MEASUREMENT OF THE STRATEGY CONSTRUCT IN THE LODGING INDUSTRY, AND THE STRATEGY-PERFORMANCE RELATIONSHIP
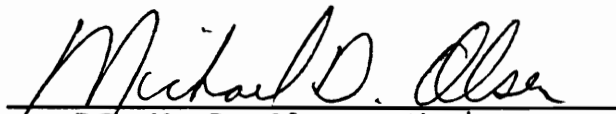
by

Bvsan Murthy

Dissertation submitted to the Faculty of the
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in

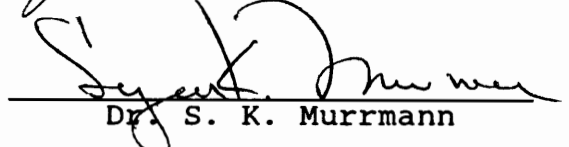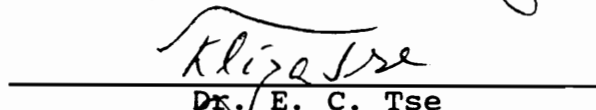**Hospitality and Tourism Management**

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Measurement of the Strategy Construct

in the Lodging Industry, and the

Strategy-Performance Relationship

by

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Hospitality and Tourism Management

(ABSTRACT)

Performance improvement is at the heart of all strategic management. Thus, the principal objectives of this study were to develop an industry-specific instrument to measure lodging strategy, identify a set of strategic dimensions underlying such strategy, and relate performance differences among lodging units to varying strategic dimensions emphasized by such units.

The study adopted the individual hotel as the unit of analysis, and realized strategy was measured as opposed to the intended. Five hundred and seventy nine hotels, which are part of the franchise systems of two industry-leading chains contributed information for this research.

Following a comparative approach to the measurement of the strategy construct, this study developed a 105-item lodging industry-specific strategy measurement scale,

capturing a comprehensive set of strategic characteristics from the business strategy (Porter, 1980) and service management (Gronroos, 1990; Zeithaml, Parasuraman, and Berry, 1990) literatures. Through factor analysis, a parsimonious set of seven strategic dimensions, Service Quality Leadership, Technological Leadership, Push, Cost Control, Pull, Group Channels, and Cross-Training, underlying this 105-item scale was delineated.

Using Yield Per Room, Market Share Index, and Return on Sales as the performance measures, the study indicated that strategies followed by high and low performing hotels were different. The empirical evidence showed that, in general, the Push, Service Quality Leadership, and Technological Leadership strategic dimensions tended to be associated with high performance.

The evidence also indicated that strategies emphasized by high and low performing hotels differed by the four control variables studied: Location, (Service) Segment, (Ownership-Management) Affiliation, and Size. Additionally, similar differences were also obtained when the hotels studied were classified by the performance measure most used by them to evaluate themselves, and the age of the properties. Preliminary indications were also obtained to confirm the existence of a strategic time lag effect.

The results from this study should be valuable not only for extending hospitality strategy research, but also for their normative implications.

Acknowledgements

This dissertation stands for much more than the research reported inside. It is the culmination of four-and-a-half momentous years of a Ph.D. program which has changed my professional life dramatically. I am grateful to many individuals who have made it possible for me to achieve this milestone.

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INTRODUCTION

Introduction

Problem Statement

The ultimate objective of strategic management is performance improvement (Venkatraman & Ramanujam, 1986). Contrary to the pop ecology view, Child (1972) posited that organizations do exercise strategic choice in charting their courses. If strategy is a match among organizational purposes, resources, skills, environmental opportunities, and risk (Hofer & Schendel, 1978), different firms within a given industry should make varied strategic choices with, consequently, varying resultant performance levels. Since there are only a limited number of strategies available to any firm, all such firms choosing similar strategies can be viewed together as a strategic group (Porter, 1980). Thus, performance differences between strategic groups has been an important area of interest to strategy researchers.

The limited number of research studies undertaken in the hospitality industry so far on the strategy-performance relationship have produced no conclusive evidence. A review of this literature shows that theories and methods borrowed from the manufacturing sector may not be adequate to study

the strategy-performance relationship in the hospitality
industry. The literature review further establishes that
the operationalization and measurement of the strategy
construct following traditional bases may not be adequate in
their application to service industries such as the lodging
industry. Zeithaml, Parasuraman, and Berry (1985, 1990),
Parasuraman, Zeithaml, and Berry (1988), Barrington and
Olsen (1987), and Grönroos (1990), among many other
researchers, have highlighted the differences between goods
and services. Service sector researchers generally agree
that goods and services differ significantly in terms of
four characteristics: intangibility, heterogeneity,
perishability, and simultaneity (of production and
consumption).

Services are intangible because they are performed
rather than produced, and cannot be seen, felt, tasted, or
touched. Production and consumption are inseparable in the
case of services because in most services they are
simultaneous. As a result, services are perishable because
they cannot be produced and stored for later consumption.
Because of the high degree of interaction involved between
the service provider and the consumer, and the high degree
of personal involvement of both in the service delivery
process, services are heterogeneous in contrast to goods.

In view of these differences, it is likely that service industry constituents such as lodging establishments have to adopt some different competitive methods to succeed. However, following Shostack (1977) who viewed goods and services on a continuum of tangibility and intangibility, one has to account for the possibility that some of the strategic dimensions identified in the manufacturing sector will also be applicable to the service sector.

Thus, the research problem investigated in this study is to identify such industry-specific strategic characteristics, also known as competitive methods in lay terms, which successful hotels in the lodging industry adopt to maximize performance. This is achieved by developing operational measures of the strategy construct drawn from (a) a broader and complete set of strategic dimensions postulated by Porter (1980), and (b) strategies prescribed by service management theorists such as Zeithaml et al. (1985, 1990), Parasuraman et al. (1988), and Grönroos (1990).

Theoretical Underpinnings

The Concept of Strategy

There are varied definitions of strategy in the literature, depending upon the theoretical perspectives from which researchers viewed the construct. The central theme of most such definitions, however, is that strategy is a set of concerted actions an organization adopts to achieve its desired performance goals.

It is generally agreed that strategies vary by the hierarchical level of the organization. Thus, there are strategies at the institutional level (Thompson, 1967), corporate level, business level, and functional level (Schendel & Hofer, 1979). Whereas the corporate level strategies are concerned with domain definition, the business level strategies address domain navigation issues (Bourgeois, 1980). The focus of the business-level strategies is on resource allocation and integration of different functional strategies (Schendel & Hofer, 1979), to enable an organization to effectively compete in a chosen product/market segment (Hofer & Schendel, 1978).

The total concept of strategy has two principal elements - process and content. The process element circumscribes the strategy formulation and implementation aspects. The content of strategy refers to the specific strategic actions organizations take to survive and succeed.

Strategy Measurement

Strategy content has been studied by a number of researchers, and there are wide variations in the approaches to its measurement. Venkatraman (1989a) classified these various approaches into three types: (1) narrative approach, (2) classificatory approach, and (3) comparative approach. The description-oriented narrative approach (Andrews, 1980) has slowly made way for the other two approaches over the last two decades, as the atomistic view of the Industrial Organization researchers has been replaced by the contingency perspectives of the strategic management researchers (Ginsberg & Venkatraman, 1985).

While the classificatory approach to strategy measurement yielded a number of typologies (Miles & Snow, 1978; Porter, 1980) and taxonomies (Galbraith & Schendel, 1983; Miller & Friesen, 1978), a number of strategy researchers are increasingly turning to the comparative

approach, particularly in the last decade. The comparative approach to strategy measurement relies on isolating and measuring key strategic dimensions. This is based on the realization that strategy is a multi-dimensional construct.

Strategic Groups

Early strategy researchers used coarse-grained survey research methods or fine-grained case studies. Harrigan (1983) advocated balancing these two methods by using hybrid methodologies to improve the effectiveness of measurement. The study of strategic groups has emerged as a major stream of research in the wake of Harrigan's call. Porter (1980) noted that the notion of strategic grouping is an intermediate frame of reference to study organizations, compromising the extreme views of treating each firm separately and studying all firms in an industry together.

Introduced first by Hunt (1972), the concept of strategic groups has attracted the attention of many strategy researchers. While Porter (1980) studied it from a theoretical standpoint, perhaps the most concerted empirical research program on the relationship between strategy and performance, employing the strategic grouping concept, is the 'Purdue Studies' led by Hatten, Schendel, and Cooper

(1978), Schendel and Patton (1978), and others. The Purdue Studies attempted to identify strategic groups in the U.S. brewing industry and tried to relate firm performance to strategic group membership. Other researchers, subsequently, extended this stream of research to different industries (Cool & Schendel, 1987, 1988, pharmaceuticals; Mascarenhas & Aaker, 1989, oil drilling; Fiegenbaum & Thomas, 1990, insurance).

The empirical results of this stream of research on strategic grouping has at best been equivocal. In general, the within-group differences were found to be more pronounced than the between-group differences. An analysis of some of these empirical studies shows two major problems associated with the ambiguity surrounding the concept of strategic groups. First, as the strategic variables that impact performance are industry-specific, no universal operationalization of the strategy construct could be established. Porter (1980) identified 13 strategic dimensions that form the basis of strategic posturing by firms: specialization, brand identification, push versus pull, channel selection, product quality, technological leadership, vertical integration, cost position, service, price policy, leverage, relationship with parent company, and relationship to home and host government. While the

scope of differences along these dimensions may vary from industry to industry, Porter argued that these strategic dimensions collectively describe a firm's strategic position. However, none of the strategic group researchers tried to operationalize all these dimensions yet. Second, there has been a wide variety of performance measures used by different researchers of strategic grouping. The lack of agreement on the operationalization of this consequent construct in most strategic grouping research has also contributed to the inconclusive state of this research stream.

Hospitality Strategy Research

Hospitality strategy researchers have also been investigating the existence of strategic grouping, in their quest for establishing the strategy-performance link in this industry. Schaffer (1986), Dev (1988), Tse (1988), West (1988), and Crawford-Welch (1990) have conducted the most research in this area. All these researchers used either the Miles and Snow's (1978) or Porter's (1980) typologies, or a set of strategic characteristics drawn from Dess and Davis' (1984) work, to delineate the strategic postures of their respondents. However, their results have been

inconclusive in that none of them could establish the
strategy-performance link.

There is also conflicting evidence on the strategic
grouping concept as applied to the hospitality industry in
these studies. Whereas Schaffer (1986) claimed to have
identified five distinct strategic groups in his study of
the lodging industry, Dev (1988), using only a slightly
modified instrument, could find no such strategic grouping
in his sample. This ambiguous state of empirical evidence
led Tse (1988) and Crawford-Welch (1990) to conclude that
the generic typologies of Miles and Snow (1978) and Porter
(1980) are probably not adequate to explain hospitality
strategy, whereas Dev questioned the adequacy of the Dess
and Davis' (1984) instrument which formed the basis of the
comparative approach to hospitality strategy measurement.

A close examination of these research studies shows
that they suffer from both conceptual and methodological
inadequacies. At the conceptual level, the imperfections
are related to the definition of the strategy construct
itself, the choice of the unit of analysis, and the
operationalization of the constructs of strategy and
performance. The methodological shortcomings are with
respect to the methods used to measure the variables under

investigation, and the choice of statistical techniques. A
brief summary of some of the more important problems
follows.

Problems with hospitality strategy research.

Instead of studying realized strategy, most of these
researchers, except for Dev (1988), tapped the intended
strategy. To the extent that intentions may not be
realized, and that unintended strategies may emerge
(Mintzberg, 1978), the correspondence between the antecedent
and consequent constructs, strategy and performance, seems
to have got clouded because of studying the wrong antecedent
construct.

Again with the exception of Dev (1988), all the other
researchers used the firm as their unit of analysis. With
many multi-unit firms in their samples, it appears that they
ended up measuring corporate-level strategy, rather than
business-level strategy, because multi-unit firms have to
adopt different strategies for each of their units facing
varying environments. In so far as the grounded theory used
by these researchers is that of business strategy, whereas
their actual measurements have been at a different level,

there are again correspondence problems between the constructs of strategy and performance.

As stated previously, either classificatory or comparative approaches to strategy measurement have been adopted in this stream of research. As Venkatraman and Grant (1986) pointed out, the use of nominal scales, the method followed in the classificatory approach using typologies to tap the strategy construct, is not advisable because nominal scales are useful only for highlighting across-group differences. In contrast, past research suggests the within-group differences are quite predominant.

As for the use of a set of strategic characteristics to delineate strategy, following the comparative approach, the problem seems to have been with the instrument used to measure the strategy construct. Briefly, the major problem areas in this regard are as follows:

a.   The basic instrument followed in most of this research is the one developed by Dess and Davis (1984) who used only six of the 13 strategic dimensions identified by Porter (1980): brand identification, channel selection, technological leadership, cost position, service, and leverage. It may be that the dimensions not taken into

account by Dess and Davis originally are resulting in an inadequate tapping of the strategy construct.

b. All of the past strategic grouping research shows that the strategic variables used in such research have to be industry-specific. By using Dess and Davis' (1984) instrument, which is grounded in the manufacturing industry, as the basis, the hospitality strategy researchers seem to have failed to capture industry-specific strategic characteristics.

c. There is considerable literature in the service sector, which suggests that services differ from manufactured goods in at least four important aspects: intangibility, perishability, heterogeneity, and simultaneity (of production and consumption) (Barrington & Olsen, 1987; Grönroos, 1990; Zeithaml, Parasuraman, & Berry, 1985). Hospitality research thus far has not given due credit to these differences in the measurement of strategy. This subject is followed up in the next section.

As regards the performance construct, the principal problems with past hospitality research are as follows:

a. Most strategy research in the manufacturing sector has
    focused on financial and operational performance
    measurements, and not considered the overall concept of
    organizational effectiveness, difficult as it is to
    measure (Venkatraman & Ramanujam, 1986). Hospitality
    researchers have mostly concentrated on the financial
    performance alone, and not taken into account
    operational measures, such as market share, which are
    equally important.

b. Because of the unit of analysis problem discussed
    previously, even the financial measures studied in past
    hospitality research are contaminated by the
    franchising/ownership/management arrangements varying
    across the sample firms.

    The above problem areas are discussed in depth in the
following chapters. One summary conclusion to be drawn from
this review and critical examination of extant hospitality
research is that more than justified adequacy of construct
measurements has been assumed in these studies. Venkatraman
(1989a) opined that "it is necessary to recognize that
construct measurement is at least as important as the
examination of substantive relationships" (p. 945). This
fundamental tenet has not received enough attention so far

in hospitality strategy research. Venkatraman has also exhorted that "... it is premature to restrict the number and diversity of approaches to conceptualize the strategy construct" (p. 945), considering its multi-dimensionality and multi-facetedness. In a discussion on theory development, Whetten (1989) also expressed a similar view. As pointed out earlier, by not taking into account the important differences between goods and services, hospitality research has left out a major source of strategy variations. If the dimensions underlying the strategy construct in this industry have to be captured effectively, this omission needs to be remedied. As stated earlier, this goods-services dichotomy and its implications to strategy are briefly discussed next.

The Goods-Services Dichotomy

There is universal agreement among service management researchers that services differ significantly from goods in their intangibility, heterogeneity, perishability, and simultaneity (of production and consumption). Zeithaml et al. (1985) and Grönroos (1990), among many other researchers, discussed these differences in depth. Barrington and Olsen (1987) highlighted these differences in the hospitality context. In the light of these differences

between goods and services, service management theorists believe that strategies borrowed from the manufacturing sector are not necessarily applicable to the services sector.

Distinguishing between *internal efficiency* and *external efficiency*, Grönroos (1990) discussed how a *strategic management trap* can result by trying to pursue a low cost strategy in service industries. He posited that trying to assume a low cost position in many service situations leads to lower service quality, by affecting the service provider-customer interactions. Buzzell and Gale (1987) and Grönroos also stated that it is the customer perceived service quality that is extremely important for service firms' success. Building on this, Grönroos presented a number of strategic characteristics for service firms to improve customer perceived quality and, consequently, performance. Zeithaml et al. (1985), reviewing service marketing strategy literature, consolidated a list of successful strategies prescribed by various researchers.

Parasuraman, Zeithaml, and Berry (1988) extended this thinking by constructing a scale to measure service quality. Defining service quality as the difference between customer expectations from/about a service and customer perceptions

of the quality of service actually received, Parasuraman et
al. developed and tested their SERVQUAL instrument. Their
investigations resulted in the delineation of five distinct
service quality dimensions: tangibles, reliability,
responsiveness, assurance, and empathy.

Zeithaml, Parasuraman, and Berry (1990) then used this
SERVQUAL instrument to assess the differences between
customers' ratings of service quality and managerial
perceptions of the service quality being delivered. They
found significant differences between the service quality
ratings of management and customers. Zeithaml et al.
captured these differences in a service-quality-gap model,
which identified four service quality gaps: Customers'
Expectations-Management Perceptions Gap, Management's
Perceptions-Service Quality Specifications Gap, Service
Quality Specifications-Service Delivery Gap, and Service
Delivery-External Communications Gap. The cumulative
effects of these four gaps, Zeithaml et al. posited, create
Gap 5 which is the difference between the Customers'
Expected Service and Perceived Service, which is what the
SERVQUAL instrument developed by Parasuraman et al. (1988)
is intended to measure.

Implications.

It is well known that in the hospitality industry, product differentiation is becoming increasingly difficult. For all practical purposes, there is hardly any difference between lodging products within a given price range and offering generally similar levels of service. Therefore, it seems all the more important for the lodging industry constituents to look for that niche, each of them so desperately needs to effectively compete, in differentiating on service quality, improving customer perceived quality, and thereby reducing the gap between the customer expectations and perceptions of service quality. The service management researchers believe, it is only such strategies aimed at enhancing customer perceived quality which will enable a firm to succeed. However, following Shostack (1977) who viewed goods and services on a continuum of tangibility and intangibility, one has to account for the possibility that some of the strategic dimensions identified in the manufacturing sector will also be applicable to the service sector.

By not capturing the implications of this very important stream of literature, hospitality strategy researchers have missed out on measuring strategy in an

industry-specific context, exhorted so much by strategic group researchers in general. There is clearly a need for developing methods/instruments for measuring strategy in this industry which reflect the multifaceted nature of the strategy construct and, in particular, the unique service industry characteristics and determinants of success. Therefore, a combination of the strategic dimensions identified by Porter (1980), strategies recommended by service management theorists like Zeithaml et al. (1985, 1990), Parasuraman, Zeithaml, and Berry (1988), and Grönroos (1990) can possibly give hospitality strategy researchers a more robust measure of strategy with which the strategy-performance relationship could be studied.

Context of the Study

The context of this study is the U.S. lodging industry. The lodging industry continues to face the vicissitudes of the economic slump it encountered in late '80s, after a meteoric growth in the decade before. While the long-term outlook for the industry seems to be good, now that it is considerably re-structured, lean and consolidated, the industry is expected to witness intense competition in the short-term. A brief review of the industry scenario is presented next.

Industry Performance

The industry average occupancy in 1992 increased by
2.7%, to 61.7% from 60.2% in 1991, but is still below the
last peak of 62.6% reached in 1989. An occupancy of 68% is
considered to be the minimum needed for continued
profitability. Industry average room rate increased to
$59.82 in 1992 from $59.03 in 1991 (McDowell, 1993;
Reynolds, 1993). Still, 1992 was the sixth straight year in
which the increase in the industry average room rate was
below the corresponding overall inflation rate of the
economy (Graves, 1992).

Despite the modicum of revival, the lodging industry
continues to lose money on the average. According to
Standard & Poor's, in 1991, full-service hotels lost on
average $1,531 per room, all-suites lost $543, and only
limited service properties posted a modest gain of $206 per
room (Graves, 1992). Overall, the industry is losing about
$1,000 per room, largely on account of the high debt
servicing costs following the excessive capacity buildup and
acquisition activities of the '80s (Reynolds, 1993).
Although new hotel construction has slowed down
significantly in the last two years, the industry is still
trying to absorb the overbuilding in earlier years. Even in

1992, about $3 billion worth of new hotel construction came on stream, although this represents the lowest level of capacity increase since 1980. Leaving aside specific instances such as the opening of the 1,200-room Sheraton Chicago Hotel & Towers in an already overbuilt downtown Chicago (Morris, 1992), the total number of rooms in the country, however, declined in the last two years, partly because of the difficulty in obtaining finance (Graves, 1992; Sharav, 1993).

Consolidation

With overall capacity shrinking, growth is being sought by several firms through conversions from other brands. According to Smith Travel Research, about 5% of all rooms in 1,240 hotels changed flags in 1991, double the level of such conversions in 1988. Of these conversions in 1991, about half the rooms switched from one chain to another, 29% changed from independents to chain affiliation, and 22% left the chains to become independent (Graves, 1992). In general, the industry is witnessing intense consolidation, with a handful of chains controlling the bulk of the capacity, much like the situation in the airline industry.

Cost Control

Concomitant with this consolidation, the industry has considerably tightened its belt in controlling costs. Hyatt, for example, substituted white bed sheets for beige ones, made bed turn-down service optional in many hotels, downgraded courtesy transportation, cut back on bathroom linen, eliminated fancy garnishes in restaurants, among many cost-cutting measures, saving millions of dollars (Reynolds, 1993). The industry has also saved at least 10% in debt servicing through recapitalization, debt refinancing, apart from the benefit accrued from lower interest rates. Also, as a result of consolidation, with several brands coming under one management, marketing and operations efficiencies are being realized. Such multi-brand firms are able to "better leverage corporate resources such as management experience, access to capital markets, and back-office operations" (Graves, 1993, p. L44).

Future Outlook

While improved economic conditions in the coming years are expected to help the industry fortunes, job security concerns, longer working hours and limited leisure time, the recent baby boom, anticipated increases in health care costs

under the Clinton administration, increases in airfares because of reduced competition in the airline industry, reduced interest of the Japanese in investing in this industry because of their own domestic economic concerns, are some of the dampening trends facing the industry (Graves, 1992, 1993). In general, the U.S. lodging industry is expected to face a continued turbulent environment at least till the mid-'90s, and competitive savvy and imaginative strategies are required for survival till then.

Overview of the Research Study

Purpose and Objectives

The preceding section highlights the need for understanding and differentiating successful and unsuccessful strategies in the lodging industry. However, this cannot be achieved until a strategy measurement valid for the lodging industry is developed. The principal objective of this study, therefore, is to develop an instrument to measure the strategy construct in the lodging industry context and to test the predictive validity of its relationship to performance.

Research Questions

The main research question under study here is whether, in the context of the lodging industry, the strategy construct can be measured by empirically deriving its underlying dimensions and, if so, whether strategy thus measured can be related to performance. This broad research question can be framed into the following specific research propositions.

1. Through a combination of strategic characteristics rooted in business strategy theory and service management theory, it is possible to identify a set of strategic dimensions underlying lodging strategy.

2. Performance differences among lodging units can be related to varying strategic dimensions emphasized by such units.

Overview of the Study Design

Strategy Construct

In keeping with the emphasis on the measurement of the strategy construct in this study, circumscribing the

conceptual domain of this construct is considered critical
to this exercise. Following Venkatraman (1989a), the domain
of the strategy construct in this study is anchored within
four boundaries, as follows:

Scope   :   Content of strategy

Hierarchical Level   :   Business-level (hotel)

Domain   :   Holistic

Intended vs. Realized   :   Realized strategy

Strategy has traditionally been operationalized in two
ways: (1) through a nominal scale, using descriptors of
typologies, such as those propounded by Miles and Snow
(1978) or Porter (1980), or (2) multi-item scales capturing
several strategic characteristics. Nominal scales are
useful only for highlighting the between-group variances.
When within-group variance is predominant, as seems to be
the case in the lodging industry, use of multi-item scales
is essential (Venkatraman & Grant, 1986). This study,
hence, used a multi-item scale to measure realized strategy,
developed from all of Porter's 13 strategic dimensions as
well as service strategies prescribed by Zeithaml et al.
(1985, 1990), Parasuraman et al. (1988), and Grönroos
(1990).

Performance Construct

Performance was measured through multiple operational and financial measures. Two financial measures, Return on Assets (ROA) and Return on Sales (ROS), and two operational measures, Yield Per Room and Market Share Index, were used to operationalize the performance construct. By using Income Before fixed Charges as the profit measure in the computation of ROA and ROS, the performance measured is restricted to the scope of responsibility and authority of a typical hotel manager. The ratios of ROA, ROS, YPR, and Market Share Index are such that a wide range of hotels can be compared with each other. Four control variables were used in this study: size, segment, location, and affiliation. These were measured in terms familiar to industry managers. Detailed descriptions of all the measures are presented in Chapter 3.

Strategic Time Lag

One of the most vexatious and least resolved problem areas in strategy research is the issue of the time lag between strategy implementation and performance. This is a very ambiguous issue with very little theoretical support. On the one hand, strategic time lag is a concept which makes

intuitive sense. At the same time, with rapid imitation being so characteristic of service industries, there is also reason to believe that such a lag effect may have limited applicability in the hospitality context. To strike a balance between these two perspectives, this study measured strategy over the period 1991-1992, and measured performance in 1992 and 1993. The attempt was to account for the possibilities that some strategies take longer than others to implement, and that some strategies pay off faster than others, while still addressing the time lag issue.

Industry Cooperation

Owing to the predominance of private business units in this industry, performance measurement has always been a problem in hospitality strategy research. Neither are market-based measures available, nor is financial information freely forthcoming from the respondents. Since this is an exploratory study, where a major emphasis is on scale development and testing, getting a cooperative representative sample is considered more important than relying on a random sample with doubtful response outcomes. For this purpose, two large lodging chains were approached for their cooperation in this study, and their entire portfolios of upscale, midprice, and economy hotels were

targeted for study. Because of this co-optation of such industry giants in this research, one is assured of not only above average response but also reliable performance data which is so difficult to get from this industry.

Research Strategy

The study used a sample survey design with individual hotels as the unit of analysis, and thereby tried to avoid some of the past problems in the performance measures created by the contamination from franchising/management arrangements.

Contribution of this Research

There have been only three strategy research studies in the lodging industry so far (Crawford-Welch, 1990; Dev, 1988; Schaffer, 1986). Of these, Crawford-Welch got very poor response from his lodging sample as compared to his restaurant sample. Therefore, this study, of itself, adds to our current meager knowledge about lodging strategy.

This study represents the most comprehensive effort yet to develop an industry-specific instrument to operationalize the construct of lodging strategy by including all of

Porter's (1980) 13 strategic dimensions, as well as strategic characteristics prescribed in normative service literature. The study yielded a 105-item strategy scale with a high reliability. This strategy scale was successfully factor analyzed resulting in a 7-factor solution. The theoretical background to this eclectic approach to strategy measurement was discussed earlier in this chapter.

In previous studies, either the unit of analysis or the type of scale used (nominal) has been a problem. The present research studied individual hotels with a multi-item scale which has a better construct validity.

As West and Anthony (1990) noted, it is the realized strategy that we should be studying when performance implications are under investigation. Except for Dev (1988), no one has taken care of this. This study extends Dev's effort by using a multi-item scale to measure strategy. Though Dev did use a multi-item scale, because of the inherent weaknesses in the scale, he could not empirically derive any strategic dimensions.

By adding Market Share Index as an additional measure of performance not used before in hospitality strategy

research, this study for the first time tried to evaluate the often contradictory business goals of profitability and growth.

Last but not least, by using a different approach to the treatment of the strategic time lag issue, this study produced some preliminary evidence confirming the strategic time lag effect.

Limitations

The research process is "a *series of interlocking choices*, in which we try *simultaneously to maximize several conflicting desiderata*" (p. 69), viz., generalizability, precision, and existential realism (McGrath, 1982). Though careful attention has been paid to the choices being made in the research design, methodology, scale development and other related issues, there are still limitations to this study as in most research.

Organizational performance is dependent upon a number of variables - strategy, structure, technology, life-cycle stage, and environmental influences, to name some of the major ones. In a dissertation, it is impossible to take care of all such variables owing to considerations of

parsimony of time and money. Nonetheless, as a researcher,
one cannot ignore what one is missing.

Harrigan (1983) strongly equivocated the use of hybrid
methodologies and multi-method measurement to balance the
disadvantages of survey research and case studies. Once
again, for reasons of parsimony, this study is cross-
sectional and suffers from the error variance issues, as
well as the inability to establish causality. However, it
must be noted that given the current state of knowledge,
there is no other method of measuring hospitality strategy
that has merit. As far as performance is considered, this
study did use multi-method measurement.

As Venkatraman and Ramanujam (1986) stated, financial
and operational performance measures are only part of the
overall effectiveness of an organization. There are other
stakeholder interests that a business entity has to
consider, which could not be attended to in this study.

Lastly, as McGrath (1982) stated, when one tries to
balance two of the three conflicting issues, getting impaled
on the third issue is certain. In this study, while
precision and realism are balanced, generalizability had to
be sacrificed. Nonetheless, further hospitality research

should greatly benefit from the construct-valid strategy

measurement scale developed in this study.

Chapter 2

LITERATURE REVIEW

Introduction

Domain of the Strategy Construct

"A major task in conceptualizing a theoretical construct relates to the specification of its boundaries. For strategy constructs, this is particularly complex given the wide array of differences in terminology, disciplinary orientations as well as underlying assumptions" (Venkatraman, 1989a, p. 945). As stated in the previous chapter, developing an instrument to measure strategy in the lodging industry context, and then testing its predictive validity in its relationship to performance, is the main objective of the current research study. Thus, circumscribing the conceptual domain of the strategy construct is critical to this exercise. Venkatraman used four boundaries to anchor the strategy construct: scope, hierarchical level, domain, and intentions versus realizations.

The current study follows this scheme with the exception that whereas Venkatraman (1989a) viewed scope in terms of *means* or *ends* (actions or goals), scope in this study is viewed as *content* or *process*. Organizations may

follow similar strategy-making processes but may actually choose different strategies (content). Thus, this study focused on strategy content rather than the process(es) by which it is arrived at.

It is generally agreed in strategy research that there are three levels of the strategy concept - corporate, business, and functional (Hofer & Schendel, 1978). Whereas corporate strategy is too broad a concept for studying firms involved with multiple product-market segments (Venkatraman, 1989a), functional strategy is too narrow and is subsumed in the integrative role played by business-level strategy. Thus, it is the business-level strategy which was studied in this research.

The issue of domain is concerned with the choice between *parts* versus *holistic* perspectives (Venkatraman, 1989a). The former refers to a focus on one or two functional areas, whereas the latter refers to viewing strategy in more comprehensive terms. In keeping with the philosophy of business-level strategy mentioned previously, a holistic perspective was adopted here.

The last issue involved in delineating the boundaries of the strategy construct is the distinction between

intended and realized strategies (Mintzberg, 1978). As strategies intended but not realized cannot possibly affect performance, whereas emergent strategies though unintended do affect performance, it is the realized strategy which was the focus of this study.

Not specifying the boundaries as discussed above and, more importantly, not constraining research to the boundaries specified can result in questionable construct validity and throw doubts on the results obtained. As will be seen in the later sections of this chapter, not anchoring the constructs firmly within such boundaries may also explain many of the inconsistencies in previous research.

Chapter Preview

The purpose of this chapter is to review the literature on the constructs of strategy and performance and their inter-relationship. This is done by first reviewing the theoretical underpinnings of strategy as a research construct, in terms of the boundaries described above, and the approaches to measure it. This is followed by a review of the literature on the strategy-performance relationship, with special emphasis on the operationalization/measurement problems encountered in such research. The later part of

this chapter exclusively examines the critical shortcomings of extant hospitality research in its attempt to confirm the strategy-performance relationship.

The Concept of Strategy

Strategy Definitions

Etymologically, the word strategy can be traced to the ancient Greek *strategos* meaning the art of the general. A large volume of literature on strategy has accumulated over the past four decades but no universally accepted definition has emerged (Venkatraman & Grant, 1986). There have been, however, a number of attempts by various researchers to define and measure strategy from different theoretical underpinnings. It is important to look at the major contributions of prominent strategy researchers in this effort.

Two of the earliest researchers to study organizational strategy were Chandler (1962) and Ansoff (1965). Chandler viewed strategy as a descriptive concept, contrary to the prevalent thinking at that time. He suggested that strategy was the means by which an organization achieves its goals and objectives. Ansoff observed strategy as the decision

rules and guidelines that define the scope and growth direction of a firm. According to Ansoff, the decisions made by the management in relation to the product/market domain reflect the essence of a firm's strategy. Other researchers who defined strategy and their descriptions of the concept are presented in Table 1 in chronological order. According to Schendel and Hofer (1979), the concept of strategy has four major components: (a) scope, defined by product/market and geographic territories, (b) resource deployments and distinctive competencies, (c) competitive advantage, and (d) strategy.

Table 1. Definitions of Strategy

Dror (1971)	Application of structured rationality to problems of choice
Hofer and Schendel (1978)	A match among organizational purposes, resources, skills, environmental opportunities, and risk ... the way the organization's aspirations are linked to its non-controllable environment
Bourgeois (1978)	How an organization defines its relationship to the environment in pursuit of its objectives
Mintzberg (1978) Mintzberg and Waters (1982)	A pattern in the stream of decisions about a firm's domain
Miles and Snow (1978)	A pattern or stream of major and minor decisions about an organization's possible future domains
Porter (1980)	Steps taken by an organization to ensure or protect its competitive position in the market
Hambrick (1980)	A pattern of important decisions that (1) guides the organization in its relationships with its environment, (2) affects the internal structure and processes of the organization, and (3) centrally affects the organization's performance
Thompson and Strckland (1981)	Giving purposeful direction, formulating means to accomplish goals, marshaling and allocating resources, directing pursuit to produce desired results ... how an organization's purposes and objectives are to be accomplished
Leontiades (1982)	Systematic methods for dealing with uncertain environments ... what course of action to follow, what steps to take
Bower (1982)	Management of the fundamental relationship across the boundary of a system and its environment
Steiner, Miner and Gray (1982)	Formulation of the organization's basic mission, purposes and objectives ... and the program to achieve them

These definitions vary semantically from one another. A central theme, however, is that strategy is a set of concerted actions an organization adopts to achieve its desired performance goals. In the process, strategy addresses specific product/market domains and co-aligns internal structures with the external environment.

Early researchers tended to view strategy as a situational art. The chief executive of an organization devised a comprehensive plan to balance the objectives of exploiting opportunities and avoiding threats while emphasizing the internal strengths and correcting weaknesses (Andrews, 1971; Chandler, 1962). Later research brought to light the subtler intricacies associated with the concept - such as the distinction between deliberate or intended, emergent, and realized strategies (Mintzberg, 1978), and the lag effect of strategy on performance (Miller & Freisen, 1983; Mintzberg, 1978; Snow & Hambrick, 1980).

Levels of Strategy

The strategy content varies with the hierarchical level of the organization (Schendel & Hofer, 1979). Literature suggests that there are four distinct hierarchical levels

of strategy related to the different levels of organization structure. They are the institutional level (Parsons, 1960; Thompson, 1967), the managerial/corporate level (Parsons, 1960; Schendel & Hofer, 1979; Thompson, 1967), the business/competitive level (Schendel & Hofer, 1979), and the technological/functional level (Schendel & Hofer, 1979; Thompson, 1967).

At the institutional level, strategy content comprehends how an organization integrates with its external environment. The overall role of the organization is defined at this level, thus establishing the constraints within which the organization must operate (Parsons, 1960; Thompson, 1967).

The next level of strategy, the managerial level (Parsons, 1960; Thompson, 1967), has also been labeled corporate-level strategy in the context of an economic organization (Schendel & Hofer, 1979). Reflecting the concerns of stockholders and society (Rumelt, 1974), strategy content at this level addresses the domain definition of an organization (Bourgeois, 1980), i.e., what business should the organization be in, and how its business activities are integrated with the internal and external environments of the organization. Taking a portfolio

approach and concentrating on the distinctive competencies of the organization, strategies at this level include concentration, product/market development, innovation, horizontal/vertical integration, joint ventures, concentric/conglomerate diversification, retrenchment/turnaround, divestiture, and liquidation (Rumelt, 1974). Necessarily, such decisions are made by the top management of an organization.

The business-level or competitive strategy of an organization, in contrast, is concerned with the domain navigation issues (Bourgeois, 1980). The focus is on how an organization competes within a chosen product/market segment (Hofer & Schendel, 1978). Resource allocation and integration of the different functional aspects of the organization are integral to this level of strategy (Schendel & Hofer, 1979). Heavily influenced by the task environment, decisions at this level are made by the business unit managers which include, inter alia, strategies of differentiation, segmentation, positioning, and profitability (Dev, 1988).

At the lowest level of strategy making, viz., the functional level or the technological level (Thompson, 1967), functional strategies in the areas of marketing,

finance, operations, administration, research and
development, and human resources are determined. The
emphasis here is on finding the best way to
implement/execute the strategic plan of the company (Pearce
& Robinson, 1982), and the manner in which the different
functional parts of an organization will discharge their
responsibilities in tune with the organization's overall
competitive strategy (Schendel & Hofer, 1979).

Strategy Content and Process

The literature on strategy can be broadly classified
into two categories - research on the process of strategy
(Bourgeois, 1980; Hofer & Schendel, 1978; Mintzberg, 1978;
Mintzberg & Waters, 1982; Reid & Olsen, 1981) as opposed to
research on the content of strategy (Ansoff, 1965; Hambrick,
1980, 1983a; Miles & Snow, 1978; Rumelt, 1974).

The first stream of research is concerned with strategy
formulation and implementation. Strategy formulation
encompasses development of the business mission, goals and
objectives, and resource allocation decisions to achieve
such goals and objectives (Hofer & Schendel, 1978). The
strategy implementation decisions are concerned with the
adoption of administrative structures and control systems,

in addition to the resource allocation issues (Bourgeois, 1980). Hofer and Schendel developed a strategy formulation model consisting of seven steps describing how organizations arrive at strategic decisions. These seven steps are: strategy identification, environmental analysis, gap analysis, strategic alternatives, strategy evaluation, and strategic choice. In the hospitality literature, Reid and Olsen (1981) proposed a similar seven-step planning model which they recommended for the facilitation of strategy formulation, implementation and evaluation.

In contrast to the process of strategy which answers the *how* question, strategy content is concerned with the *what* question. "Strategy content research is defined as research which examines the content of decisions regarding the goals, scope and/or competitive strategies of corporations, or of one or more of their business units" (Dev, 1988, p. 34). Strategy and performance; environment, strategy and structure; and strategy taxonomies, are the important variables usually studied in strategy content research (Jauch, 1983). Whereas taxonomies refer to classification schema arrived at through empirical means, typologies refer to similar classification means developed from theory. Strategy literature has a number of strategic typologies put forward by various researchers (Buzzell,

Gale, and Sultan, 1975; Hofer & Schendel, 1978; Miles, 1982; Miles & Snow, 1978; Porter, 1980; Utterback & Abernathy, 1975; Vesper, 1979; Wissema, Van der Poll, and Messer, 1980). While the classifications put forward in these typologies may be somewhat varying, one common basis underlying all of them is strategic choice.

Strategic Choice

The concept of strategic choice advocates that organizations can and do choose appropriate actions to suit their respective positions in the environment. Child (1972) calls such a choice as being able to define and manipulate the organization's domain. Cyert and March (1963), Hofer and Schendel (1978), and Porter (1980) also hold a similar view. To the extent that different organizations within an industry may make different strategic choices about their domain definition and navigation, understanding and taking into account such varying domains is an essential pre-requisite to the study of organizations (Child, 1972). Hofer (1975) has aptly summed up this argument thus: "unless one is willing to admit the possibility that there exists some strategy or set of strategies which are optimal for all businesses (corporations) no matter what their resources and no matter what environmental circumstances they face ... any

theory of business (corporate) strategy must be a
contingency theory" (p. 785-786). Strategic choice is thus
integral to any business strategy theory.

Since different organizations may make different
strategic choices, even though all of them may be in the
same industry, the specific choices made in each case will
have a direct bearing on their individual performances.
Thus, content of strategy at the business level is the main
focus of the subsequent sections of this dissertation.

Measurement of Business Strategy

Three Approaches

Despite so much interest in strategy research, no
universally accepted operationalization of the construct of
business strategy exists. This lack of consensus among
researchers regarding the measure of strategy is
attributable to the wide differences in the vocabulary
adopted by researchers in the various disciplines of
strategic management (Ginsberg, 1984). Venkatraman (1989a)
classified the various approaches to strategy measurement
into three types: (1) narrative approach, (2) classificatory
approach, and (3) comparative approach.

Narrative Approach

The narrative approach to strategy measurement is based on the view that strategy is a holistic concept which, because of its being unique to each setting (Andrews, 1980), should be described in verbal terms. Early strategy researchers adopted this atomistic view of strategy, i.e., each firm was considered unique in every respect. Furthermore, early strategy research did not take into account the distinction between the various levels of strategy discussed previously, or the contingency perspectives (Ginsberg & Venkatraman, 1985). However, these viewpoints have changed significantly in the past two decades, and led to the notion that "the narrative approaches should give way for superior schemes" (Venkatraman, 1989a, p.943).

Classificatory Approach

As Dess and Davis (1984) pointed out, the revised view of strategy research reflected the acceptance of commonalities existing between firms in a given industry. The classificatory approach to strategy measurement reflects this view, with strategies being classified either conceptually or empirically. Strategy classifications

derived conceptually are called typologies, whereas similar
classifications arrived at through empirical means are
termed taxonomies.

Researchers have postulated a number of strategic
typologies since the '60s. Some of the prominent ones are
those developed by Utterback and Abernathy (1975), Hofer and
Schendel (1978), Miles and Snow (1978), Porter (1980), and
Wissema et al. (1980). While all these typologies use
different nomenclature to describe the groups of firms
following various strategy types, most of these researchers
conclude that there are but a few identifiable strategies.
In fact, this parsimonious representation of strategy has
been the principal attraction of following this approach to
strategy classification/measurement. Among the most
venerated and researched strategic typologies, Miles and
Snow's and Porter's typologies stand out. More follow up
research and literature exists on these two typologies than
any other. All the hospitality strategy researchers have
based their studies on one or the other of these typologies.

Among the prominent empirically derived strategic
taxonomies, the works of Buzzell et al. (1975), Miller and
Friesen (1978), and Galbraith and Schendel (1983) have
received wide attention. Such taxonomies are based on

internally consistent configurations of strategic

dimensions. Miller (1981) and Hambrick (1983b) referred to

these configurations of like strategies as "gestalts"

referring to "tightly interdependent and mutually supportive

parts, the significance of which can best be understood by

making reference to the whole" (Miller, p. 3).

While the strategic typologies are conceptually

elegant, they are too broad and general; whereas the

strategic taxonomies rely heavily on the correct choice of

underlying dimensions (Venkatraman, 1989a).

Comparative Approach

The third approach to strategy measurement, viz., the

comparative approach, relies on isolating and measuring key

strategic dimensions. Strategy is treated in this approach

as a multi-dimensional, multi-faceted construct, and the

emphasis here is on measuring the differences on a large set

of strategic characteristics which "collectively describe

the strategy construct" (Venkatraman, 1989a, p. 944).

Though less parsimonious than either of the classificatory

approaches discussed previously, the comparative approach

gives more depth and breadth to strategy measurement.

Researchers such as Dess and Davis (1984) have used this

approach to study the differences in strategies adopted by different firms in a given industry.

Hybrid Methods

Early strategy research used either coarse-grained survey research methods or fine-grained case study approaches. Harrigan (1983) strongly equivocated the use of hybrid methodologies and multi-method measurement of business strategy, if the potentially large and unexplainable error terms common in survey research and the lack of generalizability in case study research are to be avoided. Influenced by similar thinking, many researchers of business strategy have turned to the use of strategic grouping as a balancing act in the measurement of strategy. Porter (1980) noted that the notion of strategic grouping is an intermediate frame of reference to study organizations, compromising the extreme views of treating each firm separately and studying all firms in an industry together as a whole.

In so far as research on strategic grouping has at its heart the normative theory that different organizations within a given industry follow different strategies, and further that such varying strategies have differing

performance implications, a brief review of this stream of
research on strategic grouping is very relevant to the
present context. However, it is first necessary to
introduce the other major construct of interest in this
study, viz., performance. Therefore, a review of the use of
the performance construct in strategy research is presented
next before discussing the stream of literature on strategic
grouping which studies the strategy-performance link.

