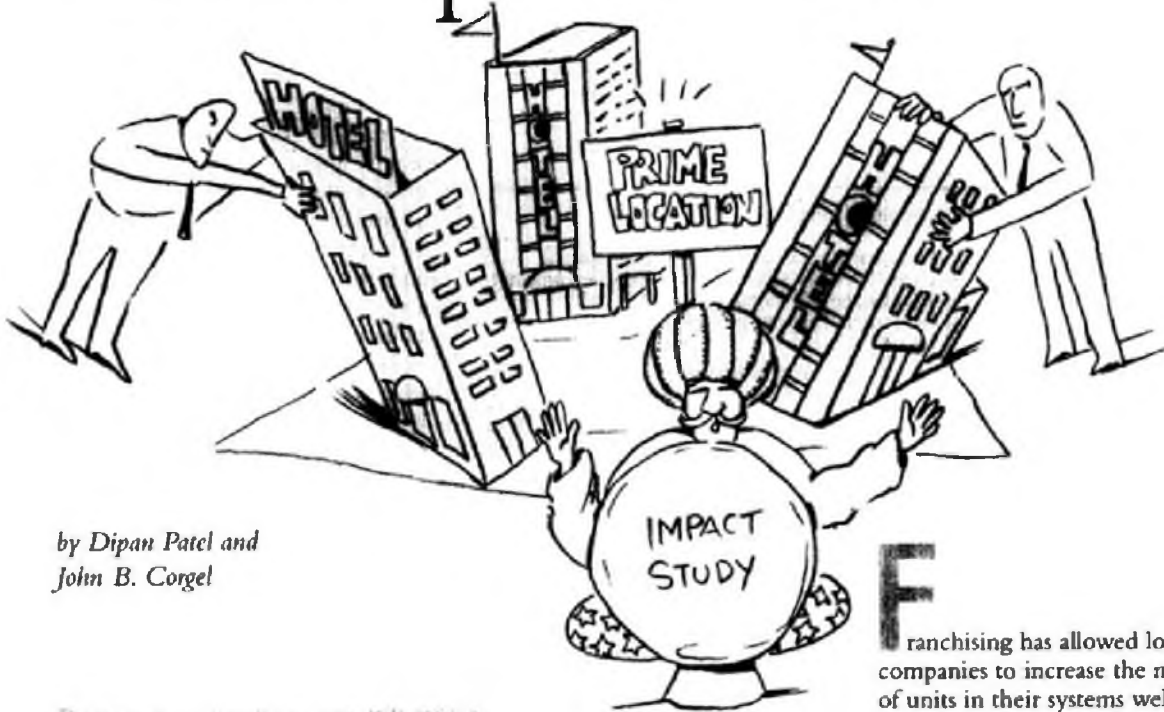


An Analysis of Hotel-Impact Studies



by Dipan Patel and
John B. Corgel

The business of real estate development and the
continues a specialty of real estate. Franchisees often
depend on the accuracy of an impact analysis. In
the context of that study, it is not always the
sufficiently comprehensive to be predictive.

Franchising has allowed lodging
companies to increase the number
of units in their systems well beyond
the increases possible through devel-
opment of company-owned units
alone. Because of franchising, com-
panies can rapidly expand brand
awareness, consumers have better
access to hospitality products and
services, and entrepreneurs are af-

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Exhibit 1

	25 Largest Lodging Companies ¹			25 Largest Restaurant Companies ²		
	1983	1993	Percent Change	1983	1993	Percent Change
Total Properties	8,965	14,965	66.9	58,454	87,340	49.4
Company Owned	1,347	1,890	40.3	22,240	27,113	21.9
Franchised	7,116	10,294	44.6	36,214	60,227	66.3
Other ³	502	2,781	453.9	—	—	—
Top-25 companies with more franchised units than owned units	17	14	—	15	15	—

¹ *Lodging Hospitality*, August 1984, pp. 60-61; and *Lodging Hospitality*, August 1994, pp. 52-54.

² The 1984 Technomic Top 100: The Largest U.S. Chain Restaurant Companies" (Chicago: Technomic, Inc., 1984); and "The 1994 Technomic Top 100: The Largest U.S. Chain Restaurant Companies" (Chicago: Technomic, Inc., 1994).

