td>
<td>.018</td>
<td>+.101***</td>
<td>+.075**</td>
<td>+.332***</td>
<td>+.095</td>
<td>-.010</td>
<td></td>
</tr>
<tr>
<td>Marketing payroll</td>
<td>+.372***</td>
<td>+.074**</td>
<td>+.038</td>
<td>+.298***</td>
<td>+.010</td>
<td>+.149*</td>
<td>+.106</td>
<td></td>
</tr>
<tr>
<td>Marketing other</td>
<td>+.604***</td>
<td>+.589***</td>
<td>+.758***</td>
<td>+.423***</td>
<td>+.362***</td>
<td>-.225***</td>
<td>+.427***</td>
<td></td>
</tr>
<tr>
<td>Rooms</td>
<td>+.177***</td>
<td>+.321***</td>
<td>+.156***</td>
<td>+.257***</td>
<td>+.447***</td>
<td>+.581***</td>
<td>+.464</td>
<td></td>
</tr>
</tbody>
</table>

*p < .1.  **p < .05.  ***p < .001.

### Analyzing Marketing Expenditures and NOI

In our second analysis, we analyzed the relationship between marketing expenditures as an independent variable and NOI as the dependent variable, again by hotel chain scale segment. As with our first analysis involving room revenue, all analyses were multilevel regressions. In the first step, we controlled for the number of rooms (due to the high correlation between hotel size and NOI), and then in the second step we analyzed the effects of marketing payroll expenditures, marketing other expenses, and franchise fees on NOI percentage. Noting the high correlation between NOI and gross operating profit (GOP), our analyses focused on NOI.

**Luxury.** For luxury hotels, there was a significant and positive relationship between marketing other and NOI (standardized $B = .519, p < .001$) after controlling for the number of guest rooms. We also found a significant positive relationship between marketing payroll and NOI (standardized $B = .379, p < .001$), but no significant relationship between franchise fees and NOI. As with the room revenue analysis, marketing other had the highest beta coefficient for luxury hotels (after
controlling for ADR), indicating it had the relatively highest correlation with NOI (higher than marketing payroll and franchise fees).

Upper upscale. For upper upscale hotels, there was a significant and positive relationship between marketing other and NOI (standardized $B = .606, p < .001$). We also found a significant and positive relationship between marketing payroll and NOI (standardized $B = .103, p < .05$), but no significant relationship between franchise fees and NOI.

Upscale. The results for upscale hotels were similar to those of luxury and upper upscale hotels, except that the relationship between marketing payroll and NOI was negative. We also found a weak significant relationship between franchise fees and NOI (standardized $B = .104, p < .05$), indicating that unlike luxury and upper upscale hotels, franchise fee expenditures are associated with increased hotel profit. Marketing other had the highest beta coefficient (standardized $B = .820, p < .001$).

Midscale, full service. For midscale hotels with F&B, results were similar to upscale hotels, including that marketing other had the highest beta coefficient (standardized $B = .446, p < .001$), while marketing payroll and franchise fees also had a significant effect on NOI.

Midscale, limited service. For midscale hotels without F&B, results were similar to those for upscale and midscale hotels with F&B, including that marketing other had the highest beta coefficient (standardized $B = .300, p < .001$).

Economy. Economy hotels, in contrast, showed a significant and negative relationship between marketing other and NOI (standardized $B = -.424, p < .001$). We found no significant relationship between franchise fees and NOI or between marketing payroll and NOI. These results show that economy, upper upscale, and luxury hotels behave differently than other chain scale segments with regard to marketing expenditures. These hotel types may not benefit from hotel branding in the same way as do hotels in the vast midmarket. This finding is consistent with previous research showing that brand is a significant predictor of market value for hotels in the upscale and midscale tiers, regardless of whether the hotels have F&B. This is not the case, however, for brands of luxury and economy properties. In other words, franchise branding appears to have more influence on profit in the tangle of the middle of the hotel market.

Independents. For independent hotels, we again found a significant and positive relationship between marketing other and NOI, and this beta coefficient was the highest of the three types of marketing expenditures (standardized $B = .586, p < .001$). There was no significant correlation between marketing payroll and NOI, but there was a significant and negative one between franchise fees and NOI (standardized $B = -.103, p < .05$). As previously discussed, franchise fees for this hotel type include costs of referral groups, such as Preferred Hotels or Leading Hotels. Thus, we could find no evidence that such costs have a positive effect on the profitability of independent hotels.

In summary, our study reveals several significant relationships between marketing expenditures and NOI.

1. There is a significant and positive relationship between marketing other expenditures and NOI for the following segments: luxury, upper upscale, upscale, midscale with F&B, midscale without F&B, and independent hotels. For these tiers, higher marketing other expenditures are consistent with higher NOI.
2. There is a significant but negative relationship between marketing payroll and NOI for economy hotels. Thus, higher
Exhibit 3:
Net Operating Income (NOI) as Dependent Variable, Controlled for Size