Performance

The ultimate objective of strategic management is
performance improvement (Venkatraman & Ramanujam, 1986).
Given an environment in which an organization is
operational, the choice of appropriate strategies and their
effective implementation should intuitively lead to better
performance than in the alternative. Thus, organizational
performance is a major variable studied in strategy
research. Yet, there still remains a great degree of
controversy on the definition of organizational performance
and its measurement. Snow and Hrebiniak (1980) felt that
multifaceted phenomenon that performance is, it is difficult
to understand the concept and measure it. Bedian (1986)
commented about the divergent definitions, differing
explanatory variable sets, and unintegrated analysis of

performance in organizational research. Venkatraman and Ramanujam aptly summed up the situation thus: "... the treatment of performance in research settings in perhaps one of the thorniest issues confronting the academic researcher today. With the volume of literature on this topic continually increasing, there appears to be little hope of reaching any agreement on basic terminology and definitions" (p. 801).

Venkatraman and Ramanujam (1986) stated that the importance of performance in strategic management can be argued along three dimensions: theoretical, empirical, and managerial. Viewed in theoretical terms, performance is the time test of any strategy (Schendel & Hofer, 1979). Empirically, performance is used to test strategy content and process issues (Miles & Snow, 1978). From the managerial point of view, performance relates to the prescriptions employed for performance improvement.

Anderson (1982) categorized organizational performance theories into two types - economic and behavioral. Following Parson's (1956) classification of organizations by type of goals or functions, Randolph and Dess (1984) say that measuring the performance of business organizations by financial criteria is quite appropriate. Snow and

Hrebiniak (1980) agree with this with some reservations. They opined that profitability does not fully account for organizational effectiveness. However, they felt that because well managed firms should perform better than poorly managed ones, using economic performance in the study of strategy is acceptable.

Thus, profitability and growth are two aspects which have been most predominantly used in performance measurement in extant literature. Whether performance should be measured with a single measure or multiple measures is a controversial issue (Hatten, Schendel, & Cooper, 1978). Tosi and Slocum (1984) and Bedian (1986) feel that profitability is the single most important criterion by which business performance should be measured. However, according to Venkatraman and Ramanujam (1986), business performance is *only* (emphasis added) a subset of the overall concept of organizational effectiveness. Therefore, it is a controversial issue whether performance measures which are of primary importance to organizations should be preferred over those that are of greater import to society at large (Parsons, 1960; Price, 1972; Steers, 1975). For the time being, organization-relevant measures seem to be holding the attention of most researchers, in so far as the literature is replete with return on investment

(ROI), return on assets (ROA), return on equity (ROE),
market share, sales and profit as the variables mostly used
to measure business performance.

Strategy-Performance Link

While the strategy-performance linkage has always been
of great interest to researchers both for its descriptive
and prescriptive value, the strategic typologies enumerated
by Miles and Snow (1978) and Porter (1980) have given a
boost to this research. As a result, in the last decade,
there have been several attempts to test and validate these
two typologies in studying the strategy-performance link.

Snow and Hrebiniak (1980) studied four different
industries to examine the relationship between strategy,
distinctive competencies and performance. They found that
only one distinctive competence, product research and
development, discriminated among the four organizational
strategies. They also found that strategy was a more
powerful variable than industry affiliation in explaining
performance variation. They concluded that significantly
divergent strategies can co-exist among different firms
within the same industry.

Hall (1980) studied 64 firms in eight manufacturing industries to investigate the relationship between firm strategies and financial performance. The target firms were all operating in hostile environments. He found that achieving the lowest delivered cost and/or the highest product/service/quality differentiation were the two strategies adopted by the more successful firms in their respective industries.

Hambrick (1983a) tested Miles and Snow's (1978) typology using the Profit Impact of Market Share (PIMS) database, and found differences in performance between defenders and prospectors. Galbraith and Schendel (1983) also concluded, from their study based on a consumer and industrial products database, that performance varied by distinctive strategic postures maintained by their sample firms. Based on their factor and cluster analyses, Galbraith and Schendel identified distinct strategic types of firms leading to their postulation of a strategic taxonomy.

Prescott (1986) also used the PIMS database and analyzed 1638 firms' strategy and performance. Classifying strategy into cost efficiency, asset parsimony and

scale-scope, he found that these variables explained 40% of the variance in firm performance as measured by ROI.

Schoeffler, Buzzell, and Heany (1974) and Schoeffler (1977) also utilized the PIMS database to study a sample of industrial firms and found that corporate strategy and market conditions jointly accounted for 80% of the variance in ROI. In general, most studies using the PIMS database conclude that market share and profitability are causally related (Buzzell et al. 1975). Perhaps the most concerted research program on the relationship between strategy and performance in the manufacturing industry is what has come to be termed as the 'Purdue Studies,' led by Hatten et al. (1978), Schendel and Patton (1978), and others. All these studies attempted to identify *strategic groups* in the U.S. brewing industry and tried to relate firm performance to strategic group membership.

Strategic Groups

The concept of *strategic groups* has been receiving increasing attention in the last decade, as researchers try to understand why and how different sets of firms in a given industry achieve varying performance levels. Simply stated, strategic group refers to a group of firms in an

industry which adopt similar strategies to compete in the market place. In so doing, these firms diverge from other groups of firms in their strategic orientation. Whether such strategic grouping has any bearing on the differing performance levels of firms within an industry has been a matter of interest to strategy researchers, both for its explanatory power as well as predictive utility with regard to firm performance.

Hunt (1972) first coined the term *strategic groups* in departing from the traditional Bain and Mason paradigm, which took a deterministic view of the structure-performance relationship, characteristic of the Industrial Organization researchers. According to this paradigm (Bain, 1956; Mason, 1939), the structure-conduct-performance framework governs an industry's operations. Industry structure was viewed as an inviolable influence on the constituent firms' performance, with very little independent role for conduct (strategy). According to this tradition, since conduct was determined by structure, researchers could directly study the structure-performance relationship without regard to the possible ability of firms to vary their strategic orientation to change their performance levels. Hunt disagreed with this view. In his study of the U.S. home appliance industry in the 1960s, he found different groups

adopting common strategies to compete with other groups, in
an industry characterized by intense rivalry. Hunt labelled
them *strategic groups*. This concept was extended by Newman
(1972) who noted that strategic grouping counters the
possibility of collusion of firms, typically central to the
Industrial Organization view.

A number of subsequent researchers have studied the
concept of strategic groups from a theoretical standpoint
(Porter, 1980) as well as through empirical investigations
(Cool & Schendel, 1987, 1988; Dess & Davis, 1984; Fiegenbaum
& Thomas, 1990; Mascarenhas, 1989; Mascarenhas & Aaker,
1989). Notwithstanding this growing interest in the concept
of strategic groups, research findings on the strategy-
performance relationship are still equivocal.

Problems with strategic group research

Two problems recurring in most research on strategic
groups are of particular interest here. First, despite a
lot of research interest in this area, no systematic
procedure to operationalize the concept of strategic groups
has emerged. The strategic variables that impact
performance vary from industry to industry. As such, an
in-depth knowledge of the industry in which the research on

strategic grouping is being attempted is absolutely
imperative to capture the relevant strategy variables (Cool
& Schendel, 1987; Mascarenhas & Aaker, 1989). Following
this basic assumption, correct as it is, researchers have
focused their work on single industry empirical
investigations in different industries with which they were
most familiar (e.g., Cool & Schendel, 1987, pharmaceuticals;
Mascarenhas & Aaker, 1989, oil drilling; Fiegenbaum and
Thomas, 1990, insurance). In the process of tailoring each
study to the industry in which it is being conducted, no
broad-based consensus has been arrived at on the general
strategic variables that need to be considered in
operationalizing the concept of strategic groups. Normally,
replication of any given research in different settings
should increase the external validity. However, this is
true only if the research findings are consistent across
several studies. If the results are inconsistent, as is
the case in this stream of research, not only is external
validity not established but the very basis of the
research, including the operationalization used, is also
rendered questionable.

Porter (1980) has identified several strategic
dimensions that "capture the possible differences among a
company's strategic options in a given industry" (p. 127):

specialization, brand identification, push versus pull, channel selection, product quality, technological leadership, vertical integration, cost position, service, price policy, leverage, relationship with parent company, and relationship to home and host government. While the industry setting influences the scope of differences along a particular dimension, and other dimensions may be appropriate for particular industries, Porter (1980) is unequivocal in his assertion that these dimensions describe a firm's strategic position.

While acknowledging Porter's (1980) contribution, and that his theory is not tested (Cool & Schendel, 1987), none of the researchers to date have captured all these dimensions in their operationalization of strategic groups. Cool and Schendel have taken into account only specialization, brand identification, push versus pull, channel selection, and technological leadership. Mascarenhas and Aaker (1989) have used specialization, technological leadership, and vertical integration. Fiegenbaum and Thomas (1990) have considered only specialization, cost position, and leverage. Donsimoni and Leoz-Arguelles (1981), Oster (1982), Tassey (1983), and Hergert (1983) have likewise considered only a few of the strategic dimensions identified by Porter. Strategy is a

multi-dimensional concept, impacted as it is by the industry

forces of competitors, substitutes, potential entrants,

buyers, and suppliers (Porter , 1980). Thus, it is

essential that a maximum number of possible dimensions of

strategy should be captured in operationalizing the

construct in any strategy research, if rich dividends are

to be expected. In contrast, extant research has taken

into account less than half of the strategic dimensions

postulated by Porter.

The second problem is the inconsistent support from

empirical investigations of the effect of strategic grouping

on firm performance. Different researchers have used

varied measures of firm performance. While Cool and

Schendel (1987, 1988) and Fiegenbaum and Thomas (1990) have

used market share, weighted market share, and risk-adjusted

measures of these two shares, Mascarenhas and Aaker (1989)

have used return on assets. Strategy research has

generally used, among others, sales growth, return on

investment, return on equity, and return on sales as

measures of performance.

There seems to be a fundamental difference

distinguishing researchers as far as performance measures

used is concerned. The PIMS program treats market share as

a competitive position/strategy factor (Buzzell et al. 1975). While information on return on assets, etc. is available in the database, the PIMS design treats only return on sales and return on investment as the performance measures. Hence, almost all strategy researchers using the PIMS database use these performance measures, though some exceptions do exist such as Dess and Davis (1984) who used annual sales growth and return on total assets. In contrast, as noted earlier, several researchers not using the PIMS database have considered market share and its derivatives as performance measures rather than strategy factors as the PIMS program does.

While many researchers have confirmed the existence of strategic groups in the different industries studied by them, not all of them could establish that some groups were better performers than others. In the absence of such evidence, it has become impossible to understand (much less be able to predict) which strategic variables lead to increased performance.

Strategy-Performance Research in the Hospitality Industry

In the hospitality literature, Schaffer (1986), Dev (1988), Tse (1988), West (1988), and Crawford-Welch (1990)

studied either directly or indirectly the
strategy-performance relationship. West and Anthony (1990)
followed up on West's dissertation work. While Schaffer and
Dev studied the lodging industry, West and Tse studied the
restaurant industry, and Crawford-Welch studied both.
Schaffer, Dev, and Crawford-Welch followed Miles and Snow's
typology to operationalize strategy. West and Tse adopted
Porter's generic strategies. A review of this literature
follows.

Schaffer (1986)

Schaffer's study was aimed at (1) studying the
characteristics of competitive strategies in the lodging
industry, (2) comparing the strategic grouping obtained in
this study with Miles and Snow's (1978) strategic typology,
(3) studying the performance differences between lodging
firms following different strategies, and (4) studying the
strategy-structure match and its impact on firm performance
in the lodging industry. Schaffer drew his sample from the
1984 Directory of Hotel and Motel Systems. He excluded
hotel companies headquartered outside the U. S. and those
firms with hotel units primarily located abroad. Also
excluded were hotel firms which operated less than three
units. According to Schaffer, there were 350 lodging firms

which met these criteria, representing "approximately 35% of the total number of domestic lodging units" (p. 88). This study was based on a final sample of 101 lodging firms.

Of the six hypotheses Schaffer tested, the following are relevant to the present context: "H1: Strategic archetypes corresponding to Defenders, Prospectors, Analyzers, and Reactors will be distinguishable from identifiable groupings of important strategy characteristics" (p. 11); and H5: There are no differences in the performance of organizations that are classified according to their strategic group memberships" (p. 12). In addition, Schaffer's sixth hypothesis tested if the strategy-structure *match* resulted in higher levels of performance.

Schaffer used the self-typing method in which respondents answered a structured questionnaire mailed to them. To operationalize strategy, Schaffer primarily used the instrument developed by Dess and Davis (1984) and added five strategic characteristics "that specifically address factors specified by Miles and Snow (1978) but were not included in ... Dess and Davis' strategic dimensions ... " (p. 106).

Porter (1980) described several strategic dimensions that "usually capture the possible differences among a company's strategic options in a given industry" (p. 127). These dimensions, as described by Porter, are specialization, brand identification, push versus pull, channel selection, product quality, technological leadership, vertical integration, cost position, service, price policy, leverage, relationship with parent company, and relationship to home and host government. According to Porter, firms in any given industry adopt "a number of different though internally consistent combinations of (these) dimensions" (p. 129). Dess and Davis (1984) in their study of the paint industry adopted some of these strategic dimensions articulated by Porter in developing their research instrument to measure the strategic orientations of their respondent firms.

Schaffer compared the 21-item scale of Dess and Davis' (1984) instrument with the strategic characteristics described by Miles and Snow (1978) to identify any missing characteristics not taken into account by Dess and Davis. It is thus that Schaffer's instrument had 26 strategic characteristics as shown in Table 2, the last five of which were the additions made by him to the Dess and Davis' instrument. Schaffer asked the CEOs of respondent firms to

indicate the degree of importance associated by them with
each strategic characteristic in the survey instrument. In
so doing, respondents were asked, "to think of the
organization's pattern of behavior over time rather than
for any specific period" (p. 88), and "to focus their
responses on operations for which the organization has
direct control and profit responsibility, *excluding
franchised operations* (emphasis added)" (p. 88).

Table 2. Strategic Characteristics used in Schaffer's instrument

Strategic Characteristic/Method

01. New Product/Service Development
02. Customer Service
03. Operating Efficiency
04. Product/Service Quality Control
05. Experienced Trained Personnel
06. Maintain Extensive Inventory Levels
07. Competitive Pricing (Price Leadership)
08. Broad Range of Products/Services
09. Developing/Refining Existing Products/Services
10. Brand Name Identification
11. Innovation in Marketing Techniques and Methods
12. Control of Channels of Distribution
13. Procurement of Raw Materials
14. Minimizing the Use of Outside Financing
15. Serving Special Geographic Markets
16. Capability to Produce and Deliver Specialty Products and Services
17. Products or Services in High Price Market Segments
18. Advertising
19. Reputation Within Industry
20. Forecasting Market Growth
21. Innovation in Service Processes
22. A Narrow Product/Market Focus
23. Stability in the Operating Environment
24. Continually Searching for New Market Opportunities
25. Environment Scanning Activities
26. Continual Change in the Operating Environment

Source: Schaffer (1986)

Schaffer used two performance measures in his study:
(1) percentage change in total revenue, and (2) average
percentage of income after property taxes and insurance,
following the example of Hambrick (1983b) and Dess and
Davis (1984), and the normative prescription of Pannell
Kerr Forster (1983) for the lodging industry. The
respondents were asked to consider the 4-year period
1979-'82 and rate their performance on both these measures
on a 5-point interval scale relative to the overall industry
averages.

Following a principal component analysis, a 5-factor
solution, accounting for 47.5% of the total variance, was
found to be the most acceptable. Schaffer labeled these
five factors as Efficiency/Quality Controller,
Prospector-like, Internalized Resource Controller,
Market(ing) Focused Analyzer, and Geographic Focused Price
Leadership, based on the strategic characteristics that
significantly loaded on to each of the factors. Analyzing
the strategic characteristics of each factor, Schaffer
concluded that the Efficiency/Quality Controller strategy
was similar to Miles and Snow's (1978) defender type. He
argued that Market(ing) Focused Analyzer and Geographic
Focused Price Leadership strategies were like those followed
by analyzers, and he equated the Internalized Resource

Controllers to the reactors of Miles and Snow's typology.
Notwithstanding the presence of two distinct types of
analyzers in his classification, Schaffer argued that his
results confirmed the presence of Miles and Snow's
strategic types in the lodging industry.

To test the rest of the hypotheses, the respondent
firms had to be categorized into strategic groups. For
this, Schaffer performed two cluster analyses - one using
the factor scores and another using the raw data. The
objective of doing two cluster analyses was to validate the
cluster solutions by comparing them with each other. After
trying out various combinations of 4-, 5-, and 6-factor
solutions with 4-, 5-, and 6-cluster solutions, a
5-factor/5-cluster solution was chosen as the most
appropriate. Based on an examination of this solution
together with the highest and lowest average factor scores
for each of the clusters, five strategic groups were named:
Do-It-All Differentiators, Internalized Resource
Controllers, Narrow Focused Marketing Innovators,
Efficiency/Quality Controllers, and Geographic Focused Price
Leaders. A similar analysis was done using the raw scores
of the 26-item scale, instead of the factor scores. Though
a 5-cluster solution was accepted in this case as well, the

cluster solution based on factor scores was accepted as the basis for further analysis.

Firms classified as Do-It-All Differentiators were found to be both prospector- and defender-like at the same time. They emphasized "uniqueness and innovation as well as efficiency and quality control" (p. 168). Internalized Resource Controllers were concerned with control of resources and were characterized by an internal focus. Considering that the strategic characteristics of the firms in this group were very unlike any that can be expected in service organizations, Schaffer concluded that they lack a strategic focus and "may well represent the 'reactor' types referred to by Miles and Snow" (p. 169). The Narrow Focused Marketing Innovators exhibited an emphasis on innovative marketing techniques, advertising and so on, but a de-emphasis on quality, cost control and other efficiency factors. The Efficiency/Quality Controllers were those firms which exhibited "defender/cost leadership type of strategy with an aversion toward innovation" (p. 170). Last, Geographic Focused Price Leaders were found to emphasize concentration in limited geographic markets and price leadership with a de-emphasis on both efficiency and innovation. Schaffer concluded these firms were analyzer-like by Miles and Snow's typology.

If one accepts Miles and Snow's (1978) theory, different competitive strategies would be expected to lead to different performance levels. Specifically, defenders, prospectors and analyzers should perform better than reactors. Schaffer used a one-way ANOVA procedure to test whether there were performance differences between his five strategic groups. Contrary to expectations, no statistically significant differences were found in the mean performance measures. As part of his further analysis (the details are omitted here as they are not relevant to the present context), Schaffer divided his respondent firms into four categories: transient hotels, resort hotels, motels with restaurants, and motels without restaurants. A chi-square test established statistically significant differences in strategies popularly employed by these four categories of lodging firms. Schaffer also analyzed the performance differences across the five strategic types in each of these four industry categories. Except in the case of motels with restaurants, no significant differences were found in the mean performance scores of the different competitive strategy types in the three other industry categories. In the case of motels with restaurants, significant differences at less than 0.05 level occurred in three of the five performance scores. Duncan's test indicated that Do-It-All Differentiators had significantly

higher mean performance scores than Narrow Focused

Marketing Innovators in all three instances.

Dev (1988)

Dev's study of 204 U. S. lodging firms was aimed at
investigating the relationship between perceived
environmental uncertainty, business strategy, and financial
performance. The strategic typology used in Dev's study is
also that of Miles and Snow (1978). Unlike Schaffer
(1986), Dev chose his unit of analysis to be the individual
hotel. He drew his sample from a national data base of
25,711 lodging units in the U. S. maintained by Laventhol
and Horwath (which is no longer in existence). Guided to
some extent by the structure of the data base, and a key
consideration of requiring the existence of a top management
team, Dev selected as his sample frame all hotels with 150
or more rooms.

The central hypothesis relevant to the present context
that Dev formulated is that no differences will be found in
the performance of hotels classified according to their
strategy type. He also tested the same hypothesis in two
different environment conditions - stable and volatile.

To operationalize strategy, Dev followed Snow and Hrebiniak (1980) who used descriptive statements to clarify the terms defenders, prospectors, analyzers, and reactors, and asked respondents to choose the strategy which best described their firm's strategic orientation. Dev also used Schaffer's (1986) approach of asking the respondents to rate a set of strategic characteristics, as originally tried by Dess and Davis (1984). In adapting Schaffer's 26-item scale of strategic characteristics, Dev made two significant improvements. Schaffer did not make any changes in his original scale even after the feed back in his pilot test suggested that the respondents did not understand the scale statements in the same way the researcher intended. Dev corrected this mistake by replacing the original statements with the corresponding suggestions made by Schaffer's pilot test respondents. In purifying the scale as above, Dev also detected and eliminated some superfluous statements and ended with a 23-item scale of strategic characteristics as shown in Table 3.

Table 3. Strategic Characteristics used in Dev's Instrument

Strategic Characteristics/Methods

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01. Serving specific markets/segments
02. Controlling sources of business
03. Financial/Cost control
04. Training and development
05. Building reputation of property in the community
06. Monitoring guest satisfaction
07. Providing high service level
08. Quality control
09. Maintaining market leadership
10. New product/service development
11. Maintaining high inventory of food, beverage, and operating supplies
12. Providing many facilities/services
13. Selling at your lowest rate
14. Testing new marketing ideas and methods
15. Serving a variety of customer groups
16. Controlling material/supply sources
17. Using debts (loans) to finance projects
18. Providing special services
19. Trying innovative service ideas/methods
20. Maintaining operational efficiency
21. Searching for new markets/opportunities
22. Keeping track of competition
23. Regular renovation/refurbishment

Source: Dev (1988)

The other important change effected by Dev is with respect to the semantic anchors for the 23-item scale. Dev's pilot test showed that using *not important* and *very important* as the semantic anchors for the strategy characteristics led the respondents to think in terms of *intended* strategies rather than *realized* strategies (Mintzberg, 1978). Intended strategies may not always materialize in which case they become unrealized strategies. On the other hand, a firm may adopt originally unintended strategies as it goes through the process of strategy formulation and implementation. Thus, the strategies finally adopted by some firms may be *emergent* ones which may be different from their *intended* ones (Mintzberg, 1978). If we assume the normative theory that strategy impacts performance to be true, it is only the *realized* strategies, which may be intended or emergent, that we should concentrate on, for it is only strategies that are actually implemented that can affect performance. As such, what Dev observed from his pilot test is a very significant finding affecting instrument construction. Dev corrected the problem by changing the semantic anchors to *not part of strategy* and *key part of strategy* to ensure that respondents indeed considered their realized strategies while responding to his 23-item strategy characteristics scale.

Dev operationalized firm performance by measuring two
financial performance indicators: total sales and income
before fixed charges. To render this information
comparable across diverse properties, Dev computed two
measures as follows:

$$\text{Performance Ratio (PROF)} = \frac{\text{Income before fixed charges}}{\text{Total sales}}$$

$$\text{Sales Per Available Room (SPAR)} = \frac{\text{Total Sales}}{\text{Available Roomnights}}$$

Dev employed a variety of factor analytic and
clustering routines to identify any strategic grouping
underlying the 23-item scale of strategic characteristics.
The objective was, of course, to validate Miles and Snow's
typology with this data. Contrary to Schaffer's (1986)
claim in a similar effort as discussed previously, Dev did
not find any meaningful groupings leading to the conclusion
that the strategy characteristics questionnaire was
"inappropriate for further analysis" (p. 119). As a
consequence, all his further analysis depended on the

self-typing of strategies furnished by the General Managers
of the respondent hotels, based on the descriptions
provided to them of the Miles and Snow's four strategic
types.

One-way ANOVA procedures failed to reject the null
hypothesis that "no difference will be found in the
performance of hotels classified according to their
strategy type" (p. 140). Thus the normative theory that
strategy impacts performance could not be confirmed, much
the same as Schaffer (1986) found in his study. Dev,
however, did find a significant relationship between the
strategy-environment match and performance. An interesting
finding by Dev was that analyzers outperformed both
prospectors and defenders in a volatile environment.

West (1988)

In contrast to Schaffer (1986) and Dev (1988), West
used Porter's (1980) generic strategy typology to study the
relationship between strategy and environmental scanning to
performance.   Unlike the two previous studies which were
set in the lodging industry, West's study was based on
restaurant firms. West used a number of restaurant industry
listings to draw his sample as there is no single source

where the entire industry, including the multitudinous small independents, is listed. His study is based on a final non-random sample of 65 firms with 106 individual responses, including the CEOs and other top management members.

The hypothesis of interest here that West tested is, "High performing firms will espouse at least one generic intended strategy while firms that do not espouse an intended strategy will exhibit low performance" (p. 84). West operationalized strategy through the self-typing method using descriptions of the three generic strategies postulated by Porter (1980). Performance was operationalized by three measures, Return on Sales (ROS), Return on Assets (ROA), and Growth in Unit Sales. For the calculation of ROS and ROA, net operating income before tax and interest was used. All performance data was collected for the 5-year period 1982-1986.

ANOVA procedures indicated that only ROS is significantly affected by strategy, with "firms espousing a differentiation strategy significantly outperform[ing] firms following a focus strategy" (p. 152). Given that only one out of three performance measures was found to be significantly affected by strategy and, more importantly,

that firms not following any of Porter's generic strategies outperformed those following the focus strategy on all three performance measures and even those following differentiation and low cost strategies in Growth of Unit Sales, West was forced to conclude that his hypothesis should be rejected. Strategy, evidently, seemed to have no affect on performance in this study too.

Tse (1988)

Tse's study of the strategy-structure-performance relationship paralleled West's (1988) research. In fact, the survey instrument was common for both these studies. The operationalization of strategy and performance was also the same. Tse got responses from 91 restaurant firms. To test the strategy-performance relationship, Tse departed from West in the statistical methods used. Instead of using ANOVA, Tse adopted the chi-square test by dividing the firms into high, medium and low performers based on each of the performance measures. However, her results were identical to West's in that only ROS showed a significant variation by strategy. Tse concluded that they "were inconclusive as to support the relationship between strategy and performance" (p. 124).

Crawford-Welch (1990)

Among the various research objectives of
Crawford-Welch's study, the one which is relevant here is:
"to determine if there exist any significant differences in
the level of performance of hospitality organizations
grouped according to type of business strategy" (p. 36).
Crawford-Welch tried to combine the efforts of Schaffer
(1986) and Dev (1988) on the one hand in studying the
lodging industry, and West (1988) and Tse (1988) on the
other in studying the restaurant industry. His samples
from both these segments were drawn from similar sources
relied on by the previous four researchers. However,
Crawford-Welch got only 30 responses from lodging
establishments and 116 responses from the restaurant
industry.

To operationalize strategy, Crawford-Welch also relied
on a self-typing method. He, however, combined the
approaches of Dev (1988) and Schaffer (1986) by using both
descriptor statements of Miles and Snow's (1978) strategic
typology as well as a 23-item scale of strategic
characteristics. Performance was operationalized by ROS,

ROA, and Growth in Unit Sales as West (1988) and Tse (1988) have done.

Factor analytic and clustering routines led Crawford-Welch to conclude the following:

(1) Factor analysis resulted in only two meaningful factors conforming to Miles and Snow's (1978) descriptions of defenders and prospectors. Thus, it was opined that this typology has limited applicability to the hospitality industry.

(2) While a few significant differences were found between low and high performers, these were more in terms of individual strategic characteristics rather than in clusters of these characteristics which alone would have indicated differences in strategies as a whole. Crawford-Welch concluded: "When firms were classified as either high or low performers according to return on sales, return on assets, and growth in unit sales, there was a high level of consensus in terms of the distinguishing strategic attributes of the cluster" (p. 374).

West and Anthony (1990)

West and Anthony followed up on West's (1988) work to
study the performance differences between strategic
groupings of firms in the restaurant industry. They used
Dess and Davis' (1984) 21-item scale of strategic
characteristics to operationalize strategy. Six strategic
groups were identified through factor and cluster analyses
of the scale responses from the same sample used by West,
reflecting five underlying strategic factors - focused
efficiency, product/service innovation and development,
image management, focused differentiation, and control.
The sixth cluster was found to consist of firms with no
apparent strategy. West and Anthony also discovered
significant performance differences between the strategic
groups. Product/service innovation and focus strategies
were found to result in a significantly higher performance
in ROS than focused differentiation or control. Firms
relying on product/service innovation significantly
outperformed firms emphasizing focused differentiation or
no apparent strategy, as measured by ROA.

Discussion

It is evident from the literature that strategy research in the hospitality industry has not progressed far in the past six years. Looking at the conflicting results obtained in the different studies by Schaffer (1986), Dev (1988), Tse (1988), West (1988), Crawford-Welch (1990) and West and Anthony (1990), in fact, we seem to have come a full circle and reached the same point we were prior to Schaffer's work. This disillusioning fact is reflected in Tse's conclusion that "perhaps Porter's generic strategies cannot be extended to the service industry and may not be appropriate in examining the variation in firm performance in the restaurant industry" (p. 124). Crawford-Welch (1990) echoed this view, "In sum, it appears that the Miles and Snow (1978) strategic typology has limited applicability in the context of the hospitality industry" (p. 384).

The fact that neither of the two most popularly researched strategic typologies were found to be applicable in the hospitality industry raises some very fundamental questions and concerns. Are these typologies really not suitable to this industry, or are we not testing them properly? Are we operationalizing the strategy and performance constructs, and measuring the variables

involved, correctly in the first place? The big question, of course, is where do we go from here? In order to answer that, we must consider the possible reasons behind the inability of extant research to lead us in the intended direction. On close examination, it seems that the limited strategy research undertaken so far in this industry has failed to reckon with several imperfections. Understanding and correcting these imperfections should get us back on the road again. In the following section, some of the problems with the extant hospitality strategy research are discussed.

Where did we go wrong?

Broadly speaking, the imperfections in the past research in hospitality strategy can be viewed at two levels, the conceptual and the methodological. The former level refers to the definition of the construct of strategy itself, the unit of analysis, and the operationalization of the constructs of strategy and performance. The latter refers to the choice of statistical techniques, and the methods used to measure the variables under investigation. Each of these issues is dealt with hereafter.

Conceptual Problems

Intended vs. realized strategy.

At the outset, exception can be taken to the very conceptualization of business strategy itself in most of the reviewed studies. With the exception of Dev (1988), all the other studies measured *intended* strategies rather than *realized* strategies. It has been argued earlier that it is only the realized strategies which matter in any investigation of the strategy-performance link. It is obvious that most of these studies have failed to conceptualize the strategy construct correctly. It is only Dev (1988) who took pains to attend to this problem when he corrected the semantic anchors of the strategy characteristics scale after his pretest. The realization of this problem with the conceptualization of the strategy construct is succinctly summed up by West and Anthony, "Future research should be directed toward examining the realized strategy/performance relationship and the variables affecting it" (p. 264).

A related problem concerns strategy implementation. West and Anthony (1990) stated, "This study addressed intended strategy and possessed no means to ascertain if

firms were capable of actually implementing strategies they espoused. The within-group differences of the various strategic clusters is largely unexplained since environmental scanning explained only 8% of the variance in ROS and only 9% in ROA. The ability to implement intended strategy might explain much within group variance" (p. 263). West and Anthony further commented, "While it has been established that there are differences between members of the same strategic group in the food service industry, not much attention has been directed toward discovering conditions which may account for these differences such as implementation of chosen strategy by food service firms" (p. 264). In fact, "the ability of the firm to execute or implement its chosen strategy in an operational sense" (p. 142) is an important factor which determines the profitability of a firm within a strategic group (Porter, 1980).

While, admittedly, all these studies were concerned with the content of strategy rather than the process of strategy formulation and implementation, the researchers should have taken into account this very important theoretical consideration that variation in implementation can change the effect of an intended strategy. Once again, if realized strategy had been measured, this problem would

not have been relevant as realized strategy accounts for imperfections in implementation.

Unit of analysis.

Another conceptual problem in the extant research concerns the unit of analysis adopted. Once again, with the exception of Dev (1988), the unit of analysis adopted by the other researchers was the firm, multi-unit in some cases (Schaffer, 1986) and not necessarily so in others (Crawford-Welch, 1990; Tse, 1988; West, 1988). In contrast, Dev studied individual hotels as strategic business units. In the absence of due consideration to the unit of analysis, Schaffer, Tse, and West, in fact, measured corporate-level strategy and not business-level strategy as they presumed, because their samples included many multi-unit firms.

In such multi-unit firms, the individual business units face varying environments, in terms of demand and supply situation, competitive threats, availability of labor and operating supplies, taxation, etc. Consequently, the strategies of these business units have to be necessarily different in their effort to align themselves with their respective environments. In such a situation, there can be

no single business strategy that can be articulated by the
multi-unit firms as being common to all their constituent
units. This is what these past researchers tried to
measure, which clearly is not appropriate.

Literature is replete with the distinctions between
these two levels of strategies (reviewed in an earlier
section herein) and not taking these distinctions into
account may have caused some of the inconsistent results.
The seriousness of this problem will be all the more clear
when the performance measurement issues are discussed in a
subsequent section herein.

Operationalization of strategy.

To operationalize strategy, these researchers have
followed one or both of these approaches: (1) responses to
set descriptions of the strategic typology employed were
solicited, and/or (2) responses on the appropriateness of a
number of strategic characteristics were obtained which
were then analyzed through factor analysis and clustering
techniques. While all the studies had a pretest built into
them, the strategic characteristics used to identify the
strategies were not generated from ground up. Instead,
these researchers borrowed the scale developed by Dess and

Davis (1984) and made a few modifications before using it, if at all. Whether these characteristics are appropriate to the context of their research studies has not been paid as much attention as was necessary, thereby affecting the construct validity of the strategy scale.

The goods-services dichotomy.

In contrast to the exhortations of Miles and Snow (1978) and Porter (1980) that their strategic typologies are so generic that they can be used in any and all industries, other literature in the services sector raises doubts about this universal claim. Whether theories developed in the manufacturing sector are applicable to the service industries remains a moot point till today and is the subject of a regular debate between academicians on each side of this dichotomy. Zeithaml et al. (1985, 1990), Barrington and Olsen (1987), Parasuraman et al. (1988), and Grönroos (1990), among many other researchers, have highlighted the differences between goods and services.

There is universal agreement, at least among the researchers in the service sector, that goods and services are significantly different on four accounts: intangibility, inseparability, heterogeneity, and

perishability. Services are intangible because they are performed rather than produced, and cannot be seen, felt, tasted, or touched. Production and consumption are inseparable in the case of services because in most services they are simultaneous. As a result, services are perishable because they cannot be produced and stored for later consumption. Because of the high degree of interaction involved between the service provider and the consumer, and the high degree of personal involvement of both in the service delivery process, services are heterogeneous in contrast to goods.

Service management perspectives.

These significant differences between goods and services are reasons enough to question whether strategies developed and tested in the manufacturing sector are equally applicable in the service sector. Service management theorists believe that, in fact, such borrowing of strategies from the manufacturing sector to test in service settings is not likely to work. Grönroos (1990), for example, argued that trying to become cost-efficient by employing more technology and self-service concepts and reducing personnel, will not work in the service sector. He drew a distinction between *internal efficiency* and *external*

efficiency - the former referring to "the way the firm
operates and the productivity of labor and capital" (p. 95),
and the latter referring to "the way the customers perceive
the operations and the output of the firm" (p. 95).
Grönroos persuasively argued that trying to achieve internal
efficiency will mostly lower external efficiency in service
industries and result in what he labelled as the *strategic
management trap*, which is a vicious circle of greater
internal efficiency and lower service quality feeding on
each other. Thus, it may be argued that strategies like
overall cost leadership (Porter, 1980) aimed at achieving
high cost efficiencies may not work in a service setting
like the hospitality industry.

Similarly, differentiation may be difficult to be
sustained in a service industry setting because competition
can and does quickly copy any such efforts. Very few
efforts towards differentiation in service industries give
sustainable advantages to the pioneer firm over a long term.
There may be some exceptions such as the high-tech, high-
cost reservation systems being designed by some of the
lodging chains in collaboration with other travel industry
partners. Such differentiation attempts are indeed
difficult to be imitated by one and all. But, such examples
are by far too few and in between.

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Buzzell and Gale (1987) and Grönroos also stated that it is the customer perceived service quality that is extremely important for service firms' success. Building on this, Grönroos presented a number of strategic characteristics for service firms to improve customer perceived quality and, consequently, performance. Zeithaml et al. (1985), reviewing service marketing strategy literature, consolidated a list of successful strategies prescribed by various researchers.

Parasuraman, Zeithaml, and Berry (1988) extended this thinking by constructing a scale to measure service quality. Defining service quality as the difference between customer expectations from/about a service and customer perceptions of the quality of service actually received, Parasuraman et al. developed and tested their SERVQUAL instrument. Their investigations resulted in the delineation of five distinct service quality dimensions: tangibles, reliability, responsiveness, assurance, and empathy. Zeithaml, Parasuraman, and Berry (1990) then used this SERVQUAL instrument to assess the differences between customers' ratings of service quality and managerial perceptions of the service quality being delivered. They found significant differences between the service quality ratings of management and customers. Zeithaml et al. captured these

differences in a service-quality-gap model, which identified
four service quality gaps: Customers' Expectations-
Management Perceptions Gap, Management's Perceptions-Service
Quality Specifications Gap, Service Quality Specifications-
Service Delivery Gap, and Service Delivery-External
Communications Gap. The cumulative effects of these four
gaps, Zeithaml et al. posited, create Gap 5 which is the
difference between the Customers' Expected Service and
Perceived Service, which is what Parasuraman et al.'s
SERVQUAL instrument is intended to measure.

It is well known that in the hospitality industry,
product differentiation is becoming increasingly difficult.
For all practical purposes, there is hardly any difference
between lodging products within a given price range and
offering generally similar levels of service. Therefore, it
seems all the more important for the lodging industry
constituents to look for that niche, each of them so
desperately needs to effectively compete, in differentiating
on service quality, improving customer perceived quality,
and thereby reducing the gap between the customer
expectations and perceptions of service quality. The
service management researchers believe, it is only such
strategies aimed at enhancing customer perceived quality
which will enable a firm to succeed.

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Problems with Dess and Davis' instrument.

By using the Dess and Davis (1984) instrument to measure strategy, hospitality researchers have not given adequate attention to this issue of the differences between the manufacturing and service sectors. The inconclusive results they obtained in their studies only tend to strengthen the argument that probably the Dess and Davis instrument is not entirely suitable for hospitality strategy research. Strategic group researchers are in agreement that the strategic variables that impact performance vary from industry to industry (Cool & Schendel, 1987; Mascarenhas & Aaker, 1989). Hospitality strategy researchers have not adequately addressed this issue. To this extent, some of the factor solutions of strategic characteristics expounded by these researchers are more methodological artifacts rather than credible discoveries. For instance, one of the strategic factors identified by Schaffer (1986) is what he labeled as *internalized resource controllers*. Discussing this factor, Schaffer states, "this appears to be an odd strategic profile for firms operating in a service industry. Emphasis on channels of distribution, raw material purchases and inventory levels may be critical in manufacturing but do

not seem to be the type of strategic issues that would be of high importance to service organizations. This peculiar competitive strategy profile may be indicative of firms in this industry that lack an appropriate strategic focus. They may well represent the 'reactor' types referred to by Miles and Snow" (p. 169). On the contrary, channels of distribution are extremely important to the lodging industry. That raw material purchases, etc. are not appropriate strategic issues in the context of the lodging industry should be a priori knowledge. Why were such strategic characteristics, which may have been relevant to Dess and Davis (1984) in the context of their study set in the manufacturing sector, included in the first place by Schaffer in his study? Including such obviously extraneous characteristics such as emphasis on raw material purchases and inventory levels in a study of lodging, and then equating them with Miles and Snow's (1978) reactors, is of no help in trying to establish the applicability of this typology to the hospitality industry.

A second issue related to the Dess and Davis (1984) instrument is that it, too, was based on only a limited set of strategic dimensions articulated by Porter (1980), as is the case with most other strategic group research. According to Dess and Davis, of the 13 strategic dimensions

enunciated by Porter, they used six: brand identification, channel selection, technological leadership, cost position, service and leverage. To the extent that (1) the rest of Porter's strategic dimensions have not been considered by Dess and Davis (1984), and (2) some of those dimensions left out, viz., specialization, push vs pull, vertical integration, price policy, product quality, relationship with parent company, and relationship to home and host government, may be particularly significant to service industries in general and the hospitality industry in particular. Relying exclusively on Dess and Davis' instrument is clearly fraught with problems. Besides, none of the extant hospitality strategy research has also questioned and validated whether the strategic characteristics developed by Dess and Davis (1984) are collectively exhaustive in describing even the six strategic dimensions upon which they concentrated. Finally, there still remains the question whether Porter himself has identified all the strategic dimensions possible in the first instance.

Dev (1988) sums up these apprehensions aptly thus: "Is it realistic to hope that the essence of a multidimensional and complex construct [strategy] can be tapped through the analysis of responses on a few characteristics? To

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adequately tap the construct, how many characteristics are appropriate? Were the characteristics used, drawn from the literature, appropriate for the analysis?" (p. 162). The answer seems to be in the negative, based on the results of the hospitality strategy research studies conducted thus far.

Operationalization of performance.

Operationalization of performance is also a problem in the extant research. There are really several issues involved here. First, are financial performance measures adequate to capture the essence of organizational effectiveness? What is wrong with hotel firms – particularly in the early years of their life cycle – concentrating on customer service and guest satisfaction even at the expense of financial performance? Such performance criteria correspond to what Anderson (1982) categorized under behavioral theories of organizational performance.

Second, are the financial performance measures used in extant research the right ones? If maximization of shareholder wealth is the ultimate objective of any good management, and if investors evaluate firms on this basis,

it would logically follow that return on investment (ROI) would be the most appropriate financial performance measure. Accounting measures such as ROA do not capture the essence of this evaluation at all. A firm may plow back the bulk of its cash flow into asset expansion and thereby show depressed profits and ROA. However, its long-term rate of return may in fact prove to be excellent. Thus, relying on short-term oriented accounting measures is not appropriate in evaluating a firm's performance. Further, none of the researchers have considered risk-adjustment of their financial performance measures, which is imperative if a realistic assessment of performance is desired.

Third, some performance measures may be conflicting with each other. Though market share has not been used as a performance measure in the research studies being discussed here, it is well known that market share and profitability are conflicting performance goals at least in the short-term. In general, growth and profitability could be conflicting performance criteria and different firms following a similar strategy may choose one or the other of these as their objective. This would increase the within-group differences in performance depending upon the measure used, and between-group performance differences will

fail to be proven in such a situation. This may well be the case in these studies under discussion.

Growth in unit sales is one of the performance measures used by all the researchers except Dev (1988). In the hospitality industry, particularly in the lodging sector, growth of a firm mostly comes from extending the distribution, i.e., increasing the number of units, rather than from improvement in same-unit sales. In fact, it is for this reason that many hospitality firms are multiplying their units. Growth in unit sales, which measures most closely the increase in same-store sales, is thus not the right measure of performance for this industry.

Methodological Problems

Performance-unit of analysis.

Apart from some of these conceptual level problems, the past research is also beset with some methodological problems. The most important of these is a unique performance measurement problem in all the studies, with the exception of Dev (1988), because of the unit of analysis adopted. Schaffer (1986), Tse (1988), and West (1988), chose the firm as their unit of analysis. With

franchising being a popular strategy for growth and profitability in this industry, the samples in each of these studies had varying proportions of franchised and owned operations. The single-unit firms would have all been independently owned, whereas the multi-unit firms definitely had an assortment of owned and franchised properties. Comparing performance across such samples, with the measures used, is impossible. The single-unit firms would have reported their total assets and revenues as performance measures. But in the case of multi-unit part-franchised firms, part of the revenues would have been just franchising fees and not the actual revenues of the business units involved. Likewise, reporting of assets by such firms would also be depressed because franchisee assets are not reflected in their books. In such a scenario, comparing, say, ROA of all the firms is clearly methodologically incorrect. Hospitality strategy research definitely cannot copy the performance measures used in the manufacturing sector because of this peculiar nature of the industry.

Strategy-unit of analysis.

As a corollary to the above problem posed by the industry structure - varying proportions of owned and

franchised operations - except for Dev (1988), all the
other studies had a built-in problem in the measurement of
strategy. Schaffer (1986), for instance, asked his
respondents to focus their responses on operations for
which the organization had direct control and profit
responsibility, *excluding franchised operations* (emphasis
added). To expect any respondent to fulfill this task is
being very optimistic. West (1988) and Tse (1988) did not
specify any such guidelines to the respondents. However,
their respondents, too, would have mixed up owned and
franchised units in their minds while answering the survey
instrument. As a result, the responses to the strategy
characteristics scale may not have been comparable at all
in any of these studies because a high degree of
interpretative bias has been built into the questions.