³ Includes management contracts and reservation-system contracts.

forfeited opportunities to own and operate nationally recognized businesses. The information provided in Exhibit 1 shows how the growth of many firms in the hospitality industry during the last ten years has resulted from expansion of their franchise systems.¹

Expansion via franchising, however, creates conflict between franchisors and franchisees when that expansion encroaches on existing properties. Franchise contracts contain detailed provisions governing the relationship between franchisors and franchisees for the conduct of business at specific locations, but usually do not restrict the

franchisors' ability to expand the franchise systems within a territory. Many franchisees believe they have lost business as a result of cannibalization from new units in the same chain, a phenomenon referred to as "impact" in the lodging and food-service industries. Disputes between franchisees and franchisors over territorial encroachment have elicited responses from some state legislatures, which enacted laws to protect franchisees from encroachment, and from the franchisors themselves, many of whom are instituting policies for managing the impact of system expansion on existing franchised units.²

An integral part of hospitality-company impact policies is the requirement that impact studies be performed whenever proposed units may siphon business from existing

² An excellent review of state statutes and common law on encroachment is found in: Rupert M. Barkoff and W. Michael Garner, *Encroachment: The Thorn in Every Successful Franchisor's Side* (Dallas, Texas: American Bar Association Forum on Franchising, 1993).

units. Most franchise companies use independent consultants to perform these studies (e.g., Choice International), while others sometimes produce studies internally (e.g., Holiday Inn Worldwide).³

Critique. As the hospitality industry's evaluation of franchise impact begins to approach maturity, we believe the time is appropriate for a critique of the process and methodology of impact assessment. As part of our review, we collected and examined 24 externally and internally prepared impact studies for new lodging properties or conversions of existing units, grading the studies for their methodology and content. We found substantial room for improvement in the way in which impact assessments are performed. Specifically, impact assessment appears to be reactive rather than proactive, and impact-study methodology, in its current form, relies too much on subjective interpretations.

After reviewing impact policies and procedures and reporting on the findings of our evaluation of impact studies, we recommend an alternative conceptual and empirical approach to impact assessment that is proactive and should be more objective.

Evaluating Impact

We developed the flow chart in Exhibit 2 to show the typical impact-evaluation process followed by hotel-franchise companies. The process begins when a prospective franchisee makes an application. The four key decision points in the process are the impact-policy test, objection letters, internal resolution, and the impact study itself.

³ We provide some details about impact studies in subsequent sections of this article. For a detailed procedural discussion, see the article by Rachel J. Roginsky, "A Critical Analysis of Hotel-Impact Issues" (pp. 18-26 of this *Cornell Quarterly*).

¹ Readers interested in examining why firms choose to expand by franchising and why franchising is more prevalent in some industries than others may consult: Seth W. Norton, "An Empirical Look at Franchising as an Organizational Form," *Journal of Business*, Vol. 61 (1988), pp. 197-218; Francine Lafontaine, "Agency Theory and Franchising: Some Empirical Results," *RAND Journal of Economics*, Vol. 23 (1992), pp. 263-283; and Alanson Minkler, "Why Firms Franchise: A Search Cost Approach," *Journal of Institutional and Theoretical Economics*, Vol. 148 (1992), pp. 240-259.

All franchisees in the area specified by the company's policy who may be affected by the proposed unit receive a notification letter. The responsibility for objecting to the application falls completely on the affected franchisees. Most franchisors require submission of a formal objection form that contains property-level and general market data such as occupancy, competition, and average daily rate. If the existing franchisees choose not to object, then the impact issue is closed and the application continues to be processed.

If an existing franchisee sends a formal objection letter, however, potential impact becomes an issue. The franchisor reviews any objection letters and negotiates with the affected franchisees in an effort to resolve issues raised in the letter. In some instances, franchisors are willing to share the cost of allowing the new unit to be part of the system (e.g., by reducing royalty fees for a specified period of time). If, however, the parties fail to resolve the issue, they commission an impact study.

After the completion of the study, the franchisor and franchisees review the results. If all parties agree with the findings of the study, impact ceases to be a point of contention. If an agreement is not reached, however, the issue may be taken to non-binding arbitration. Notwithstanding this procedure, the final decision about the creation of new franchise units lies with the franchisor.

Lodging Companies' Impact Policies

Viewed broadly, the impact policies of major franchisors are the guidelines for franchise-system growth. Protection