<table>
<thead>
<tr>
<th></th>
<th>Luxury</th>
<th>Upper Upscale</th>
<th>Midscale with Food and Beverage (F&amp;B)</th>
<th>Midscale without F&amp;B</th>
<th>Economy</th>
<th>Independent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted R-square</td>
<td>.74</td>
<td>.79</td>
<td>.71</td>
<td>.44</td>
<td>.40</td>
<td>.28</td>
</tr>
<tr>
<td>Franchise fees</td>
<td>-.059</td>
<td>+.008</td>
<td>+.104***</td>
<td>+.108***</td>
<td>-.181***</td>
<td>-.064</td>
</tr>
<tr>
<td>Marketing payroll</td>
<td>+.379***</td>
<td>+.103***</td>
<td>-.138***</td>
<td>+.211**</td>
<td>-.134***</td>
<td>+.088</td>
</tr>
<tr>
<td>Marketing other</td>
<td>+.519***</td>
<td>+.606***</td>
<td>+.820***</td>
<td>+.446**</td>
<td>+.300***</td>
<td>-.424***</td>
</tr>
<tr>
<td>Rooms</td>
<td>+.240***</td>
<td>+.230***</td>
<td>+.082**</td>
<td>+.048</td>
<td>+.418***</td>
<td>+.485***</td>
</tr>
</tbody>
</table>

**p < .05. ***p < .001.

Marketing payroll is correlated with lower NOI for this chain scale segment.

3. There is a significant and positive relationship between franchise fees and NOI for upscale, midscale with F&B, and midscale without F&B. For these properties, higher franchise fees are consistent with higher NOI.

4. There is a significant but negative relationship between franchise fees (that is, referral fees) and NOI for independent hotels. Higher franchise or referral fees are correlated with lower NOI for this segment.

These results are summarized in Exhibit 3.

Findings of Interest

We consider the following findings to be of considerable interest:

1. Marketing other is an important and relevant expenditure category for nearly all hotels. For both room revenue and NOI, marketing other expenditures was the most important variable studied based on its beta. Hotels in all categories, except for economy properties, enjoyed higher room revenue and profitability when they spent higher amounts on marketing other. Another way of expressing this correlation is that management should consider expenditures for marketing other as its most important marketing investment, as compared with marketing payroll and franchise fees.

2. Marketing payroll expenditures may increase room revenue but might not generate higher NOI for all types of hotels. We found that higher marketing payroll is consistent with higher room revenue for three segments. However, marketing payroll expenditures are related to lower NOI for two chain scale segments and have no significant relationship to NOI for two segments. Specifically, higher marketing payroll expenditures may increase room revenue and NOI for in the luxury, upper upscale, and midscale with F&B hotels, but may not generate sufficient revenue to cover the cost of the higher payroll in the upscale, midscale without F&B, economy, or independent chain scale segments.

3. Looking at franchise fees as a stand-in for hotel brand, we see the importance of branding in the middle of the hotel market, while hotels at the top end and at the budget end of the market seem to stand more on their own (even if they have a brand flag). We say this because we found that higher franchise fees are correlated with higher room revenue and higher NOI for upscale, midscale with F&B, and mid-scale without F&B hotels. Outside of these “middle” segments, however, higher franchise fees (or referral fees) do not relate with higher room revenue or NOI for luxury, upper upscale, economy, or independent hotels.
Another way of expressing this relationship is that there appears to be high levels of value for franchise fees for the “middle” chain scale categories, but not the “upper” (luxury and upper upscale) or “lower” (economy) chain or for independent properties generally.

The Surprising Value of Advertising and Loyalty Programs

The generally high value of increasing marketing other expenditures surprised us, given this element’s ability to generate both higher room revenue and higher NOI for virtually all hotel types. On the other hand, managers should regard the marketing payroll carefully. Employing people in the marketing department is necessary to the business, but hoteliers should be wary about allowing expenditures to increase, unless it is clear that higher expenditures in this area draw incremental NOI. Indeed, our data indicate situations in which reducing marketing payroll is appropriate, particularly for midmarket hotels.

The story on franchise fees is mixed. The expense of a brand may be a good value for hotels in the upscale and midmarket segments, but the added expense of a franchise does not seem to improve the bottom line for luxury, upper upscale, economy, and independent hotels. It is interesting and important to note that previous research relates to brand performance measured by brand equity (e.g., O’Neill and Xiao 2006), rather than revenue or profit at the hotel level, which we studied here.

To return to the discussion of loyalty programs that began this article, our analysis revealed the importance of not stinting on marketing other expenses, which include loyalty programs. Loyalty, rather than satisfaction, has become the key strategic goal for many service organizations, including hospitality (Oliver 1999; Srinivasan 2006). Strong brands not only foster customer loyalty, but they also enable hospitality operators to apply premium pricing (Prasad and Dev 2000). In our analysis, the extent of such pricing premiums is exhibited by room revenue.

Our research revealed several surprises as well as the need for additional study. Among the components of sales and marketing costs, marketing other is the most interesting because it is generally associated with both higher room revenue and NOI. Higher spending on marketing payroll results in higher room revenue for most hotels, but some end up with lower NOI in the wake of higher spending on marketing payroll. We think this finding indicates that there may be a precisely appropriate threshold of staffing and payroll cost, possibly lower than currently thought.

Franchise fees offer quite different values among the chain scale segments. Hotels that are able to distinguish themselves based on such factors as service, as is the case with luxury, upper upscale, and independent hotels, or on price, as occurs with economy hotels, receive less benefit from franchise fee expenditures than do hotels in the middle price range. We hope the findings of this exploratory research will offer developers, owners, managers, and researchers insights about sales and marketing expenditures and will stimulate further research on this subject.

References
The relationship of sales and marketing expenses to hotel performance

US Operations

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