Validity issues.

Further, while some of the researchers claimed using
multi-method measurements to improve the construct
validity, in fact, they did not fully analyze the data in
the manner prescribed by Campbell and Fiske (1959) and
Churchill (1979) as far as the strategy construct is
concerned. Dev (1988) could not have attempted this
because he could not factorize his strategic

characteristics. Schaffer (1986) did not use a multi-method measurement approach at all as far as the strategy construct is concerned. West (1988) and Tse (1988) did design their instrument to suit this purpose but did not follow through in their analysis. As a result, none of the researchers established the construct validity of their scales for measuring strategy.

Statistical techniques.

Another methodological problem is that, in a number of cases, ANOVA procedures were used when MANOVA procedures were appropriate, considering the multicollinearity existing between the performance variables. This would have affected the power of the tests as well as the results.

The foregoing discussion highlights some of the major flaws in extant hospitality strategy research. Though not central to the current study, it may be appropriate to present here a brief critique of the contingency research in hospitality strategy research before ending this literature review, so that future hospitality strategy researchers may address the issues raised.

Contingency Research in the Hospitality Industry

Contingency Variables

Harvey (1982) observed that the contingency approach to
strategy implies that, a unique strategy exists for a given
set of organizational and environmental conditions. At the
heart of the contingency theory is the presumption that
there is no one best way to organize, and that varying
conditions require different ways of organizing for an
enterprise to be successful (Galbraith, 1973). There is a
general agreement today that to be successful an
organization's strategy must be aligned with several
contingent variables, the most important of which are
environment, life cycle stage, technology, and structure.
In the hospitality field, very limited research has been
attempted so far in examining the relationships between
strategy and these four contingency variables, and the
impact of such relationships on firm performance. While
Dev (1988), West (1988), and Crawford- Welch (1990) studied
the strategy-environment-performance linkage, Tse (1988)
studied the strategy-structure-performance relationship. No

empirical work exists on the relationship of strategy and
life cycle stage or technology.

Following the earlier arguments that a fresh start is
needed in the strategy-performance research because of the
faulty conceptualization and operationalization of these two
constructs in the extant research, it is imperative that
research in the relationship of strategy and the four
contingency variables and its effect on performance, also
be re-examined. In the case of technology and life cycle
stage, such research will, of course, be new as there are
no empirical investigations of these variables in the
hospitality strategy research till date.

The Concept of Fit

While doing such a re-examination of the relationships
between strategy and the four contingency variables
mentioned above, strategy researchers must delineate the
type of contingency relationship they anticipate or
hypothesize in each case. Venkatraman (1989b) observed that
phrases such as *contingent upon* are imprecisely used in
research, without any consideration for the isomorphous
relationship between the conceptualization of such a
contingency and the analytical framework used to confirm

it. Venkatraman posited that there is a fixed relationship between a given contingency conceptualization and how it is measured. For example, a contingency relationship espoused as a *moderation* effect cannot be tested with an analytical framework that actually measures a *mediation* effect. The problem with the earlier research in this area is that the type of contingency relationship being studied is not carefully delineated. As a result, the analytical evaluations have not been consistent with the real (possible) contingency relationships. This might explain the conflicting results obtained so far in extant research. Though Venkatraman exclusively dealt with the strategic *fit* between environment and strategy as the starting point for his exposition on different perspectives of fit, the same arguments and theoretical perspectives can be applied to the contingency relationships between strategy and life cycle stage, technology, and structure as well, in their impact on firm performance.

Multiple perspectives.

Venkatraman (1989b) identified six different perspectives of fit: moderation, mediation, matching, gestalts, profile deviation, and covariation. Of these, only moderation, mediation, and matching could be

considered as alternative perspectives for most research questions involving the fit between only two concepts. In the moderation perspective, an *interaction* between two supposedly related variables which predict a criterion variable is assumed (Schoonhoven, 1981). The mediation perspective confirms the presence of an intervening factor which "accounts for a significant proportion of the relation between the predictor and criterion" (Venkatraman, 1989b, p. 429). In the matching perspective, the relationship between the predictor variables is specified without regard to the criterion variable. Each of these perspectives demands different analytical techniques to test the fit between the contingent variables (Venkatraman, 1989b).

In hospitality research, no consideration has so far been paid to these different contingency perspectives and the appropriateness of the analytical techniques used to test the bivariate fits. The predominant use of ANOVA procedures presumes a *moderation* effect of the contingency variables, whereas, in fact, no theoretical support has been provided by any of the researchers for such a presumption. When the contingency research in this field is revisited, as argued previously, Venkatraman's (1989b) exhortations need to be taken into account.

Further, even the limited hospitality research in the contingency relationship of strategy with other variables has examined only a bivariate fit. Also, only covariational relationships between these variables have been examined so far, and no causal modeling has been attempted. On the contrary, strategy, life cycle stage, environment, structure, and technology are all intricately related to each other. It is only a complex co-alignment of all these variables together that can result in effective firm performance. As such, future research should experiment complex causal models relating all the five variables to study their combined effect on firm performance. When we do that, the other three perspectives of fit - gestalts, profile deviation, and covariation - articulated by Venkatraman (1989b) will have to be taken into account, as these perspectives address multivariate fits in contingency relationships between several concepts.

Summary and Conclusion

This chapter has reviewed the theoretical underpinnings of the strategy-performance relationship. The individual constructs involved have been examined conceptually. In particular, the different approaches to the measurement of strategy have been discussed. Empirical research till date

on strategic grouping, both in the manufacturing and hospitality industries, has been discussed in detail. The possible reasons for the inconclusive results so far of the studies on the strategy-performance relationship have been expounded. There is clear evidence that a more eclectic approach to the measurement of the strategy construct, using a broader set of underlying strategic dimensions is necessary. More specifically, if strategy research in the hospitality industry is to be fruitful, industry-specific strategic characteristics have to be identified to operationalize the strategy construct. It is only then that the relationship between strategy and performance can be studied in this setting. The main objective of this research is to develop such an instrument to measure lodging strategy and study its relationship to performance.

Chapter 3

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Introduction

The preceding chapters identified the purpose and objectives of this research study, i. e., the development of a lodging industry-specific instrument to measure the construct of strategy and studying the relationship between strategy and performance in this industry. This chapter lays down the research procedures used in this study. The research propositions studied, operationalization of the constructs of strategy and performance, unit of analysis adopted, measurement issues, strategy scale development, sampling and data collection methods, statistical techniques used in data analysis, and reliability and validity issues are the focus of this chapter.

Objectives of the Study

Venkatraman (1989a) based his study of the strategy construct on three premises:

1. Strategy research within a 'variance' perspective requires valid measures.
2. The search for a universal conceptualization of strategy is futile.

3. Construct measurement is at least as important as examination of substantive relationships.

Keeping in view the state of the art of strategy research in the hospitality industry, the last two premises stated above have, in particular, influenced the formulation of this research study. First, as Venkatraman stated, "... it is premature to restrict the number and diversity of approaches to conceptualize the strategy construct" (p. 945). From the literature review presented in the previous chapter, it appears that at the current stage in hospitality strategy research, a wide-ranging set of strategic characteristics with a variety of underlying dimensions should be employed to capture the strategy construct. Second, there is evidence to show from the literature review that more than justified adequacy of construct measurements has been assumed in past hospitality strategy research. In view of the inconclusiveness of results obtained thus far, it appears that more attention needs to be paid to the measurement of the strategy construct, in particular, in future research. As Venkatraman put it, "it is necessary to recognize that construct measurement is at least as important as the examination of substantive relationships" (p. 945).

Thus, the principal objective of this investigation was to develop an instrument to measure the strategy construct in the lodging industry context and to test the relationship of the strategy construct so captured to firm performance. At the heart of such an investigation is the notion that lodging units can improve their performance by exercising judicious strategic choice, as propounded by Child (1972).

This study adopted the comparative approach to the measurement of strategy discussed in the previous chapter, which attempts to identify and measure the key dimensions of the strategy construct (Venkatraman, 1989a). It is an approach used by other strategy researchers in the past (Dess & Davis, 1984; Hambrick, 1983a). The expectation was that by capturing a wide variety of strategic characteristics from varied strategic dimensions drawn from the manufacturing as well as service industry settings, it is possible to arrive at an appropriate instrument to measure strategy in the lodging industry context, and that it is possible from this to identify successful and unsuccessful strategies in the lodging industry. It is hoped that lodging firms can and will benefit from such an understanding of the performance implications of different strategies.

Conceptual Framework

Before discussing the methodological issues such as operationalization of the constructs and statistical techniques used to test the relationship between the variables, it is appropriate that the theoretical underpinnings and limitations of hospitality research in this area till date are revisited briefly. The objective of this is to contribute to the knowledge accrual process, by striking the right balance between replication and triangulation (McGrath, Martin, & Kulka, 1982).

Organizations are able to define and manipulate their domain and choose appropriate strategies matching their respective positions in the environment. Several researchers contribute to this notion of strategic choice (Child, 1972; Cyert & March, 1963; Hofer, 1975; Hofer & Schendel, 1978; Porter, 1980). Though certain generic strategic typologies, notably those proposed by Miles and Snow (1978) and Porter, have gained wide acceptance by strategy researchers, the concept of unique (industry-specific) strategic groups has been equally popular ever since Hunt (1972) first coined the term. A strategic group refers to a group of firms in an industry adopting similar strategies to compete in the market place.

The last decade has witnessed considerable research
effort on the relationship between organizational
performance and strategic group membership. It is now
generally accepted that the strategic variables impacting
performance differ from industry to industry (Cool &
Schendel, 1987; Mascarenhas & Aaker, 1989). Thus, most of
the research in this area is industry-specific. The
empirical evidence till date on the relationship between
strategic group membership and performance has been
inconclusive.

Porter (1980) identified 13 strategic dimensions
characterizing firms' strategic options in a given industry:
specialization, brand identification, push versus pull,
channel selection, product quality, technological
leadership, vertical integration, cost position, service,
price policy, leverage, relationship with parent company,
and relationship to home and host government. While
acknowledging Porter's contribution, and that his theory is
not tested (Cool & Schendel, 1987), none of the researchers
till date tried to operationalize all these dimensions in
identifying strategic groups, which may possibly be one of
the reasons why research in this area has been so
inconclusive. Whetten's (1989) advice about theory
development seems to be appropriate to note here: "When

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authors begin to map out the conceptual landscape of a topic they should err in favor of including too many factors, recognizing that over time their ideas will be refined. It is generally easier to delete unnecessary or invalid elements than it is to justify addition. However, this should not be interpreted as license to throw in the kitchen sink" (p. 490).

As in the case of research on strategic grouping in the manufacturing industry, similar research in the hospitality industry, limited as it has been so far, has also been inconclusive. Dev's (1988) data did not yield any strategic groups at all, whereas Schaffer (1986), Tse (1988), West (1988), and Crawford-Welch (1990) failed to confirm the strategy-performance relationship from their respective data. These researchers' work seems to be fraught with some conceptual as well as methodological limitations which may possibly account for their inconclusive results.

The conceptual limitations of the above cited research can be identified in some of their (1) definitions of the strategy construct, (2) unit of analysis adopted, and (3) operationalization of the strategy and performance constructs. The methodological limitations seem to be in the (1) methods used to measure the variables, and (2)

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choice of statistical techniques used. These issues have
been more fully discussed in the preceding chapter.

The present study tried to compensate for some of the
limitations in earlier research in its attempt to contribute
to the knowledge accrual process.

Unit of Analysis

Strategy literature distinguishes between corporate-
level, business-level, and functional-level strategies, as
discussed in the preceding chapter. The strategic
typologies of Miles and Snow (1978) and Porter (1980), which
formed the basis of all the hospitality strategy research to
date, are primarily business-level strategies. However,
with the exception of Dev (1988), the unit of analysis
adopted by the other hospitality researchers was the firm.
In Schaffer's (1986) research, all the firms were multi-
unit; whereas in the studies of Tse (1988), West (1988), and
Crawford-Welch (1990), many firms were so. There is either
a difference of opinion on the choice of the unit of
analysis or an oversight of the implications of such a
choice among these researchers. In multi-unit lodging
firms, the individual hotels face varying environments, in
terms of demand and supply situation, competitive threats,

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availability of labor and operating supplies, taxation, and so on. As a consequence, each hotel of a multi-unit firm has to adapt its strategies in alignment with the environment in which it operates. Location, type of property, etc. necessitate variations in strategy. Hence, measuring strategy at the firm level instead of at the individual hotel level is clearly inappropriate when the theoretical underpinnings are rooted in business-level strategy. Dev alone took notice of this and used the individual hotel as the unit of analysis. The current study followed Dev's approach and treated each hotel establishment as a different unit.

Operational Definitions: Key Variables

Business Strategy

The business-level or competitive strategy is concerned with domain navigation issues (Bourgeois, 1980) of how to compete within a chosen product/market segment, with resource allocation and integration of different functional strategies of the organization being the focus issues. There is no universally accepted definition of strategy. As a result, strategy has been measured by various researchers

using a variety of measures, including nominal, single-item, and multi-item scales.

In hospitality strategy research, nominal scales using either Miles and Snow's (1978) or Porter's (1980) typology descriptions, or multi-item scales adapted from Dess and Davis (1984) have been the two measurement approaches. When within-group differences are predominant, as seems to be the case from the strategic grouping research till date, using nominal scales which are only useful for highlighting across-group differences is not preferable. Such growing concerns for validity have prompted many strategy researchers to adopt multi-item scales of strategy (Venkatraman & Grant, 1986).

Most of the hospitality strategy researchers using multi-item scales for measuring strategy have asked the CEOs of the respondent business units as well as one or two other top management members of such units to indicate the degree to which a number of strategic characteristics, which constituted the items of the scale used, were important to or characterized the strategy of the business unit.

In this study, a multi-item scale of strategic characteristics was used to capture the strategy construct.

However, only the General Managers of the hotels were asked to respond. This is considered preferable for two reasons. First, the general manager of a hotel is expected to be the person who knows best which strategies are to be / being employed. Second, many a time, the strategy of a business unit is not even fully articulated and it is this researcher's view that it is only the GM of the unit who really knows what s/he is trying to do. It may also be noted that in the previous research studies, only a small proportion of the respondent firms have returned multiple responses. So, sending more than one questionnaire to each hotel is felt to be a wasteful exercise.

As discussed in the preceding chapter, intended but unrealized strategies cannot possibly have any performance implications. So, it is only the realized - intended or emergent - strategies (Mintzberg, 1978) that one should study if the strategy-performance relationship is to be tested. This study followed Dev's approach in the instrument design to ensure that only realized strategy is tapped.

Snow and Hambrick (1980) discussed the advantages and disadvantages of four different approaches to the measurement of strategy: investigator inference, self-

typing, external assessment, and objective indicators. Snow
and Hambrick favored the self-typing method of measuring
strategy because they felt it is the management of a
business unit which is in the best position to articulate
the strategies employed by the business unit, and also
because self-typing allows large sample investigations
making it also cost-effective. Other strategy researchers
have since preferred the use of the self-typing method of
strategy measurement (Dess & Davis, 1984; Venkatraman,
1989a). Therefore, the self-typing method was used in this
study to tap the strategies employed by the respondent
hotels.

Performance

As in the case of measurement of strategy, strategic
performance measurement is also a controversial subject with
little agreement among researchers (Cameron & Whetten,
1983). Woo and Willard (1983) reported 14 separate measures
of performance based on a survey of performance measures
used in strategy research: Return on Investment, Return on
Sales, Growth in Revenues, Cash Flow/Investment, Market
Share, Market Share Gain, Product Quality Relative to
Competitors, Product R & D, Process R & D, Variations in
ROI, Percentage Point Change in ROI, and Percentage Point

Change in Cash Flow/Investment. A factor analysis of these
14 variables using the PIMS database yielded four factors:
profitability, relative market position, change in
profitability and cash flow, and growth in sales and market
share, with profitability emerging as the dominant factor.
Woo and Willard concluded that return on investment and
return on sales were the more important performance
measures.

Venkatraman and Ramanujam (1986) stated that "'business
performance,' which reflects the perspective of strategic
management, is a subset of the overall concept of
organizational effectiveness" (p. 803). They viewed the
domain of business performance at three levels: financial
performance, financial + operational performance, and
organizational effectiveness. Reviewing the measurement of
business performance in strategy research, Venkatraman and
Ramanujam concluded that "most strategy studies have
restricted their focus to the first two [levels]" (p. 804).

Performance measurement in hospitality strategy
research poses some unique problems. With most firms in
this industry being in the private sector, the traditional
market-based measurements such as ROI which require a lot of
information are difficult, if not impossible, to be applied

to this industry. Measures such as Return on Equity are
also problematic with multiple unit ownership such as in
chains. Alternative perspectives such as the bankruptcy
model and quality of a firm's transformations through the
deployment of slack resources (Chakravarthy, 1986) are
difficult to be employed in this industry for want of
required market-based information.

Hospitality strategy researchers have generally used
Return on Assets (ROA), Return on Sales (ROS) and Growth in
Unit Sales as the performance measures. As discussed in the
preceding chapter, some of these measurements were
contaminated because of the mixing up of firms with
different ownership/management/franchising arrangements.
However, in this study, with the unit of analysis being
defined as the individual hotel, some of these contamination
problems discussed previously are overcome. Growth in unit
sales in the lodging context is largely achieved by either
an increase in occupancy or increase in average room rate.
With the difficult conditions the Industry has been facing
in recent years, it is argued here that this measure is not
appropriate in the current context, and may even give
misleading indications. It is to be emphasized here that
hospitality firms seem to depend more on increased number of
operating units to achieve larger revenues, rather than

growth in revenue from existing units. This probably
accounts for the rapid multiplication of units by most
multi-unit hospitality firms during the past decade. As
such, this study does not advocate and did not use Growth in
Unit Sales.

Following the call of Venkatraman and Ramanujam (1986)
regarding the use of operational performance measures, this
study used Yield Per Room (YPR) and Market Share Index, in
addition to the traditional financial performance measures
of ROA and ROS. YPR is arrived at by dividing the Total
Room Sales by the Available Roomnights (A roomnight is one
room sold for one night). Its merit is that it combines the
occupancy percentage and average room rate (in fact, an
alternative way of arriving at the YPR is to multiply these
two factors) into one statistic and eliminates the confusion
of the common inverse relationship between these two
factors. Though labeled differently, this is the same
statistic which Dev (1988) used - SPAR. It is also labeled
as REVPAR by other hospitality professionals. Market Share
Index is defined as the actual market share divided by the
fair share of a hotel, multiplied by 100. The fair share of
a hotel is its capacity (number of rooms) as a proportion of
the total competition's capacity. The following
hypothetical example will clarify this measure:

Hotel	No.of Rooms	Fair Share	Occupancy	Occupied Roomnights	Market Share	Mkt. Share Index
A	100	0.20	70%	70	0.24	120
B	150	0.30	60%	90	0.32	107
C	250	0.50	50%	125	0.44	88
Total	500	1.00		285	1.00	

As the example demonstrates, the higher the Market Share Index, the better the hotel is faring in the competitive arena. Whereas in the above example, one single day's hypothetical statistics are used, the actual study obtained this information on an annual basis.

In the financial performance ratios - ROA and ROS - the *profit* figure used was *Income Before Fixed Charges*. This is a term well-known to hotel managers, most of who follow the Uniform System of Accounts prescribed by the American Hotel & Motel Association. It is also the measure used by accounting and industry consulting firms such as Pannell Kerr Forster. As Dev (1988) pointed out, it is one figure which is within the realm of the hotel manager's control as it is entirely operations-oriented, and is not contaminated by debt-equity structure, nature of property ownership, etc.

Operational Definitions: Control Variables

Hospitality researchers have in the past used size (Dev, 1988; Schaffer, 1986), location (Dev, 1988), and segment (Crawford-Welch, 1990; Schaffer, 1986) as control variables. There are, however, some variations in their approaches.

Size

Whereas Schaffer (1986) used number of employees as a measure of size, Dev (1988) preferred using number of rooms instead, following the advocation of Price and Mueller (1986). There is considerable merit in the argument that the number of employees in a hotel can vary substantially depending upon the environment in which it is operating. For example, resort hotels usually have more employees than city hotels, given the same number of rooms. Further, hotel revenues are more dependent on the number of rooms. As such, this study used the number of rooms as a measure of size.

Location

Based on the normative prescription that environment and strategy have to be co-aligned for optimizing

performance, location was used in this study as a surrogate for environment. The standard industry classification for the location of hotels, used by industry consultants such as Pannell Kerr Forster, is city-center, suburban, airport, highway, and resort locations. It is intuitive that resort hotels need to use different strategies from, say, those located in city centers, because of the differences in the clientele, facilities offered and so on. Using such a classification will also enable comparison of operational performance statistics reported by industry analysts and consultants with the measurements obtained in this study.

Segment

As for segment as a control variable, Schaffer (1986) classified his respondent units into transient hotels, resort hotels, and motels with and without restaurants. In contrast Crawford-Welch (1990) used the traditional classification scheme of budget, mid-scale, luxury and other hotels. However, in recent times, with increasing competition, the differences based on this schema are disappearing. Therefore, this study took the view that segment is a useful control variable when classified based on a different perspective, i.e., service level. This study, hence, used a classification scheme of full-service,

limited service, resort, all-suite and convention hotels, to capture the differences in service level. It is intuitive and general knowledge that full-service hotels have to compete differently from, say, limited service hotels. Besides, this is a classification used popularly by industry consultants such as Pannell Kerr Forster. Thus, using this classification for measuring the segment variable affords comparison of industry information with the sample data.

Affiliation

In addition to these three control variables - size, location, and segment - it is felt that chain/management affiliation (labeled simply *affiliation* hereafter for brevity) is yet another important control variable that needs to be taken into account. While hospitality researchers have generally included this measure in their questionnaires, they have not considered it as a control variable. It seems only logical to assume that chain-managed hotels will follow more the strategies developed by the chain operator. In contrast, the independent hotelier is not constrained by such strategic directives or input. Franchised hotels probably fall somewhere in between following some independent strategies devised by the franchisee and adopting some strategies recommended by the

franchisor. Hotels managed by multi-unit management
companies are also likely to have similar dual forces
influencing their strategies. As such, affiliation was used
as the fourth control variable in this study. From a study
of the various permutations/combinations in vogue in the
industry, as depicted in Figure 1, the following alternative
possibilities are derived as the scale items for measuring
this variable:

* Independent hotels, not franchised, self-managed
* Independent hotels, not franchised, managed by a
  management company
* Independent hotels, franchised, self-managed
* Independent hotels, franchised, managed by a
  management company
* Independent hotels, franchised, also managed by the
  franchisor
* Chain hotels, not franchised, self-managed
* Chain hotels, not franchised, managed by a
  management company
* Chain hotels, franchised, self-managed
* Chain hotels, franchised, managed by a
  management company
* Chain hotels, franchised, also managed by the
  franchisor

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Of the above, non-franchised hotels were not used in this study, as will be explained in a subsequent section of this chapter.

```
                              ALL HOTELS
                                  |
         +------------------------+------------------------+
[A]   CHAIN OWNED                              INDEPENDENTLY OWNED
         |                                          |
    +----+----+                              +------+------+
[B] FRANCHISED      NOT                   FRANCHISED        NOT
                 FRANCHISED                             FRANCHISED
    |               |                         |             |
 +--+--+         +--+--+              +------+------+    +--+--+
[C] CHAIN FRANCHISOR MGMT.   CHAIN      MGMT.   SELF FRANCHISOR MGMT.  SELF    MGMT.
                    COMPANY           COMPANY                COMPANY          COMPANY
```
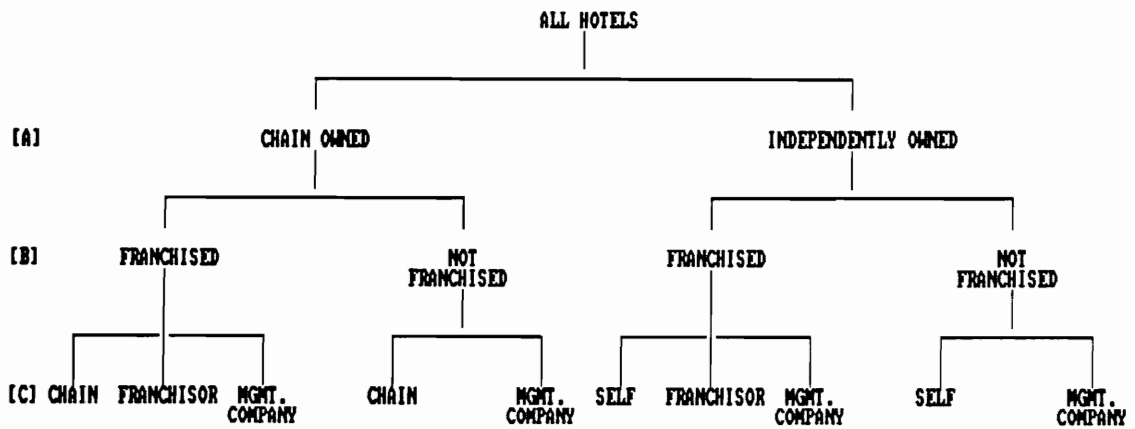
Legend : A - Ownership
         B - Franchising
         C - Management

Figure 1. Affiliation Structure in Lodging Industry

Research Propositions

Normative literature states that business units adopting different strategies have varying performance levels (Porter, 1980). This has been, somewhat inconclusively, investigated by researchers using the strategic grouping concept (Cool & Schendel, 1987, 1988; Fiegenbaum & Thomas, 1990; Mascarenhas & Aaker, 1989). In hospitality research, the identification of the strategic groups itself has been a problem. Dev's (1988) data did not yield any factors when the strategic characteristics were factor analyzed, and some of Schaffer's (1986) factors have very poor internal consistency. The major problem seems to be with the conceptualization and operationalization of the strategy construct itself. Thus, the main research question under investigation is whether, in the context of the lodging industry, the strategy construct can be measured by empirically deriving its underlying dimensions and, if so, whether strategy thus measured can be related to performance. This broad research question can be framed into the following specific research propositions:

1.   Through a combination of strategic characteristics rooted in business strategy theory and service

management theory, it is possible to identify a set of strategic dimensions underlying lodging strategy.

2.   Performance differences among lodging units can be related to varying strategic dimensions emphasized by such units.

Bacharach (1989) viewed theory "as a system of constructs and variables in which the constructs are related to each other by propositions and the variables are related to each other by hypotheses. The whole system is bounded by the theorist's assumptions" (p. 498), as depicted in Figure 2. A construct is an unobservable "broad mental configuration of a given phenomenon" (p. 500), whereas a variable is an operationalization of the construct (Bacharach, 1989). In the present study, while the performance construct is operationalized by four variables, the theoretical relationship between the construct and its operationalization is still to be established. In fact, the question of which operational measures truly reflect performance is still a moot point and an evolving issue in hospitality research. As for strategy, though it is operationalized through a set of strategic characteristics, we are not interested in relating each and all of these numerous strategic characteristics to performance. It is

the strategic dimensions, which are really like an
intermediate between a construct and a variable, that one is
interested in identifying.

Boundary = Assumptions about Values, Time and Space

Constructs — Propositions — Constructs

Variables — Hypothesis — Variables

GENERALIZABILITY
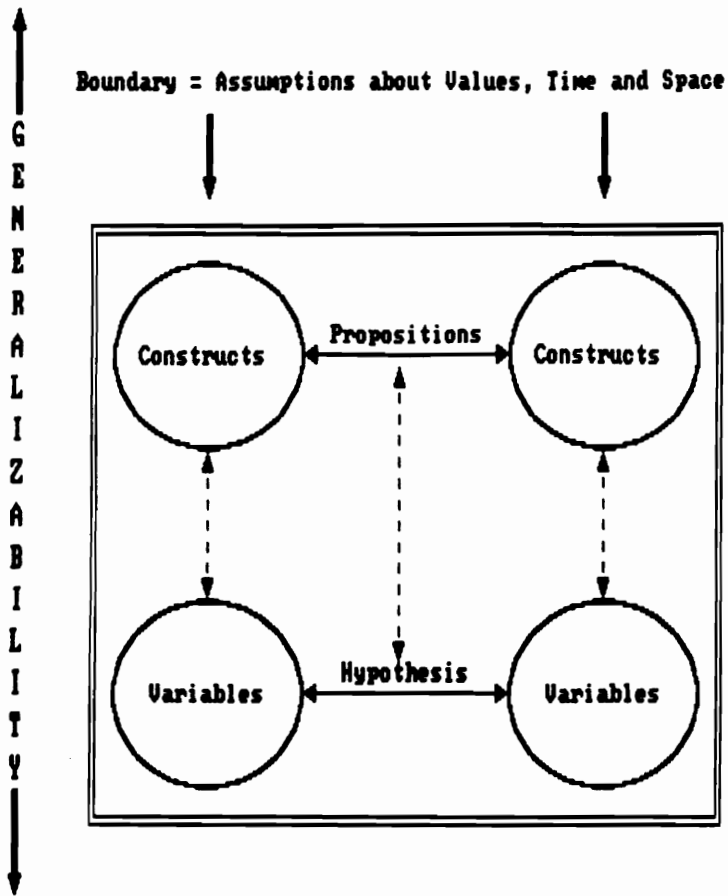
Source: Bacharach (1989)

Figure 2. Components of a theory

Thus, there is much abstraction involved in the entities being related, and the term hypotheses, which strictly "specify the relations among variables" (Bacharach, 1989, p. 500), is not appropriate in the present context. Hence, the term propositions is consciously used here because the current study is a theory building effort rather than being a theory testing attempt. In fact, given the state of hospitality strategy research, it does not seem possible at this stage to test any a priori hypotheses rooted in sound theory.

Research Design

There is very limited research done till date on strategy in the lodging industry. Consequently, little attention has been directed at construct measurement issues. The identification of strategic groups and its performance implications have been inconclusive so far. It is hypothesized that one of the major reasons for the inconclusive research results is not taking into account all possible strategic dimensions in designing the multi-item scale to measure the strategy construct. Thus, a major emphasis in this study is on the development of the strategy scale. Consequently, this study is exploratory in nature

and used a cross-sectional field survey of a representative sample of hotels.

Time Lag Issue

One of the most vexatious and least resolved problem areas in strategy research is the issue of the time lag between strategy implementation and performance. In fact, if the strategy formulation stage is also considered, the problem becomes compounded because then there is another time period to be accounted for, viz., the time it takes a firm to formulate strategy. Since the present study is concerned only with strategy content and not the process, of interest here is only the time lag between strategy implementation and the resultant performance.

No hospitality strategy researcher, except for Crawford-Welch (1990), has addressed this issue so far, and there is very little literature on the subject. With most of the strategy research being cross-sectional in nature, all such research shares the same weakness of not addressing this confounding factor. In hospitality strategy research, Dev (1988) measured strategy and performance for the same year, and Schaffer (1986) measured performance for the period 1979-1982 in the year 1985 while asking the

respondents about their strategies over an undefined longer term. Tse (1988) and West (1988) followed Schaffer's approach on strategy measurement, but obtained more current performance data. In these last three studies, while performance was measured over a 4- or 5-year period, there is nothing definite about the corresponding period over which strategy is measured.

Crawford-Welch (1990) was the first to point out this fallacy in hospitality strategy research. However, his attempt to remedy the situation is also not uncontroversial. Based on an intrinsically legitimate assumption that environmental events, strategy formulation, and performance are sequential in that order, Crawford-Welch measured the strategy for 1988 and performance for 1989. But, the argument on which he arrived at this is not entirely error-free. For instance, he states, "if a strategy were formulated in *mid to late 1988* (emphasis added) as a result of environmental conditions in early 1988, it is suggested that the financial results of pursuing that strategy would not begin to appear until 1989" (p. 137). If a strategy were *formulated* in *mid to late 1988*, its *implementation* could only have been later, say late 1988 to early 1989, and his measuring strategy for 1988 and performance for 1989 is clearly not in consonance with his argument. In fact, some

strategies may pay dividends immediately whereas others may take much longer. There is no known way to distinguish between such variations.

Also to be considered here is the general pattern of business behavior. While strategy-making is not a one-time exercise, firms do follow a strategic planning cycle. Most generally, environmental information of, say, 1990 is gathered in early 1991 and this information is used around mid-1991 to formulate strategies for 1992. By the time the various levels of the organization involved review these strategies and approve them, it is the end of 1991 and the implementation begins at the beginning of 1992. Assuming that some strategies pay off the same year and some do so later on, part of the performance of 1992 and subsequent years may be the result of these strategies implemented in 1992. So, measuring the strategy of 1991 and performance of 1992 is not necessarily the right solution, given such a scenario.

There is, thus, no unambiguous solution to this problem. On the one hand, strategic time lag is a concept which makes much intuitive sense. At the same time, with quick copying of any new strategy being so easy and common in service industries, there is also reason to believe that

such a lag effect may have limited applicability in service industries. Therefore, this study measured strategy for the period 1991-1992, and measured performance for the years 1992 and 1993. Hopefully, this will address the time lag issue, while at the same time accounting for the possibilities that some strategies take longer than others to implement, and further that some strategies pay off sooner than others. By no means, can it be claimed that this is an error-free approach, if there is any such thing at all to address this issue.

Instrumentation and Scaling

There are two major constructs in this study: strategy (independent variable) and performance (dependent variable). In addition, four control variables are also involved: size, location, segment, and affiliation. The approach to operationalizing/measuring these has been discussed in earlier sections. The scales/measures used in each case are described here. In particular, the process used to develop the strategy scale is explained in detail. In this exercise, the procedure suggested by Churchill (1979), as shown in Figure 3, was used as a guideline. This procedure has been used by several strategy researchers (Dess & Davis, 1984; Hambrick, 1983a, 1983b; Venkatraman, 1989a).
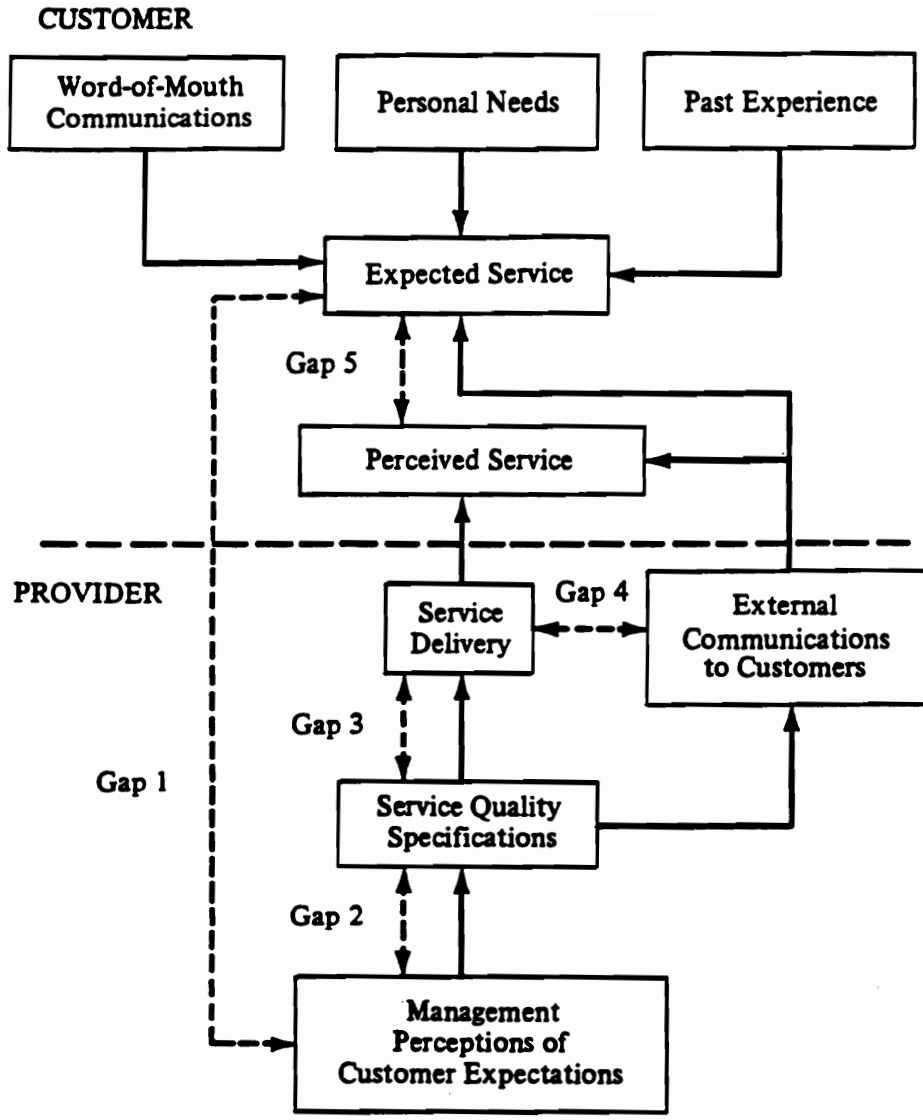
Figure 4. Conceptual Model of Service Quality
        Source : Zeithaml et al (1990, p. 46)

Multi-item scale to measure strategy

Strategy is a multi-dimensional construct. There are two methods by which this dimensionality can be formulated. In the a *priori* approach, various dimensions of the construct are developed from theory and techniques such as Confirmatory Factor Analysis are used to confirm the dimensionality. The alternative is the a *posteriori* approach in which the dimensions are derived empirically through techniques such as Exploratory Factor Analysis (Venkatraman, 1989a). There is no theory of hospitality strategy available that can guide researchers at this stage in adopting the a *priori* approach. Even those researchers who adopted the a *priori* approach, such as Venkatraman, have seldom provided convincing a priori evidence that their theory-based dimensions are mutually exclusive and collectively exhaustive, or for that matter as to how the dimensions chosen were decided upon to start with. Thus, this study will adopt the a *posteriori* approach as it is the only choice "in those cases where little theoretical basis exists for a *priori* deriving the dimensions" (Venkatraman, 1989a).

Porter (1980) identified 13 strategic dimensions which underlie the strategic differences between businesses

competing in any industry. These are: specialization, brand
identification, push versus pull, channel selection, product
quality, technological leadership, vertical integration,
cost position, service, price policy, leverage, relationship
with parent company, and relationship to home and host
government. Porter advocates that while the industry
setting influences the scope of differences along a
particular dimension, and other dimensions may be
appropriate for particular industries, these dimensions
describe a business unit's strategic position.

The 21-item scale used by Dess and Davis (1984) to
measure strategy used only six of the above dimensions:
brand identification, channel selection, technological
leadership, cost position, service and leverage. Though
hospitality researchers (Dev, 1988; Schaffer, 1986) made
some modifications in the Dess and Davis' scale, the latter
remained the principal basis on which hospitality strategy
was measured. As discussed in the previous chapter, this
led to two major problems: (1) As most of Porter's (1980)
and Dess and Davis' work is based on manufacturing industry
experiences, the unique characteristics of service
industries are not reflected in their work (2) Not all of
Porter's 13 strategic dimensions have been used in
developing the strategy measurement scale. As strategic

characteristics that impact performance vary from industry to industry (Cool & Schendel, 1987; Hambrick, 1983b; Mascarenhas & Aaker, 1989), there is a great need to develop such a strategy measurement scale grounded in the lodging industry practices. Thus, as befitting an exploratory study of this type, an eclectic approach is taken in developing the multi-item scale to measure strategy in this study, following Whetten's (1989) advocation.

As a first step, the cooperation of a medium-sized hotel company headquartered in a major town in a mid-Atlantic state was enlisted. This company, called Merlin Hotels here to maintain anonymity, owned/operated a chain of 35 hotels across several states along the east coast of the U.S. These 35 hotels carried a variety of flags - Holiday Inn, Ramada, Sheraton, Howard Johnson and Day's Inns. At a workshop session where the 35 hotels' general managers were assembled, the managers were asked to list all the major competitive methods they have adopted to face the competition. In the normal course, a consolidation of the strategic characteristics (competitive methods) listed by this large group of managers should have yielded the desired comprehensive multi-item scale to measure lodging strategy. However, a content analysis of the strategic characteristics listed by these managers revealed that their responses were

conditioned by the exposure they received earlier to the strategy scales used by earlier hospitality researchers. The strategic characteristics listed were thus generally restricted once again only to the six strategic dimensions originally tapped by Dess and Davis (1984), as modified later by the hospitality researchers. Therefore, further steps were necessary to expand this scale as discussed earlier. The following steps were undertaken to arrive at such a comprehensive scale:

Step 1.

Porter's (1980) 13 strategic dimensions were first screened using the definitions provided (p. 127-129), to eliminate any dimensions obviously irrelevant to the present context. Table 4 enumerates these dimensions and their definitions/descriptions. From a study of these definitions, it was concluded that "relationship to home and host government" is irrelevant to the present problem context as it is set in the domestic lodging industry. It was further concluded that "vertical integration" and "relationship with parent company" are also unsuitable for inclusion in this study, each for a different reason though. Vertical integration is a widely recognized strategy, but seems inapplicable to a single hotel which is the unit of

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analysis here. After all, any one hotel can hardly be expected to find it worthwhile either to integrate backward (by getting into the business(es) of the suppliers of food and beverages, and operating supplies) or to integrate forward (by getting into the distribution business, such as travel trade). Larger, multi-unit lodging firms may well employ these strategies, but then the unit of analysis in that case would be the firm and not the individual hotel as is the case here.

As for "relationship with parent company", two reasons contributed to its elimination. First, it is not applicable to a large portion of the sample studied, viz., the independent hotels. Second, though it may be relevant in the context of hotels owned by multi-unit firms (the other significant part of the sample), it is not a competitive method per se. Relationship with the parent company is more a "given" situation outside the control of the hotel manager. It is more an environmental variable aiding or constraining the hotel manager's functioning. Thus, after eliminating these three dimensions from Porter's (1980) list, there were ten dimensions to be addressed in the subsequent steps.

Table 4.   Porter's Dimensions of Competitive Strategy

Dimension	Definition/Description
Specialization	The degree to which it [a company] focuses its efforts in terms of the width of its line, the target customer segments, and the geographic markets served
Brand Identification	The degree to which it seeks brand identification rather than competition based mainly on price or other variables. Brand identification can be achieved via advertising, sales force, or a variety of other means
Push vs. Pull	The degree to which it seeks to develop brand identification with the ultimate consumer directly versus the support of distribution channels in selling its product
Channel Selection	The choice of distribution channels ranging from company-owned channels to specialty outlets to broad-line outlets
Product Quality	Its level of product quality, in terms of raw materials, specifications, adherence to tolerances, features, and so on
Technological Leadership	The degree to which it seeks technological leadership versus following or imitation. It is important to note that a firm could be a technological leader but deliberately not produce the highest quality product in the market; quality and technological leadership do not necessarily go together
Vertical Integration	The extent of value added as reflected in the level of forward and backward integration adopted, including whether the firm has captive distribution, exclusive or owned retail outlets, an in-house service network, and so on
Cost Position	The extent to which it seeks the low-cost position in manufacturing and distribution through investment in cost-minimizing facilities and equipment

Service	The degree to which it provides ancillary services with its product line, such as engineering assistance, an in-house service network, credit, and so forth. This aspect of strategy could be viewed as part of vertical integration but is usefully separated for analytical purposes
Price Policy	Its relative price position in the market. Price position will usually be related to such other variables as cost position and product quality, but price is a distinct strategic variable that must be treated separately
Leverage	The amount of financial leverage and operating leverage it bears
Relationship with Parent Company	Requirements on the behavior of the unit based on the relationship between a unit and its parent company. The firm could be a unit of a highly diversified conglomerate, one of a vertical chain of businesses, part of a cluster of related businesses in a general sector, a subsidiary of a foreign company, and so on. The nature of the relationship with the parent will influence the objectives with which the firm is managed, the resources available to it, and perhaps determine some operations or functions that it shares with other units (with resulting cost implications)
Relationship to Home and Host Government	In international industries, the relationship the firm has developed or is subject to with its home government as well as host governments in foreign countries where it is operating. Home governments can provide resources or other assistance to the firm, or conversely can regulate the firm or otherwise influence its goals. Host governments often play similar roles

Source : Porter (1980, p. 127-129)

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Step 2.

The multi-item strategy scales used by earlier hospitality strategy researchers were examined at this stage to eliminate such items which are unsuited for inclusion in the new scale being developed. The scales examined here included those used by Schaffer (1986), Dev (1988), Tse (1988), West (1988), Crawford-Welch (1990), as well as Dess and Davis' (1984) scale which formed the basis for the scales used by the hospitality researchers. There were two types of items which were eliminated from this examination. The first set to be eliminated included such statements as, "maintaining market leadership", which were more like goals/objectives to be reached rather than being the vehicles (competitive methods) to reach them. Second, there were items such as, "stability in the operating environment," which were, once again, more environment descriptions rather than strategic characteristics. The remainder of the items from all the scales listed earlier were then classified under the ten dimensions of Porter (1980) short-listed in Step 1. No duplications were removed at this stage yet.