Exhibit 2

Typical impact-analysis process

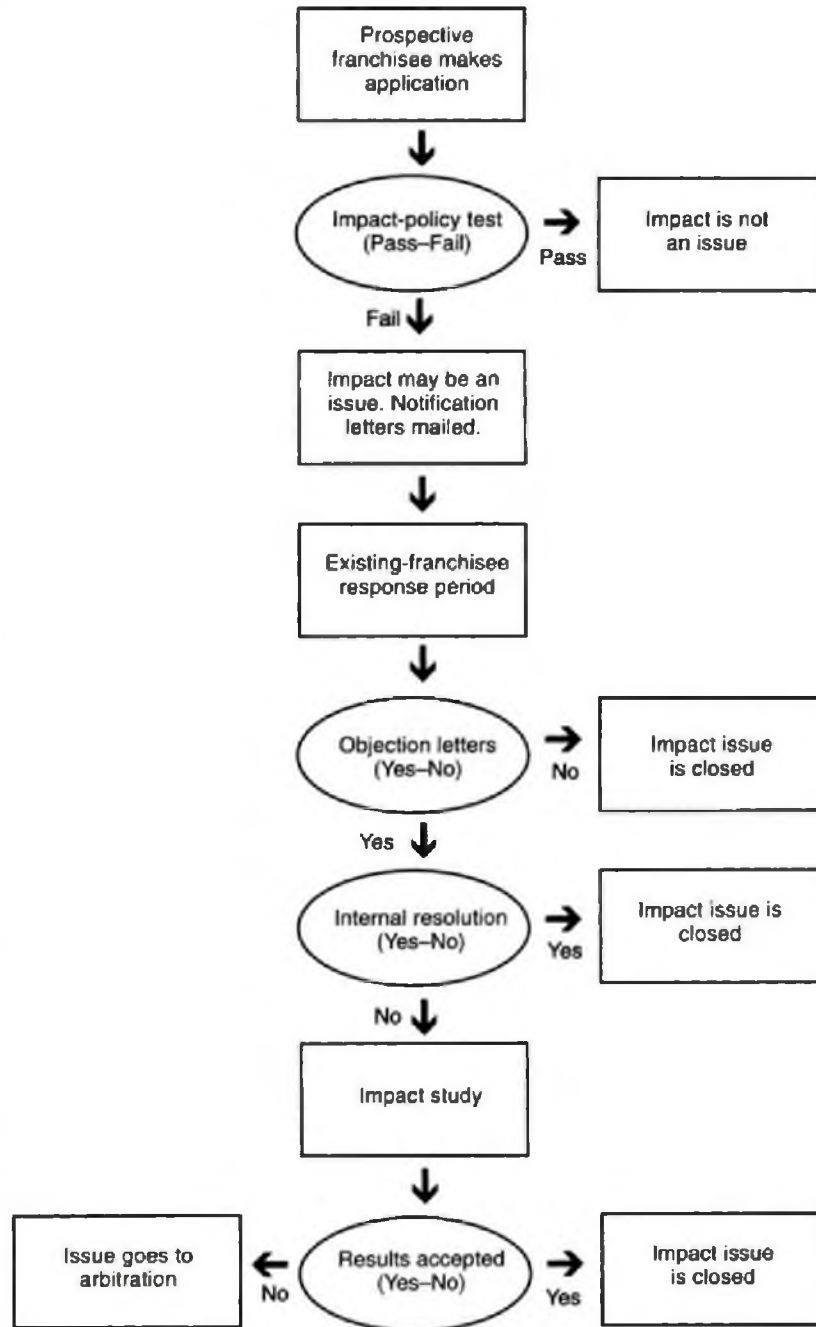


Exhibit 3

Lodging franchisors' impact policies

Franchisor	Brands	Policy Objective	Notification Area	Response Period	Objection-Letter Requirements	Impact Threshold
Holiday Inn Worldwide	Holiday Inn, Crowne Plaza, Express, SunSpree	None stated	3 nearest properties, any HIW brand	14 days	Written comments, Holiday Inn property-survey form	None set
Hospitality Franchise Systems	Days Inn, Howard Johnson, Park Inns, Ramada, Super 8	To allow expansion of the system without substantial adverse impact on existing properties	Same brands in the greater of a 15-mile radius or 3 closest properties	15 days	Written comments based on impact-response-guide requirements	3 occupancy points in any of first 3 years (2 points for new construction)
Choice International	Clarion, Comfort Inn, Econo Lodge, Friendship Inn, Quality Inn, Rodeway Inn, Sleep Inn	To ensure minimal incremental impact from addition of properties to Choice system	Same brand: 15 mi.; Same tier: 8 mi.; All brands: 5 mi.; Minimum 3 properties regardless of brand	10 days	Management-committee letter or formal objection (required to trigger impact study)	Average of 3 or more occupancy points during first 5 years, or incremental impact of 5 or more points during any of first 5 years
Best Western	Best Western	To enable informed decisions regarding membership development without an impact on existing members and considering best interests of association	10 mi. in metro areas (over 100,000), 25 mi. in rural areas	N/A	Complete property and market survey form	None set

against overly aggressive growth of the franchise system is often a point of negotiation between the parties, but is not standard in most contracts. Only a few lodging companies such as Super 8, Park Inns, and Knights Inns, offer protection clauses in franchise contracts.