Step 3.

The previous step, obviously, resulted only in a thin representation of the ten dimensions of Porter (1980) since all the scales examined had only around 20 items in each, after the eliminations described above. In this step, the strategic characteristics listed by the Merlin general managers were classified by the ten dimensions.

Step 4.

At the conclusion of Step 3, four observations emerged. First, the dimensions were now better represented by larger sets of scale items than at the end of Step 2. Second, some dimensions were, however, still underrepresented. Third, no scale items which could be classified under the three dimensions eliminated in Step 1 were present. This strengthened the validity of the decision to eliminate these three dimensions. Fourth, there were some items left from the Merlin general managers' listings which could not be classified under any of Porter's (1980) dimensions. These items were mostly service-related. These were kept under a temporary category labelled "Unclassified" until further steps described below were executed.

Step 5.

To capture the underrepresented dimensions more
adequately, additional statements of competitive methods
were developed, based on the researcher's personal
experience with, and knowledge of, the lodging industry.
Other sources such as the TRENDS Database at the Dept. of
Hospitality and Tourism Management at Virginia Tech were
also used as the basis for the development of these
additional scale items under the respective dimensions.

Step 6.

At this stage, all scale items under each dimension
were critically examined to eliminate duplications. Since
most of the scales considered so far had common and inter-
linked origins, there were, obviously, many duplications
with minor semantic variations. This stage eliminated all
such duplications resulting in parsimonious sets of scale
items under each dimension.

The above procedure thus far was still rooted in
Porter's (1980) work. For a truly eclectic approach to this
scale building, it was necessary to bring in the service
literature's perspective to ensure that the unique

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characteristics of service industries - intangibility, heterogeneity, perishability and simultaneity (of production and consumption) - are reflected in the scale being developed.

Service Strategy Dimensions.

Buzzell and Gale (1987) and Grönroos (1990) stated that customer perceived quality is extremely important for service firms' success. Building on this, Grönroos (1990) presented several strategic characteristics for service firms to improve the customer perceived quality and, consequently, performance. Some of the strategic characteristics identified by Grönroos are listed below:

* Improving the technical skills of the employees
* Service orientation of attitudes and behavior of employees
* Making systems and the technology more supportive to employees and/or to customer participation
* Industrializing the service operation
* Increasing customer cooperation in the service production process
* Reducing the mismatch between supply and demand

* Practicing relationship marketing (as opposed to
  transaction marketing)

Zeithaml et al. (1985) consolidated a list of
(marketing) strategies from their review of service
literature, and classified them by the unique service
features they address. An adaptation of their exercise is
shown in Table 5.

Table 5. Marketing Strategies from the Service Literature

	Suggested (Marketing) Strategies for Problems Stemming from Unique Service Features
Unique Service Features	(Marketing) Strategies to Solve Problems
Intangibility	1. Stress tangible cues 2. Use personal sources more than non-personal sources 3. Simulate or stimulate word-of-mouth communications 4. Create strong organizational image 5. Use cost accounting to help set prices 6. Engage in post-purchase communications
Inseparability	1. Emphasize selection and training of public contact personnel 2. Manage consumers 3. Use multi-site locations
Heterogeneity	1. Industrialize service 2. Customize service
Perishability	1. Use strategies to cope with fluctuating demand 2. Make simultaneous adjustments in demand and capacity to achieve a closer match between the two

(Adapted from Zeithaml et al (1985))

Parasuraman et al. (1988) developed a service quality measurement scale, SERVQUAL. Their investigations using this scale yielded five service quality dimensions: tangibles, reliability, responsiveness, assurance, and empathy. Zeithaml et al. (1990) used SERVQUAL to identify the differences between managerial perceptions of service quality being delivered and customer' ratings of service quality. Based on this study, Zeithaml et al. developed a service-quality-gap model in which five Gaps have been identified. As customer perceived service quality is held to be the key to service businesses' success, according to normative service management theory (Buzzell & Gale, 1987; Grönroos, 1990; Parasuraman et al. 1988; Zeithaml et al. 1985, 1990), whether respondent lodging units are differentiating on service quality, and trying to improve customers' perceptions of service quality, are areas of interest that need to be investigated here. To capture the strategic characteristics unique to the service industries such as lodging, Ziethaml et al's (1990) Service Quality Gap Model was used as the starting point for additional scale development. Ziethaml et al's service quality model is depicted in Figure 4.
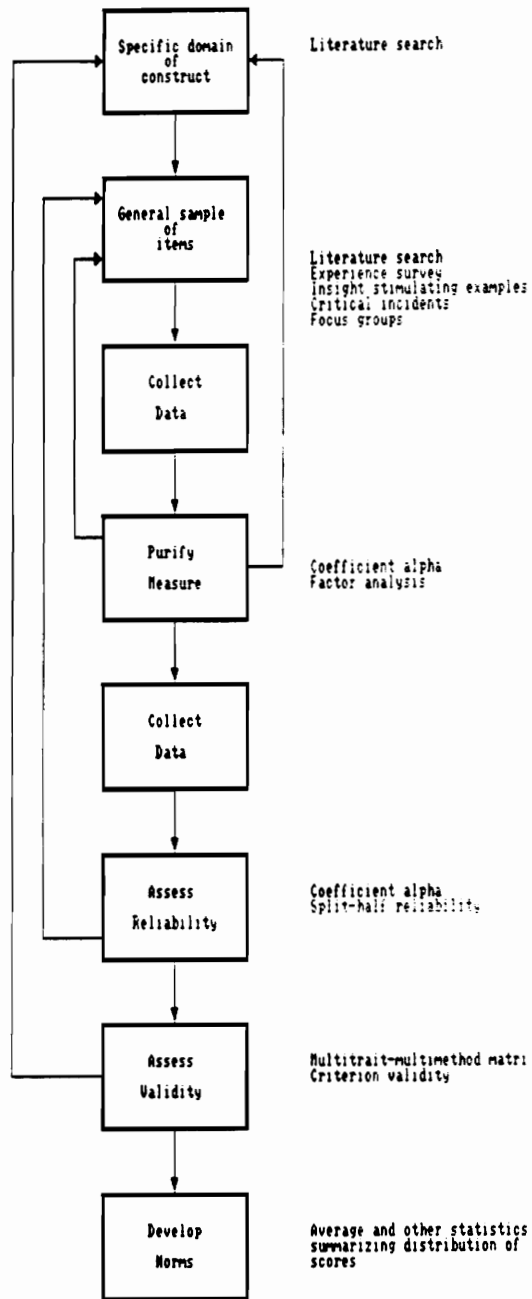
Source: Churchill (1979)

Figure 3. Suggested Procedure for Developing Better Measures

Four Gaps identified in the model are:

Gap 1: Not Knowing What Customers Expect

Gap 2: The Wrong Service Quality Standards

Gap 3: The Service Performance Gap

Gap 4: When Promises Do Not Match Delivery

Gap 5, between customers' expected service and perceived service is a result of the first four Gaps, according to the Model. Zeithaml et al (p.51-135) discussed a number of strategies that business units can adopt to bridge Gaps 1 through 4 and, as a result, reduce or even eliminate Gap 5. Several strategic characteristics applicable to the lodging industry were isolated from this literature and classified under four strategic dimensions. These dimensions were labelled as Service Identification, Service Specification, Service Delivery, and Service Communication, corresponding to the four Gaps identified by Ziethaml et al. Strategic characteristics isolated from other service literature cited before, such as Grönroos (1990), were then classified under these four dimensions.

At this stage, two observations came to light. First, it was now possible to classify the strategic characteristics categorized earlier under the label,

"Unclassified", into the four new service strategy
dimensions just created. Second, it was found that one of
Porter's (1980) ten strategy dimensions - Service -
shortlisted in Step 1 was now found to be redundant in the
wake of the more detailed scales developed for the four
service strategy dimensions. Thus, Porter's 'Service'
dimension was eliminated. At this stage, all semantic
duplications were also screened out as was done earlier, so
that each dimension had a set of mutually exclusive scale
items.

The consolidation of competitive methods from the above
sources, which are grounded in service theory literature,
resulted in a rich source of service industry-oriented
strategic characteristics. Combining these strategic
characteristics with the list developed in Step 6
previously, taking care to eliminate any duplications,
yielded the most comprehensive strategy measurement scale
till date. This strategy scale classified by the 13 final
dimensions, nine from Porter (1980) and four service
dimensions, is enumerated in Table 6. Throughout this
process of developing this 122-item strategy measurement
scale, two expert faculty members were involved constantly.

Table 6. Multi-item Scale to Measure Lodging Strategy

Strategy Dimension	Scale Item
Specialization	1. Developing new products and/or services
	2. Providing a broad range of products/facilities/services
	3. Serving a variety of market segments
	* 4. Focusing on few specific market segments and/or geographic markets
	5. Searching for new markets/opportunities
	6. Catering to the specific needs of individual customers/customer groups
	7. Positioning food & beverage operations compete with outside competition
	8. Testing new marketing ideas and methods
	9. Providing better security than competitors
Push vs. Pull	10. Concentrating on direct selling to local businesses
	11. Using sales blitzes in source markets to tap corporate clients
	12. Emphasizing on working relationships with local visitor/tourist bureau for referral business
	13. Cultivating competitors to get their overflows
	14. Promoting the hotel to the travel trade to get bookings
	15. Entertaining regular guests to solidify repeat business
	16. Participating actively in franchise alliance for referral business
	17. Offering special rates and/or privileges for repeat guests

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	∗	18.	Giving overriding (i.e., above normal) commissions to travel trade
		19.	Contacting customers after they have stayed at the hotel
		20.	Trying to increase business in low season by calling on customers
Product/Service Quality		21.	Renovating and/or refurbishing regularly
	∗	22.	Using high quality food & beverage as roomnight generator
		23.	Maintaining consistently high quality product and/or service
		24.	Using technology to enhance product and/or service quality
		25.	Using training and development to raise service quality standards
		26.	Developing standard operating procedures for all areas of the hotel to ensure consistently high quality service delivery
Price Policy	∗	27.	Adopting competitive pricing (at par with competition)
	∗	28.	Assuming price leadership (high end pricing in the market) stressing superior quality
	∗	29.	Being the lowest-priced hotel in the market
	∗	30.	Increasing service offerings to improve the perceived dollar value received by guests (e.g., extra room amenities, free breakfast buffet, providing the best tourist information, etc.)
	∗	31.	Pricing decisions based on a cost plus approach
	∗	32.	Pricing based on what the market is willing to pay
Brand Identification		33.	Building a good reputation of the property in the community

	34.	Advertising to create and/or maintain awareness of the hotel
	35.	Deploying a highly visible professional sales force
	36.	Gearing much of marketing effort to project a specific image of the hotel
	37.	Using the uniforms/dresses of guest-contact employees as a means to project image
	38.	Designing facilities to achieve specific image objectives
Channel Selection	39.	Adopting joint marketing and distribution along with competitors, local chamber of commerce, etc. to bid for shared business (e.g., conferences)
	40.	Affiliating with hotels located in other markets to build mutual referral business
	41.	Setting up sales offices in generating markets
	42.	Contracting with hotel representation firms to promote the property
	43.	Promoting the hotel to incentive houses
	44.	Negotiating contracts with travel agents and tour operators for volume business
	45.	Tying up with airlines and/or car rental firms to offer integrated reservations
Technological Leadership	46.	Developing innovative service ideas/methods
	47.	Introducing latest computer/communication technologies in guest rooms
	48.	Expanding automation/computerization in guest handling
	49.	Leading the competition in introducing new technologies

	*	50.	Waiting till competitors introduce some new technology before following suit
		51.	Adopting innovative technologies wherever possible in different areas of the hotel
Cost Position		52.	Employing automation/computerization to reduce costs
		53.	Bargaining with suppliers for lowest prices
		54.	Using every management decision to reach the goal of achieving the lowest cost of operation among the competition
		55.	Using a cost accounting system to establish costs accurately
		56.	Using cross-training of employees to reduce costs
Leverage		57.	Minimizing the use of debt financing
		58.	Minimizing overhead through standardization
		59.	Achieving high operational efficiency levels
		60.	Employing rigorous cost control systems/procedures in all areas
		61.	Adopting risk management practices
		62.	Training employees in risk management
		63.	Maximizing the use of debt financing
		64.	Minimizing debt servicing costs through refinancing
Service Identification		65.	Using guest complaints/suggestions/ feedback as a resource in strategic planning

		66.	Researching what service standards customers expect from industries similar/related to hotels (e.g., airlines)
		67.	Researching sources of business (e.g., travel agents) to understand what guests want
*		68.	Using customer panels to get regular information on customer needs/expectations
		69.	Soliciting guest comments on their stay at the time of departure
		70.	Using market research effectively in designing product and/or service strategies
		71.	Encouraging all departmental managers to interact with customers personally and experience the service delivery process
		72.	Encouraging free upward communication between guest-contact employees and management
		73.	Staying close to the customers by reducing the organizational levels between the guest-contact level and management level
Service Specification		74.	Enhancing the personalization of service in all areas of the hotel
		75.	Employing yield management techniques/systems
		76.	Ensuring that hotel activities are coordinated to enhance customer satisfaction
		77.	Adopting user-friendly (to both employees and guests) systems and new technologies which improve the effectiveness of service delivery

* 78. Industrializing the service operation by substituting technology and automation for people wherever possible (e.g., video check-in/check-out)

* 79. Increasing the number of self-service operations in as many areas of the hotel as possible (e.g., coffee shops, swimming pools)

80. Improving customer participation skills (in self-help services) by simplifying systems and procedures, installing easy-to-understand signage, etc.

81. Employing additional part-time workers to maintain service levels in peak demand periods

82. Promoting special rates and/or packages to improve traffic in low season

* 83. Reducing service levels in high season to restrict demand

84. Using differential scheduling of existing employees to cope with seasonal fluctuation in demand

* 85. Making employees work overtime in peak season

86. Cross-training employees to perform other tasks as a means of coping with peak season demand

87. Educating customers to use the hotel during non-peak periods

88. Constantly and visibly expressing/demonstrating management's commitment to product/service quality

89. Training departmental managers in the skills needed to lead employees to deliver quality service

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90. Instituting financial incentives for departmental managers linked to behaviors that foster high service quality
91. Viewing customers' demands as challenges and puzzles rather than as problems (i.e., believing in the feasibility of solving any customer problem)
92. Using computerized information systems as the basis for setting standards to improve customer service
93. Standardizing service tasks with the help of information databases (e.g., pre-registration)
94. Standardizing routine service tasks through automation, so that time is freed to personalize other service aspects
95. Effectively using computers/automation to improve job scheduling, service delivery, etc.
96. Ensuring that a single guest-contacting employee can handle customer problems involving interaction between different departments of the hotel
97. Setting service quality goals that are designed to meet customer expectations
98. Setting specific service quality goals for employees which emphasize critical service tasks
99. Setting service quality goals which are challenging but realistic, are accepted by the employees, and measured and reviewed regularly

Service Delivery

100. Improving the service orientation of employee behavior (particularly among those in guest-contact positions)
101. Training employees in the technical aspects of the services they are supposed to provide
102. Training employees in interpersonal skills
103. Training employees in communication skills
104. Training guest-contact employees about their customers/customers' expectations
105. Providing regular feedback to employees on their service delivery achievement
106. Designing employee incentive/reward/recognition systems based, at least in part, on the delivery of quality service
107. Adopting innovative recruitment and retention methods to foster employee loyalty (e.g., recruiting physically challenged personnel)
108. Carefully choosing personnel who interact with customers (e.g., assessment of social adaptation skills)
109. Emphasizing employee empowerment by pushing decision-making down to the lowest organizational levels of the hotel
110. Building teamwork by cross-training employees, team-based reward systems, etc.
111. Re-doing service when a customer is dissatisfied
* 112. Educating customers on their roles in receiving quality service

Service Communication

113. Promoting horizontal communication between different departments of the hotel (e.g., sales/marketing and operations)
114. Emphasizing in external communications those aspects of service quality (e.g., reliability) which customers consider most important
115. Effectively using external communications (e.g., advertising) to manage customers' expectations (e.g., advertising only what can be and/or actually is delivered)
116. Determining pricing carefully to convey the appropriate quality signals
117. Designing marketing programs aimed at developing and enhancing enduring customer relationships, i.e., repeat business
118. Making specific effort to encourage customers to tell others about the hotel's good service
119. Stressing tangible cues in all communications (advertising, in-house signage, direct mail, etc.) to define the product/service
120. Communicating service quality guarantees to customers
121. Treating employees as customers and seeking their input in product/service design
    * 122. Featuring actual employees doing their jobs in external communications (such as advertising)

Scale items marked with an asterisk (*) were dropped in the scale purification process

Though almost all these strategic characteristics are extracted from grounded theory, some of them - notably those developed anew for the strategic dimensions of Porter (1980) and the adaptations from the service management literature - have not been operationalized previously in hospitality research. Therefore, it was necessary to validate this scale before it could be further used in the current study. For this purpose, a pilot questionnaire, shown in Appendix I, was developed and mailed to the Merlin general managers. By the time this scale development process was completed, Merlin Hotels had gone through a restructuring process, and only 18 hotels out of the earlier 35 were with the company. As such, the pilot questionnaire was mailed to only these 18 general managers. The main purpose of this pilot study was to assess the comprehensiveness and comprehensibility of the strategy scale. Thus, Question 1 in Appendix I was the principal question in this survey instrument. The question read as follows:

Considering your property as a whole and using your competitors as a frame of reference, please indicate the extent to which each of the following items was a part of the overall competitive posture (strategy) of your unit for the year 1992:

	Not part of strategy			Key part of strategy	
[Comprehensive list of strategic characteristics as developed above]	1	2	3	4	5	6

This question was adapted from Dev's (1988) survey instrument. Framing this question as above had the following advantages:

* Its wording had been pretested.

* As Dev modified the semantic differential used by Schaffer (1986), realized strategy is captured instead of intended strategy. This eliminated one of the contentious issues discussed in the preceding chapter.

As can be seen from Appendix I, the strategy scale items were randomized for this pilot study. Other additional questions were added to verify some assumptions, to assist in the development of the survey instrument to be used in the final study. Some of the findings of this pilot study formed the basis of the decision rules adopted in the design of the final instrument, and these are discussed in Chapter 4.

Measurement of Performance

The operational measures of performance were (1) ROA (2) ROS (3) YPR and (4) Market Share Index. To compute these, the following information was requested from the respondent units:

1. Number of Available Roomnights

2. Number of Occupied Roomnights

3. Total Room Sales

4. Total Annual Sales

5. Income before fixed charges (before interest, income taxes, rent, property taxes, insurance, depreciation, and reserve for replacement of FF&E)

6. Total Fixed Assets

7. Total capacity (number of rooms) of all competition, including the respondent hotel

8. Total Occupied Roomnights of all competition, including the respondent hotel

All the above information was obtained for the years 1992 and 1993.

From the above information, the performance measures can be calculated as below:

$$ROA = \frac{\text{Income before Fixed Charges}}{\text{Total Fixed Assets}}$$

$$ROS = \frac{\text{Income Before Fixed Charges}}{\text{Total Annual Sales}}$$

$$YPR = \frac{\text{Total Room Sales}}{\text{Number of Available Roomnights}}$$

Market Share Index:

$$\text{a) Fair Share} = \frac{\text{Capacity of respondent hotel}}{\text{Total capacity of competition}}$$

$$\text{b) Market Share} = \frac{\text{Occupied Roomnights of respondent hotel}}{\text{Total Occupied Roomnights of competition}}$$

$$\text{Market Share Index} = (a / b) \times 100$$

Quantile statistics of these performance variables were then used to classify the respondent hotels as high and low performers. This was done on each performance variable separately. The practice of classifying respondent business entities falling in the upper quartile as high performers, and those falling in the lower quartile as low performers, is quite common in this type of research.

Measurement of Control Variables

Size was measured by the average number of rooms available for sale in each year. This is obtained by dividing the Available Roomnights by the number of days in the year.

Location was measured by asking the respondents to classify their hotel's location, using the following classification scheme: city-center, suburban, highway, airport, and resort locations.

Segment was measured by asking the respondents to classify the type of their hotel, using the following classification: city-center, full-service, limited service, all-suite, resort, and convention hotels.

Affiliation was measured by asking the respondents to classify their hotels, using the following classification:

* Independently owned, self-managed

* Independently owned, managed by the franchisor

* Independently owned, managed by a management company (other than the franchisor)

* Chain owned (i.e., part of a multi-unit company),
  managed by the chain
* Chain owned, managed by the franchisor
* Chain owned, managed by a management company (other
  than the franchisor)
* Other than any of the above

It is to be noted that four of the ten types of affiliations
discussed previously had to be dropped in this scale, since
all the respondent hotels carry the flags of the hotel
companies whose cooperation was sought to conduct this
research. This arrangement is discussed in the next
section.

Sample Frame

One of the major problems faced in hospitality research
is the predominance of private business units. As a
consequence of this, many market-based measures, that
researchers in the manufacturing industry so easily have
access to, are unavailable to hospitality researchers.
Specifically, in the case of performance measures,
hospitality researchers neither have the luxury of secondary
sources of data to cross-check their primary data, nor is
primary data forthcoming in the first place as private firms

are very confidentiality-minded. The poor response rates

some of the earlier researchers got is evidence of this

problem.

As such, if a researcher needs a high response rate,

particularly on performance measures, alternative mechanisms

for selecting the respondent population have to be

considered. For this reason, as well as the fact that this

is an exploratory study where a major emphasis is on scale

development and refining, it is felt that getting a

cooperative representative sample is more important than

seeking a random sample with doubtful response pattern.

Such non-random but representative sample frames were used

by other hospitality researchers such as West (1988). With

this reasoning, two very large lodging chains - both

industry leaders - known for their interest in scientific

management and research-based decision making were

approached for their cooperation in this study. With the

support of the top management of these chains, identified

hereafter as Company A and Company B to preserve their

anonymity, it was expected that reliable performance

measures as well as a high response rate would be obtained.

Though this method does not allow any law-like

generalizations from this study, the quality and quantity of

data produced should make the results more robust and set

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the stage for other researchers to attempt confirmatory
studies.

The entire portfolios of the upscale, midprice, and
economy hotels of both the companies were targeted in this
study. As these three classificatory labels are frequently
used hereafter, a brief explanation of this labelling is in
order here. As everyone involved with this industry knows,
these labels have lost much of their discriminatory power in
recent years. A Days Inn hotel on the oceanfront in
Jacksonville, FL, charges $100 for a room per night. Many
other Days Inns located on highways charge as little as
$29.95 for a room per night. Examples of this type abound
with most brands. As such, hotels are classified by the
companies mostly on the basis of the average profile of
their brands. Detailed discussions with the top managements
of the two participating companies confirmed this, and these
discussions formed the basis for the classification of the
hotels into upscale, midprice, and economy price segments.

The upscale hotels here are those whose brands on
average sell at more than $70 a room per night. Midprice
hotels are those whose brands on average sell between $55 to
$70 a room per night. Economy hotels are those whose brands
on average sell between $40 to $55 a room per night. Of

course, depending on the specific location, exception cases are there in all the three price segments, like the Days Inn example cited above. The Budget brands were deliberately excluded from this study, based on the recommendation of the participating companies. The managements of these companies expressed the view that because almost all of their Budget properties are managed by just one person who, most usually, is not very sophisticated in professional management, it is extremely unlikely that these persons would be able to complete the research instrument used in this study.

Data Collection

A modified version of the total design method of Dillman (1978) was adopted for this study. Owing to several frequent changes in the strategic management department of Company B over the past year, necessary arrangements to execute this research study could not be tied up at the same time as they were with Company A. As such, the research commenced with Company B around three weeks after it did with Company A, and the mechanical procedures followed differed slightly for the two companies.

In both cases, the first mailing to the respondent hotels included a cover letter from a top management person

from the respective companies, a cover letter jointly signed by the Chairman of the Doctoral Committee and the researcher, the final questionnaire and a postage-paid self addressed envelope. A copy of the final questionnaire is included in Appendix II. Company A provided 1344 mailing labels for all of its hotels in continental U.S.A. and the mailing was done by the researcher. About a week later, a reminder post-card was sent to all non-respondents (Appendix III). When the first reminder still did not produce sufficient response desired, a second reminder (Appendix IV) was sent one week later, requesting the respondents to complete at least the sections excluding the performance question. As discussed previously, obtaining performance data from hospitality businesses has always been a serious problem. It was hoped that the second reminder would eliminate this problem by requesting for less confidential information. However, even this attempt did not generate sufficient response. So, Company A agreed to another fresh mailing of the research documentation. A random sample of 300 hotels was drawn out of the non-respondents up to that point of time, and this second mailing was undertaken a fortnight after the second reminder of the first mailing. The cover letters used for this second mailing were similar to those used earlier.

As for Company B, owing to the delayed start, the company graciously agreed to undertake the mailing for this study. The researcher provided the company a sample of the documentation materials (with the exception of the Company's cover letter) and the company put together all the materials and mailed them to 1361 hotels, which constituted all of its portfolio of hotels in continental U.S.A. Approximately one week later, Company B also sent a reminder post-card to all the respondent hotels. To protect the confidentiality of the Companies involved, some of the above referred communications which contained the Companies' names are not appended hereto.

The entire data collection process lasted about eight weeks, commencing from March 1, 1994 and ending April 30, 1994. At the time of writing this dissertation, responses are still trickling in. However, owing to the time constraints, further coding of data from newly received questionnaires stopped on May 1, 1994, and the analysis was completed only with the questionnaires received till April 30, 1994.

There is some debate about whether reliability is part
of the overall concept of validity as it represents the
internal consistency of operationalization (Bagozzi, 1980),
or it is different from validity (Nunnally, 1978; Peter,
1981). Whichever may be the case, it is essential that the
reliability and validity of the measures used to tap the
constructs under investigation be established to lend
credibility to any research study.

Construct validity cannot be established by any one
study (Cronbach, 1971). It can be achieved only when
multiple studies tapping the same construct are validated.
However, hospitality strategy research is too nascent to
have reached such a stage. In view of this, as well as due
to the fact that the concepts of reliability and validity
have not always been studied rigorously, it is imperative
that these issues be paid greater attention in hospitality
research.

Reliability

Reliability is one part of the general concept of
internal consistency, the other being unidimensionality

(Nunnally, 1978). The latter, which assesses whether all
the items in a multi-item scale measure a unidimensional
construct is not relevant to this study because the major
scale here is that developed for measuring strategy, and it
is a priori based on multiple dimensions. Thus, we are
concerned only with reliability in this study. Peter (1981)
defined reliability "conceptually as the correlation between
a measure and itself" (p. 136). Reliability, a necessary
precondition for validity, is measured by the coefficient
alpha (Cronbach, 1951; Nunnally, 1978). The multi-item
strategy scale was subjected to this reliability test. A
more detailed description of this important part of this
research study is presented later in Chapter 4.

Construct Validity

"The term 'construct validity' generally is used to
refer to the vertical correspondence between a construct
which is at an unobservable, conceptual level and a
purported measure of it which is at an operational level.
In an ideal sense, the term means that a measure assesses
the magnitude and direction of (1) all of the
characteristics and (2) only the characteristics of the
construct it is purported to assess" (Peter, 1981, p. 134).
In simple terms, construct validity refers to whether an

operational measure is indeed measuring the construct it is supposed to, and only that construct. There are four different components of construct validity usually discussed in the literature: content validity, convergent validity, discriminant validity, and nomological validity. Venkatraman and Grant (1986), in a comprehensive critique on the current state of construct measurement in strategy research, opined that "in the present stage of development of strategy theories, this [nomological validity] is not yet a key requirement" (p. 82). Nomological Validity can be established only when a network of relationships between different constructs is developed through programmatic research. In hospitality strategy research, these constructs would be strategy, structure, environment, and so on. In the absence of a reliable and valid strategy measurement instrument, past research has thus far not been able to establish such relationships. So, only the first three components of construct validity are discussed below.

Content Validity

This refers to the "extent to which empirical measurement reflects a specific domain of content" (Venkatraman & Grant, 1986, p. 79). Content validity can be established through the use of expert panels of scholars and

executives (Hambrick, 1981, 1983a). In this study, content validity is established through the process by which the strategy scale was developed. First, 35 general managers provided input on the competitive methods they actually use to compete in the market place. Second, all the hospitality strategy scales used by past researchers were consolidated into this scale. Third, new strategy scale items were developed directly from the strategic management and service literature. Fourth, the consolidated scale that was finally developed was thoroughly scrutinized by two experts in hospitality research. Last, the scale was subjected to several iterations of reliability testing using sophisticated methodology. Thus, the rigorous process of the scale development ensured its content validity.

Convergent Validity and Discriminant Validity

If the correlation between responses obtained through maximally different methods measuring the same construct is high, convergent validity is established. Conversely, if the correlation between responses from two methods measuring different constructs is low, discriminant validity is established. Convergent and discriminant validities are generally examined by using multi-trait-multi-method matrices (Campbell & Fiske, 1959; Churchill, 1979). This

procedure, however, needs more than one measurement method for tapping the same construct. In the current study, it was not possible to use this approach to establish these components of construct validity as there is only one scale for measuring strategy. In the current state of knowledge of hospitality strategy, there is no second method that can be used.

Another method that can be used in this context is confirmatory factor analysis. If a construct can be a priori hypothesized to have *n* dimensions underlying it, and a factor analysis of a measure operationalizing that construct produces the same *n* number of interpretable factors, the construct validity is presumed to have been established (Peter, 1981). However, since this is an exploratory study trying to develop a new scale for measuring strategy, confirmatory factor analysis could not be used because one did not know a priori how many interpretable factors there ought to be.

Venkatraman and Grant (1986), however, stated that among other methods, using "multiple managers in different key functions, ... [and] expert opinion" (p. 82) are also acceptable alternatives. Thus, the process used in the development of the strategy scale involving, as it did, the

input of general managers of several hotels and two experts
is considered sufficient evidence to establish construct
validity.

The other variables involved in this study -
performance, size, location, segment, and affiliation - do
not require any validation, as they are drawn from
universally standard industry terminology, used by previous
researchers as well.

Data Analysis

The following statistical tests were performed in this
study:

*   Descriptive statistics were generated by all the
    variables used in the study, except for the strategy
    scale, to assess the distribution pattern of the data.
    This was necessary to ensure that the data does not
    suffer from any abnormalities.

*   Chi-square tests were performed on the cross-
    tabulations to evaluate the inter-relationships in the
    data.

*   The strategy scale was factor analyzed to identify the strategic dimensions underlying the response pattern, which is the primary objective of this study. Successful factorization resulting in meaningfully interpretable factors supports Proposition 1.

*   The factor scores were then used in multivariate analysis of variance procedures to identify the differences in the strategy dimensions between high and low performers, identified by using the quantile statistics. This was done for each performance measure separately.

*   Based on the results obtained in the previous step, univariate ANOVAs were performed in all such cases where the MANOVAs indicated significant differences.

*   For each significant ANOVA result, factor means were calculated to verify the direction of the relationship between the significant strategy dimensions and the performance variables concerned.

*   To investigate how the strategy-performance relationship varies across the different classifications of the control variables, a similar

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series of MANOVA->ANOVA->factor means procedures were
performed for each control variable.

*   Last, differences in performance between 1992 and 1993
       were classified into high and low, and analysis of
       variance procedures were used to investigate the
       strategic time lag issue.

The detailed steps in executing the above analytical
procedures are more fully explained in the next Chapter as
the results are presented.

Summary

     This chapter dealt with the methodological issues of
the study. Specifically, the operationalization of the
variables, statement of propositions, research design, the
detailed process used in the development of the multi-item
strategy scale, validity and reliability issues, and the
statistical tests to be performed were discussed.

Chapter 4

RESULTS AND ANALYSIS

Introduction

The previous chapter described the methodology followed in this research study. This chapter reports the findings from this study. Specifically, the results of the pilot testing of the strategy scale and the survey instrument used in the final study are presented first. This is followed by a discussion of the extensive diagnostic checks performed on the data. Next, the purification of the strategy scale using reliability testing is discussed, which is followed by a factor analysis of the strategy scale. The relationship between the strategy dimensions and performance is discussed thereafter, followed by a presentation on the effect of the control variables on this strategy-performance relationship. Last, the investigation of the strategic time lag issue is reported.

Pilot Study Results

One question that is frequently raised in hospitality strategy research is whether strategy should be measured over a longer term, say five years. Notwithstanding its intuitive appeal, as strategy is after all supposed to reflect a longer term orientation, there are problems in

implementing this idea. Two major problems in this regard
are as follows:

1.   In a turbulent environment, strategies have to change
      frequently and, hence, their measurement over a longer
      term, desirable as it may be, is a difficult task if
      not an impossible one.

2.   With all the corporate restructuring that is being
      witnessed over the past few years, it is equally
      difficult to find hotel managers who have been with one
      property for five years to help measure the strategy
      construct over a longer term.

      Each of the above problems have been addressed in the
pilot study which obtained 16 usable responses. In Question
2 (Appendix I), respondents were asked to indicate if their
hotel's competitive activities in 1990-1991 were
significantly different from those adopted by them during
1987-1989. It will be noted that these two time periods
together add up to five years. Twelve out of 13 respondents
(with three missing values) answered that their competitive
methods, as described by their responses to the strategy
scale in Question 1, significantly differed between the two
time periods.

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Question 8 investigated whether the respondents were in their current position in 1990 as well as 1991. The results were as follows :

7 respondents <u>were</u> at the same (current) hotel in both 1990 and 1991.

7 respondents <u>were not</u> there in either 1990 or 1991.

2 respondents <u>were not</u> there in 1990, but came in 1991.

Both these results tend to confirm this researcher's view that, despite its desirability, measuring hospitality strategy over a five-year period is infeasible at this time. This is no way refutes the importance of trying to measure strategy over a longer term, which should be undertaken when more stable environmental conditions prevail.

A new question might arise from the above findings, and that is, how did the respondents know whether the hotel's competitive methods were different between 1987-1989 and 1990-1991, if half of them were not even there in 1990 and 1991. A Chi-Square test was performed to examine this question by cross-tabulating the responses to Questions 2 and 8. It was found that regardless of whether the respondents were at the current hotel in both 1990 and 1991 or not, their responses to Question 2 were the same. This

means that their not being at the current hotel in 1990 and 1991 did not affect their knowing whether the 1987-1989 competitive methods were different from those of 1990-1991.

Another issue that was verified was whether or not the responses to the strategy scale in Question 1 were different between those respondents who were at the current hotel in both 1990 and 1991 and those who were not. It was found that the responses were in general the same. Only in the case of three competitive methods out of the total of 122 scale items, were any differences found.

From the above findings, it was concluded that :

1. it was more pragmatic to measure strategy over a recent 2-year period, and

2. that it was not necessary to reject the responses of such hotel managers who were not present at the current hotel in the relevant 2-year period (as was originally contemplated by the researcher).

One is, of course, conscious of the fact that these conclusions are being drawn from a study of only 16 respondents.

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As stated in Chapter 3, the primary purpose of this pilot study was to assess the comprehensibility and comprehensiveness of the strategy scale. Questions 3, 4 and 5 in the pilot survey instrument addressed the first issue, i.e., comprehensibility. Fourteen out of 15 respondents did not find any problems with the clarity of the strategy scale. The lone exception was a respondent who claimed that he was in this industry for 48 years, and considered most academic research of this kind to be of no value. Considering the nature of this exception, it was ignored and the strategy scale as tested was considered to be comprehensible enough to be adopted for the final study without any changes.

The comprehensiveness issue was addressed through Questions 6 and 7. Again, 14 out of 15 respondents did not find any competitive methods missing in the scale compared to what they have been practicing. The lone exception in this case (not the same respondent as the one referred to previously) responded that maintaining a high profile with the Welcome Center managers to get more seniors' leisure business is an additional competitive method he follows which was not included in the strategy scale. As it so happens, this competitive method was indeed in the strategy scale (no. 12 in Table 6) and this respondent, as a matter

of fact, correctly identified this item of the strategy

scale as being a key part of his strategy. In view of this,

his exception response to Question 5 was disregarded, and

the strategy scale was deemed to be comprehensive.

The Final Instrument

A copy of the final survey instrument is included in

Appendix II. Most of the measurement issues involved in

this instrument have already been discussed in detail in

Chapter 3 and are not being repeated here. This section

will thus only briefly introduce the instrument and provide

below a few additional clarifications not covered elsewhere

herein:

1.   Questions 1, 3 and 4 in Section I were designed to

     measure the control variables Location, Segment, and

     Affiliation. Measurement of the control variable Size

     is embedded in Question 2 of Section III (page 6 of the

     instrument), as the variable Rooms Available.

2.   In an earlier discussion of this research study, the

     relevance of assessing whether a hotel's location is

     good or bad, in addition to simply classifying the

     location by a scale, was raised. To address this

concern, Question 2 investigated how the respondents
rated their hotel's location vis-a-vis their
competition.

3. Likewise, in the previous discussion referred to above,
    whether the quality of a property had anything to do
    with its performance was another point that was raised.
    Considering the aging inventory of hotels in the market
    place, at issue here is whether all hotels regardless
    of age can follow similar strategies and achieve
    similar performance levels. To address this issue, the
    age of the respondent hotels was measured through
    Question 5 in Section I.

4. The 122-item strategy scale in Section II is identical
    to the one used in the pilot study, as no changes were
    warranted from the pilot study responses. However, the
    question relating to this strategy measurement was
    slightly modified on the recommendation of the
    corporate sponsors, by separating the instructional
    part from the question per se and highlighting the
    former in a box. In fact, from the consultations with
    the corporate sponsors, the presentation of the
    instrument was enhanced by prominently including
    instructions and preamble statements.

5. Another issue that was raised in the earlier discussion was whether the objective/goal of a business unit (of analysis) had any bearing on the strategies pursued by such a unit. For instance, do hotels which aim for a higher market share (probably a longer term goal) differ from those which look for immediate gratification through a higher gross operating profit? A related question might be, "Is market share a performance variable (as a goal/objective) or a strategy variable?" The discussion on strategy research based on the PIMS-Database in an earlier part of this dissertation has dealt with this subject. Question 1 of Section III, thus, investigated which of several alternatives was the most important performance objective for the hotel. The criterion by which the hotel manager's performance is judged is deemed to be a surrogate of the objective of the hotel (owners).

6. Question 2 of Section III of the instrument was designed to capture the data on the four performance variables under study. The formulae by which these performance measures - YPR, MSI, ROA and ROS are calculated from the information solicited in this question have already been described in Chapter 3.

An extensive list of diagnostic checks were employed to scan the information reported by the respondents who returned the completed survey instrument described above. The next section reports on these checks and the findings.

Diagnostics

As reported earlier, this study was conducted in collaboration with two corporate sponsors who are industry leaders with large portfolios of hotel properties. The final survey documentation was mailed to a total of 2705 hotels belonging to these chains. The questionnaires returned by the respondents added up to 654, representing a 24.2% response rate. Very few packets mailed to Company A's hotels were returned undelivered. As Company B undertook the mailing to its hotels, the corresponding information of returned questionnaires was not available for Company B. However, as both companies provided/used their current mailing labels, the returns in the latter case also could not have been too many. As such, this returns figure has not been considered in the response rate calculated. Likewise, the questionnaires received after the data processing has commenced have also not been included in the total response figure. This rate compares very favorably with the experience of previous hospitality strategy

researchers.   This is particularly so considering the length
of the survey instrument in this study and the breadth and
exactness of the performance information solicited.   The
company-wise break up of the response pattern is as shown in
Table 7.

Table 7. Response Pattern of the Survey of Lodging
         Establishments of Two Major Chains in U.S.A.

	Company A	Company B	Total
Total Mailing	1344	1361	2705
Questionnaires Returned	302	352	654
Response Rate	22.5%	25.9%	24.2%
Questionnaires Rejected	55	20	75
Effective Responses	247	332	579
Effective Response Rate	18.4%	24.2%	21.4%

As Table 7 shows, 75 questionnaires were rejected for various reasons described in the ensuing section, yielding a final sample of 579 hotels for further analysis. This represented an effective response rate of 21.4%. This response rate compares well with the response rates obtained in past hospitality strategy research. More importantly, this final sample size of 579 is four to five times the sample sizes realized in previous studies, and was considered more than adequate for the analyses contemplated in this study.

The diagnostic checks made were of two types. First, the questionnaires received back were physically screened, and then they were subjected to statistical checks.

Physical Screening

The following decision rules were adopted a priori to screen the questionnaires received:

1. Each questionnaire was scanned, and any questionnaire found to have been mutilated or filled lackadaisically was rejected outright. For instance, three respondents obliterated the price segment codes on the

questionnaires, thereby disabling their identification as upscale, midprice, or economy hotels. A couple of respondents encircled the entire columns of numbers on each page. All such frivolous cases were eliminated first.

2.   Several responding hotels were not in operation in 1991 and/or 1992. Many of them even clearly indicated as such. Since the strategy scale refers to the period 1991-1992, it was decided even before the first questionnaires started returning that any hotel not in operation at least for the entire year of 1992 should be eliminated.

3.   Also eliminated at this stage were all such questionnaires in which the respondents did not completely respond to the strategy measurement question. Less than 10% missing values were, however, accepted.

These decision rules resulted in the 75 rejections reported earlier. The 579 accepted responses were coded and analyzed with the SAS package. The diagnostic checks reported in the ensuing section have been performed with computer analysis.

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One of the first observations made during the physical screening process was that respondents, while reporting the performance information, failed to take into account the fact that 1992 was a leap year and had 366 days. Many of them provided exact performance figures right down to the second decimal place (thereby confirming their willingness to furnish accurate information), but forgot to adjust their own available roomnights and those of the competition as a whole for 1992. In contrast, many other respondents not only took care of this adjustment, but even pointed out in writing that they have done so lest the researcher misinterpret the data. It was thus obvious that the data needed some adjustment. This was accomplished as follows.

The Rooms Available for 1992 and 1993 were each divided by 365. If the resultant pair of data was identical, it is obvious that adjustment for the leap year was forgotten. If the resultant numbers (of daily rooms) were unequal, obviously, the respondents have made adjustments. So, for all such cases where the Rooms Available for 1992 and 1993 were the same, the 1992 figure was recomputed using 366 days. A similar exercise was done in respect of Total Rooms Available of Competition. The rest of the performance

fields are not affected by this leap year difference as they are all actual achieved figures.

The Average Room Rates (ARR) for 1992 and 1993 were computed by dividing the Net Room Sales figures reported by the corresponding Rooms Sold/Occupied figures. Scanning these ARRs not only helped in locating data entry errors but also highlighted highly improbable situations (e.g., an ARR less than $5). Such questionnaires were re-examined and the corresponding performance information was deleted, if found inaccurate.

Another very important observation which resulted from the physical screening of the returned questionnaires concerned the Total Fixed Assets figures reported by the respondents (Q.2, Section III, p. 6 of Appendix II). It was observed that these figures seemed to vary radically among the questionnaires, and appeared to have no discernable pattern of relationship with the size of the respondent hotels. To investigate this further, an intermediate variable COST (per room) was computed for each year. These calculations gave two figures, COST92 and COST93, being the result of dividing the Total Fixed Assets by the number of rooms. The latter figure was taken from the just described exercise of adjusting the Rooms Available for the leap year.

The computations of COST92 and COST93 was done for upscale, midprice, and economy hotels separately for obvious reasons.

These calculations highlighted the problem at hand which was not all that clear from merely studying the Total Fixed Assets figures. For upscale hotels, it was found that the COST figures ranged from a minimum of $6,145 to a maximum of $116,224. The corresponding minima and maxima for midprice and economy hotels were $308 and $87,260, and $361 and $68,236 respectively. It was quite clear from these figures that the sample consisted of a mixture of leased and owned hotels. This is quite representative of the larger universe of the lodging industry in general. The leased properties seem to have reported as their fixed asset values only such amounts which account for the limited capital infused by them after leasing the properties. Usually, such investments are restricted to some limited remodelling, acquisition of new computers, and so on. This is conjectural, of course, but is based on one's knowledge of the industry and an interpretation of the lower end of the COST figures computed.