The impact policies of most major lodging-franchise companies including Choice International, Hospitality Franchise Systems (HFS), Holiday Inn, and Best Western are similar to each other. These policies, summarized in Exhibit 3, define the notification area, the period for raising objections, requirements for objection letters, and impact threshold, or the acceptable level of impact on

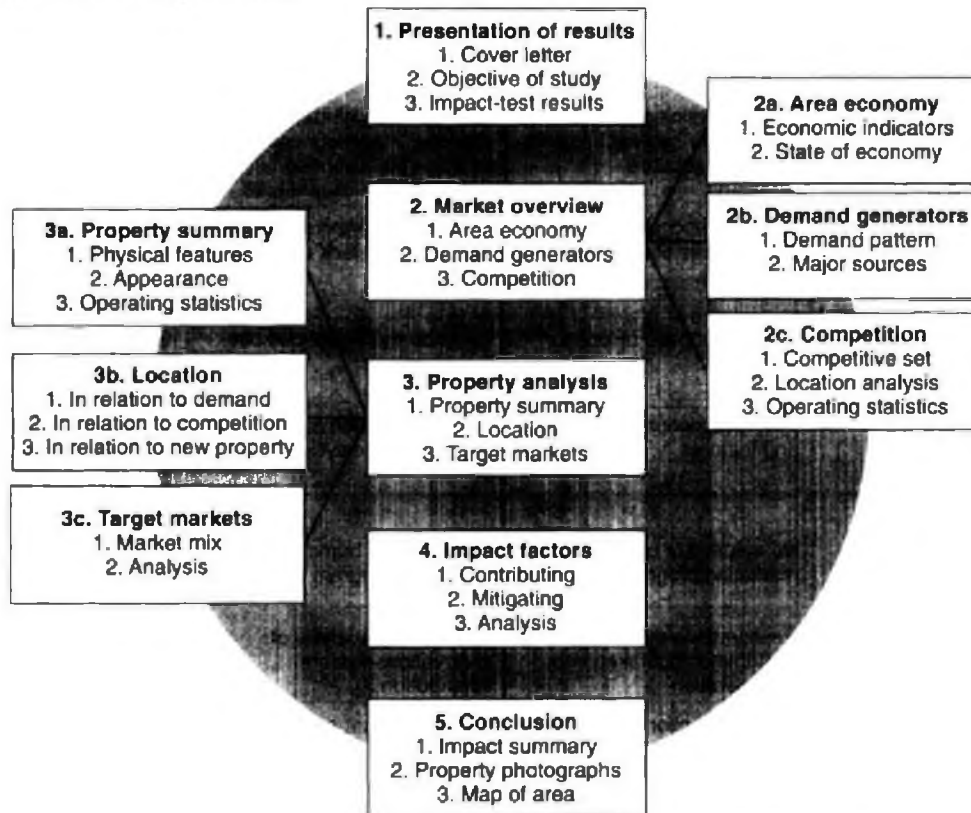
existing units resulting from the new unit. Choice International and HFS, for instance, use a threshold of the loss of three percentage points of occupancy to define adverse impact.

The thresholds appear to be arbitrary. If an impact study shows less than a 3-point drop in occupancy for affected properties in the first year, the proposed franchise is deemed acceptable. A critical problem with using this hurdle-rate approach is that it shifts the burden of

making a decision from the franchisor to the consultant. Moreover, the 3-point benchmark is an arbitrary number applied by franchisors. Impact-policy documents offer no evidence to support the use of a 3-point threshold level.⁴

The size of the notification area also seems arbitrary. Typically, existing units within a 15-mile radius of the new unit are notified of the franchise application. While Best Western defines the notification area

⁴ Another problem with using a threshold related only to occupancy is that the impact on room rate is ignored. In response to this issue, some lodging franchisors now specify a threshold of gross rooms income or revenues per available room (REVPAR) instead of occupancy rate in company impact policies. Jeff Wilder, "Impact Policies are Overdue for Overhaul," *Hotel and Motel Management*, October 3, 1994, p. 13, recommends that the profit-and-loss statements of affected franchisees be examined as part of impact assessment. Wilder's recommendation takes into consideration changes in expenses.

Exhibit 4*Outline of typical impact study*

in accordance with market characteristics, the policies of other lodging franchisors are silent on the relationship between market characteristics and the notification area.⁵

Impact Studies

An impact study forecasts the potential financial changes for existing units when a unit of the same brand or a similar brand with a common affiliation is added nearby. The fi-

ancial analysis is limited to the incremental impact on overall occupancy, average rate, or revenue and does not take into account expenses or profitability. The analyst first calculates the base impact, which is the financial loss or gain of existing units in a market resulting when any additional lodging property (usually a competitor) opens within the trading area. Then the analyst must estimate the incremental impact that

results from the new unit's having the same or an affiliated brand, a common reservation system, and related marketing programs.⁶

The study must discuss factors that contribute to or mitigate impact. Some such factors are the locations, target-market segments, and physical attributes of the units. If, for instance, the proposed unit is not near the existing property, then location is a mitigating factor. Although there is no set format guidelines, we found the formats of most studies to be similar, as shown in Exhibit 4.

⁵ Consider two applications received by a franchisor. The first application is for a franchise at an interstate-highway exit; and the second application is for a franchise at a suburban location. If both applications are just over 15 miles from the nearest existing franchise, they pass the impact-policy test. Although both applications are analyzed using the same impact policy, their impacts may be quite different. The suburban location may be a distinct market. The highway location, however, could cause serious impact to existing franchises because interstate travelers are somewhat indifferent to hotels that are around 15 miles apart on an interstate. Therefore, although both applications are accepted by the franchisor the impact of the interstate location on existing franchisors is potentially greater because of the endemic market characteristics.

⁶This process is described more fully in the accompanying article by Rachel J. Roginsky, "A Critical Analysis of Hotel-Impact Issues" (pp. 18-26 of this *Cornell Quarterly*).

Exhibit 5

<i>Area of study</i>	<i>1</i> <i>(poor)</i>	<i>3</i> <i>(average)</i>	<i>5</i> <i>(good)</i>
Market background			
Market overview Supply and competition	Unclear definition of competitive set and basis for supply projections	Competition well-defined but with some inconsistencies; supply well-described but without statistical analysis	Use of statistical tools and market research in defining competitive set and explaining supply
Demand analysis	Unclear description and analysis of demand generators	Demand generators well-described but lack evidence of analysis	Evidence of demand-generator analysis with regression model to project demand
Location analysis	Poor description of location	Location well-described but lacks analysis	Good analysis of traffic flow and relationship to demand generators
Property analysis	Poor description of facilities and features	Good description but no quantitative analysis	Quantitative comparison of properties, good analysis of impact due to facilities
Market segment			
Brand marketing program	No mention of brand's marketing program	Objectives of brand's marketing program described	Analysis of program's impact on target market segments
Reservations system	Reservations-system contribution not taken into consideration	Reasonable analysis of reservations-system contribution	Market-segment analysis based on market research
Property-segment analysis	Poor description and analysis of market segments	General market-segment analysis with broad description	Reservations-system analysis includes bookings, denials, and month-by-month analysis of contribution
Impact summary	Poor description of impact factors	Impact factors well-described but without quantitative analysis	Quantitative analysis of each factor's impact
Reliability of data	Poor	Average	Good (Smith Travel, registration cards)
Use of economic indicators	Poor	Average	Good
Objective of study	Poorly defined	Average	Well-defined

Evaluation of Impact Studies

Using the standards shown in Exhibit 5, we evaluated a sample of recent studies. In our estimation, the standards are based on principles of logic and sound professional practice. The studies were graded in the eight content areas and earned an overall grade for meeting their objectives. The minimum grade assigned to each section or subsec-

tion that did a poor job of meeting its objective was one point. For example, a study that included only a sketchy description of the proposed unit's location and the location of potentially affected units would receive one point for that section. The maximum grade per section or subsection was five, given to studies that did an excellent job in these areas. We gave credit for

Exhibit 6

Impact-study scores

Area of study	Grade					Mean (n=24)	Std. Dev.
	(poor) 1	2	3	4	(good) 5		
Market background							
Market overview	0	1	13	5	5	3.58	0.88
Supply and competition	0	6	12	6	0	3.00	0.72
Demand analysis	1	6	9	8	0	3.00	0.88
Location analysis	0	6	8	10	0	3.17	0.82
Property analysis	0	6	11	7	0	3.04	0.75
Market segment							
Brand marketing program	5	18	1	0	0	1.83	0.48
Reservations system	0	2	8	14	0	3.50	0.66
Property-segment analysis	0	4	15	4	1	3.08	0.72
Impact summary							
Impact factors	0	1	7	16	0	3.63	0.58
Impact test	1	2	11	10	0	3.25	0.79
Reliability of data	1	2	10	2	7	3.54	1.18
Use of economic indicators	1	8	13	2	0	2.67	0.70
Objective of study	0	8	10	2	4	3.13	1.08

Note: The table shows the number of impact studies achieving the grade at the top of the column for each of the topics listed at left. So, for example, 13 studies earned a grade of 3 for their market overview. The mean shows the average score for all the studies on each topic. Scoring is according to the authors' scheme shown in Exhibit 5 and explained in the text.

quantitative analysis to studies that applied statistical tools and provided evidence of market research. Many studies earned grades in the three-to-four range because they included adequate description, but lacked quantitative analysis or other supporting data.