It must be clarified here that the possibility of older hotels having low fixed asset values (because of being fully depreciated) as compared to newer hotels was considered and

rejected as an explanation for the variations in this data. This is because an examination of the COST and Age figures showed that there were many new hotels with very low COST figures and vice versa. Further probing on this subject also revealed that there are some prevalent industry practices which confound this issue. For example, it appears there are informal cartels of hotel owners who by turn depreciate their properties on the books and then sell them off at a higher (than book) value to another cartel member. The differential between the book value of the assets and the sale price in these cases is accounted for by "good will" of the property. The cartel member who purchases the property once again starts depreciating it on his/her books, and the cycle continues. As a result, all the cartel members are able to reap huge tax savings.

Faced with these kinds of dynamics, it was obvious that using the Total Fixed Assets figures reported in these questionnaires for computing ROA was fraught with serious problems. It is not surprising that hospitality strategy researchers have never managed to get any meaningful results in the past in their attempts to relate ROA with the different independent variables under investigation. Though the phenomenon that came to light here may have been generally known, it is only in the current study that

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"exact" data on assets was collected for the first time,
confirming the enormity of the problem in using ROA as a
dependent variable measuring performance. While possible
solutions to this problem for future research are discussed
in Chapter 5, it was decided that in this study ROA should
not be used as a performance measure. Thus, in all
subsequent analyses reported in the ensuing sections, only
YPR, MSI, and ROS have been used as the performance
measures.

Statistical Checks

In the remainder of this dissertation, the variables
are referred to by the names used to process them in the SAS
programs. This is being done (a) for brevity, and (b) to
create an integrity between the narration and the computer
outputs. To facilitate easy identification/reference of
these variables, a dictionary of variables is included in
Table 8.

Table 8.   Dictionary of Variables Used in this Study

Variable Abbreviation	Description
AFFILIAT	Affiliation, i.e., ownership-management structure of a hotel (Independently owned, self-managed, etc.)
LOCATION	Location of hotel (City-center, etc.)
LOCRATE	Variable classifying RATELOC into most superior (=1) or most inferior (=2) location
MSI92	Market Share Index for 1992
MSI93	Market Share Index for 1993
MSI	Average of MSI92 and MSI93
MSIDIFF	Difference between MSI93 and MSI92
NEWAGE	Variable classifying the Age of a hotel into four categories (<=7 years, etc.)
NEWMSI92	Variable classifying MSI92 into high or low by quartiles (High = 1, Low = 2)
NEWMSI93	Variable classifying MSI93 into high or low by quartiles (High = 1, Low = 2)
NEWMSI	Variable classifying MSI into high or low by quartiles (High = 1, Low = 2)
NEWMSIDF	Variable classifying MSIDIFF into high or low by quartiles (High = 1, Low = 2)
NEWRMS92	Variable classifying the Size (Available Rooms) of a hotel in 1992 into four categories (<=100 rooms, etc.)
NEWRMS93	Variable classifying the Size (Available Rooms) of a hotel in 1993 into four categories (<=100 rooms, etc.)
NEWROS92	Variable classifying ROS92 into high or low by quartiles (High = 1, Low = 2)
NEWROS93	Variable classifying ROS93 into high or low by quartiles (High = 1, Low = 2)
NEWROS	Variable classifying ROS into high or low by quartiles (High = 1, Low = 2)
NEWROSDF	Variable classifying ROSDIFF into high or low by quartiles (High = 1, Low = 2)

NEWYPR92	Variable classifying YPR92 into high or low by quartiles (High = 1, Low = 2)
NEWYPR93	Variable classifying YPR93 into high or low by quartiles (High = 1, Low = 2)
NEWYPR	Variable classifying YPR into high or low by quartiles (High = 1, Low = 2)
NEWYPRDF	Variable classifying YPRDIFF into high or low by quartiles (High = 1, Low = 2)
PERFMESR	Performance Measure, which the respondents considered to be the most important to evaluate the performance of their hotel
RATELOC	Variable measuring the rating of a hotel's location vis-a-vis its competition
ROS92	Return On Sales for 1992
ROS93	Return On Sales for 1993
ROS	Average of ROS92 and ROS93
ROSDIFF	Difference between ROS93 and ROS92
SEGMENT	Variable classifying the service-level of a hotel (Full-service, etc.)
YPR92	Yield Per Room for 1992
YPR93	Yield Per Room for 1993
YPR	Average of YPR92 and YPR93
YPRDIFF	Difference between YPR93 and YPR92

To perform various data manipulations and statistical checks involving the variables Size and Age, these continuous variables had to be categorized first. In order that a balanced distribution across categories is obtained for each of these variables, frequency distributions were first printed and the categories were then decided in such a way that the distribution is uniform. This resulted in Size being categorized as: <=100 rooms, 101-150 rooms, 151-250 rooms, and >250 rooms. Age was categorized as: <=7 years, 8-20 years, 21-30 years, and >30 years.

Unless otherwise specified, an α = .05 was used in all statistical analyses.

Response Bias

The next diagnostic test(s) dealt with verifying whether there was any response bias. Whereas generalization to the whole universe of lodging properties was not the main objective of this study as discussed previously, it is nevertheless important to ensure that the respondents in this study are not significantly different from the non-respondents, so that the results could at least be generalized to the level of the universe of both sponsors' total portfolios of properties. In as much as these two

companies, as industry leaders, account for a significant number of hotels in the total population, being able to generalize the results to the level of their total portfolios will enhance the robustness of the findings from this study. With this objective in mind, respondent-nonrespondent differences, if any, were studied as described below.

The response bias tests had to be performed in different ways for each of the sponsors' respondent-nonrespondent groups. This was because information about the non-respondents was available for each of these groups in different formats. It should be clarified here that with the 2705 hotels to whom the research documentation was mailed being spread all across the country, it was not possible to reach the non-respondents directly. In any case, such an exercise would have been futile because the non-response can safely be presumed to be due to the reluctance of hotel managers to part with confidential information on their strategies and performance. This meant that any response bias checks could be performed only on classificatory data, such as Location, Segment, and so on. Information on these variables was gathered in different ways for each sponsor's portfolios.

Company A.

At the time of this study, Company A was going through an overhaul of its information database and could not access any franchisee-descriptive data. So, it was decided in this case to treat the respondents of the second mailing (described earlier), as the non-respondents to the first mailing. Anticipating the necessity of this strategy, the 300 hotels to whom the second mailing was done (as described in Chapter 3) were randomly selected from the non-respondents up to that point of time. As such, the responses received from this second mailing could be generalized to all non-respondents of the first mailing, and if there are no differences between the respondents to the two mailings, then the possibility of any response bias can be discounted. The additional advantage of this strategy was that even performance data was available for the second group of respondents, so that the response bias checks could be performed on the dependent variable too, in addition to the classificatory information. Usually, this is never possible in most research studies because performance information is never available for non-respondents.

Chi-square tests were performed on the cross-tabulations of LOCATION, SEGMENT, AFFILIAT, NEWAGE,

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NEWRMS92, and NEWRMS93, with the two respondent groups. As Table 9 shows, the null hypothesis of equality failed to be rejected in all the tests . So, it can be presumed that there is no response bias as measured by these variables. As for the performance variables, Cochran T-tests were performed on the means of the two respondent groups for the variables, YPR92, YPR93, MSI92, MSI93, ROS92, and ROS93. As the tariffs and, consequently, the revenues of hotels in general differ from upscale to midprice to economy, it was considered appropriate to perform these tests for each price classification separately, for the revenue related performance variables - YPR92, YPR93, ROS92, and ROS93. To maintain uniformity, the same approach was taken in respect of MSI92 and MSI93 as well. As Table 10 shows, all the T-tests failed to reject the null hypothesis of equality of means. Therefore, it can be presumed that there is no response bias as measured by the performance variables as well. The summary conclusion from both the Chi-square and T-tests put together is that in the case of Company A, the respondents and non-respondents are alike in all respects.

Table 9. Response Bias Tests between Respondents and Non-
respondents by Classificatory Variables
(Company A)

Classificatory Variables	N	DF	Chi-Square	Probability
LOCATION	245	4	3.492	.479[*]
SEGMENT	248	4	5.664	.226[*]
AFFILIAT	248	5	8.239	.144[*]
NEWAGE	243	3	0.235	.972[*]
NEWRMS92	181	3	2.711	.438[*]
NEWRMS93	187	3	1.999	.573[*]

[*] Not Significant

Table 10. Response Bias Tests between Respondents and Non-respondents by Performance Variables (Company A)

Upscale Hotels

Performance Variables	DF	T - Value	Probability>\T\
YPR92	(2,2)	0.5248	.6274*
YPR93	(2,3)	(0.3280)	.7562*
MSI92	.	0.7653	.5841*
MSI93	.	0.0993	.9370*
ROS92	(1,3)	(0.3646)	.7339*
ROS93	(1,4)	(0.5194)	.6257*

Midprice Hotels

Performance Variables	DF	T - Value	Probability>\T\
YPR92	(5,47)	(1.7133)	.0926*
YPR93	(6,49)	(1.2974)	.1999*
MSI92	(18,1)	(1.3465)	.1940*
MSI93	(20,1)	(1.4473)	.1626*
ROS92	(4,28)	0.3579	.7227*
ROS93	(4,28)	0.3374	.7380*

Economy Hotels

Performance Variables	DF	T – Value	Probability>\T\
YPR92	(71,13)	1.2307	.2219*
YPR93	(74,13)	1.7108	.0907*
MSI92	(1,21)	0.8942	.8305*
MSI93	(1,23)	0.5117	.9049*
ROS92	(4,39)	2.8179	.2000*
ROS93	(4,41)	2.4730	.2652*

* Not Significant

Company B.

Company B presented a different scenario for similar
testing. They had an information database on their
franchisees readily available and it was decided to use this
database to check the response bias. Of course, in this
case, no such checks could be attempted on the performance
variables as such information was unavailable and not
forthcoming. Once again, a random sample of 100 non-
respondents were chosen from Company B's portfolio for this
testing. Company B tried to prepare a subset of information
from their database on the variables LOCATION, SEGMENT, and
AFFILIAT as well as tabulate data on age and number of rooms
(corresponding to the variables NEWAGE, and RMS92 and
RMS93). Some problems were encountered in this exercise.
The Company's classification on AFFILIAT did not match with
the one used in this study, and no type of reclassification
was successful in making the two sets of data comparable.
So, though this information was available, it could not be
used. In the case of age, it was found that the Company's
database reflected only the year in which a property became
its franchisee, and not the year in which the hotel was
first put up. The Company tried to collect this information
as they too became interested in measuring the age as this
research study did, but the data compilation could not be

completed by them in time for this analysis. As for number
of rooms, the Company's database reflected the total number
of rooms as published, but not adjusted for rooms taken out
for repairs and maintenance. The information gathered in
this research study was based on the latter. So, once
again, though the information was available, it could not be
used owing to comparability problems.

Thus, Chi-square tests were performed in this case on
LOCATION and SEGMENT to check the response bias. As Table
11 shows, the null hypothesis of equality failed to be
rejected for SEGMENT, and was narrowly rejected for
LOCATION. Being surprised at the last result, a check was
made on the Company's classification of LOCATION for the
respondent hotels. It was found that there were some
differences between how the Company classified a hotel's
LOCATION and the hotel's own classification on this variable
as reported in the questionnaires received back. In view of
the strong support obtained in the case of Company A for the
hypothesis of no response bias, and the fact that the
portfolios of these two Companies are very similar, it was
considered safe to presume similarly in the case of Company
B as well.

Table 11. Response Bias Tests between Respondents and Non-respondents by Classificatory Variables (Company B)

Classificatory Variables	N	DF	Chi-Square	Probability
LOCATION	428	4	9.713	.046**
SEGMENT	430	4	8.248	.083*

* Not Significant
** Significant $\underline{p} < .05$

Thus, it was concluded overall that there is no response bias in this study, which means that the results can be generalized to the portfolio populations of these two companies. This set the stage for the next diagnostic check to verify whether the respondent populations from the two companies' franchisees are similar. Obviously, one would like them to be similar so that all the responses can be combined for all further analysis. The results of these checks are reported in the next section.

Company A vs. Company B

Unlike in the response bias checks reported above, we are not interested here in verifying the similarity between the two groups of respondents on the classificatory variables, LOCATION, SEGMENT, etc. This is because the two companies could well have different mixes of properties on each of these variables without making any difference to this study. In fact, the portfolios of these two Companies have differences in LOCATION, etc. and these are reported just for sample description purposes later on. On the other hand, what is critical here is that the two respondent groups be similar on the dependent and independent variables because of the nature of the statistical analysis contemplated, as outlined in the previous chapter. In

particular, that the two respondent groups be similar on the strategy construct is important and this reasoning is discussed first before presenting the results of the diagnostic checks.

The strategy construct is measured in this study by a 122-item scale. Factor analytic techniques are to be employed on the responses to this scale to identify the underlying dimensions of strategy. The appropriate sample size for factor analysis is a controversial subject, and there is no one ultimate word on this subject. As Pedhazur and Schmelkin (1991) put it, "although there is general agreement that large samples are imperative for stability of factor analytic results, there is no agreement as to what constitutes large" (p. 624). According to Nunnally (1978), "a good rule is to have at least 10 times as many subjects as variables" (p. 421). This translates to 1220 sample hotels needed for analysis in this study. As every hospitality strategy researcher knows, this is an utopian situation, particularly considering the fact that this study required the respondents to answer a very long questionnaire (largely because of the strategy scale) and also report very detailed performance data. As such, it was quite clear from the beginning that sample size would pose a major problem in this study and, hence, the extreme efforts taken to maximize

the returned responses through multiple reminders, multiple mailings, and coopting two sponsors (despite the delay in the second sponsor coming on board). It will be recalled that in the second reminder of the first mailing to Company A's hotels, hotel managers were requested to provide at least the non-performance-related data so that the strategy scale responses could be maximized. Through all this process, it was considered that a sample size of somewhere between 500 to 600 would be acceptable for two reasons. First, assuming that the scale purification process would leave around 110 items, a sample size of, say, 550 would give a 5:1 ratio between subjects and variables. In organizational research, unlike consumer studies, such a ratio should be considered adequate considering the difficulty of obtaining any better response rates. Further, a sample size of 500-600 would constitute a fairly large sample size by itself. Second, in the past, other hospitality strategy researchers such as Schaffer (1987) and Crawford-Welch (1990) have relied on a 5:1 ratio of responses to employ factor analytic techniques.

Assuming that a target of, say, 550 responses have to be achieved, it will be apparent that this cannot be realized from either Company's franchisees alone, because response rates are seldom greater than around 20% in

hospitality strategy research. Thus, the only way a sample size of around 550 could be achieved was to hope that the responses to the strategy scale from the two Companies' franchisees would be similar. As it turned out, the sample size achieved (579) was enough to meet the analytic requirements, if only there are no dissimilarities between the two respondent groups. To verify the differences, if any, between these respondent groups, the MANOVA technique was used for the strategy scale and Chi-square tests were performed on the performance variables. The results of these tests are reported next.

Strategy Comparison.

As the strategy scale consists of as many as 122 items, it was considered inappropriate to subject the whole scale to a multivariate analysis of variance. This is because the two respondent groups may be similar on 12 of the 13 dimensions (based on which the scale items were developed) and differ only in the remaining single dimension, and yet a MANOVA test on the total scale might result in rejecting the null hypothesis of equality. Clearly, this is an impractical approach. After all, we do hope to discover differences in strategy between all the respondents and, thus, need only a general similarity between the two

respondent groups and not equality on every last dimension and item of the strategy scale. Thus, it was considered that the most appropriate approach here would be to perform a MANOVA for each strategy dimension, i.e., on sets of scale items constituting such dimensions. However, in doing so, it was apparent that the general α-level of .05 for testing the Type I error should not be employed here because of the Bonferroni's Inequality. When multiple independent tests are performed at, say, $\alpha'=.05$, but conclusions are to be drawn on a total set of such multiple tests, then the overall α, which is the "probability of at least one false rejection when the null hypothesis is true" (Stevens 1992), across the group of tests is not the same as α'. The upper bound of this Bonferroni Inequality is given by, overall $\alpha \leq k\alpha'$. But, this upperbound is conservative and, hence, $k\alpha'$ can be used only for up to 10 tests. For larger number of tests, a tighter upperbound is required which is given by, overall $\alpha = 1-(1-\alpha')^k$ where 'k' is the number of tests. In the current situation, as k = 13, the latter Bonferroni's upper bound was used.

Translating the above formula, the level of α' was calculated such that the overall α = .05, with k = 13. This comes to .004 as shown below:

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$$\alpha = 1-(1-\alpha')^k$$
$$\therefore \quad \alpha' = 1-(1-\alpha)^{1/k}$$
$$= 1-(1-.05)^{1/13}, \text{ in the present case}$$
$$= .004$$

This means that if the p-value of the F-statistic in each MANOVA (of each sub-scale accounting for individual strategy dimensions) is less than .004, the null hypothesis of equality has to be rejected. On the other hand, if the p-value for any of the MANOVA's is greater than .004, we fail to reject the null hypothesis, and the two groups of respondents can be considered to be similar on that strategy dimension.

Table 12 shows the results of the 13 MANOVAs performed to determine the differences between the two groups of respondents. Of the 13 comparisons, the two groups are similar in eight cases, dissimilar in four cases, and one test presents a tie and can be considered as failing to reject the null hypothesis of equality. As nine out of 13 comparisons indicate similarity of the two groups, it is argued that there is sufficient evidence to presume their overall similarity, and combine them for all subsequent statistical analyses.

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Table 12.   Differences in Strategy - Company A vs Company B

Strategy Dimension	F	NUM DF	DEN DF	PR > F
Specialization	2.3919	9	373	.0121[*]
Push vs. Pull	3.7109	11	371	.0001[-]
Product/Service Quality	3.2708	6	381	.0038[=]
Price Policy	2.2804	6	379	.0356[*]
Brand Identification	4.7821	6	378	.0001[-]
Channel Selection	2.8559	7	379	.0065[*]
Technological Leadership	0.5055	6	380	.8042[*]
Cost Position	2.3549	5	392	.0400[*]
Leverage	2.5110	8	350	.0115[*]
Service Identification	1.5133	9	370	.1412[*]
Service Specification	2.3546	26	345	.0003[-]
Service Delivery	1.7935	13	370	.0424[*]
Service Communication	6.3401	10	374	.0001[-]

Bonferroni's Inequality Upper Bound : .004 at k=13

[*] Not Significant
[-] Significant $\underline{p}$ < .004
[=] Tie

Nonetheless, curiosity is the hallmark of every good researcher, and we should thus see why the null hypothesis was rejected in the four cases that it was. This was done by studying the univariate analysis of variance statistics produced by the MANOVA procedure. Here too, the individual α' has to be calculated, as described previously, for each test separately as the value of k (the number of scale items for which individual ANOVAs are reported) varies from dimension to dimension. These values of α' and the observations from this examination of the ANOVA output are reported next.

For the Push vs. Pull dimension, given k = 10, the α' works out to .0004, such that the overall α for this subscale is .004 as calculated previously. Against this critical value, only the comparison on scale item 19 (Table 6) was found to be rejected (PR > F .0001) and for all the other nine items of this subscale, the test failed to reject the null hypothesis. An examination of the means of this scale item for the two companies revealed that Company B's hotels adopted this strategy, of contacting customers after they stayed at the hotel, more than Company A's hotels did.

For the Brand Identification dimension, given k=6, the α' works out .0007. Against this critical value, only the

comparison on scale item 34 (Table 6) was found to be rejected. For the remaining five scale items of this dimension, the test failed to reject the null hypothesis. Once again, comparing the means of this scale item for the two companies, we find that Company A's hotels rely more on this strategy, of advertising to create and/or maintain awareness of the hotel, than Company B's hotels do.

For the Service Specification dimension, while the MANOVA results indicated differences between the two Companies' strategies, univariate ANOVAs failed to show any significant differences at $\alpha' = .0001$, given k=26.

For the Service Communication dimension, given k=10, α' is once again .0004, such that the overall α for the subscale is .004. Against this critical value, only the comparison on scale item 120 (Table 6) was found to be rejected. Comparing the means of this scale item, it is found that Company B's hotels relied more on this strategy, of communicating service quality guarantees to customers, than Company A's hotels did.

Thus, it is only in three scale items out of a total of 122 items that significant differences were found between the two Companies' hotels. This evidence is considered

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strong enough to assume that the two Companies' hotels are overall similar in their strategies.

Performance Comparison.

To study the differences, if any, in the dependent variables - YPR92, YPR93, MSI92, MSI93, ROS92, and ROS93 - between the two respondent groups, T-tests were performed on the means of each variable. As the tariffs and revenues of the various price segments differ from each other, these tests were conducted for the upscale and midprice segments separately. No tests were possible for the economy segment as Company B had no representation in that segment. It may be clarified here that Company B had only recently entered this segment. Thus, there were 12 T-tests in all. At α = .05 level, only two tests, for YPR92 and YPR93 for upscale hotels, rejected the null hypothesis of equality, as Table 13 indicates. The balance of the 10 tests showed that the two respondent groups are similar. In fact, even here the Bonferroni's Inequality has to be taken into account as we are looking at 12 T-tests and making a combined judgement on the similarity or otherwise of the two groups. The α' to account for the Bonferroni Inequality works out to .0042 at k = 12. Using this critical value of α', only in the case of YPR93 of upscale hotels is there any difference between

the two groups. Even YPR92 of upscale hotels does not show a difference at this α' level. In view of the fact that 11 out of 12 variables fail to show any differences, it may be presumed that the two Companies' hotels do not differ in the dependent variables as well.

Table 13. Differences in Performance - Company A vs. Company B

Upscale Hotels

Performance Variables	DF	T - Value	Probability>\T\
YPR92	(9,5)	(2.6314)	.0197⁻
YPR93	(9,6)	(3.7796)	.0018⁼
MSI92	(2,6)	(0.3821)	.7123*
MSI93	(2,6)	0.0529	.9591*
ROS92	(5,8)	0.7578	.4621*
ROS93	(6,8)	(0.1542)	.8797*

Midprice Hotels

Performance Variables	DF	T - Value	Probability>\T\
YPR92	(252,53)	(1.9294)	.0546*
YPR93	(254,56)	(1.8957)	.0589*
MSI92	(20,119)	(0.7045)	.4823*
MSI93	(22,125)	(0.6249)	.5330*
ROS92	(33,203)	0.3622	.7175*
ROS93	(33,210)	(0.1147)	.9088*

* Not significant
⁻ Significant $p < .05$
⁼ $p < .005$

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However, we should know why YPR93 indicates a
difference between the two groups. Looking at the means for
this test, it is seen that Company B's upscale hotels
averaged $64.22 per available room in 1993 compared to
$34.94 per available room for Company A's hotels. Company
A's YPR for 1992 was $34.97, showing practically no change
between the two years. In sharp contrast, Company B's
average YPR92 was $59.23, showing a $5 increase from 1992 to
1993. A closer examination revealed practically similar
increases in the Average Room Rates (ARR) for both the
groups between 1992 and 1993. This means that the YPR
increase for Company B's upscale hotels from 1992 to 1993
can be solely attributed to an increase in their average
occupancy level between the two years. In fact,
computations show that Company B's upscale hotels increased
their average occupancy from 69.3% to 73.1% between 1992 and
1993, whereas Company A's hotels in this segment suffered a
decrease in occupancy from 60.6% to 57.3%. Company B has
been going through an extensive reorganization during this
period under new management and this improved performance
may be attributable in some part to the new management
style. However, the upscale segment accounts for only 17
hotels out of the 579 hotels in the total sample.

Considering this fact along with that the rest of the evidence showed overwhelming similarities, the two respondent groups were considered not dissimilar. Thus, it has been possible to combine the two groups into one overall sample resulting in a set of 579 responses which met the sample size criterion for the factor analytic techniques employed later in this analysis. From this stage onwards, all tests and descriptions refer to the whole sample.

Now that we have one wholesome sample of 579 respondent hotels to deal with, it is appropriate that the sample be described first before any further statistical analyses are presented. In the next section, the sample in this study is described by various classificatory variables used in the questionnaire.

Sample Description

Table 14 shows the LOCATION by SEGMENT crosstabulation of the sample. Highway hotels accounted for the largest proportion of the sample (37.8%) followed by suburban hotels (25.9%). City-Center hotels formed nearly 17% of the sample. Airport and resort hotels were roughly equal in proportions. Full-service hotels accounted for more than 60%, while limited-service hotels were 28.7% of the sample.

Tables 15 and 16 show the crosstabulation of LOCATION with NEWRMS92 and NEWRMS93. There are virtually no differences between these tables. Hotels with 151-250 rooms were the largest segment of the sample (32.3%), while those with 100 rooms or less and those with 101-150 rooms were roughly equal in number (111 and 119 in 1992, and 115 and 122 in 1993, respectively).

Table 17 shows the crosstabulation between LOCATION and NEWAGE. This table indicates that on average the lodging properties are quite aged. Slightly more than 10% of the hotels are more than 30 years old. Nearly 33% of the sample consisted of 21 to 30 years old hotels.

Table 14. Cross-tabulation of LOCATION by SEGMENT

LOCATION	SEGMENT					
	Full-service	Limited-service	All-suite	Resort	Convention	Total
City-center	60	20	5	0	12	97
Suburban	101	38	4	0	5	148
Highway	128	80	2	0	6	216
Airport	41	9	1	0	1	52
Resort	16	17	1	23	1	58
Total	346	164	13	23	25	571

Table 15. Cross-tabulation of LOCATION by NEWRMS92

LOCATION	NEWRMS92				
	<=100	101-150	151-250	>250	Total
City-center	16	16	23	34	89
Suburban	22	30	51	17	120
Highway	62	56	45	12	175
Airport	3	5	19	13	40
Resort	8	12	11	7	38
Total	111	119	149	83	462

Table 16. Cross-tabulation of LOCATION by NEWRMS93

LOCATION	NEWRMS93				
	<=100	101-150	151-250	>250	Total
City-center	17	15	24	33	89
Suburban	22	31	51	17	121
Highway	64	57	45	12	178
Airport	3	7	19	13	42
Resort	9	12	12	7	40
Total	115	122	151	82	470

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Table 17. Cross-tabulation of LOCATION by NEWAGE

| LOCATION | NEWAGE | | | | |
	<=7	8-20	21-30	>30	Total
City-center	27	29	28	13	97
Suburban	40	43	47	15	145
Highway	65	55	77	13	210
Airport	9	19	19	5	52
Resort	17	15	14	11	57
Total	158	161	185	57	561

Table 18. Cross-tabulation of LOCATION by RATELOC

| LOCATION | Most superior location against competition | | | Most inferior location against competition | | | |
	1	2	3	4	5	6	Total
City-center	18	36	24	9	8	1	96
Suburban	20	48	36	28	12	4	148
Highway	41	77	61	27	7	2	215
Airport	4	23	16	7	2	0	52
Resort	16	25	9	5	2	2	59
Total	99	209	146	76	31	9	570

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Table 18 crosstabulates LOCATION with RATELOC. As many as 54% of the respondents (scale responses 1 and 2 combined) rated their property's location as being most superior against the competition, whereas only 7% (scale responses 5 and 6 combined) rated themselves most inferior. More resort properties tended to rate themselves as being most superior in location in comparison to the overall sample (69.5% vs. 54%). In contrast, a lesser proportion of suburban hotels felt this way about their properties compared to the total sample (46% vs. 54%).

Tables 19 and 20 crosstabulate SEGMENT with NEWRMS92 and NEWRMS93. As these tables indicate, full-service hotels account for 64.3% of the sample and limited-service hotels account for an additional 26.3%. Full-service hotels are relatively larger in size, compared to the overall distribution of the sample. In contrast, limited-service hotels are expectedly concentrated in the smaller size categories. For example, there were no limited service hotels with more than 250 rooms.

Table 19.   Cross-tabulation of SEGMENT by NEWRMS92

SEGMENT	NEWRMS92				
	<=100	101-150	151-250	>250	Total
Full-service	30	66	134	71	301
Limited-service	73	42	8	0	123
All-suite	6	3	1	0	10
Resort	2	7	1	3	13
Convention	2	3	6	10	21
Total	113	121	150	84	468

Table 20.   Cross-tabulation of SEGMENT by NEWRMS93

SEGMENT	NEWRMS93				
	<=100	101-150	151-250	>250	Total
Full-service	29	69	136	70	304
Limited-service	77	42	7	0	126
All-suite	6	3	1	0	10
Resort	3	7	2	3	15
Convention	2	3	6	10	21
Total	117	124	152	83	476

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Table 21 crosstabulates SEGMENT with AFFILIAT. Nearly 43% of the hotels were independently owned and self-managed. Around 28% were also independently owned, but managed by a management company (other than the franchisor). Around 17% of the hotels were managed by the franchisors.

Table 22 crosstabulates SEGMENT with NEWAGE. Generally, more full-service hotels seem to be older than the overall sample. As many as around 58% of the limited-service properties were seven years old or newer. This is the largest proportion of new properties compared with all other segments, indicating a higher growth of this segment in recent years.

Table 21. Cross-tabulation of AFFILIAT by SEGMENT

AFFILIAT	SEGMENT					
	Full-service	Limited-service	All-suite	Resort	Convention	Total
Independently owned,						
self managed	124	92	6	14	11	247
managed by the franchisor	67	20	0	1	5	93
managed by a management company (other than the franchisor)	103	40	6	5	5	159
Chain owned (i. e., part of a multi-unit company),						
managed by the chain	43	10	1	2	4	60
managed by the franchisor	4	2	0	0	0	6
managed by a management company (other than the franchisor)	4	2	0	1	0	7
Other than any of the above	2	0	0	0	1	3
Total	347	166	13	23	26	575

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Table 22. Cross-tabulation of SEGMENT by NEWAGE

SEGMENT	NEWAGE				
	<=7	8-20	21-30	>30	Total
Full-service	48	105	154	36	343
Limited-service	95	37	20	11	163
All-suite	8	3	1	1	13
Resort	4	8	5	6	23
Convention	5	9	8	2	24
Total	160	162	188	56	566

Table 23. Cross-tabulation of PERFMESR by SEGMENT

PERFMESR	SEGMENT					
	Full-service	Limited-service	All-suite	Resort	Convention	Total
Percentage of Occupancy	33	44	2	3	0	82
Average Room rate	5	8	2	0	0	15
Market Share	12	10	0	0	1	23
Gross Operating Profit / Income Before Fixed Charges	208	74	7	15	18	322
Return on Sales (i.e., Profit/Sales)	23	10	1	2	3	39
Return on Assets (i.e., Profit/Fixed Assets)	10	1	0	0	1	12
Other than any of the above	26	8	1	0	1	36
Total	317	155	13	20	24	529

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Table 23 crosstabulates SEGMENT with PERFMESR. By far,
Gross Operating Profit/Income Before Fixed Charges is the
single most important performance measure (nearly 61% of the
sample) by which hotel owners/management judge the
performance of their properties. A distant second
performance measure is the percentage of occupancy.
Limited-service properties seem to be more interested in
this measure of performance. Average Room Rate and Return
on Assets seem to be the least popular measures. Nearly
seven percent of the sample used measures other than those
specified in the questionnaire. Of the 36 respondents who
fell into this category, 25% used REVPAR (revenue per
available room) and another 36% used either NOP (net
operating profit) or NOI (net operating income). It appears
that using YPR (which is the same as REVPAR) and not using
ROA (though this was done for entirely unrelated reasons) in
this study conform very well with industry practices.
Further research in this area might benefit from including
either NOP or NOI or both as additional/alternative
performance measures.

Tables 24 and 25 crosstabulate AFFILIAT with NEWRMS92
and NEWRMS93. Independently owned and self-managed
properties tended to be smaller in size, and chain-owned and

managed properties tended to be larger, as compared to the overall sample distribution by size.

Table 24. Cross-tabulation of AFFILIAT by NEWRMS92

AFFILIAT	NEWRMS92				
	< =100	101-150	151-250	>250	Total
Independently owned,					
self managed	78	51	49	18	196
managed by the franchisor	12	16	34	14	76
managed by a management company (other than the franchisor)	19	44	45	26	134
Chain owned (i. e., part of a multi-unit company),					
managed by the chain	2	5	19	24	50
managed by the franchisor	1	1	0	1	3
managed by a management company (other than the franchisor)	1	2	3	0	6
Other than any of the above	0	1	0	1	2
Total	113	120	150	84	467

Table 25. Cross-tabulation of AFFILIAT by NEWRMS93

AFFILIAT	NEWRMS93				
	< = 100	101-150	151-250	> 250	Total
Independently owned,					
self managed	78	52	50	18	198
managed by the franchisor	12	18	34	14	78
managed by a management company (other than the franchisor)	21	44	47	25	137
Chain owned (i. e., part of a multi-unit company),					
managed by the chain	4	5	18	24	51
managed by the franchisor	1	1	0	1	3
managed by a management company (other than the franchisor)	1	2	3	0	6
Other than any of the above	0	1	0	1	2
Total	117	123	152	83	475

Table 26 crosstabulates AFFILIAT with NEWAGE. Hotels managed by the franchisors and multi-unit chained-managed hotels tended to be concentrated more in the older properties, particularly the 21-30 years old segment.

Table 27 crosstabulates AFFILIAT with PERFMESR. As stated previously GOP/IBFC is the leading measure of performance used by a majority of the sample hotels. However, the independently owned and self-managed hotels seem to rely less on this measure in proportion (slightly more than 50%) as compared to the total sample. These hotels relied more on percentage of occupancy to judge their performance as compared to the total sample.

Table 26. Cross-tabulation of AFFILIAT by NEWAGE

AFFILIAT	NEWAGE				
	<= 7	8-20	21-30	>30	Total
Independently owned,					
self managed	78	72	72	21	243
managed by the franchisor	18	26	40	7	91
managed by a management company (other than the franchisor)	53	44	42	18	157
Chain owned (i. e., part of a multi-unit company),					
managed by the chain	9	13	31	7	60
managed by the franchisor	1	1	0	3	5
managed by a management company (other than the franchisor)	0	5	1	1	7
Other than any of the above	1	1	1	0	3
Total	160	162	187	57	566

Table 27. Cross-tabulation of AFFILIAT by PERFMESR

AFFILIAT	PERFMESR							
	1	2	3	4	5	6	7	Total
Independently owned,								
self managed	52	8	9	114	19	7	16	225
managed by the franchisor	16	3	4	46	4	3	10	86
managed by a management company (other than the franchisor)	9	2	7	110	14	1	7	150
Chain owned (i. e., part of a multi-unit company),								
managed by the chain	3	2	2	45	1	0	4	57
managed by the franchisor	0	0	0	2	0	1	0	3
managed by a management company (other than the franchisor)	1	0	1	4	0	0	0	6
Other than any of the above	0	0	0	1	1	0	0	2
Total	81	15	23	322	39	12	37	529

Legend:

1 - Percentage of Occupancy
2 - Average Room rate
3 - Market Share
4 - Gross Operating Profit / Income Before Fixed Charges
5 - Return on Sales (i.e., Profit / Sales)
6 - Return on Assets (i.e., Profit / Fixed Assets)
7 - Other than any of the above

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Table 28 and 29 crosstabulate NEWRMS92 and NEWRMS93 with NEWAGE. In general, the newer hotels tended to be smaller. For example, 41.7% of hotels which are less than 7 years old had less than 100 rooms. The larger properties, in contrast, were the oldest ones. Clearly, there seems to be a trend of new construction being concentrated in smaller hotels.

Table 28. Cross-tabulation of NEWRMS92 by NEWAGE

NEWRMS92	NEWAGE				
	<=7	8-20	21-30	>30	Total
<= 100	54	28	18	9	109
101 - 150	37	34	37	12	120
151 - 250	22	47	63	14	146
> 250	17	25	38	4	84
Total	130	134	156	39	459

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Table 29. Cross-tabulation of NEWRMS93 by NEWAGE

NEWRMS93	NEWAGE				
	<=7	8-20	21-30	>30	Total
<= 100	55	29	20	9	113
101 - 150	37	34	39	13	123
151 - 250	23	49	62	14	148
> 250	17	24	38	4	83
Total	132	136	159	40	467

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Table 30 and 31 crosstabulate NEWRMS92 and NEWRMS93 with PERFMESR. For the total sample, more than 60% of the hotels used GOP/IBFC as the most important performance measure. However, these tables show that the smaller hotels (with less than 100 rooms), in contrast, use percentage of occupancy more as the performance measure. Nearly 34% of these hotels reported preferring occupancy percentage as the performance measure, against only about 15% for the overall sample.

Table 30. Cross-tabulation of PERFMESR by NEWRMS92

PERFMESR	NEWRMS92				
	$< = 100$	101-150	151-250	> 250	Total
Percentage of Occupancy	37	14	12	2	65
Average Room rate	7	4	0	2	13
Market Share	6	5	5	3	19
Gross Operating Profit / Income Before Fixed Charges	41	70	93	62	266
Return on Sales (i.e., Profit/Sales)	8	10	13	3	34
Return on Assets (i.e., Profit/Fixed Assets)	3	1	3	3	10
Other than any of the above	7	10	12	4	33
Total	109	114	138	79	440

Table 31. Cross-tabulation of PERFMESR by NEWRMS93

PERFMESR	NEWRMS93				
	< = 100	101-150	151-250	> 250	Total
Percentage of Occupancy	37	15	14	2	68
Average Room rate	7	4	0	2	13
Market Share	8	6	5	3	22
Gross Operating Profit / Income Before Fixed Charges	44	71	93	62	270
Return on Sales (i.e., Profit/Sales)	7	10	14	2	33
Return on Assets (i.e., Profit/Fixed Assets)	2	2	3	3	10
Other than any of the above	8	8	12	4	32
Total	113	116	141	78	448

Table 32 crosstabulates NEWAGE with RATELOC. The cross-distributions here follow more or less the overall distribution of the sample.

Table 33 crosstabulates NEWAGE with PERFMESR. Nearly 87% of the hotels who considered Average Room Rate (ARR) as the most important performance measure tended to be 20 years old or newer. In the overall sample, only 57% of the hotels were 20 years old or newer. So, a larger proportion of the newer hotels prefer ARR as the performance measure than the overall sample.

Table 32. Cross-tabulation of NEWAGE by RATELOC

NEWAGE	RATELOC						
	Most superior location against competition			Most inferior location against competition			
	1	2	3	4	5	6	Total
< = 7	32	53	47	19	6	3	160
8 - 20	26	64	41	18	12	1	162
21 - 30	34	70	46	26	9	2	187
> 30	7	22	12	10	4	2	57
Total	99	209	146	73	31	8	566

Table 33. Cross-tabulation of PERFMESR by NEWAGE

PERFMESR	NEWAGE				
	<=7	8-20	21-30	>30	Total
Percentage of Occupancy	27	26	21	7	81
Average Room rate	7	6	1	1	15
Market Share	7	3	12	1	23
Gross Operating Profit / Income Before Fixed Charges	82	93	110	34	319
Return on Sales (i.e., Profit/Sales)	12	12	8	3	35
Return on Assets (i.e., Profit/Fixed Assets)	3	2	5	1	11
Other than any of the above	8	10	15	3	36
Total	146	152	172	50	520

Overall, the sample seems to be fairly well
distributed, reflecting current industry patterns. No
serious anomalies were discovered. While the above
descriptions of the sample may seem like a long exposition,
it was done deliberately because no recent hospitality
research study collected data from such a large size sample
of hotels. The information reported here should serve
interested researchers well in comparing their own
investigations with the distributions reported here. This
brings us to the last diagnostic check and that is to verify
the normality of the sample over the performance measures,
These checks are described in the ensuing section.

Normality of Performance Variables

Many statistical procedures such as analysis of
variance assume that the variables being studied are
normally distributed. If this assumption of normality is
violated, the power of such statistical procedures is
seriously compromised. Thus, it is necessary in the present
context to check the normality of the distribution of the
performance variables, YPR92, YPR93, MSI92, MSI93, ROS92,
and ROS93. Once again, as the tariffs and revenues differ
between price segments, these checks have to be performed

for the upscale, midprice, and economy segments of the sample separately.

Normality of distribution of any variable can be verified by testing for the significance of the skewness and kurtosis in the data distribution or by studying the plots of the data, such as the normal probability plot. Other statistics such as the Shapiro-Wilk's W are also available for this purpose.

"The drawback to tests of normality is that their power is greatest at the wrong times. With large samples, the tests are very powerful and generally reject the null hypothesis of normality, even when the data are relatively close to the normal shape .... On the other hand, if the sample size is very small, the tests for normality are weak. We are liable to accept the null hypothesis of normality even when the data depart rather markedly from the normal shape. The tests for normality are powerful only with large sample sizes, precisely when we need be <u>least</u> concerned with the normality assumption [as increasing sample size tends to lessen the need for normality]. Instead, we recommend plotting the data to see if they

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resemble the normal shape. When examining this plot, we should keep in mind that relatively greater departures from normality can be tolerated with larger sample sizes" (Schulman 1992, p. 92).

Considering the large sample size in this study, it was considered appropriate to follow Schulman's (1992) advice and use the normal probability plots to verify the normality of the distribution of the variables. The normal probability plot "is a quantile-quantile plot of the data. The empirical quantiles are plotted against the quantiles of a standard normal distribution. Asterisks (*) mark the data values. The vertical coordinate is the data value, and the horizontal coordinate is

$$\phi^{-1}(r_i - 3/8)/(n + 1/4))$$

where

r_i is the rank of the data value,

ϕ^{-1} is the inverse of the standard normal distribution function,

n is the number of nonmissing data values. The plus signs (+) provide a reference straight line that is drawn using the sample mean and standard deviation. If the data are from a normal distribution, they should tend to fall along the reference line" (SAS Institute Inc., 1990a, p. 414).

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As Figures 5 to 31 indicate, the plots in this case seem to be reasonably normal. While there are some aberrations in some of these plots, they are very minor considering the large sample size. Thus, the performance data is considered to be normally distributed for further analysis.

It must be pointed out, however, that some of the data indicates the incidence of leptokurtosis (peaked distribution), notably in the YPR data. This is to expected in a highly competitive situation where the margin for differences in room rates is rather narrow and very many hotels realize almost the same room rates.

```
105+                                                 ✗      ++
   |                                                      +++++
   |                                                 ✗ ++++
                                                ✗++++
 65+                                       +++++
   |                                   ++✗+✗  ✗  ✗
                                    ++✗✗  ✗
                                 ++✗✗✗✗+✗
 25+                    ✗     +✗+++
   +----+----+----+----+----+----+----+----+----+----+
        -2        -1         0        +1        +2
```
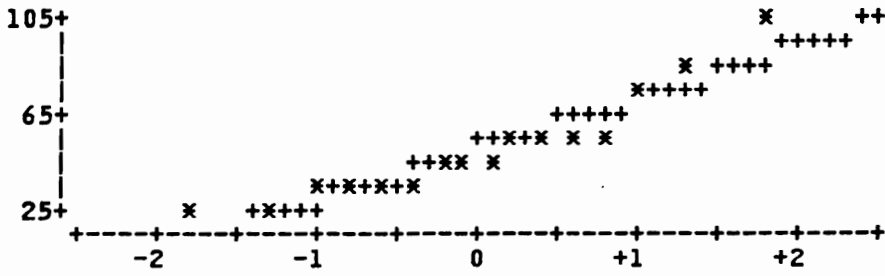
Figure 5. Normal Probability Plot-YPR92 of Upscale Hotels

```
105+                                             ✗      +++
   |                                                  +++++
   |                                       ✗   ✗++++
                                               +++++
 65+                                   +✗✗+✗
   |                               ++✗+✗
                                 ✗+✗+✗✗
                              ++✗+✗
 25+              ✗     ++✗++✗
   +----+----+----+----+----+----+----+----+----+----+
        -2        -1         0        +1        +2
```
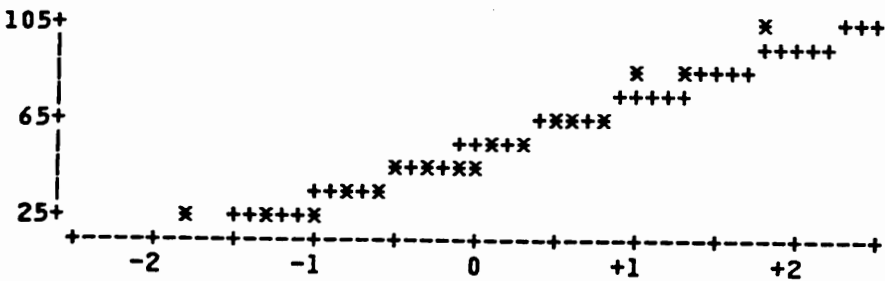
Figure 6. Normal Probability Plot-YPR93 of Upscale Hotels

```
105+                                             ✗      ++
   |                                                  +++++
   |                                           ✗ ++++
                                            ✗++++
 65+                                  +++++
   |                              +✗+✗+✗✗  ✗
                              ✗+✗+✗✗
                          +✗+✗+
 25+            ✗     +✗++✗
   +----+----+----+----+----+----+----+----+----+----+
        -2        -1         0        +1        +2
```
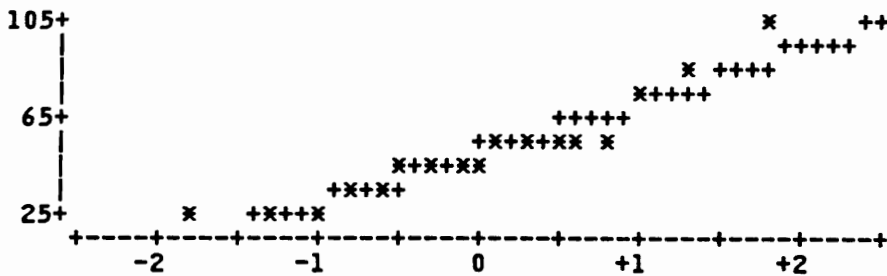
Figure 7. Normal Probability Plot-YPR of Upscale Hotels

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```
1.175+                                                    +X+++
     |                                              X+++
     |                                          +X++
     |                                  X X++X+
     |                              ++++
     |                          ++++
     |                    +X++X
0.825+              +X+++
     +----+----+----+----+----+----+----+----+----+----+
          -2        -1         0        +1        +2
```
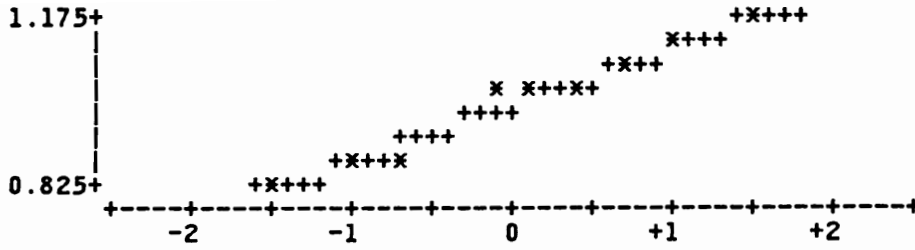
Figure 8. Normal Probability Plot-MSI92 of Upscale Hotels

```
1.225+                                            X +++++
     |                                         +++++
     |                                     ++++X
1.075+                              X++X+  X
     |                          X +X++++
     |                      ++++
0.925+              X++++X
     +----+----+----+----+----+----+----+----+----+----+
          -2        -1         0        +1        +2
```
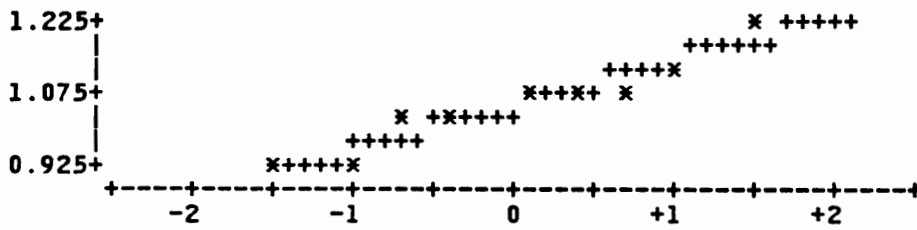
Figure 9. Normal Probability Plot-MSI93 of Upscale Hotels

```
1.225+                                            X  +++++
     |                                         +++++
     |                                     ++X++
     |                                 +X++X
     |                             +X+X+
     |                         +++X+
     |                     +X++X
0.875+              +X+++
     +----+----+----+----+----+----+----+----+----+----+
          -2        -1         0        +1        +2
```
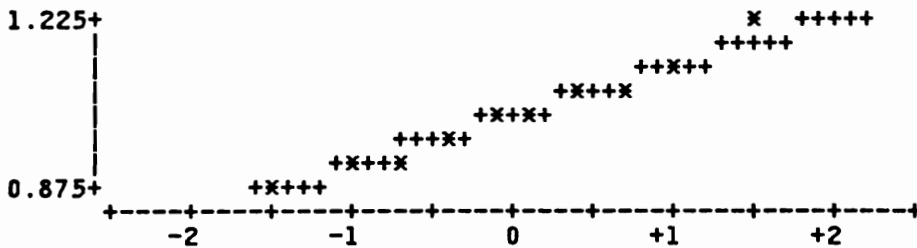
Figure 10. Normal Probability Plot-MSI of Upscale Hotels

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```
  75+                                                            X+++++
   |                                                    X+++++
   |                                          X  X+X+++
  45+                                    ++++
   |                              +++++X
   |                         ++X+XX  X  X
  15+  ------------------X+-X++X+X---------------------------------------
      +----+----+----+----+----+----+----+----+----+----+
         -2        -1         0        +1        +2
```
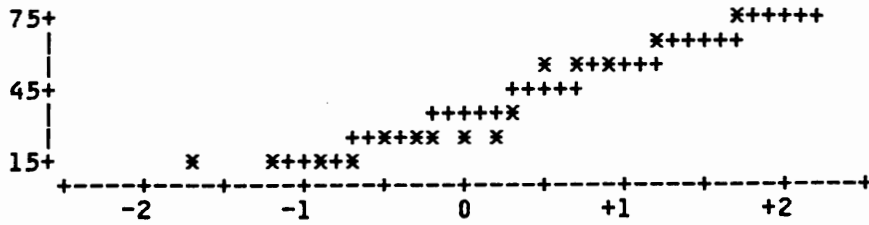
Figure 11. Normal Probability Plot-ROS92 of Upscale Hotels

```
  75+                                                      +X++
   |                                                 +X++++
   |                                      X  X+X+
   |                                 +++++
  35+                         +++X  X
   |                    X+X+XX  X
   |           X    X+X+
   |        ++++
  -5+     +X++
      +----+----+----+----+----+----+----+----+----+----+
         -2        -1         0        +1        +2
```
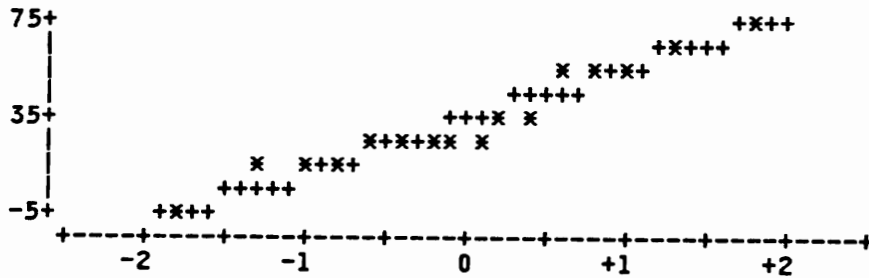
Figure 12. Normal Probability Plot-ROS93 of Upscale Hotels

```
  75+                                                   +X+++
   |                                              X+++
   |                                    X  X+X++
   |                               ++++
  35+                       +++++X
   |                X+X+XX  XX
   |        X    X+X++
   |     ++++
  -5+  +X++
      +----+----+----+----+----+----+----+----+----+----+
         -2        -1         0        +1        +2
```
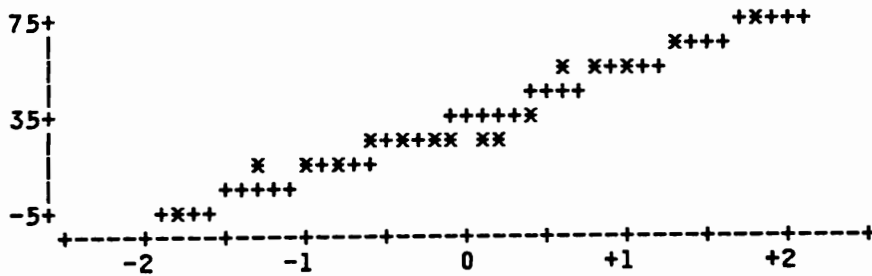
Figure 13. Normal Probability Plot-ROS of Upscale Hotels

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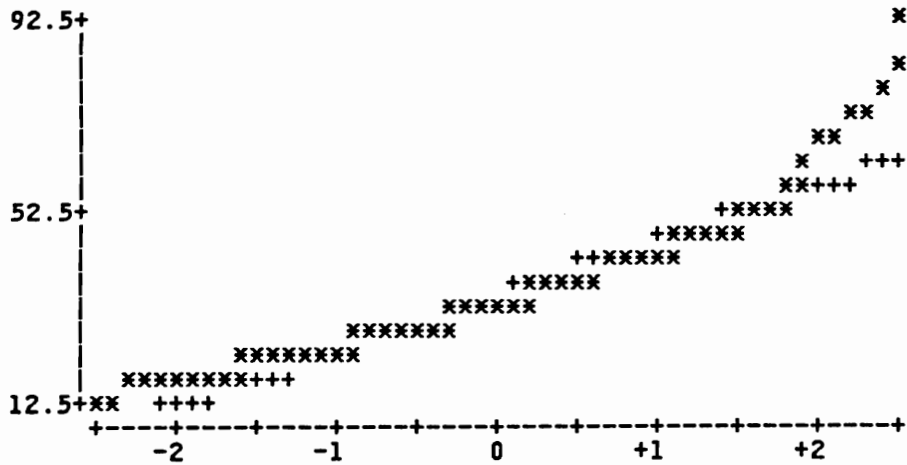
Figure 14. Normal Probability Plot-YPR92 of Midprice Hotels
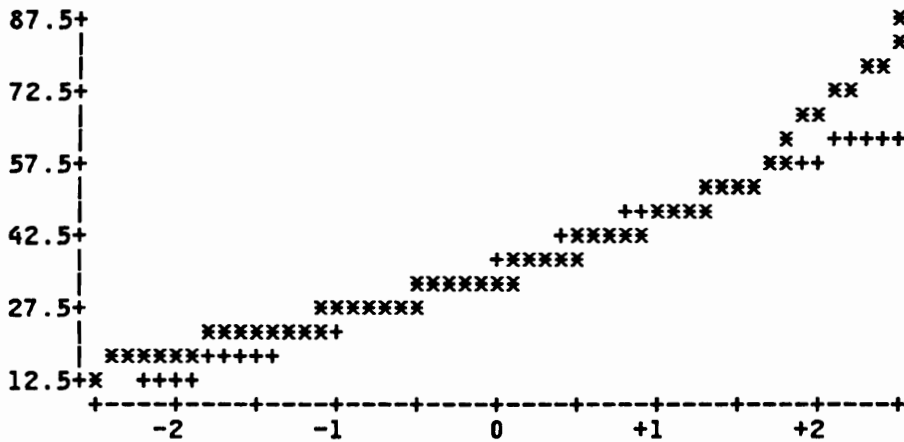
Figure 15. Normal Probability Plot-YPR93 of Midprice Hotels
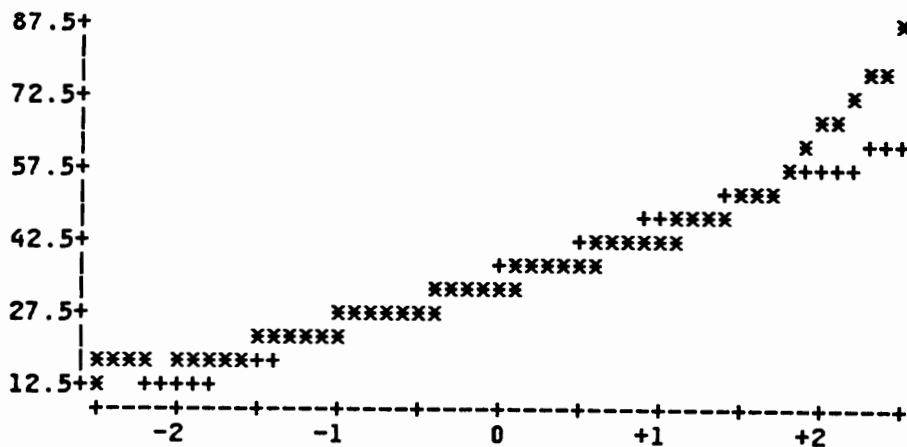
Figure 16. Normal Probability Plot-YPR of Midprice Hotels

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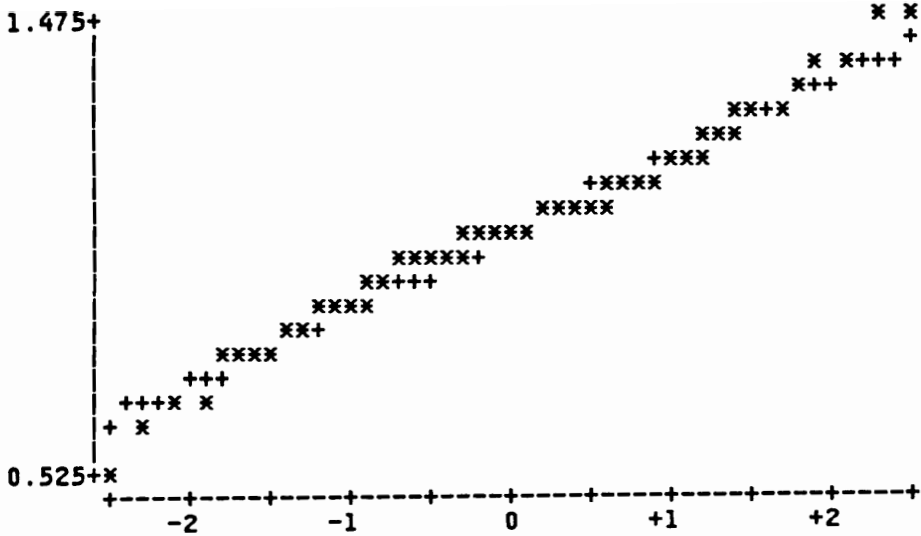
Figure 17. Normal Probability Plot-MSI92 of Midprice Hotels
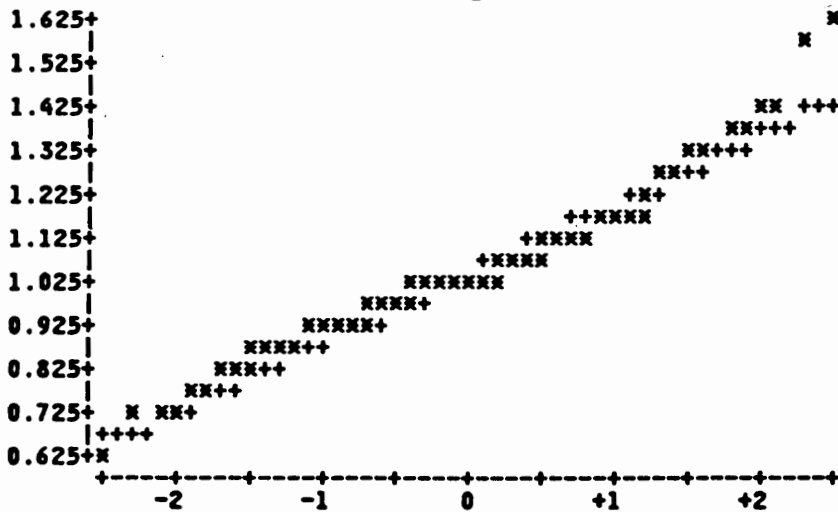
Figure 18. Normal Probability Plot-MSI93 of Midprice Hotels
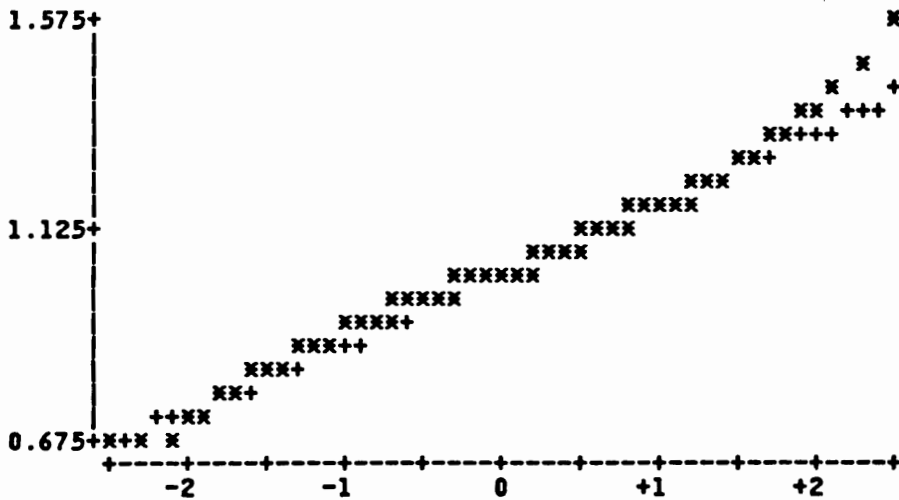
Figure 19. Normal Probability Plot-MSI of Midprice Hotels

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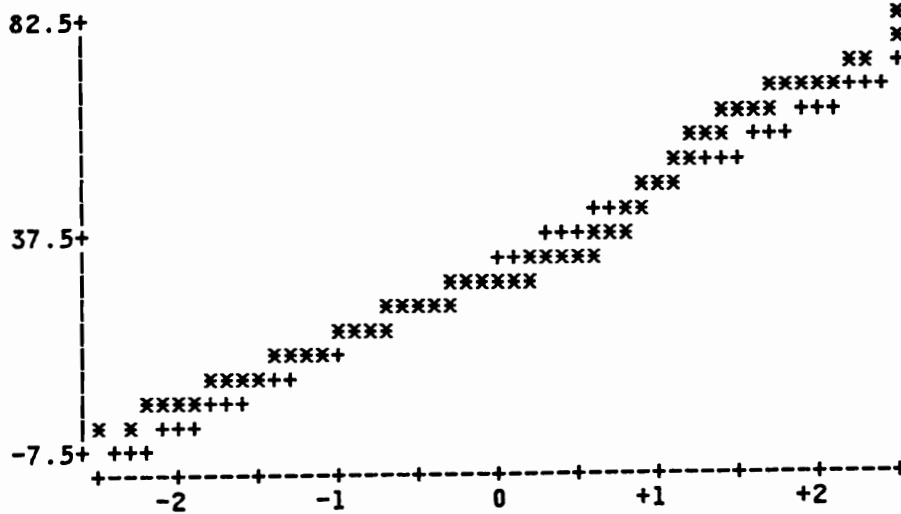
Figure 20. Normal Probability Plot-ROS92 of Midprice Hotels
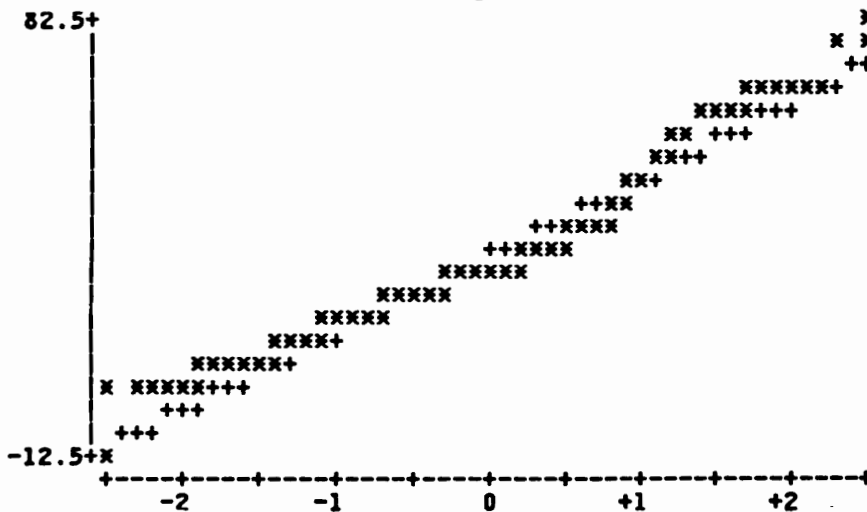
Figure 21. Normal Probability Plot-ROS93 of Midprice Hotels
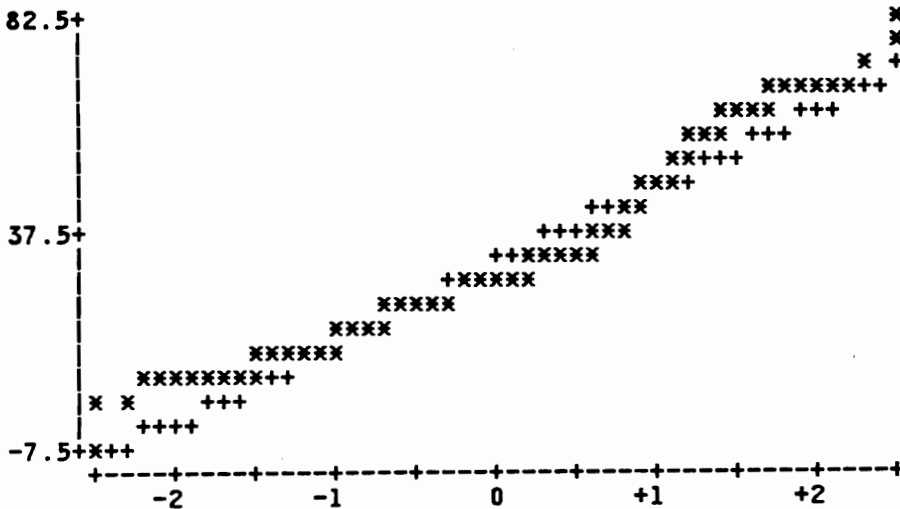
Figure 22. Normal Probability Plot-ROS of Midprice Hotels

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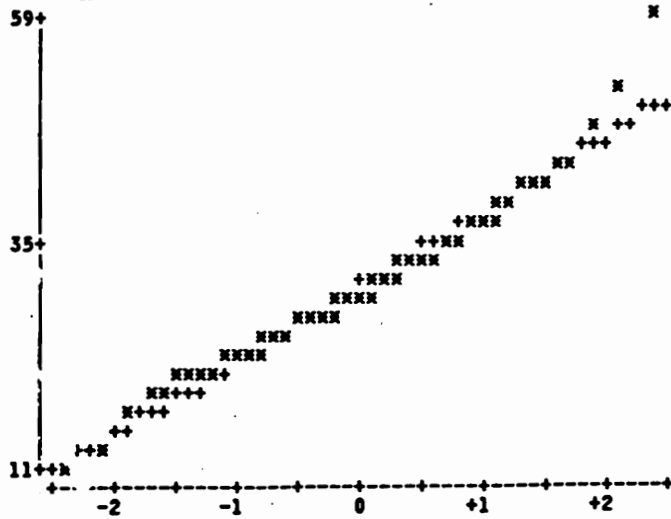
Figure 23. Normal Probability Plot-YPR92 of Economy Hotels
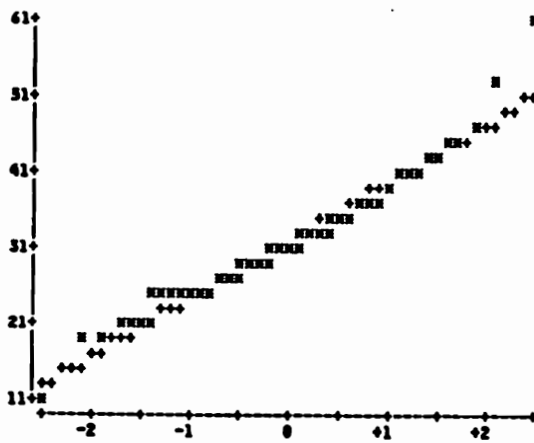
Figure 24. Normal Probability Plot-YPR93 of Economy Hotels
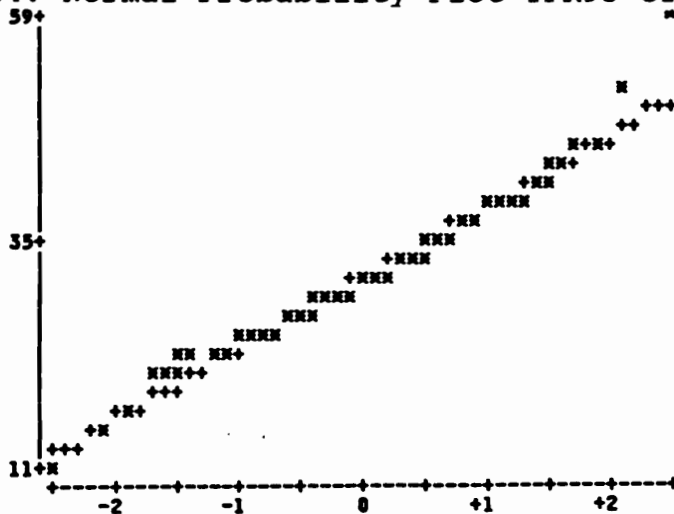
Figure 25. Normal Probability Plot-YPR of Economy Hotels

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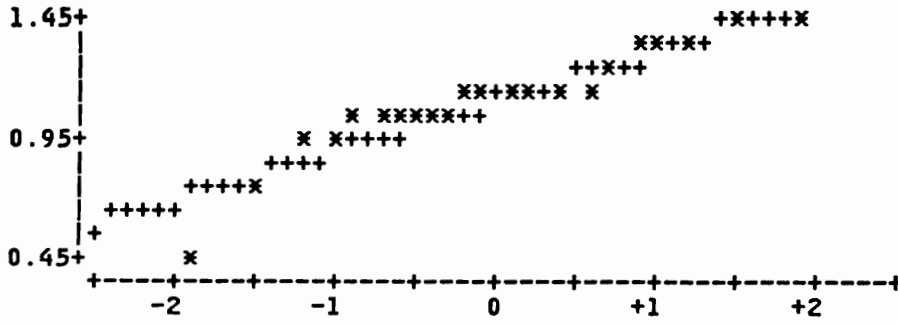
Figure 26. Normal Probability Plot-MSI92 of Economy Hotels
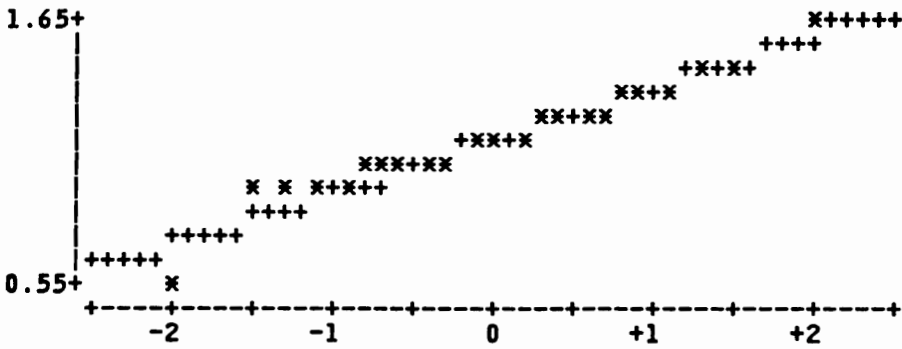
Figure 27. Normal Probability Plot-MSI93 of Economy Hotels
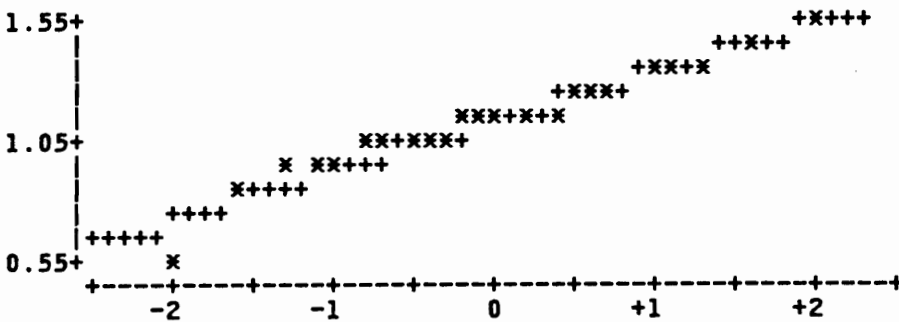
Figure 28. Normal Probability Plot-MSI of Economy Hotels

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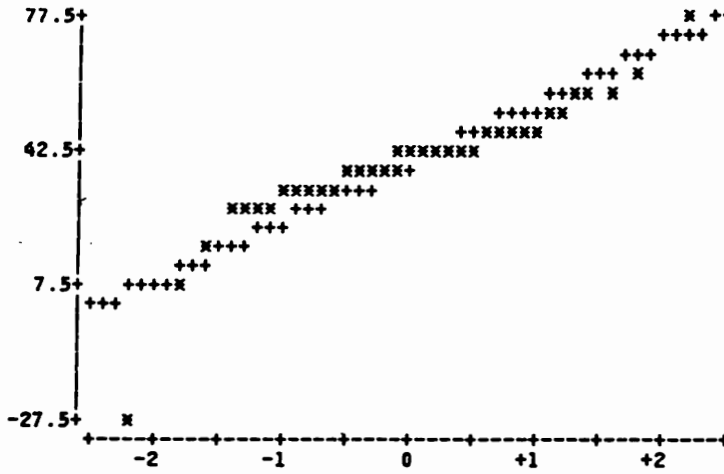
Figure 29. Normal Probability Plot-ROS92 of Economy Hotels
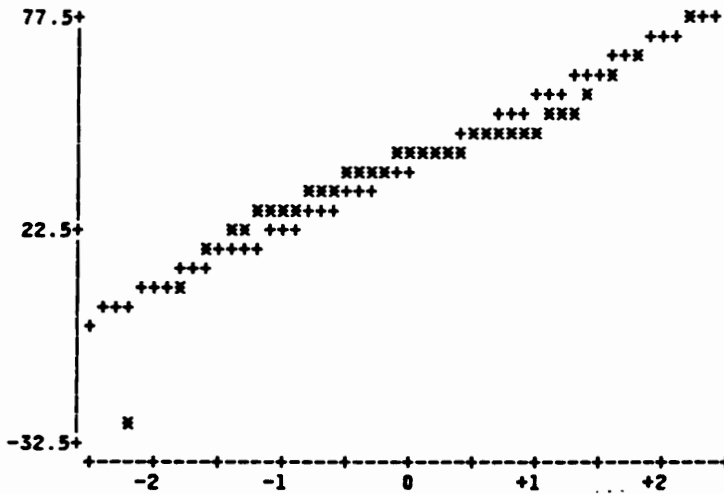
Figure 30. Normal Probability Plot-ROS93 of Economy Hotels
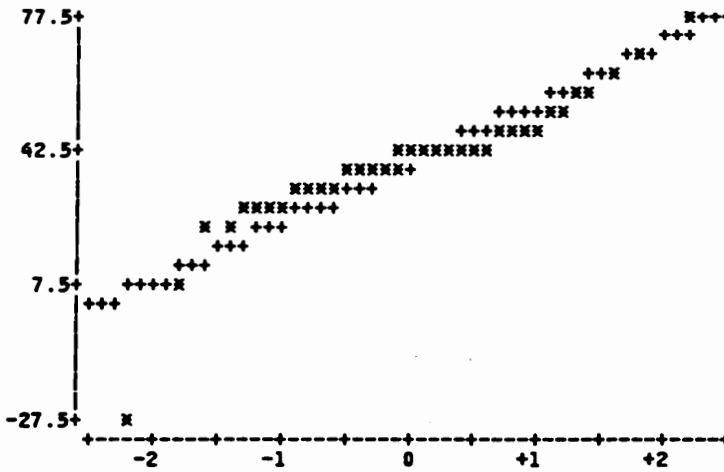
Figure 31. Normal Probability Plot-ROS of Economy Hotels

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Having thus far established that the data does not indicate any serious abnormalities from response bias, dissimilarities between the respondent groups from the two sponsors' portfolios, and non-normality, further analysis of the strategy and performance constructs are proceeded with. The next section describes the results of the strategy scale purification process.

Purification of the Strategy Scale

Reliability of Individual Strategic Dimensions

The multidimensional scale developed for measuring the strategy construct was subjected to reliability testing using the Cronbach α. According to Churchill (1979), "Coefficient alpha <u>absolutely</u> should be the first measure one calculates to assess the quality of the instrument" (p. 68). As the strategy scale here is multidimensional, we need to measure the reliability of a linear combination of measures (Nunnally 1978). Nunnally (p. 246-254) provided the formula which should be used for this purpose, which is as follows:

$$r_{yy} = 1 - \frac{\Sigma\sigma_i^2 - \Sigma r_{ii}\sigma_i^2}{\sigma_y^2}$$

where, r_{yy} is the reliability of the total scale composed of several dimensions,

σ_i^2 is the variance of each dimension,

σ_y^2 is the variance of the total scale, and

r_{ii} is the reliability of each dimension

In actual computations, σ_i^2 is measured by the variance of the mean of each subscale, and σ_y^2 is measured by the variance of the total of all the subscale means.

To compute the reliability of the strategy scale, Cronbach α was obtained for each subscale of items. The computer output also provides the standardized item-to-total correlations (i.e., the correlation between the score of an item and the sum of scores of all other items making up the dimension) and the expected Cronbach α value if the item were to be excluded from the dimension. From this printout, scale items with the least item-to-total correlations were identified for each subscale. If the Cronbach α is expected to increase by dropping the item, that item was dropped and the Cronbach α was recomputed. This iterative exercise was repeated till no additional exclusion of a scale item could improve the Cronbach α of the subscale.

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Table 34 shows for each dimension the values of
Cronbach α at the first instance and at the end of the
purification process, along with the scale items dropped in
this process and their corresponding item-to-total
correlations with the respective dimensions. As can be seen
from this table, except for the dimension labelled Price
Policy, the Cronbach α values have been very high, ranging
from .64 to .90. These reliabilities compare very favorably
with most contemporary research. The Price Policy dimension
had six scale items to begin with and the initial Cronbach α
for this dimension was only .39. Of the six scale items,
the item "being the lowest-priced hotel in the market" had
the lowest item-to-total correlation. In fact, it was
negatively correlated with the rest of the items in this
subscale. After it was eliminated, the Cronbach α increased
to .499. An examination of the means revealed that this
item had a very low mean (1.9) as compared to the rest of
the items falling under this dimension. It seems no hotel
manager wants his/her hotel to be the lowest-priced in the
market. Most of the other items in this subscale are
alternative strategies (e.g., competitive pricing vs. price
leadership) and thus have low correlations with each other.
Dichotomous scale items which cannot be reverse coded lead
to poor reliabilities and this is the reason why this
dimension fared so poorly in its reliability measurement in

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contrast to the rest of the dimensions. Considering its poor reliability score of .499, it was decided to drop this dimension from further analysis. Further research will be needed to add the Pricing dimension back to this scale, as the scale items have to be reconsidered so as to improve the reliability of this subscale.

Table 34. Cronbach Alphas Before and After Scale Purification

Strategy Dimension	Cronbach Alpha at Beginning	Scale Item No.	Item-to-Total Correlation	Cronbach Alpha at End
Specialization	0.75	4	0.166	0.77
Push vs. Pull	0.75	18	0.232	0.76
Product/Service Quality	0.73	22	0.266	0.75
Price Policy	0.39	29	(0.073)	0.50
Brand Identification	0.69			0.69
Channel Selection	0.71			0.71
Technological Leadership	0.69	50	0.015	0.77
Cost Position	0.64			0.64
Leverage	0.75			0.75
Service Identification	0.81	68	0.308	0.81
Service Specification	0.89	85	0.049	0.89
	0.89	83	(0.008)	0.90
	0.90	78	0.258	0.90
	0.90	79	0.260	0.90
Service Delivery	0.89			0.89
Service Communication	0.83			0.83

Reliability of the Total Strategy Scale

Table 35 shows the computations for obtaining the overall reliability of the total strategy scale, as a linear combination of the remaining 12 dimensions. These computations are performed after all scale items with poor item-to-total correlations are eliminated as described earlier. The computations show an extremely high overall reliability of 0.97. In general, Cronbach α tends to increase with sample size. Notwithstanding this feature of this statistic, the reliability estimated for this new strategy scale lends credibility to the process adopted for realizing this task and the theoretical underpinnings which contributed to its development.

Table 35. Computation of the Overall Reliability of the Strategy Scale

Strategy Dimension	Cronbach Alpha (r_{ii})	Variance (σ_i^2)	$r_{ii}\sigma_i^2$
Specialization	0.771946	0.6811753	0.525830
Push vs. Pull	0.756084	0.6797140	0.513920
Product/Service Quality	0.751908	0.8472075	0.637022
Brand Identification	0.687914	0.7656077	0.526672
Channel Selection	0.705526	0.9611032	0.678083
Technological Leadership	0.769334	1.0880564	0.837078
Cost Position	0.643511	0.8808422	0.566831
Leverage	0.749144	0.8608720	0.644917
Service Identification	0.811352	0.7581359	0.615115
Service Specification	0.904372	0.6378849	0.576885
Service Delivery	0.892580	0.7765891	0.693167
Service Communication	0.830010	0.8068895	0.669726

$$\Sigma\sigma_i^2 = 9.7440777$$

$$\Sigma r_{ii}\sigma_i^2 = 7.485251$$

$$\sigma_y^2 = 75.2231636$$

$$\therefore r_{yy} = 1 - \frac{9.7440777 - 7.485251}{75.2231636}$$

$$= 0.97$$

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This scale purification process resulted in 17 scale items being dropped, leaving a 105-item strategy scale for further analysis. The 17 scale items dropped in this purification process are shown with an asterisk (*) mark against each of them in Table 6. This 12-dimensional scale was next subjected to a factor analysis, the results of which are presented in the next section.

Delineation of Strategic Dimensions

Factor analysis is a term which is misapplied not too infrequently. Quite apart from the fact that there are very many types of factor analyses, each with a specific label, much confusion is created by labelling principal component analysis as factor analysis, and referring to principal components as factors. Whereas a principal component is an observable linear combination of variables, a common factor is most often a hypothetical, unobservable variable. The more important distinction here stems from the fact that components are not correlated with each other. As linear combinations, they are orthogonal. In contrast, common factors can be and most often are correlated with each other. Whereas factor analysis explains the common variance, principal component analysis extracts the total variance, i.e., including the error variance. Commenting on

some of these differences, Pedhazur and Schmelkin (1991) conclude as follows:

> ".... unless the first few components extract a sizeable percentage of the total variance, there is little to be gained from the application of a PCA [principal component analysis]. As a rule of thumb, one would want the first two or three components to extract over 50% of the variance .... It does not make sense to rotate components, nor to attach substantive meaning to them" (p. 598-599).

In so far as principal components are orthogonal linear combinations, they can at best be subjected only to orthogonal rotations, where the underlying assumption is one of zero correlation between the components. If, on the other hand, there is reason to believe that the factors are correlated and, consequently, oblique rotations are called for to interpret the factors, then factor analysis is the right choice. In this study, there is every reason to believe that the underlying dimensions of the strategy construct are correlated with each other. In fact, several of the a priori dimensions around which the strategy scale items have been developed have much in common (e.g., all the

related items grouped under the four service dimensions) and
they are expected to show significant inter-correlations
necessitating oblique rotation of the factors for
interpretation. With this in view, the 105 strategic
characteristics, remaining in the scale after the previously
described purification process, have been subjected to a
principal factor analysis.

Two early decisions that had to be made in this
analysis related to the number of factors that should be
extracted and the minimum factor loadings that should be
considered significant. Stevens (1992) provided a lucid
discussion on these issues and recommends the following as
far as the number of factors to be extracted is concerned:

"The Kaiser rule will accurately determine the
number of components when the number of variables
<30 and the communalities are >.70, or when N>250
and the mean communality >.60. For other
situations when N<200, a statistical test is
advisable. For N>200, use of the scree' test will
probably be reasonably accurate, provided most of
the communalities are fairly large" (p. 401).

As this last condition was the most applicable to this study, it was decided that the scree' test would be used to decide on the number of factors to be extracted. As for the minimum factor loadings that should be considered significant, the popular rule of thumb is greater than .30. Presenting evidence against this practice, Stevens (1992) recommended that the sample size should be taken into account in deciding on the critical values for a correlation coefficient. Interpolating from the table of "Critical Values for a Correlation Coefficient at $\alpha=.01$ for a Two Tailed Test" (p. 383), the FUZZ level was set at .22 in this study. The result is that the SAS program takes into account only factor loadings higher than .22 as being significant and treats lower correlations as missing values.

The last decision that needed to be taken at this stage was regarding the factor rotation method that should be used. As stated previously, it was expected that the factors would be inter-correlated and, hence, an oblique rotation would be necessary to interpret them. Among the choices of oblique rotations available in SAS, the PROMAX rotation was considered the best alternative. This is because, according to the SAS Institute Inc. (1990), the PROMAX rotation "has the advantage of providing orthogonal

and oblique rotations with only one invocation of PROC
FACTOR" (p. 778).

With these decisions made, a preliminary run of the
FACTOR procedure was performed to check the scree diagram.
As Figure 32 shows, the scree test indicates the appropriate
choice as being seven factors. The preliminary diagnostic
output, however, showed that 13 factors account for 82.04%
of the variance in the model. In contrast, the first seven
factors account for a variance of 70.76%. This meant that
the later six factors account for only an additional 11.28%
of the variance. Clearly, the trade off was not in favor of
the larger number of factors, considering the difficulties
in interpreting such a large number. As such, a seven
factor solution was specified as indicated by the scree
test. Table 36 shows the eigenvalues and the variance
explained by the factors pre- and post-rotation.
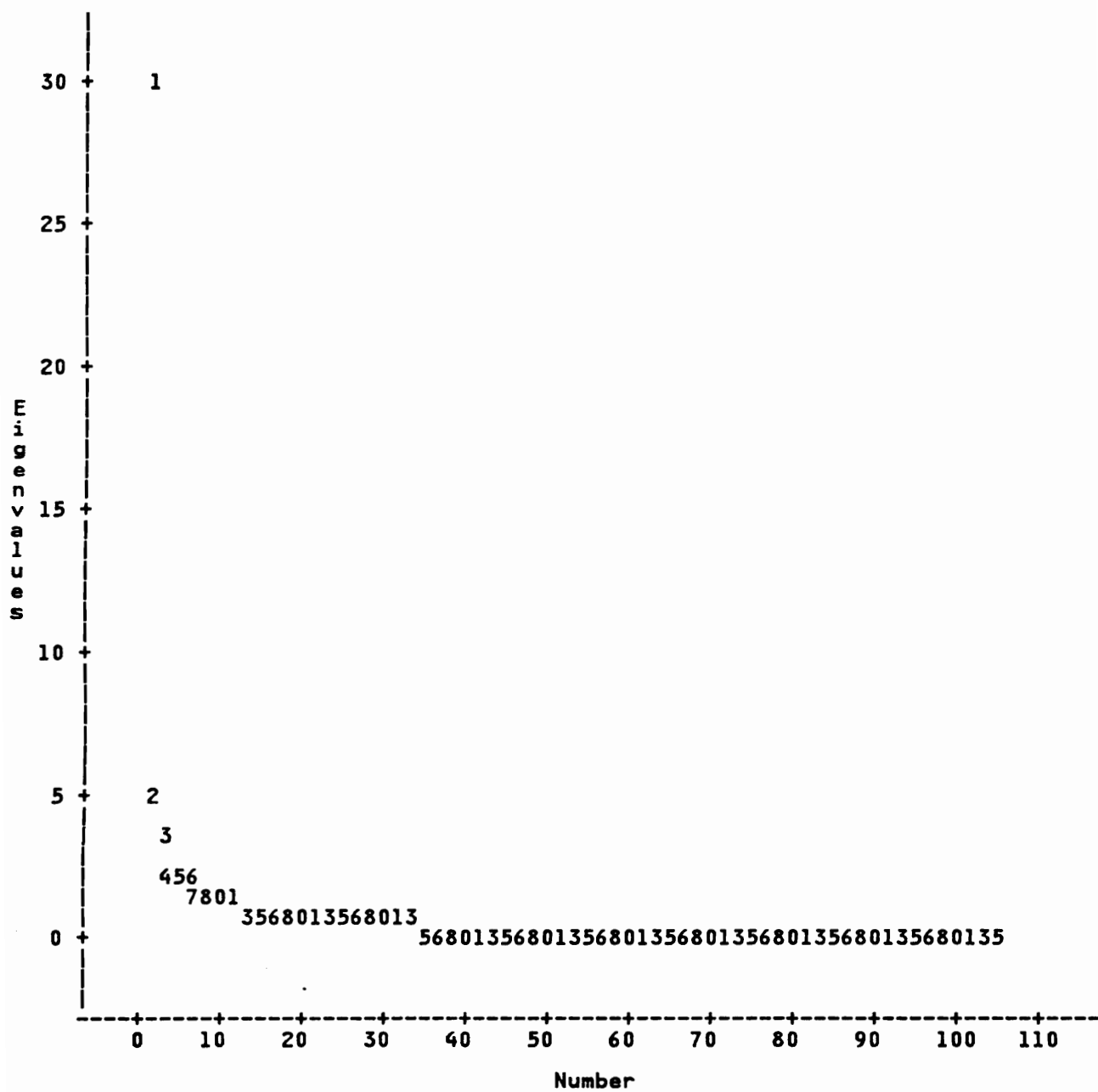
Figure 32. Scree Plot of Eigenvalues
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Table 36. Seven Factor Solution for the Strategy Scale

Factor No.	Eigen Value	Cumulative % Variance Explained	Post-Rotation Variance Explained
1	29.68	45.66	17.16
2	5.00	53.66	7.86
3	3.38	58.56	6.67
4	2.37	62.21	4.80
5	2.07	65.39	3.77
6	1.95	68.39	3.33
7	1.54	70.76	2.41
8	1.50	73.08	
9	1.40	75.24	
10	1.18	77.06	
11	1.15	78.83	
12	1.08	80.49	
13	1.01	82.04	
Total for the Reduced Correlation Matrix	64.99		

Among other things, the computer output indicated that the correlations between the scale items within each strategy dimension were generally high and significant. The correlation matrix could not be included here as the printout was nearly 100 pages long. The computer output also showed that the partial correlations controlling the other variables were generally small, which should be the case if the data is appropriate for common factor analysis. The Kaiser's Measure of Sampling Adequacy (MSA) showed an overall MSA of 0.94. Almost all the individual variables' MSAs were also above 0.8 which is considered to be desirable. The MSA is an indicator of "how small the partial correlations are relative to the ordinary correlations" (SAS Institute Inc., 1990b, p. 798). The goodness-of-fit of a common factor model can be assessed from the residual correlations, which are the differences between the predicted correlations and the actual correlations between variables. The SAS output confirmed the goodness-of-fit through low residual correlations.