Data collection. We gathered a sample of impact studies from consultants and franchisors. A chief selection criterion was availability. We make, therefore, no claim of random selection, comprehensive industry representation, or generalizability. Yet the 24 studies that compose the sample were performed by 12 different consultants at various consulting practices. The studies are from three different hotel companies representing 12 brands. In addition, the hotels range in size from 40 to

250 rooms and are located in markets throughout the United States.

The studies were conducted between January 1991 and December 1993. Due to their confidential nature, we do not disclose names or locations.

Results

The results of the analysis presented in Exhibit 6 are organized by section in accordance with the typical impact-study format. Mean standard deviations are given for results in each category. We comment below on our ratings for each section.

Market background. The market-background section analyzes the overall condition of the market, the competition, and demand generators. Most studies did a good job of describing the market conditions,

but a poor job of analyzing those conditions.

Specifically, we identified problems in the analysis of supply trends and in the definition of competitive sets. The studies betray little evidence of interviews with local developers, chambers of commerce, and hotel owners to support supply-growth forecasts. With regard to determining the competitive set, many studies rely entirely on interviews with the management of the affected properties and the analyst's personal judgment. Because impact is usually estimated down to one percentage point, misallocation of the competition may result in serious errors. For example, one study included a 2,000-room Hilton property as part of the competitive set for economy hotels.

Although management interviews and industry experience are common ways of determining competitive sets, personal bias remains an issue. Alternatively, the application of consumer-switching data, which shows consumers' lodging-choice patterns, has been shown to be an unbiased approach to defining competitive sets.⁷ Although it may be unreasonable to assume that consultants will develop consumer-switching databases, franchisors have the resources to develop competitive-set models.

Studies that provided a demand analysis—offering potentially valuable data—focused on the overall market. Such a broad approach did not address the individual property's competitive position as effectively as would an analysis targeted on the growth rate of the market segments sought by the hotel in question. Understanding growth rates by segment is critical because of the difference in properties' market mix. A good starting point is to conduct demand-generator interviews to gauge the market's demand stability and future potential. Some studies provided evidence of such interviews, but this practice does not appear to be standard in the industry or among consultants.

Another problem we discovered with the studies' demand analysis is the practice of aggregating demand

over the entire year. Aggregation makes it difficult to portray the seasonality of businesses. Only a third of the studies showed a month-by-month analysis of demand. One study described the status of the overall demand in the area without providing any description or analysis of the demand generators.

Location analysis. The location analyses of the impact studies we reviewed were generally limited to a discussion of the relative distance from demand generators to the existing and proposed properties. Although most studies did an excellent job of describing the study area, relative distances (e.g., actual driving times between sites) were not mentioned in all studies. We also found no evidence of research on the consumer-reservation distance, which is the maximum distance consumers are willing to travel from their business, home, or other point to reach a hotel.⁸ The location analyses would be stronger if they showed driving distances and times on an area map with a depiction of a property's location relative to demand generators. Such an analysis would be further improved if franchisors were able to supply customer-survey data that indicate reservation distances.

Property analysis. An impact study's property analysis is important because of the potential effects of a property's characteristics on consumer decisions. To evaluate features that influence consumer choices, studies ought to consider the key features involved in the decision, and then measure the importance of these features to consumers. Some key features include curb appeal, brand name, physical facilities, and location. The studies we evaluated provided a comparative property

⁷ See: Michael S. Morgan and Chekitan S. Dev, "Defining Competitive Sets of Hotel Brands Through Analysis of Consumer Brand Switching," *Journal of Hospitality & Leisure Marketing*, Vol. 22 (1994), pp. 57-91.

⁸ See: W. Black, "Choice-Set Definition in Patronage Modeling," *Journal of Retailing*, Vol. 60 (1984), pp. 63-65.

analysis, but the analyses are not quantitative and the studies failed to list the properties' characteristics in terms of consumer priority.

Market-segment analysis.

Although most studies offered information about market segmentation, the analyses were limited to a small number of market segments and the information was based solely on interviews with management. Market-segmentation analysis is driven by an understanding of brand marketing programs, the brand's reservation system, and the specific segments served by the property.