As Table 37 shows, the PROMAX rotation has yielded an interpretable 7-factor solution, accounting for 70.76% of the total variance. In social sciences, a factor solution accounting for 60% of the total variance is considered

satisfactory (Hair, Anderson, and Tatham 1987), and the result in this study is thus considered good. Further, the choice of the factor rotation (oblique) is proved to be quite correct by the fact that the factor structure and reference structure are different from the factor pattern (a condition that occurs if the common factors are correlated), and also that the computer output clearly shows inter-factor correlations, as shown in Table 38. The next step in this analysis is to interpret and name the factors, which is discussed next.

Table 37. Factor Matrix After Promax Rotation

Scale Item No.	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
1.	83						
2.	77						
3.	76						
4.	76						
5.	75						
6.	73						
7.	70						
8.	70						
9.	69						
10.	68						
11.	68					23	
12.	68						24
13.	67						
14.	65						
15.	64						
16.	64						
17.	63						
18.	61						
19.	61						
20.	60						
21.	60						
22.	56						
23.	55			32			
24.	53						
25.	53						
26.	53						
27.	51						
28.	51						
29.	43		23				
30.	43			27			
31.	41						
32.	39						
33.	34	25					
34.	34			28	25		
35.		87					
36.		81					
37.		77					
38.		72					
39.		68					
40.		67					
41.		59					
42.		59		22			
43.		57					

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Scale Item No.	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
44.	44	46					
45.		45					
46.		43					
47.		41					31	
48.		28					
49.			67				
50.			64			28	
51.			62				
52.			61				
53.	30		45				
54.	27		43				
55.	26		42				27
56.	24	(23)	41				
57.			39				
58.			39		28		
59.			37			30	
60.			37		24		
61.			36				
62.			35		24		
63.	30		32				
64.			31				
65.			31				
66.			28			24	
67.				55			
68.				54		26	
69.				48			
70.			(27)	45	22		
71.				44			
72.				42			
73.			28	39			
74.				38			
75.				32			
76.	24			31			
77.			23	30			
78.			25	29			
79.	28			28			
80.			23	26			
81.	26	26		26			
82.	34		25	(32)			
83.			26		47	28	
84.					45		
85.			38		42		
86.			23		41	31	
87.					38		23

Scale Item No.	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
88.	23				38		
89.					36		(29)
90.					36	25	
91.					30		
92.		30			30		
93.						69	
94.					22	59	
95.						51	
96.						35	
97.	25				22	26	
98.	25			31			63
99.	38						48
100.	42						41
101.			32				37
102.				38			36
103.	27						30
104.	22		25				27
105.					24		27

Table 38. Inter-factor Correlations

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
Factor 1	100						
Factor 2	46	100					
Factor 3	50	31	100				
Factor 4	41	37	31	100			
Factor 5	32	23	18	16	100		
Factor 6	15	37	21	9	(1)	100	
Factor 7	29	19	25	4	17	24	100

Factor Interpretation

Table 39 shows the factor loadings obtained from the 7-factor solution, together with the scale items under each factor and their communalities. As may be expected in any factor analysis, particularly one using a large measurement scale as in the present case, some cross-loadings were present as indicated in Table 37. But these were neither too many nor too large, and are to be expected as the factors were a priori hypothesized to be correlated. It will be seen that the loadings of the scale items on the respective factors are quite large. Commenting on the criteria for the significance of factor loadings, Hair, Anderson and Tatham (1987) state, "... factor loadings greater than ±0.30 are considered significant. Loadings ±0.40 are considered more important, and if the loadings are ±0.50 or greater, they are considered very significant" (p. 249). Looking at Table 39, it is evident that most of the factor loadings obtained meet this significance criteria. In fact, very few loadings are found to be below the ±0.30 threshold level prescribed by most researchers. Thus, the results obtained are considered to be appropriate for accepting the factor solution, and naming these factors was undertaken next. As the ensuing sections naming each factor show, there were sufficient number of scale items loading on

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each factor meeting the significance criteria. In view of
this, the relatively small proportion of cross-loadings were
considered mere 'noise' and disregarded.

Table 39. Rotated Factor Solution for the Strategy Scale

Scale Item No.	Factors / Scale items	Factor Loadings	Commu- nalities
	FACTOR 1: SERVICE QUALITY LEADERSHIP		
1.	Maintaining consistently high quality product and/or service	83	.61
2.	Using training and development to raise service quality standards	77	.62
3.	Improving the service orientation of employee behavior (particularly among those in guest-contact positions)	76	.62
4.	Training guest-contact employees about their customers/customers' expectations	76	.63
5.	Setting service quality goals that are designed to meet customer expectations	75	.59
6.	Setting service quality goals which are challenging but realistic, are accepted by the employees, and measured and reviewed regularly	73	.56
7.	Constantly and visibly expressing/demonstrating management's commitment to product/service quality	70	.59
8.	Training employees in communication skills	70	.54
9.	Encouraging free upward communication between guest-contact employees and management	69	.60
10.	Carefully choosing personnel who interact with customers (e.g. assessment of social adaptation skills)	68	.52
11.	Setting specific service quality goals for employees which emphasize critical service tasks	68	.54
12.	Training employees in interpersonal skills	68	.65

13.	Achieving high operational efficiency levels	67	.47
14.	Providing regular feedback to employees on their delivery achievement	65	.39
15.	Viewing customers' demands as challenges and puzzles rather than as problems (i.e., believing in the feasibility of solving any customer problem)	64	.52
16.	Training departmental managers in the skills needed to lead employees to deliver quality service	64	.60
17.	Developing standard operating procedures for all areas of the hotel to ensure consistently high quality service delivery	63	.49
18.	Encouraging all departmental managers to interact with customers personally and experience the service delivery process	61	.49
19.	Using guest complaints/suggestions/feedback as a resource in strategic planning	61	.54
20.	Building a good reputation of the property in the community	60	.50
21.	Treating employees as customers and seeking their input in product/service design	60	.49
22.	Enhancing the personalization of service in all areas of the hotel	56	.43
23.	Making specific effort to encourage customers to tell others about the hotel's good service	55	.51
24.	Re-doing service when a customer is dissatisfied	53	.38
25.	Ensuring that a single guest-contacting employee can handle customer problems involving interaction between different departments of the hotel	53	.49
26.	Developing innovative service ideas/methods	53	.55

27. Emphasizing employee empowerment by pushing decision-making down to the lowest organizational levels of the hotel   51   .42

28. Ensuring that hotel activities are coordinated to enhance customer satisfaction   51   .46

29. Communicating service quality guarantees to customers   43   .36

30. Emphasizing in external communications those aspects of service quality (e.g. reliability) which customers consider most important   43   .46

31. Soliciting guest comments on their stay at the time of departure   41   .38

32. Staying close to the customers by reducing the organizational levels between the guest-contact level and management level   39   .37

33. Using the uniforms/dresses of guest-contact employees as a means to project image   34   .30

34. Determining pricing carefully to convey the appropriate quality signals   34   .38

FACTOR 2: TECHNOLOGICAL LEADERSHIP

35. Expanding automation/computerization in guest handling   87   .61

36. Employing automation/computerization to reduce costs   81   .56

37. Using technology to enhance product and/or service quality   77   .68

38. Using computerized information systems as the basis for setting standards to improve customer service   72   .49

39. Standardizing routine service tasks through automation, so that time is freed to personalize other service aspects   68   .53

40. Adopting user-friendly (to both employees and guests) systems and new technologies which improve the effectiveness of service delivery   67   .50

41.	Adopting innovative technologies wherever possible in different areas of the hotel	59	.55
42.	Leading the competition in introducing new technologies	59	.53
43.	Effectively using computers/automation to improve job scheduling, service delivery, etc.	57	.50
44.	Training employees in the technical aspects of the services they are supposed to provide	46	.47
45.	Improving customer participation skills (in self-help services) by simplifying systems and procedures, installing easy-to-understand signage, etc.	45	.33
46.	Standardizing service tasks with the help of information databases (e.g. pre-registration)	43	.40
47.	Introducing latest computer/communication technologies in guest rooms	41	.41
48.	Researching what service standards customers expect from industries similar/related to hotels (e.g. airlines)	28	.39

FACTOR 3: PUSH

49.	Deploying a highly visible professional sales force	67	.49
50.	Using sales blitzes in source markets to tap corporate clients	64	.50
51.	Trying to increase business in low season by calling on customers	62	.47
52.	Concentrating on direct selling to local businesses	61	.35
53.	Employing yield management techniques/systems	45	.45
54.	Designing marketing programs aimed at developing and enhancing enduring customer relationships, i.e., repeat business	43	.41

55.	Promoting horizontal communication between different departments of the hotel (e.g. sales/marketing and operations)	42	.50
56.	Serving a variety of market segments	41	.38
57.	Contacting customers after they have stayed at the hotel	39	.31
58.	Adopting joint marketing and distribution along with competitors, local chamber of commerce, etc. to bid for shared business (e.g. conferences)	39	.32
59.	Researching sources of business (e.g. travel agents) to understand what guests want	37	.45
60.	Emphasizing on working relationships with local visitor/tourist bureau for referral business	37	.40
61.	Positioning food & beverage outlets to compete with outside competition	36	.21
62.	Testing new marketing ideas and methods	35	.45
63.	Catering to the specific needs of individual customers/customer groups	32	.45
64.	Entertaining regular guests to solidify repeat business	31	.18
65.	Tying up with airlines and/or car rental firms to offer integrated reservations	31	.27
66.	Instituting financial incentives for departmental managers linked to behaviors that foster high service quality	28	.34

FACTOR 4: COST CONTROL

67.	Minimizing debt servicing costs through refinancing	55	.28
68.	Maximizing the use of debt financing	54	.34
69.	Designing facilities to achieve specific image objectives	48	.47

70.	Minimizing the use of debt financing	45	.34
71.	Using every management decision to reach the goal of achieving the lowest cost of operation among the competition	44	.36
72.	Effectively using external communications (e.g. advertising) to manage customers' expectations (e.g. advertising only what can be and/or actually is delivered)	42	.37
73.	Providing a broad range of products/facilities/services	39	.47
74.	Minimizing overhead through standardization	38	.44
75.	Bargaining with suppliers for lowest prices	32	.31
76.	Providing better security than competitors	31	.35
77.	Using a cost accounting system to establish costs accurately	30	.33
78.	Using market research effectively in designing product and/or service strategies	29	.47
79.	Gearing much of marketing effort to project a specific image of the hotel	28	.41
80.	Employing rigorous cost control systems/procedures in all areas	26	.32
81.	Renovating and/or refurbishing regularly	26	.28
82.	Designing employee incentive/reward/recognition systems based, at least in part, on the delivery of quality service	(32)	.36

FACTOR 5: PULL

83.	Promoting the hotel to the travel trade to get bookings	47	.44

84.	Promoting special rates and/or packages to improve traffic in low season	45	.33
85.	Searching for new markets/opportunities	42	.51
86.	Negotiating contracts with travel agents and tour operators for volume business	41	.34
87.	Cultivating competitors to get their overflow	38	.30
88.	Offering special rates and/or privileges for repeat guests	38	.28
89.	Advertising to create and/or maintain awareness of the hotel	36	.28
90.	Affiliating with hotels located in other markets to build mutual referral business	36	.36
91.	Participating actively in franchise alliance for referral business	30	.27
92.	Developing new products and/or services	30	.35

FACTOR 6: GROUP CHANNELS

93.	Promoting the hotel incentive houses	69	.49
94.	Contracting with hotel representation firms to promote the property	59	.34
95.	Setting up sales offices in generating markets	51	.33
96.	Educating the customers to use the hotel during non-peak periods	35	.30
97.	Stressing tangible cues in all communications (advertising, in-house signage, direct mail, etc.) to define the product/service	26	.38

FACTOR 7: CROSS-TRAINING

98.	Using cross-training of employees to reduce costs	63	.65
99.	Cross-training employees to perform other tasks as a means of coping with peak season demand	48	.54
100.	Building teamwork by cross-training employees, team-based reward systems, etc.	41	.53
101.	Adopting risk management practices	37	51
102.	Using differential scheduling of existing employees to cope with seasonal fluctuation in demand	36	.42
103.	Training employees in risk management	30	.51
104.	Adopting innovative recruitment and retention methods to foster employee loyalty (e.g. recruiting physically challenged personnel)	27	.40
105.	Employing additional part-time workers to maintain service levels in peak demand periods	27	.30

Factor 1: SERVICE QUALITY LEADERSHIP

Thirty four out of the 105 scale items loaded above the
FUZZ level of .22 on this factor which, being the first to
be extracted, explains the maximum common variance in the
variables. Twenty seven out of these 34 scale items loaded
on this factor are from the four service dimensions -
Service Identification, Service Specification, Service
Delivery, and Service Communication. Going by the normative
literature, one expected that the scale items belonging to
each of these a priori dimensions would load on separate
factors. However, it appears that in the average hotel
manager's mind, the nuances of the service quality gaps
delineated by Zeithaml et al (1990) are somewhat blurred.
The respondents seem to view most competitive methods
related to service quality maintenance and improvement as
one whole dimension. Nonetheless, the fact that so many of
the service quality scale items loaded together is in itself
significant, considering that the average hotel manager is
not as sophisticated as an academic researcher in terms of
understanding the theory of service quality. Three other
items loaded on to this factor, which were not part of the
original set of scale items developed for the four service
dimensions, but they are also related to service quality.
These items, nos. 1, 2, and 17, are scale items developed to

tap Porter's (1980) Product/Service Quality dimension.
Keeping the central theme of such a large number of scale
items loading on to this factor, Factor 1 was named SERVICE
QUALITY LEADERSHIP. This name signifies the aim and thrust
of all the scale items referred to, viz., to improve and
maintain a high level of service quality.

Factor 2: TECHNOLOGICAL LEADERSHIP

Fourteen scale items loaded on to this factor above the
FUZZ level. Four out of five scale items developed to
capture Porter's (1980) Technological Leadership dimension
are among these. It will be recalled that a sixth scale
item from this dimension was dropped in the scale
purification process. Six additional items (nos. 38, 39,
40, 43, 45, and 46) are from the original set of scale items
developed to capture the Service Specification dimension.
All these six scale items have a central theme of
adopting/using technology (computers, automation, etc.,).
Thus, though these six scale items came from a different
original subset, they are nomologically closely related to
the four scale items from Porter's Technological Leadership
dimension. Scale item 37, though originally from Porter's
Product/Service Quality dimension, is also a technology-
related item. Scale item 36, originally from Porter's Cost

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Position dimension, is likewise another technology-related item. The loading of these two items on this factor tends to strengthen the content validity of this strategy dimension. It is interesting to note that even scale item 44 which reads, "training employees in the <u>technical</u> [emphasis added here] aspects of the services they are supposed to provide," loaded on to this factor. It is quite clear from all this that the respondents mentally related all technology-related competitive methods as belonging to one domain. Thus, this factor was named TECHNOLOGICAL LEADERSHIP (retaining Porter's original label) so as to capture the thrust of this collection of strategic characteristics.

Factors 3 and 5: PUSH and PULL

These two factors have something in common, as will be apparent from the ensuing discussion, and , hence, are being dealt with together. Eighteen scale items loaded on to Factor 3 and 10 scale items loaded on Factor 5 above the FUZZ level. Ten out of this total of 28 scale items are from Porter's (1980) Push vs. Pull dimension. Porter's Push vs. Pull dimension originally had 11 scale items, one of which was dropped in the scale purification process. This means that all the remaining 10 items from this dimension

are loaded on either Factor 3 or Factor 5. Push and Pull
are in actuality dichotomous strategies, though Porter
treated them together. Though most business enterprises
adopt some of each type of these strategies, the relative
emphasis can and does differ from enterprise to enterprise.
If, in the context of the lodging industry, we were to view
all such strategies which involve direct customer contact
(such as personal selling, and so on) as Push strategies
and, as a corollary, all such strategies which involve
intermediates and/or rely on referral business, with no
direct customer contact, as Pull strategies, the distinction
between Factors 3 and 5 becomes clear. It is seen that most
of the former type of strategies involving direct customer
contact to generate and retain business are loaded on to
Factor 3. For example, scale items 50, 51, 52, 57, and 64
fall into this category. In contrast, strategies relying on
intermediaries (such as travel agents) and referrals (such
as from franchise alliances) are loaded on Factor 5. Scale
items 83, 87, and 91 are examples of this. Though there are
contrary loadings (item 60 on Factor 3, and item 88 on
Factor 5), these are lone exceptions in each case. The
majority of the loadings are, in fact, separated on the
lines identified above.

Further, even some of the other scale items loaded on to these two factors also fit this pattern. For example, scale items 49, 54, and 58 which loaded on Factor 3 have direct (or implied) customer contact in common among them. Thus, they are Push strategies. In contrast, items 84, 86, 89, and 90, which are loaded on Factor 5, are strategies which do not rely on direct customer contact. They are, obviously, Pull strategies. Further, as Hair, Anderson, and Tatham (1987) stated, although "all significant factor loadings typically are used in the interpretation process ... variables with higher loadings will influence to a greater extent the name or label selected to represent a factor" (p. 257). Looking at Table 36, we see that some of the scale items with the higher loadings on Factors 3 and 5 are from the two sets discussed above. Thus, it appears that Porter's (1980) Push vs. Pull strategy dimension is divided into its dichotomous parts in the current factor analysis. This seems not only appropriate, but the fact that other like scale items also have loaded on to each of these factors lends credence to the validity of this dichotomization. Thus, it was decided to name Factor 3 as PUSH and Factor 5 as PULL strategy dimensions.

Factor 4: COST CONTROL

Sixteen scale items loaded on to Factor 4 above the FUZZ level. Eight items out of these are from Porter's (1980) Cost Position and Leverage dimensions. An additional item, no. 82, though originally from the Service Delivery subscale, also has a financial note to it as it concerns employee incentives and rewards. It appears that respondents viewed it as a cost item. To this extent, its loading on this factor added to the factor's validity as a cost-related dimension. Thus, nine out of sixteen items loaded on this factor are finance-related. Further, four out of the top five loadings are from the Cost Position and Leverage subscales. Preserving the central theme of these statements, viz., reducing costs, this factor was named COST CONTROL.

Factor 6: GROUP CHANNELS

This factor has only five scale items loaded on it. The top three items are from Porter's (1980) Channel Selection dimension. This dimension was a priori captured by seven scale items. However, the balance of these four items did not load on to this factor. So, at first it appeared as if this factor did not have much of a central

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theme. But, a closer examination of the statements reveals an underlying theme. The unit of analysis in this study is the individual hotel. Keeping this fact in view, setting up sales offices in generating markets, contracting with hotel representation firms to promote the property, and promoting the hotel to incentive houses (the top three scale items loading on this factor) are not within the scope of such a unit's ability. None of these three strategies are worth pursuing from a single hotel's perspective. However, individual hotels can and do benefit from these strategies, if only such efforts can be/are made at a group level. In practice, this is what normally happens in the industry. These strategies are pursued by corporate sales offices of multi-unit operations for the common benefit of all units. Thus, these are legitimate channels under Porter's frame of reference, but are practically employed only at a group/consortium level. In fact, several respondents pointed this out in the returned questionnaires through marginal notes to the effect that these strategies are implemented at a group level. Thus, this factor was labelled as GROUP CHANNELS.

Factor 7: CROSS-TRAINING

Eight scale items loaded on to this last factor loaded above the fuzz level. The top three scale items have a central theme of cross-training. However, there are other patterns as well in this subscale which had to be carefully examined before naming this factor. The most important of these was management of seasonal demand. Three scale items are related to this theme. However, a close examination of the original Service Specification subscale shows at least four other statements directly related to demand management. Two of these were dropped during the scale purification process. The rest loaded on to other factors. So, if seasonal demand management is the central theme in Factor 7, the other scale items relating to this issue should have also loaded here. Another observation was that the scale item 98, which has the highest loading (far ahead of the next best loading), also relates to cost reduction. However, this could not be considered to be the central theme in this factor for two reasons. First, it is the only statement in this subscale with a cost orientation. Second, most other scale items relating to the theme of cost reduction already loaded on to Factor 4. Besides, two other scale items, nos. 102 and 105, also have cross-training implications though no explicit connection is visible. If

these scale items are also taken into account, cross-training seems to be a strong central theme in this factor. In the current environment of labor shortage (of trained employees who are willing to stick with one employer for a time), cross-training is, indeed, an important human resource strategy. Keeping these considerations in view, this last factor was labelled CROSS-TRAINING.

Thus the seven strategy dimensions that emerged from this factor analysis were : Service Quality Leadership, Technological Leadership, Push, Cost Control, Pull, Group Channels, and Cross-Training. Together, they accounted for all but two of Porter's (1980) dimensions and the four service dimensions added from the service strategy literature. In most cases, revised labelling had to be done solely to better reflect the component scale items of a given subscale. But, the core concepts from both the manufacturing and service literatures have been preserved in the new scale/dimensions. This in itself is a strong reason to believe that the new strategy scale is content valid. The only a priori dimension of Porter which did not satisfactorily load on any factor is Specialization. This point is discussed later in Chapter 5. The other dimension from Porter which is not represented in this scale is Pricing Policy, which was dropped because of its low

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reliability.   Except for these variations, a parsimonious
factor solution accounting for much of the Literature seems
to have emerged from this process.   Thus, it is considered
that an interpretable 7-factor strategy scale has been
realized from the analysis thus far, setting the stage for
subsequent analysis of the strategy-performance
relationships, which is the focus of the ensuing sections.

Strategy-Performance Relationship

To investigate the relationship between the performance
measures and the strategy factors, a series of MANOVAs were
conducted.   To facilitate this analysis, some data
transformations were first needed.   First, for each of the
performance measures, Yield Per Room, Market Share Index,
and Return on Sales, there are two observations, one for
each year.   The means of these pairs across the two years
were computed and labelled YPR, MSI, and ROS.   To clarify,
the mean of YPR92 and YPR93 is YPR, and so on.   Thus, nine
performance variables, YPR92, YPR93, YPR, MSI92, MSI93, MSI,
ROS92, ROS93, and ROS, were involved in the analysis from
here on.   MANOVAs were planned separately for each of these
dependent variables.   Later on in this chapter, the
differences between the pairs of these performance measures
for 1992 and 1993 and their implications are discussed.

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But, for the present, all nine variables are used in the
analysis. Second, these performance variables had to be
classified as high and low. To recapitulate, one of the
objectives of this study was to verify if there were any
strategy differences between high performers and low
performers in the lodging industry. To facilitate this
analysis, the quartile statistics of the performance
variables were used, and each of the nine variables was
classified as high (greater than or equal to 75%, i.e.,
upper quartile), low (less than or equal to 25%, i.e., lower
quartile), and medium (25%-75%). The recoded variables were
given a prefix 'NEW', to distinguish them from the original
data. For example, YPR92, after being classified into high,
medium, and low ranges, resulted in NEWYPR92 which assumed
the values 1 for high and 2 for low, the medium range having
been discarded from further analysis. The quantile
statistics were first obtained separately for each price
segment, i.e., upscale, midprice, and economy, because of
the differences in tariffs, etc. as explained earlier.
After the respondent hotels were first separated into high
performing and low performing sets by each of these
segments, all high performing hotels were combined into one
set and all low performing hotels were combined into another
set. Table 40 shows the quantile statistics used in this
exercise. These high and low subsets which yielded a good

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separation in the performance measurement were used in the MANOVAs, as many previous researchers have done. MANOVA is sensitive to the differences in the variances of the subsets being compared. In other words, in this case, the variances of the strategy vectors being compared between the two groups (high and low performers on a given performer measure) should be equal, if a MANOVA is to be used to compare the vector means, as is proposed here. However, the SAS package does not have a homogeneity of variance procedure to test this. So, the strategy vectors of the high and low performers were visually scrutinized with the help of frequency tables to assess their variances. This approach is appropriate given the relatively large sample size in this study. The frequency distributions suggest that the variances of the two groups are not unequal. Last, the factor scores were obtained directly from the PROC FACTOR program used in the previous stage of analysis. The results of these MANOVAs are reported below.

Table 40. Quartile Statistics used for Classifying
           Performance Variables into High and Low

Performance Variables		Upscale Hotels	Mid-price Hotels	Economy Hotels
YPR92	Q3	54.400	40.300	35.000
	Q1	35.850	27.100	24.800
YPR93	Q3	61.000	41.300	36.200
	Q1	35.400	28.400	26.400
YPR	Q3	57.500	40.600	35.000
	Q1	34.300	28.100	25.900
MSI92	Q3	1.050	1.100	1.205
	Q1	0.890	0.960	1.025
MSI93	Q3	1.090	1.120	1.290
	Q1	1.020	0.950	1.010
MSI	Q3	1.060	1.115	1.250
	Q1	0.930	0.945	1.020
ROS92	Q3	56.330	35.980	45.990
	Q1	19.550	21.000	33.850
ROS93	Q3	56.795	37.500	47.600
	Q1	19.955	20.170	31.790
ROS	Q3	55.375	36.500	45.060
	Q1	20.475	20.245	32.820

Q3: Upper Quartile (>75%)
Q1: Lower Quartile (<25%)

As Table 41 shows, the MANOVA results indicate significant differences in the strategy dimensions between high and low performers on the variables NEWYPR92, NEWYPR93, NEWYPR, NEWMSI92, NEWMSI93, and NEWMSI. All the four test statistics, Wilk's Lambda, Pillai's Trace, Hotelling-Lawley Trace, and Roy's Greatest Root, indicate the same results and, hence, only one set of F and p values have been reported. As the values of the last two statistics are identical, only one value is reported for these two statistics. As far as Return on Sales in concerned, the null hypothesis of equality of the two groups narrowly failed to be rejected in the case of NEWROS92. On NEWROS93, the result was more clear cut, in that the null hypothesis failed to be rejected in no uncertain terms. As a consequence, a similar result was obtained on NEWROS, which as explained previously is the average of NEWROS92 and NEWROS93. The interpretation of these and other results reported in the following sections of this chapter are discussed in Chapter 5.

Table 41. MANOVA Results Comparing the Strategy Dimension Vectors between High and Low Performers

Performance Variables	1	2	3	F	NUM DF	DEN DF	PR > F
NEWYPR92	0.8185	0.1815	0.2217	7.3483	7	232	.0001¯¯¯
NEWYPR93	0.8225	0.1775	0.2158	7.1214	7	231	.0001¯¯
NEWYPR	0.8098	0.1902	0.2349	7.6833	7	229	.0001¯¯¯
NEWMSI92	0.9279	0.0721	0.0777	3.4432	7	310	.0015¯¯
NEWMSI93	0.9420	0.0580	0.0616	2.7540	7	313	.0087¯
NEWMSI	0.9369	0.0631	0.0674	2.9838	7	310	.0048¯¯
NEWROS92	0.9526	0.0474	0.0498	1.9269	7	271	.0655*
NEWROS93	0.9623	0.0377	0.0392	1.5180	7	271	.1611*
NEWROS	0.9646	0.0354	0.0367	1.4006	7	267	.2051*

1:Wilk's Lambda;2:Pillai's Trace;3:Hotelling-Lawley Trace & Roy's Greatest Root

* Not Significant
¯ Significant $p < .01$
¯¯ $p < .005$
¯¯¯ $p < .0005$

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The above results as shown in Table 41 only indicate
that there are significant differences in the mean vectors
of the strategy dimensions between high and low performers.
These results do not yet show which factors these
differences are possibly stemming from. To understand such
differences in specific factors, one has to turn to the
univariate ANOVA output of the MANOVA procedure. The
results from the univariate ANOVAs for each strategy
dimension are summarized in Table 42. As seen from this
table, there are significant differences in the strategy
dimensions Push and Pull (Factors 3 and 5) between the high
and low performers on NEWYPR92, NEWYPR93, and NEWYPR. The
dimension Push shows significant differences in NEWMSI92,
NEWMSI93, and NEWMSI. In the case of NEWMSI92, the null
hypothesis of equality on the Service Quality Leadership
dimension narrowly failed to be rejected (PR > F = .06).
However, these differences in Factor 1 are reflected in the
significant difference obtained in NEWMSI. As there are
nine performance variables and seven strategy dimensions
involved in this as well as similar, subsequent analyses,
only significant results are tabulated here as well as in
the tables following for brevity and clarity of
presentation.

Table 42. ANOVA Results Comparing Individual Strategy Dimensions between High and Low Performers

Performance Variables		Service Quality Leadership	Push	Pull
NEWYPR92	F		25.07	4.34
	PR > F		.0001****	.0382*
NEWYPR93	F		23.85	4.26
	PR > F		.0001****	.0402*
NEWYPR	F		26.53	4.61
	PR > F		.0001****	.0328*
NEWMSI92	F		8.55	
	PR > F		.0037***	
NEWMSI93	F		5.37	
	PR > F		.0211*	
NEWMSI	F	3.89	7.60	
	PR > F	.0493*	.0062**	

Only significant results reported
* p < .05
** p < .01
*** p < .005
**** p < .0005

While the previous table indicates on which strategy dimensions the high and low performers differ, there is still one missing piece of information. For example, knowing that the high and low performers differ in Push strategy is not sufficient. Further information is needed to see whether relying more or less on this strategy is associated with high (or low) performance, as the case may be. To obtain this insight, factor means were computed for those strategy dimensions which showed significant differences between high and low performers. Table 43 shows these factor means. Looking at the top half of this table indicating the information on the Yield Per Room variables, it is evident that hotels realizing higher yields per room rely more on the Push strategy than the hotels realizing lower yields per room. Contrastingly, the low performers on these variables rely more on the Pull strategy as compared to the high performers. Combining these two results, the evidence seems to indicate that the high performers (only on these three variables) rely more on the Push strategy and less on the Pull strategy, whereas the low performers rely more on the Pull strategy and less on the Push strategy.

Turning to the Market Share Index variables, shown in the bottom half of Table 43, once again, it is evident that the high performers rely more on the Push strategy. The

contrary evidence on the Pull strategy is not reported here as it was not significant from the previous analysis. However, the results on the two sets of variables related to Yield Per Room and Market Share Index are consistent with each other. Any contradiction here would have rendered the results suspect, considering that Yield Per Room is a product of Average Room Rate and Percentage of Occupancy, and the higher the occupancy, the higher the market share is likely to be.

The other difference indicated in the bottom half of Table 43 is that high performers on the variable NEWMSI rely more on Service Quality Leadership as compared to low performers. As stated previously, this result was not supported for the individual years (NEWMSI92 and NEWMSI93), though it was a narrow failure of rejection in 1992 (NEWMSI92). The factor means of high and low performers in NEWMSI92 and NEWMSI93 have been included in this table, despite the differences not being significant, only for comparison purposes vis-a-vis the NEWMSI figures. Though somewhat less conclusive as compared to the Push vs. Pull strategies, Service Quality Leadership is nonetheless an important strategy that distinguishes between high and low performers.

Table 43. Factor Means of Significantly Different Strategy
Dimensions for High and Low performers

Performance Variables		Factor Means	
	Performance	Push	Pull
NEWYPR92	High	0.4047	(0.2499)
	Low	(0.2652)	0.0391
NEWYPR93	High	0.3667	(0.2390)
	Low	(0.2862)	0.0456
NEWYPR	High	0.4044	(0.2738)
	Low	(0.2816)	0.0259
		Service Quality Leadership	Push
NEWMSI92	High	0.3049	0.3972
	Low	(0.0256)	(0.1069)
NEWMSI93	High	0.1976	0.2927
	Low	(0.0050)	(0.0866)
NEWMSI	High	0.3117	0.3499
	Low	(0.0175)	(0.1070)

Having studied the issues of whether there are any differences in strategies between high and low performers and, if so, on which strategy dimensions are such differences evident and, further, the direction of such differences, the next set of issues examined were relating such differences to the control variables of Location, Segment, Affiliation, and Size. The results obtained from the analyses in this regard are reported next.

Control variables vs Strategy-Performance Relationship

"In the broadest sense, explanatory research can be conceived of as an attempt to explain variability of the phenomena of interest (the dependent variables). It is, however, necessary to recognize that countless variables, in addition to the ones the researcher is studying, may be affecting, to a greater or lesser extent, the phenomenon under investigation, thereby posing potential threats to the validity of findings and to inferences made from them" (Pedhazur and Schmelkin 1991, p. 212). It is with this in mind that this study proposed to study four control variables, viz., Location, Segment, Affiliation, and Size. These have already been defined earlier.

Among the different forms of control, four types are most frequently discussed in scientific literature, viz., control by manipulation, control through elimination or inclusion, statistical control, and control by randomization. Of these, manipulation is possible only in experiments. In organizational research of the type being reported here, variables such as Location can, obviously, not be manipulated. Statistical controls are mostly relevant when the control variables are of the continuous type (Pedhazur and Schmelkin 1991, p. 212-215). As such, these two forms of control are not suitable in the present context. So is the case with randomization as already discussed previously. This leaves control through elimination or inclusion as the most suitable form of control for this study. In the former case of this type of control, the variables are made constants; whereas in the latter, their interaction with the phenomenon under investigation is studied. Considering that this is an exploratory research, and that there is not much of hospitality literature based on which specific interactions can be hypothesized a priori, it was felt that control through elimination is the most suitable approach for this study. Accordingly, all analyses reported in the ensuing sections held the relevant control variables constant. This is done by studying the phenomenon under investigation,

viz., strategy differences between high and low performers, separately under each category of the control variables under investigation and comparing the results there from for interpretation.

Location

To study the differences in strategies adopted by high and low performers among hotels classified by LOCATION, a series of MANOVAs were first performed, one for each LOCATION category. As Table 44 shows, significant differences in the vector of strategy of dimensions between high and low performers (NEWYPR92, NEWYPR93, NEWYPR) were found in City-Center hotels and Highway hotels, and in NEWMSI92 among Airport hotels. Following a similar pattern of analysis adopted before, Table 45 shows the specific strategy dimensions in which these high and low performers differed in these LOCATION types, from univariate ANOVAs. The significant differences between high and low performing City-Center hotels in NEWYPR92, NEWYPR93, and NEWYPR were seen in the Push strategy. On the same performance variables, the high and low performing Highway hotels differed not only in the Push strategy, but also in the Technological Leadership dimension, with the exception that no strategy differences were significant on the variable

NEWYPR92. In this latter case, though the MANOVA showed an overall significant difference, the differences in individual strategy dimensions were clearly not pronounced enough. Likewise, though Airport hotels showed a significant overall strategy difference between high and low performers on NEWMSI92, the individual ANOVAs failed to substantiate such differences in any specific strategy dimension.

Table 46 shows the corresponding factor means to assist in identifying the directional relationship between the strategy dimension and performance. In all the variables in this table, the high performers relied more on the Push strategy than the low performers. Additionally, among the Highway hotels, the high performers on NEWYPR93 and NEWYPR also stressed more on the Technological Leadership dimension.

Table 44. MANOVA Results Comparing the Strategy Dimension Vectors between High and Low performers by LOCATION

Performance Variables	1	2	3	F	NUM DF	DEN DF	PR > F
LOCATION = City-Center							
NEWYPR92	0.5763	0.4237	0.7352	4.4110	7	42	.0010⁻⁻
NEWYPR93	0.6449	0.3551	0.5507	3.3043	7	42	.0069⁻
NEWYPR	0.5801	0.4199	0.7239	4.3433	7	42	.0011⁻⁻
LOCATION = Highway							
NEWYPR92	0.7740	0.2260	0.2920	3.0451	7	73	.0072⁻
NEWYPR93	0.8167	0.1833	0.2245	0.2245	7	74	.0303*
NEWYPR	0.7517	0.2483	0.3302	3.2551	7	69	.0048⁻⁻
LOCATION = Airport							
NEWMSI92	0.4665	0.5335	1.1438	2.9412	7	18	.0307*

1:Wilk's Lambda; 2:Pillai's Trace; 3:Hotelling-Lawley Trace & Roy's Greatest Root

Only Significant results reported
* $p < .05$
⁻ $p < .01$
⁻⁻ $p < .005$

Table 45. ANOVA Results Comparing Individual Strategy Dimensions between High and Low Performers by LOCATION

Performance Variables		Push	Technological Leadership
LOCATION = City-Center			
NEWYPR92	F	6.39	
	PR > F	.0148*	
NEWYPR93	F	4.75	
	PR > F	.0343*	
NEWYPR	F	5.22	
	PR > F	.0268*	
LOCATION = Highway			
NEWYPR93	F	5.51	4.71
	PR > F	.0214*	.0330*
NEWYPR	F	5.64	4.67
	PR > F	.0202*	.0339*

Only significant results reported
* $p < .05$

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Table 46. Factor Means of Significantly Different Strategy Dimensions for High and Low Performers by LOCATION

Performance Variables	Performance	Factor Means	
		Push	Technological Leadership
LOCATION = City-Center			
NEWYPR92	High	0.5948	
	Low	(0.0809)	
NEWYPR93	High	0.5739	
	Low	(0.0184)	
NEWYPR	High	0.5741	
	Low	(0.0420)	
LOCATION = Highway			
NEWYPR93	High	0.1850	0.5325
	Low	(0.4701)	(0.0943)
NEWYPR	High	0.2957	0.6130
	Low	(0.4702)	(0.1324)

Segment

A series of MANOVAs performed in this case indicated
strategy differences between high and low performers only in
the full-service segment. These significant differences
were obtained in NEWYPR92, NEWYPR93, NEWYPR, and NEWMSI92,
as shown in Table 47. It may be added here that in the case
of NEWMSI93 and NEWMSI, the tests of null hypothesis of
equality of strategy narrowly failed to be rejected (PR > F
= 0.0734 and 0.0742 respectively). All the test statistics
confirmed similar results as has been the case with all the
tests conducted thus far. Univariate ANOVAs on the
performance variables, where the MANOVAs indicated
significant differences, showed that it is once again the
Push strategy where the differences are significant. These
results are reported in Table 48. Factor means were then
computed as before to study the direction of the strategy-
performance relationship. Once again, the high performers
(in NEWYPR92, NEWYPR93, NEWYPR, and NEWMSI92) relied more on
the Push strategy than the low performers, as indicated in
Table 49.

Table 47. MANOVA Results Comparing the Strategy Dimension Vectors between High and Low Performers by SEGMENT

Performance Variables	1	2	3	F	NUM DF	DEN DF	PR > F
SEGMENT = Full-Service							
NEWYPR92	0.7167	0.2833	0.3953	7.3405	7	130	.0001*
NEWYPR93	0.7438	0.2562	0.3444	6.3460	7	129	.0001*
NEWYPR	0.7057	0.2943	0.4170	7.6847	7	129	.0001*
NEWMSI92	0.9080	0.0920	2.6341	2.6341	7	182	.0001*

1:Wilk's Lambda;2:Pillai's Trace;3:Hotelling-Lawley Trace & Roy's Greatest Root

Only significant results reported
* p < .0005
===
Table 48. ANOVA Results Comparing Individual Strategy Dimensions Between High and Low Performers by SEGMENT

Performance Variables		Push
SEGMENT = Full-Service		
NEWYPR92	F	21.61
	PR > F	.0001**
NEWYPR92	F	16.88
	PR > F	.0001**
NEWYPR	F	22.39
	PR > F	.0001**
NEWMSI92	F	5.85
	PR > F	.0165*

Only Significant results reported
* p < .05
** p < .0005

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Table 49.   Factor Means of Significantly Different
            Strategy Dimensions for High and Low
            Performers by SEGMENT

Performance Variables		Factor Means	
	Performance	Push	
SEGMENT = Full-Service			
NEWYPR92	High	0.6428	
	Low	(0.1135)	
NEWYPR93	High	0.5291	
	Low	(0.1482)	
NEWYPR	High	0.6083	
	Low	(0.1493)	
NEWMSI92	High	0.5271	
	Low	0.0577	

Affiliation

It will be recalled that this control variable has been categorized based on ownership (independent or a part of multi-unit companies) and management (self, franchisor, or management company). Thus, there are six possible combinations of arrangements involved here. The research question of interest here is whether the different groups have varying strategy-performance relationships.

In the first stage on analysis, the MANOVAs performed for each AFFILIAT category showed the following significant results as indicated in Table 50:

1. Among the independently owned, self-managed hotels, differences in strategies were significant between high and low performers in NEWYPR92, NEWYPR93, NEWYPR, NEWMSI92, and NEWMSI.

2. Among the hotels which were part of multi-unit chains and were also managed by such chains themselves, strategy differences were significant between the high and low performers in NEWROS93 and NEWROS. The null hypothesis of equality failed to be rejected for NEWROS92 (PR > F = .0850).

3.	Among the independently owned hotels which were managed by the franchisors, strategy differences were significant between the high and low performers in NEWYPR92, NEWYPR93, and NEWYPR.

As a corollary, there were no strategy differences between the high and low performers among hotels falling under the rest of the AFFILIAT categories.

Table 50. MANOVA Results Comparing the Strategy Dimension Vectors between High and Low Performers by AFFILIAT

Performance Variables	1	2	3	F	NUM DF	DEN DF	PR > F
AFFILIAT: A							
NEWYPR92	0.8162	0.1838	0.2253	3.0892	7	96	.0056⁻
NEWYPR93	0.8348	0.1652	0.1979	2.9405	7	104	.0075⁻
NEWYPR	0.7916	0.2084	0.2633	3.6113	7	96	.0017⁻
NEWMSI92	0.8930	0.1070	0.1198	2.2927	7	134	.0308*
NEWMSI	0.8967	0.1033	0.1152	2.2549	7	137	.0334*
AFFILIAT: B							
NEWYPR92	0.4771	0.5229	1.0959	3.4441	7	22	.0122*
NEWYPR93	0.4971	0.5029	1.0115	3.1789	7	22	.0176*
NEWYPR	0.4989	0.5011	1.0044	3.0133	7	21	.0235*
AFFILIAT: C							
NEWROS93	0.5894	0.4106	0.6966	2.4878	7	25	.0438*
NEWROS	0.5619	0.4381	0.7796	2.6728	7	24	.0340*

1:Wilk's Lambda 2:Pillai's Trace 3:Hotelling-Lawley Trace & Roy's Greatest Root

A:Independently owned, self-managed
B:Independently owned, managed by the franchisor
C:Chain owned (i.e., part of a multi-unit company), managed by the chain

Only significant results reported
*$p < .05$
⁻$p < .01$
⁻⁻$p < .005$

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Univariate ANOVAs were then performed on the
performance variables which indicated significant strategy
differences between the high and low performers. The
results are tabulated in Table 51. This table shows the
following results:

1.   High and low performers in NEWYPR92, NEWYPR93, NEWYPR,
      NEWMSI92, and NEWMSI among the independently owned,
      self-managed hotels differ in the Push strategy.

2.   In addition, these groups also differ in the Service
      Quality Leadership dimension, but this result is
      significant only for NEWMSI92 and NEWMSI.