Brand marketing. One of the weakest areas of the studies we examined, with over 90 percent of the studies scoring below what we judged should be a middling effort, is the review of the brand marketing program. A brand's strength is directly related to its marketing program. Thus, an analyst should request information about company marketing programs, including specific segments targeted by the brand's marketing dollars, and the brand's segment share. Impact studies likewise should take those factors into account.

Reservations. In contrast, we found the reservations-system analysis to be one of the strongest points of the impact studies, with over 50 percent of the studies scoring better than our midpoint of three. Franchisors supply a considerable amount of data to consultants, typically including information about the monthly reservation volume, cancellations, and denials. The only shortcoming we saw in the studies was the lack of trend analysis of reservations data.

Impact analysis. The results of most studies are presented in a table showing the potential impact on properties for a period of five years. The typical format includes a description of impact factors and an

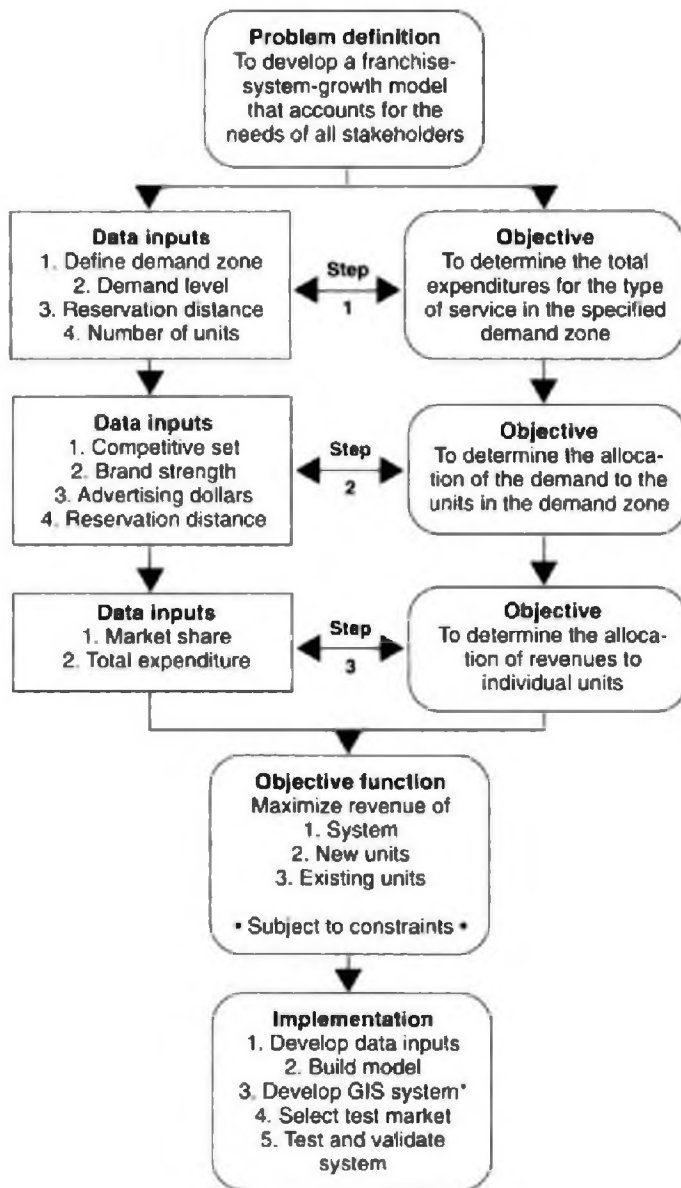
impact-summary test. Most studies list approximately eight factors that either contribute to or mitigate impact. Those factors include the physical differences of the properties, similar demand sources, proximity, and reservation-system contribution. For example, a study in New Jersey mentioned reservation-system priority as a factor that mitigates impact. But rather than provide an analysis based on research, the analyst simply assumed that impact was mitigated simply because the proposed property would be listed in the system directory following the existing property. Although most studies adequately described impact factors, they lacked objective quantitative analysis of those factors.

The impact-summary test shows the impact on occupancy percentage or some other measure of financial performance. The impact studies we reviewed took their greatest leap of faith at this point, particularly considering the highly subjective nature of transforming qualitative impact factors to quantitative results. Other leaps of faith occurred with the length of the projections, the use of aggregate numbers by year rather than a month-by-month analysis, and reliance on occupancy rather than other, more-comprehensive measures of financial performance.

Reliability of data. The sources of data for most impact studies are the management of the affected property (or properties) and the franchisor. The information from management may be tainted by self-

Reservations-system analyses were one of the strongest points of the impact studies we reviewed. The only shortcoming we saw in these sections of the studies was the lack of trend analysis of reservations data.

Exhibit 7



interest, compromised by the lack of reliable records, and limited by concerns about disclosure.

Data from the franchisor and data companies, such as Smith Travel Research, are generally more reliable than data from local managers. Impact analysts have available to them such information as property occupancy, ADR, and reservation volume. Studies performed by major consulting firms earned higher grades in this category than others because of data supplied from in-house research. In addition, some studies effectively used hotel bed-tax records or lodging-tax records to estimate overall market revenues.

Use of economic indicators. The studies made poor use of general economic indicators. Although these indicators may not directly influence impact conclusions, they support intermediate suppositions about growth in supply and demand. Some relevant indicators that are generally available from local sources include office-space use, employment growth, and employment mix.

Objective of study. The studies' statements of objectives varied widely. Some of the better studies clearly specified their objectives, scope, and limiting assumptions. For instance, one of the effective studies explained the different possible outcomes in terms of an as-is scenario, a same-brand-conversion scenario, and a different-brand-conversion scenario.

The need for substantial improvement in the methods used to analyze impact is apparent. Currently, Choice International, Holiday Inn, and HFS are evaluating the accuracy of past studies. In addition to the efforts of the franchisors, the International Society of Hospitality Consultants has conducted forums that bring together industry leaders (i.e.,

*For a discussion of GIS systems and applications, see: Christopher C. Muller and Crist Inman, "The Geodemographics of Restaurant Development," *Cornell Hotel and Restaurant Administration Quarterly*, Vol. 35, No. 3 (June 1994), pp. 88-95; and Michael Shriber, Christopher C. Muller, and Crist Inman, "Population Growth and Restaurant Success," *Cornell Hotel and Restaurant Administration Quarterly*, Vol. 36, No. 3 (June 1995), pp. 43-49.—Ed.

franchisors and franchisees) to discuss improving the impact-assessment process.

Improving Impact Assessment

The quantum leap suggested by that consultant may come from a modification of the underlying conceptual foundation of impact assessment. Currently, impact policies are reactive. The franchisor receives an application for a new franchise unit and examines its potential impact on existing units only after the local franchisees object. We suggest an alternative, proactive-policy concept implemented through the application of a franchise-system-growth model. Multiple iterations of such a model identify locations where incremental impact would be the most or least severe. Impact policies emerging from franchisor growth-management plans would allow further evaluation of applications only if they are consistent with the growth plan. Those plans would be developed cooperatively by the franchisor and franchisees.

Such an approach may sound unrealistic in today's environment, but the framework exists to build lodging-franchise-growth models. One of the most promising avenues is an adaptation of the FRANSYS model.

FRANSYS. The FRANSYS model developed by Ghosh and Craig is a promising, but as-yet-unexplored foundation upon which to develop a franchise-system-growth model for the hospitality industry.⁹ The model divides a market into demand zones and then allocates a share of market revenues to individual units. As the number of same-brand units increases, the model applies a multiplier (alpha) to increase total expenditures in a demand zone—but at a decreasing

rate. Revenue allocation is based on the advertising dollars spent on the brand and the distance between each unit and the center of the zone. Once the revenues are allocated to the units in the demand zone, the model uses a maximization function based on three objectives: (1) maximizing system revenues, (2) maximizing new-unit revenues, and (3) maximizing existing-property sales. Constraints on the objective function may be set to maximize system sales while keeping existing-property sales intact (i.e., a zero-impact scenario). Application of the FRANSYS model to the hospitality industry would require modification of data input to conform to the market and product characteristics of the hospitality industry, but few other modifications would be necessary. Exhibit 7 gives the steps involved in the development of a franchise-system-growth model.

We recommend that lodging firms reconsider their current policy framework, which we believe embodies a reactionary approach to impact assessment. We encourage analysts to use an assessment methodology that is research-based, rather than following from personal judgment as often occurs. Finally, we suggest an investigation of adapting the franchise-system-growth model for the lodging industry. The benefits of using such a model include improved relations with franchisees, better measurement of impact, and the maximization of system revenues. Growth models can aid franchisors in selecting sites that limit the impact on existing units and maximize system revenue. Models in the family of the FRANSYS model are suitable for the hospitality franchisors, and franchisors may be wise to adopt a proactive approach for managing territorial conflicts with their franchisees to blunt the prospects of restrictive legislation.

Data from the franchisor and data companies, such as Smith Travel Research, are generally more reliable than data from local managers.

⁹ Avijit Ghosh and Samuel Craig, "FRANSYS: A Franchise Distribution System Location Model," *Journal of Retailing*, Vol. 4 (1991), pp. 466-495.