3.   In contrast, independent hotels managed by the
      franchisors present a different picture. Here, the
      high and low performers in NEWYPR92, NEWYPR93, and
      NEWYPR differ in the Cost Control and Pull strategy
      dimensions. In addition, these groups also differ in
      the Cross-Training strategy dimension when the
      performance variables NEWYPR92 and NEWYPR are
      considered.

4.   Among the hotels which are part of multi-unit chains
      and are also managed by such chains themselves, the

high and low performers in NEWROS significantly differ
on the Service Quality Leadership dimension.

5. In this last group, though the MANOVA results showed an
overall significant difference in NEWROS93, no
individual strategy dimension proved to be
significantly different between the high and low
performers on this performance variable.

Table 51. ANOVA Results Comparing Individual Strategy Dimensions between High and Low Performers by AFFILIAT

Performance Variables		Push	Service Quality Leadership	Cost Control	Pull	Cross-Training
AFFILIAT: A						
NEWYPR92	F	14.95				
	PR > F	.0002⁻⁻⁻				
NEWYPR93	F	15.78				
	PR > F	.0001⁻⁻				
NEWYPR	F	17.41				
	PR > F	.0001⁻⁻				
NEWMSI92	F	11.99	4.55			
	PR > F	.0007⁻⁻	.0347*			
NEWMSI	F	12.58	6.55			
	PR > F	.0005⁻⁻	.0116*			
AFFILIAT: B						
NEWYPR92	F			4.59	16.23	6.42
	PR > F			.0410*	.0004⁻⁻⁻	.0172*
NEWYPR93	F			4.87	11.55	
	PR > F			.0357*	.0021⁻	
NEWYPR	F			6.15	13.47	5.54
	PR > F			.0197*	.0011⁻	.0261*
AFFILIAT: C						
NEWROS	F		5.55			
	PR > F		.0252*			

A:Independently owned, self-managed
B:Independently owned, managed by the franchisor
C:Chain owned (i.e., part of a multi-unit company), managed by the chain

Only significant results reported
* $p < .05$ ⁻ $p < .005$ ⁻⁻ $p < .001$ ⁻⁻⁻ $p < .0005$

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The factor means tabulated in Table 52 clarify the specific strategy differences described above. The results indicate the following:

1. Among the independently owned, self-managed hotels, the high performers rely more on the Push strategy than the low performers. These results are indicated in NEWYPR92, NEWYPR93, NEWYPR, NEWMSI92, and NEWMSI.

2. Additionally, on the last two performance variables related to market share, the high performers in this type of hotels stress more on Service Quality Leadership than the low performers do.

3. In contrast, a different set of strategy dimensions distinguish the high and low performers, in NEWYPR92, NEWYPR93, and NEWYPR, among the independently owned hotels managed by the franchisors. Here, the low performers stress more on Cost Control, rely more on the Pull strategy, and also stress on Cross-Training, as compared to the high performers.

4. Finally, among the chain owned and managed hotels, hotels in the low performance group in NEWROS stress more on the Service Quality Leadership dimension.

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Some of the results narrated in items 3 and 4 seemed a
little surprising at first. But on a deeper consideration
of the phenomena, the results seem to be logically probable.
Discussion on these issues is deferred to Chapter 5 so that
the rest of the study results may also be presented first.

Table 52. Factor Means of Significantly Different Strategy Dimensions for High and Low Performers by AFFILIAT

Performance Variables		Factor Means				
Performance		Push	Service Quality Leadership	Cost Control	Pull	Cross-Training
AFFILIAT: A						
NEWYPR92	High	0.4158				
	Low	(0.5610)				
NEWYPR93	High	0.3690				
	Low	(0.5317)				
NEWYPR	High	0.5293				
	Low	(0.5495)				
NEWMSI92	High	0.7720	0.5933			
	Low	(0.3855)	(0.1540)			
NEWMSI	High	0.5616	0.5624			
	Low	(0.3896)	(0.1469)			
AFFILIAT: B						
NEWYPR92	High			(0.4153)	(1.0455)	(0.4666)
	Low			0.2810	0.1850	0.2610
NEWYPR93	High			(0.5220)	(0.8902)	(0.4489)
	Low			0.2019	0.1599	0.1351
NEWYPR	High			(0.5141)	(0.9337)	(0.3995)
	Low			0.2682	0.1822	0.2723
AFFILIAT: C						
NEWROS	High		(0.0144)			
	Low		0.5247			

A:Independently owned, self-managed   B:Independently owned, managed by the franchisor
C:Chain owned (i.e., part of multi-unit company), managed by the chain

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Size

To study the research question whether the strategy-performance relationship varies with the Size of a hotel, MANOVAs were performed for the four different NEWRMS categories. As Table 53 indicates, only the Over-250 rooms category showed any significant differences in the strategy dimensions between high and low performers in NEWYPR93 and NEWYPR. None of the other results were significant. Univariate ANOVAs indicated that the Technological Leadership dimension was the one on which the high and low performers differed. These results are reported in the middle section of Table 53. The bottom third of Table 53 shows the factor means, which indicate that the high performers in NEWYPR93 and NEWYPR rely more on Technological Leadership than do the low performers.

Table 53. Comparison of Strategy Dimensions between High and Low Performers by NEWRMS93 (Size)

MANOVA

Performance Variables	1	2	3	F	NUM DF	DEN DF	PR > F
SIZE = > 250 rooms							
NEWYPR93	0.5580	0.4420	0.7921	2.8290	7	25	.0257*
NEWYPR	0.5623	0.4377	0.7785	2.8916	7	26	.0225*

===

ANOVA

		Technological Leadership
NEWYPR93	F	10.59
	PR > F	.0027**
NEWYPR	F	7.48
	PR > F	.0101*

===

FACTOR MEANS

		Factor Means
	Performance	Technological Leadership
NEWYPR93	High	0.0736
	Low	(0.9432)
NEWYPR	High	0.1208
	Low	(0.7647)

1:Wilk's Lambda;2:Pillai's Trace;3:Hotelling-Lawley Trace & Roy's Greatest Root

Only significant results reported.
*$p < .05$
**$p < .005$

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Strategy-Performance Relationship Related to Other Variables

The results reported thus far covered the development of the strategy scale, its reliability, the overall strategy-performance relationship, and the variations in this relationship across different categories of the four control variables: Location, Segment, Affiliation, and Size. As discussed earlier, three additional questions were raised when the research proposal was discussed. These questions related to (1) the performance measures that hotel managements use in judging how well they are doing, (2) the age of the property, and (3) the rating of a hotel's location vis-a-vis its competition. These issues have already been discussed earlier on. In each case, the question is the same, and that is, does the strategy-performance relationship vary by the concerned variable. The results of the investigation in respect of these three additional variables are presented next.

PERFMESR

The first variable considered was PERFMESR, i.e., the measure that hotel managements considered to be the most important to assess performance. The results of the MANOVAs conducted in this regard are presented in Table 54. As this

table indicates, among the hotels which considered Gross Operating Profit (GOP) / Income Before Fixed Charges (IBFC) as the most important performance measure, significant differences were found in the strategy dimensions between the high and low performances on NEWYPR92, NEWYPR93, NEWYPR, NEWMSI92, NEWMSI93, and NEWMSI. Among the hotels which considered Return on Sales (ROS) as the most important performance measure, significant strategy differences were found between the high and low performances on NEWYPR92, NEWYPR, NEWROS92, NEWROS93, and NEWROS. The differences on NEWYPR93 were also close to being significant (PR > F = .0599).

Table 54. MANOVA Results Comparing the Strategy Dimension Vectors between High and Low Performers by PERFMESR

Performance Variables	1	2	3	F	NUM DF	DEN DF	PR > F
PERFMESR: A							
NEWYPR92	0.8230	0.1770	0.2151	3.8095	7	124	.0009▃
NEWYPR93	0.8123	0.1877	0.2310	4.0590	7	123	.0005▃
NEWYPR	0.7794	0.2206	0.2830	4.9732	7	123	.0001▃
NEWMSI92	0.8926	0.1074	0.1203	2.8880	7	168	.0071▃
NEWMSI93	0.9222	0.0778	0.0844	2.0980	7	174	.0461*
NEWMSI	0.8880	0.1120	0.1262	3.0456	7	169	.0048▃
PERFMESR: B							
NEWYPR92	0.2480	0.7520	3.0327	4.3324	7	10	.0186*
NEWYPR	0.2109	0.7891	3.7426	4.8119	7	9	.0164*
NEWROS92	0.4375	0.5625	1.2855	2.7546	7	15	.0472*
NEWROS93	0.4375	0.5625	1.2855	2.7546	7	15	.0472*
NEWROS	0.4375	0.5625	1.2855	2.7546	7	15	.0472*

1:Wilk's Lambda   2:Pillai's Trace   3:Hotelling-Lawley Trace & Roy's Greatest Root

A:Gross Operating Profit/Income Before Fixed Charges
B:Return on Sales

Only significant results reported.
* p < .05
" p < .01
" p < .005
" p < .001
" p < .0005

The corresponding univariate ANOVA results are
presented in Table 55. As this table indicates, significant
differences were found in the strategy vectors between the
high and low performers in several variables. Among the
hotels which rated GOP/IBFC as the most important
performance measure, these differences were found in the
Push strategy, when the performance variables NEWYPR92,
NEWYPR93, NEWYPR, and NEWMSI92 were considered. Significant
differences in the Cross-Training dimension were found when
the performance variables used were NEWMSI93 and NEWMSI.
Among the hotels which considered ROS as the most important
performance measure, significant differences in the Push
strategy were found between the high and low performances in
NEWYPR92, NEWYPR, NEWROS92, NEWROS93, and NEWROS.
Significant differences were also found in the Technological
Leadership, and Cross-Training dimensions, when the
performance variables NEWROS92, NEWROS93, and NEWROS were
used to classify the high and low performers.

Table 55. ANOVA Results Comparing Individual Strategy Dimensions between High and Low Performers by PERFMESR

Performance Variables		Push	Cross-Training	Technological Leadership	Cost Control
PERFMESR: A					
NEWYPR92	F	13.49			
	PR > F	.0003⁻			
NEWYPR93	F	15.02			
	PR > F	.0002⁻			
NEWYPR	F	16.96			
	PR > F	.0001⁻			
NEWMSI92	F	4.04			
	PR > F	.0460*			
NEWMSI93	F		4.55		
	PR > F		.0343*		
NEWMSI	F		5.78		
	PR > F		.0172*		
PERFMESR: B					
NEWYPR92	F	6.90			
	PR > F	.0183*			
NEWYPR	F	6.34			
	PR > F	.0237*			
NEWROS92	F	7.42		7.17	7.25
	PR > F	.0127*		.0141*	.0136*
NEWROS93	F	7.42		7.17	7.25
	PR > F	.0127*		.0141*	.0136*
NEWROS	F	7.42		7.17	7.25
	PR > F	.0127*		.0141*	.0136*

A:Gross Operating Profit / Income Before Fixed Charges
B:Return on Sales

Only significant results reported
* $p < .05$
⁻ $p < .0005$

Table 56 shows the factor means in respect of these significant differences. As this table shows, among the hotels which consider GOP/IBFC as the most important performance measure, the high performers on NEWYPR92, NEWYPR93, NEWYPR, and NEWMSI92 rely more on the Push strategy. With NEWMSI93, and NEWMSI as the performance variables used to classify high and low performers, it is found that low performers rely more on Cross-Training as compared to high performers. Among the hotels which consider ROS as being the most important performance measure, once again, high performers in NEWYPR92, NEWYPR, NEWROS92, NEWROS93 and NEWROS rely more on the Push strategy. In addition, high performers in NEWROS92, NEWROS93, and NEWROS in this group rely more on Technological Leadership and Cost Control, than the low performers.

Table 56. Factor Means of Significantly Different Strategy
Dimensions for High and Low Performers by PERFMESR

Performance Variables	Performance	Factor Means			
		Push	Cross – Training	Technological Leadership	Cost Control
PERFMESR: A					
NEWYPR92	High	0.4042			
	Low	(0.2255)			
NEWYPR93	High	0.3766			
	Low	(0.2736)			
NEWYPR	High	0.4204			
	Low	(0.2691)			
NEWMSI92	High	0.3698			
	Low	(0.0381)			
NEWMSI93	High		(0.2483)		
	Low		0.1124		
NEWMSI	High		(0.3245)		
	Low		0.0853		
PERFMESR: B					
NEWYPR92	High	0.9929			
	Low	(0.2493)			
NEWYPR	High	0.9929			
	Low	(0.2473)			
NEWROS92	High	0.7916		1.1350	0.9664
	Low	(0.3602)		0.0000	(0.0416)
NEWROS93	High	0.7916		1.1350	0.9664
	Low	(0.3602)		0.0000	(0.0416)
NEWROS	High	0.7916		1.1350	0.9664
	Low	(0.3602)		0.0000	(0.0416)

A:Gross Operating Profit / Income Before Fixed Charges
B:Return on Sales

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Age

The second variable considered in this part of the analysis was the age of the property, labelled here NEWAGE. As the MANOVA results in Table 57 show, every age group had some significant strategy differences between the high and low performers. Univariate ANOVAs were performed for all significant findings in Table 57, and these results are presented in Table 58. Among the 7-year old or newer hotels, significant differences in both the Push and Pull strategies were found between high and low performers in NEWYPR92, NEWYPR93, and NEWYPR. In addition, high and low performers in NEWMSI were also found to differ in the Push strategy. From these results and Table 59, where the factor means are reported, it is evident that high performers in this group rely more on the Push strategy, and the low performers rely more on the Pull strategy. These results are consistent with the others reported thus far.

Among the 8-20 years old hotels, the high performers in NEWYPR92, NEWYPR93, and NEWYPR rely more on the Push strategy than the low performers. The low performers in this group rely more on Cross-Training than the high performers, once again, consistent with results reported previously. Among the 21-30 years old hotels, the high

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performers in NEWROS92, NEWROS93, and NEWROS rely more on
Cross-Training than the low performers. Additionally, in
this group, the high performers in NEWROS93 also rely more
on the Push strategy than the low performers.

Though the MANOVA results showed an overall strategy
difference between the high and low performers in NEWYPR93,
NEWMSI92, NEWMSI93, and NEWMSI among the more than 30-year
old hotels, no individual strategy dimensions turned out to
be significant from the ANOVAs.

Table 57. MANOVA Results Comparing the Strategy Dimension Vectors between High and Low Performers by NEWAGE

Performance Variables	1	2	3	F	NUM DF	DEN DF	PR > F
NEWAGE: A							
NEWYPR92	0.6935	0.3065	0.4420	3.6626	7	58	.0024⁻
NEWYPR93	0.6633	0.3367	0.5076	4.3508	7	60	.0006⁻
NEWYPR	0.6982	0.3018	0.4322	3.5193	7	57	.0033⁻
NEWMSI	0.8407	0.1593	0.1895	2.1661	7	80	.0460*
NEWAGE: B							
NEWYPR92	0.7526	0.2474	0.3286	3.1925	7	68	.0056⁻
NEWYPR93	0.7857	0.2143	0.2728	2.5721	7	66	.0209*
NEWYPR	0.7237	0.2763	0.3819	3.6004	7	66	.0024⁻
NEWAGE: C							
NEWROS92	0.8065	0.1935	0.2399	2.5015	7	73	.0232*
NEWROS93	0.8324	0.1676	0.2014	2.2439	7	78	.0392*
NEWROS	0.8273	0.1727	0.2087	2.2065	7	74	.0431*
NEWAGE: D							
NEWYPR93	0.3719	0.6281	1.6886	3.6184	7	15	.0174*
NEWMSI92	0.5547	0.4453	0.8028	2.7524	7	24	.0301*
NEWMSI93	0.5214	0.4786	0.9179	3.0160	7	23	.0211*
NEWMSI	0.5558	0.4442	0.7992	2.6260	7	23	.0378*

1:Wilk's Lambda   2:Pillai's Trace   3:Hotelling-Lawley Trace & Roy's Greatest Root
A: < = 7 years B:8-20 years C:21-30 years D: > 30 years
Only significant results reported.
*p < .05   ⁻p < .005   ⁻p < .01   ⁻p < .001

Table 58. ANOVA Results Comparing Individual Strategy
           Dimensions between High and Low Performers
           by NEWAGE

Performance Variables		Push	Pull	Cross – Training
NEWAGE: A				
NEWYPR92	F	10.37	6.44	
	PR > F	.0020⁻	.0136*	
NEWYPR93	F	13.93	5.38	
	PR > F	.0004⁻⁻	.0235*	
NEWYPR	F	11.63	4.58	
	PR > F	.0011⁻	.0362*	
NEWMSI	F	6.37		
	PR > F	.0135*		
NEWAGE: B				
NEWYPR92	F	5.05		5.23
	PR > F	.0276*		.0251*
NEWYPR93	F	4.77		5.28
	PR > F	.0323*		.0245*
NEWYPR	F	6.27		5.42
	PR > F	.0146*		.0227*
NEWAGE: C				
NEWROS92	F			7.14
	PR > F			.0091⁻
NEWROS93	F	4.35		8.31
	PR > F	.0401*		.0050⁻
NEWROS	F			7.86
	PR > F			.0063⁻

A:<= 7 years   Only significant results reported.
B:8-20 years   * $p < .05$
C:21-30 years   ⁻ $p < .01$
                      ⁼ $p < .005$
                      ⁻⁻ $p < .0005$

Table 59. Factor Means of Significantly Different Strategy
Dimensions for High and Low Performers by NEWAGE

Performance Variables		Factor Means		
	Performance	Push	Pull	Cross-Training
NEWAGE: A				
NEWYPR92	High	0.2538	(0.5031)	
	Low	(0.4548)	0.1834	
NEWYPR93	High	0.3148	(0.4683)	
	Low	(0.4969)	0.1448	
NEWYPR	High	0.2886	(0.4433)	
	Low	(0.4771)	0.1487	
NEWMSI	High	0.4588		
	Low	(0.2742)		
NEWAGE: B				
NEWYPR92	High	0.5451		(0.4863)
	Low	(0.0044)		0.0771
NEWYPR93	High	0.5010		(0.4168)
	Low	(0.0300)		0.1438
NEWYPR	High	0.5700		(0.4702)
	Low	(0.0343)		0.1091
NEWAGE: C				
NEWROS92	High			0.4218
	Low			(0.2214)
NEWROS93	High	0.2593		0.5382
	Low	(0.2546)		(0.1830)
NEWROS	High			0.4928
	Low			(0.1828)

A:<= 7 years
B:8-20 years
C:21-30 years

RATELOC

The third variable considered here was RATELOC, the variable which measured whether a respondent hotel's location was superior or inferior compared to its competition. This variable was measured on a 6-point scale (Q.2 of Part I, Appendix II). To transform the data to suit this analysis, the responses to this question were recoded. Response categories 1 and 2 were coded as 1, and response categories 5 and 6 were coded as 2. Thus, the new variable created LOCRATE took the value 1 to signify a most superior location, and a value of 2 to signify a most inferior location. As reported previously, the number of respondents rating their location as inferior were quite low. MANOVAs were performed on each of the categories of this new variable LOCRATE.

As Table 60 shows, significant differences in the strategy vector between high and low performers were found only in the set of hotels rated superior in location. These differences were found on the performance variables NEWYPR92, NEWYPR93, NEWYPR, NEWMSI92, NEWROS92, NEWROS93, and NEWROS. As the ANOVA results in Table 61 indicate, all these significant differences seem to be due to the differences in the Push strategy. The factor means in Table

62 show that the high performers on each of the performance
variables listed above rely more on the Push strategy than
the low performers. No significant differences were found in
the set of hotels rated inferior in location.

Table 60. MANOVA Results Comparing the Strategy Dimension Vectors between High and Low Performers by LOCRATE

Performance Variables	1	2	3	F	NUM DF	DEN DF	PR > F
LOCRATE = 1							
NEWYPR92	0.7700	0.2300	0.2986	5.1192	7	120	.0001**
NEWYPR93	0.7845	0.2155	0.2747	4.5906	7	117	.0001**
NEWYPR	0.7495	0.2505	0.3342	5.4900	7	115	.0001**
NEWMSI92	0.9125	0.0875	0.0959	2.1225	7	155	.0443*
NEWROS92	0.8962	0.1038	0.1158	2.3319	7	141	.0278*
NEWROS93	0.8965	0.1035	0.1155	2.3263	7	141	.0282*
NEWROS	0.8918	0.1082	1.1214	2.3752	7	137	.0254*

LOCRATE = 1: Respondent hotel's location most superior compared to competition

1:Wilk's Lambda
2:Pillai's Trace
3:Hotelling-Lawley Trace & Roy's Greatest Root

Only significant results reported
* $p < 0.05$
** $p < 0.0005$

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Table 61. ANOVA Results Comparing Individual Strategy Dimensions Between High and Low Performers by LOCRATE

Performance Variables		Push
LOCRATE = 1		
NEWYPR92	F	21.85
	PR > F	.0001‒‒
NEWYPR93	F	17.53
	PR > F	.0001‒‒
NEWYPR	F	22.46
	PR > F	.0001‒‒
NEWMSI92	F	6.24
	PR > F	.0135*
NEWROS92	F	5.60
	PR > F	.0193*
NEWROS93	F	9.09
	PR > F	.0030‒‒
NEWROS	F	8.03
	PR > F	.0053‒

LOCRATE = 1: Respondent hotels' location most superior compared to competition

Only Significant results reported
* $p < .05$
‒ $p < .01$
‒‒ $p < .005$
‒‒‒ $p < .0005$

Table 62. Factor Means of Significantly Different Strategy Dimensions for High and Low Performers by LOCRATE

Performance Variables	Performance	Factor Means Push
LOCRATE = 1		
NEWYPR92	High	0.4047
	Low	(0.2652)
NEWYPR93	High	0.3667
	Low	(0.2862)
NEWYPR	High	0.4044
	Low	(0.2816)
NEWMSI92	High	0.3972
	Low	(0.1069)
NEWROS92	High	0.1016
	Low	(0.1724)
NEWROS93	High	0.1388
	Low	(0.1947)
NEWROS	High	0.0847
	Low	(0.1854)

Though not central to the study objectives and, consequently, not planned for a priori, similar comparisons were also made on the strategy differences by the price segments of the sample hotels (upscale, midprice, and economy), as well as by the two sponsoring Companies. The statistical data is not being tabulated here. But, these results were also consistent with the ones reported in detail so far. For example, among the midprice hotels, high performers in NEWYPR92, NEWYPR93, and NEWYPR, relied more on the Push strategy than did the low performers. The low performers in NEWROS92, NEWROS93, and NEWROS, among the economy hotels, relied more on the Pull strategy and Service Quality Leadership. From the Company-wise analysis, it is seen that Company B's high performing hotels in NEWYPR92, NEWYPR93, and NEWYPR relied more on the Push strategy. No other significant results were obtained in respect of other possibilities.

Strategic Time Lag

As discussed in the previous Chapter, the issue of strategic time lag was addressed in this study by measuring strategy for 1991-1992 and performance for the years 1992 and 1993. It is hypothesized that if strategic time lag were to be confirmed by this data, the 1993 performance

should vary from that of 1992. Further, for strategies
which lead to higher performance, this variation should be
positive, i.e., 1993 performance should be higher than in
1992. Conversely, for strategies which lead to lower
performance, the variation should be negative.

It is, thus, obvious that the first thing that needed
to be checked in this analysis was whether or not the 1993
performance is different from that in 1992. If there is no
difference, then no further analysis on this subject of
strategic time lag would be possible. Once again, as the
tariffs, rates realized, and revenues differ between
upscale, midprice and economy hotels, this verification had
to be done for each of these segments separately. PROC
UNIVARIATE procedure in SAS provides a T-test comparing two
means, testing for the null hypothesis that $\mu_2-\mu_1=0$. This
procedure was used to compare the pairs of performance means
(YPR92 vs. YPR93, etc.). Of the nine tests (Yield Per Room,
Market Share Index, and Return On Sales by upscale,
midprice, and economy hotels), seven tests rejected the null
hypothesis. The two exceptions were both in Return On Sales
(ROSDIFF) for upscale and economy hotels. This meant that
in the remaining seven cases, the 1993 performance was
different from the corresponding 1992 achievement. A simple

examination of the means showed that in all the cases, the 1993 performance was higher than that in 1992.

The above results made it possible to test whether there were any significant differences in the strategy dimension vectors between high and low performers. However, in this analysis, the interpretation of high and low performance is slightly different from what has been used so far. Of interest here is the increase in performance between 1992 and 1993, so that one may relate such increases to strategies adopted. Therefore, the quantile statistics used in this case were for the performance differences (YPRDIFF, MSIDIFF, and ROSDIFF) between 1992 and 1993. Using the upper (75%) and lower (25%) quartile statistics for each price segment, the sample was divided into high (increase in) performance and low (increase in) performance sets, discarding the middle set, as is usually done in this type of analysis. Once the sample was divided into high and low performers there was no more any need to distinguish the price segments as all the comparisons are now relative. Thus, in the MANOVAs conducted next, the individual price segments are disregarded i.e., the tests were conducted between all high performers and all low performers. As would be obvious, the test on ROSDIFF was done only for the

midprice segment, as the differences in the other two segments were not significant.

As the MANOVA results in Table 63 show, there were significant differences in the strategy vectors of hotels which achieved higher and lower increases in performance on NEWYPRDF. For the midprice hotels only, there were also significant strategy differences between high and low performers on NEWROSDF. From the ANOVA results in Table 64, it is seen that in the case of NEWYPRDF, the significant differences are in the Push strategy and Cross-Training. For NEWROSDF, the significant difference is only in the Push strategy. Table 65 shows the corresponding factor means. From this table, it appears that hotels which stressed more on the Push strategy have achieved higher increases in YPR and ROS than hotels which did not. Also, hotels which stressed more on Cross-Training achieved lower increases in YPR, as compared to those which relied less on this strategy dimension.

Table 63. MANOVA Results Comparing the Strategy Dimension Vectors between High and Low (increases in) Performance

Performance Variables	1	2	3	F	NUM DF	DEN DF	PR > F
NEWYPRDF	0.9041	0.0959	0.1060	3.5893	7	237	.0011[**]
NEWROSDF[¹]	0.9035	0.0965	0.1067	2.6840	7	176	.0115[*]

[¹] only for the midprice hotels
Only Significant results reported
[*] $p < .05$
[**] $p < .005$
==

Table 64. ANOVA Results Comparing the Strategy Dimension Vectors between High and Low (increases in) Performance

Performance Variables		Push	Cross-Training
NEWYPRDF	F	7.38	4.08
	PR > F	.0071[**]	.0444[*]
NEWROSDF[¹]	F	12.27	
	PR > F	.0006[***]	

[¹] Only for the midprice hotels
Only Significant results reported
[*] $p < .05$
[**] $p < .01$
[***] $p < .001$
==

Table 65. Factor Means of Significantly Different Strategy Dimensions for High and Low (increases in) Performance

Performance Variables		Factor Means	
	Performance	Push	Cross-Training
NEWYPRDF	High	0.1763	(0.1705)
	Low	(0.1621)	0.0828
NEWROSDF[¹]	High	0.4694	
	Low	(0.0952)	

[¹] Only for the midprice hotels

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Summary

This Chapter presented the results from the pilot
testing of the strategy scale and then described the final
survey instrument and how it was developed. Detailed
diagnostic checks were performed on the final data before
any further processing was done. These diagnostic checks
have been reported, followed by a description of the
reliability testing of the strategy scale. The 7-factor
solution obtained to delineate the strategy dimensions
underlying the 105-item strategy scale developed in this
study was described. The seven strategy dimensions were
labelled Service Quality Leadership, Technological
Leadership, Push, Cost Control, Pull, Group Channels, and
Cross-Training. The differences in these strategy
dimensions between high and low performers in YPR, MSI, and
ROS were discussed. This was followed by a presentation of
the differences in the strategy-performance relationships
across various levels of four control variables, Location,
Segment, Affiliation, and Size. A similar analysis relating
the strategy-performance relationship to (a) the performance
measure most preferred by hotels managements, (b) the age of
the properties, and (c) the rating of the location of the
respondent hotels vis-a-vis their competition, was
presented. Last, the results of the investigation of the

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strategic time lag issue were reported. The next Chapter
discusses the interpretation of all these results and a
synthesis thereof.

Chapter 5

DISCUSSION AND CONCLUSION

Introduction

In the previous chapter, the results of all the analysis conducted in this study have been reported. With the exception of one or two instances, most of this reporting was done without any comments on the results. In this last and concluding chapter, all those results are pulled together, interpreted and commented upon. Specifically, the results are discussed with reference to the two major propositions of this research study and the associated research questions that were raised in the earlier chapters. Acknowledging the limitations of this study is an integral part of this discussion. The discussion of the results is followed by a concluding section which sums up what has been achieved in this study, and how it relates to the ongoing knowledge accrual process. This logically leads into recommendations for future research in this area.

Research Propositions Revisited

To keep the focus of the discussion within the boundaries of the principal objectives of this research

study, it is only appropriate to recap the two main research
propositions involved, which are as follows:

1. Through a combination of strategic characteristics
   rooted in business strategy theory and service
   management theory, it is possible to identify a
   set of strategic dimensions underlying lodging
   strategy.

2. Performance differences among lodging units can be
   related to varying strategic dimensions emphasized
   by such units.

The results of this research study support and confirm
both these research propositions. In the following
sections, each of these research propositions and the
corresponding results from this study are synthesized.

Proposition 1

The principal arguments for this study were that, (1)
strategic characteristics used to measure strategy must be
industry-specific, (2) previous research in hospitality
strategy has not attempted to do this, and (3) the
ambivalent results in relating hospitality strategy and
performance in past research may be attributable to not

measuring the strategy construct based on the first tenet
above. The basis for putting forward these premises has
been discussed in detail in the earlier chapters, and is not
being repeated here. However, it is apt to recall here
Venkatraman's (1989a) writing on this subject, viz., the
search for a universal conceptualization of strategy is
futile and, more importantly, construct measurement is at
least as important as examination of substantive
relationships.

Accordingly, this study focused a great deal of
attention on the development of an industry-specific
strategy scale, the details of which were discussed in
Chapter 3. In the process, unlike in many past business
strategy studies (Cool & Schendel, 1987, 1988; Dess & Davis,
1984; Feigenbaum & Thomas, 1990; Mascarenhas & Aaker, 1989)
where only a limited set of the strategic dimensions found
in the business strategy literature (Porter, 1980) were
taken into account, this study considered all the strategic
dimensions postulated by Porter. It is only after a careful
evaluation of the appropriateness of each of Porter's 13
strategic dimensions that three of them were dropped, viz.,
vertical integration, relationship with parent company, and
relationship to home and host governments. Even this
elimination was only due to the inappropriateness of these

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three dimensions to the context of this research study and the unit of analysis adopted. Further, this study expanded the scope of the measurement of hospitality strategy by including strategic dimensions from the service management literature (Grönroos, 1990; Parsuraman et al., 1988; Zeithaml et al., 1990), not captured by Porter's (1980) work.

The result of this scale development work was a 122-item strategy scale tailored to measure lodging strategy which, after a scale purification process, reduced to a 105-item scale comprising of 12 a priori dimensions. Eight of these dimensions came from the business strategy literature, and the remaining four from the service management literature. That this strategy scale is appropriate for use in further study was confirmed by the high reliability estimates obtained for each dimension, as well as for the total scale. The Cronbach α for the total scale, using the linear composite calculations necessary for a multi-dimensional scale (Nunnally, 1978), was as high as 0.97.

The 105-item strategy scale, when subjected to a principal factor analysis, yielded an interpretable 7-factor solution, which accounted for nearly 71% of the common variance in the strategy scale. The seven factors extracted

were: Service Quality Leadership, Technological Leadership,

Push, Cost Control, Pull, Group Channels and Cross-Training.

The Service Quality Leadership factor captured all the four

a priori strategy dimensions identified from the service

management literature. The Technological Leadership factor,

though it bears the same label given by Porter (1980) for

its simplicity, is loaded with industry-specific strategic

characteristics. The Push and Pull factors represent the

breakup of the dichotomous strategies combined by Porter

into one strategic dimension. It is only appropriate that

this result turned out to be what it is. Even in these two

factors, the strategic characteristics are mostly industry-

specific. The Cost Control factor is one which mostly

retained Porter's original conceptualizations under a

dimension of the same label. The Group Channels factor is a

subset of Porter's original Channel Selection dimension.

This seems to be the weakest factor coming out of this

study, and will be revisited for discussion later in this

chapter. Last, the Cross-Training factor is a subset of the

a priori dimensions isolated from the service management

literature. It appears that the strategic characteristics

loaded here seem to have enough in common to stay together

around the central theme of Cross-Training, but also enough

variation from the rest of the service-oriented strategic

characteristics to be separated from them. The latter are all in the first factor, Service Quality Leadership.

In view of the facts that these seven factors extracted in this study, (1) capture the breadth of the business strategy and service management theoretical foundations, and (2) provide interpretable industry-specific factor solutions, they are posited as being lodging strategy dimensions, which have been the quest of this study. Based on these results, it is concluded that Proposition 1 is confirmed by this study. In the process, Child's(1972) postulation about strategic choice, subsequently supported by a number of researchers, is confirmed in the lodging industry context, with performance implications as discussed in the next section.

Proposition 2

As Venkatraman and Ramanujam (1986) put it, the ultimate objective of strategic management is performance improvement. If there is no interest in the latter, there would be no reason to study the different underlying dimensions of the strategy construct. Proposition 2 captures this ethos.

This study yielded the following results in this regard:

1.   With performance measures YPR and MSI, significant differences were found in the strategy dimension vectors between high and low performers on both these measures. These significant differences were found in each of the years, 1992 and 1993.

2.   With the performance measure ROS, however, similar results were not obtained. Nevertheless, it must be noted that for 1992, the null hypothesis of equality of the strategy vectors between the high and low performers on ROS narrowly failed to be rejected (PR > F = 0.0655).

3.   The differences in the strategies followed by the high and low performers, referred to in item 1 above, were found to be mostly in the Push, Pull and Service Quality Leadership dimensions.

4.   High performers on YPR seem to rely more on the Push strategy and less on the Pull strategy. In contrast, the low performers seem to follow the Pull strategy more and the Push strategy less.

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5. With MSI as the performance measure, once again, it was found that the high performers follow the Push strategy more than the low performers.

6. Last, high performers on MSI seem to follow the Service Quality Leadership strategy more than the low performers. However, this result was confirmed only for the average MSI of 1992 and 1993, but not each year separately. Nevertheless, it must be noted that the results for 1992 came very close to be accepted as significant $(PR > F = .06)$.

The overall conclusions that can be drawn from the above are that, in general, strategies followed by high performers are different from the strategies followed by the low performers, as supported by the evidence for the performance measures YPR and MSI. Further, high performers follow the Push strategy and the Service Quality Leadership strategy more, whereas the low performers rely less on these strategies and, instead, follow the Pull strategy more. There are, however, some questions that arise from these summary findings. These questions and possible explanations are discussed next.

The first question that comes to mind is, why were no strategy differences found between the high and low performers on the performance measure ROS, as they were on YPR and MSI? In general, in this set of findings as well as in other results to be discussed subsequently in this chapter, ROS does not seem to be a good performance measure to work with. While significant results were obtained most of the time with YPR and MSI, the same was not the case with ROS. Two possible explanations for this are offered.

First, YPR and MSI have something in common as performance measures. Both rely on increased occupied roomnights. In contrast, ROS is more an efficiency measure. For example, even with increased occupancy which will result in increased YPR and MSI, there may be no increase in ROS, if the cost of sales goes up by the same proportion as the sales revenue itself. Though Cost Control is indeed one of the strategic dimensions identified, overall, it appears that the strategy differences are better discriminators of performance measured in terms of increased business (YPR and MSI) as compared to performance measured in terms of increased cost efficiency.

Second, the ownership/management structure seems to have a bearing on these results. It will be recalled that

as many as 87% of the sample hotels were independently owned. Around 43% were also self-managed, nearly 28% were managed by a management company, and the rest were managed by the franchisors. It will also be recalled that independent hotels preferred percentage of occupancy as a performance measure in greater proportion than did the overall sample. Thus, the distribution of this sample may have had influence on the results under discussion. Further, and more importantly, it is well known that independent owners (of any business) mix their business and personal finances a great deal and keep the books of accounts to suit more their personal financial planning than that of the business in question. As such, it would not be far fetched to conjecture that the ROS measure, which is based on the IBFC figures reported, may be more tainted than the purer measures of YPR and MSI. If this study were replicated on a sample consisting of a larger proportion of chain owned properties, there is every reason to believe that similar results would be obtained on ROS as well, as they were here on YPR and MSI.

The second important question that comes to mind from the summary findings is, why was no difference found in the Service Quality Leadership dimension between high and low performers on YPR, as it was found on MSI? The answer seems

to, once again, relate to the nature of these performance measures. YPR is a more "immediate" result, whereas MSI is a more long-term result. Thus, while the Push strategy is able to show the results in the short-term itself, explaining the differences between high and low performers on YPR, the Service Quality Leadership strategy takes time to implement as well as to take effect. Hence, it is only appropriate that differences in MSI are related to differences on this strategy dimension.

From the results obtained in this part of the study, there seems to be enough evidence to confirm Proposition 2, viz., performance differences among lodging units can be, as they were, related to differential emphasis on certain strategic dimensions by the high and low performers. It is gratifying to note from the results that both general business strategies (Push and Pull) and service-oriented strategies (Service Quality Leadership) are related to these performance differences. The latter supports the postulations of service management theorists, such as Parasuraman et al. (1988), Grönroos (1990), and Zeithaml et al. (1990).

Having discussed the support for Propositions 1 and 2 from the results of this study, the next section should be

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about the variations in the strategy-performance
relationship by the control variables, Location, Segment,
Affiliation, and Size. However, a brief departure to
address the issues of reliability and construct validity of
the strategy measurement scale seems to be appropriate at
this juncture before exiting this section. Therefore, these
issues are discussed next before turning to the control
variables.

Reliability

That a highly reliable strategy measurement instrument
in the lodging industry context has been developed through
this study has already been affirmed. The overall Cronbach
α for the scale was a very respectable 0.97. In fact, it
seems almost too high. But then, it should be remembered
that Cronbach α increases with sample size which was also
large in this study, when compared to most other hospitality
strategy research. The high Cronbach α value confirms that
even with an adjustment for sample size, the reliability of
this scale would be very acceptable.

Construct Validity

As discussed in Chapter 3, the content validity of the
strategy scale is ensured through the rigorous process by
which it has been developed. Further, the successful
delineation of an interpretable 7-factor solution is a
further confirmation of the content or trait validity of the
scale. It has already been reported that scale items a
priori developed from different theoretical underpinnings
have loaded on appropriate factors under the 7-factor
solution. For example, items 1, 2, and 17 (Table 36) from
Porter's (1980) Product/Service Quality dimension have
loaded on the Service Quality Leadership factor. Similarly,
items 38, 39, 40, 43, 45, and 46, all of which have a
central theme of adopting/using technology, but were
originally developed under the Service Specification
dimension loaded on to the Technological Leadership factor,
which is once again quite appropriate. These and other
similar results discussed in the previous chapter confirm
the content validity of the strategy scale.

The use of a panel of hotel managers, and,
subsequently, two academic experts in the process of
developing this strategy scale is a method which researchers
have posited is sufficient basis for establishing construct

validity. In addition, some of the analytical results from the use of this strategy scale also confirm its construct validity. For example, in the process of testing for differences between Company A and Company B, the strategy scale was responded to by two samples of 247 and 332 respondents respectively. As already reported, the responses differed only on 3 items of the original 122-item scale. This exercise, though conducted for a different purpose, represents a replication as the two samples came from different sources. As one of the accepted methods of confirming construct validity is replication, the analysis reported is assumed to have served that purpose.

Thus, the strategy scale developed in this study is deemed to have met the standards expected for an exploratory research of this type to assume its construct validity.

The Role of Control Variables

Each of the four control variables was studied by control through elimination, as discussed in Chapter 4. In the MANOVAs of each case, differences in the strategy dimension vectors were found between high and low performers. These results, the details of which have been reported earlier, are now discussed.

Location

The most prominent result here seems to be that with YPR as the performance measure, high performing City-Center hotels followed the Push strategy more than the low performers. This was true for Highway hotels as well (though no significant result was obtained for 1992). In addition, high performing Highway hotels also seem to follow the Technological Leadership strategy more than the low performers. The results regarding the Push strategy are in conformity with the earlier discussion. Intuitively also, City-Center hotels, in particular, would definitely benefit from aggressive personal selling and other forms of direct customer contact to achieve and maintain repeat business. To a lesser extent, this would be true for Highway hotels as well as many such hotels have additional facilities such as conference rooms which cannot be filled with transient traffic and need to be "pushed." In this sense, in the case of Highway hotels, the need for a Push strategy is probably dictated more by the product mix. The significant results obtained for Technological Leadership among Highway hotels were a little surprising. It is not that Technological Leadership is unimportant, but it is the fact that these differences proved to be significant only for Highway hotels

and not for the other locations, particularly City-Center and Suburban, which was surprising.

Segment

The notable result in this case was that significant strategy differences between high and low performers were found only in the case of Full-service hotels. On both YPR and MSI as performance measures, high performers seem to follow the Push strategy more than the low performers. It must be noted here that the Full-service and Limited-service hotels together account for more than 90% of the sample. Therefore, the only other segment where any significant results could have been obtained was the Limited-service segment. In fact, the null hypothesis failed to be rejected in this segment with PR > F=.0899. It is quite possible that this segment, being largely composed of hotels smaller in size, does not find it worthwhile to adopt the Push strategy, and relies more on the Pull strategy (business generated by the franchisor's reservation networks, franchisor's brand advertising, and so on). In contrast, the Full-service hotels are generally larger in size and need greater roomnight generation and, hence, the reliance on the Push strategy.

Affiliation

Analysis with this control variable produced some very
interesting results. In fact, as alluded to before, some of
these results appeared to be surprising and questionable at
first glance. But, a more deliberate consideration of the
results does find rational explanations for most of the
results.

There were no surprises as far as independently owned,
self-managed hotels are concerned. On both YPR and MSI, the
high performers relied on the Push strategy more than the
low performers. Additionally, on MSI as the performance
measure, the high performers relied on Service Quality
Leadership more than the low performers. The probable
reason for differences in this later strategy being
discovered only with MSI but not with YPR has already been
discussed earlier.

In sharp contrast to the above, if the independently
owned hotels were managed by the franchisors instead, the
results obtained were radically different. In this case,
the strategy differences were discovered only with YPR as
the performance measure. But, more importantly, the low
performers here relied on the Pull, Cost Control, and Cross-

Training strategies more than the high performers. The
first of these is not surprising, as it is in conformity
with the general results so far. It is the latter two
results which need rational explanations.

First, why would hotels stressing on cost control
perform worse than hotels which do not? It must be noted
that these are franchisor-managed hotels. Most management
contracts provide for a percentage of profits as part of the
management fees. In fact, franchisors and management
companies would rather that their fees be tied to sales than
profits. But the hotel owners generally are against this
and prefer to tie up a larger proportion of the management
fees to the unit profitability rather than sales revenue.
This being the scenario of the industry operations, it is in
the interest of the management companies (in this case the
franchisors) to reduce costs as much as possible so as to
boost profits and, as a consequence, their own fees. It is
here that Grönroos' (1990) argument, that trying to become
cost-efficient by employing more technology and self-service
concepts and reducing personnel will not work in the service
sector, becomes relevant. According to Grönroos, trying to
achieve internal efficiency will lead to reduced external
efficiency, and create, what he termed as, a strategic
management trap. The low performance of this group of

hotels resorting to Cost Control more than the high performers, may be empirical evidence of Grönroos' theory of the strategic management trap.

The second question arising from the results of this part of the analysis is, why would hotels adopting the Cross-Training strategy perform worse than those who do not? Franchisors do bring modern management concepts to the operations. Thus, these hotels managed by the franchisors may be adopting Cross-Training strategies advocated by the franchisors. But they may also happen to be poor performers because of relying on the Pull strategy and Cost Control strategy, as discussed above. If this is the case, the low performance is probably attributable to these two strategies, and not to Cross-Training. That these hotels also emphasize on Cross-Training may then be incidental. In other words, there may be no causality involved between Cross-Training and lower performance.

The third group where significant results were obtained is the set of hotels which are chain owned and managed. With ROS as the performance measure, low performers here emphasized the Service Quality Leadership dimension. From the overall results reported first, as well as intuitively, this result seems surprising. One of the possible rational

explanations for this phenomenon is that because of low performance these hotels are having to rely on Service Quality Leadership to remedy the situation. But, since this strategy cannot be implemented overnight as it were, the performance results are still low at the time of this study.

Size

The last control variable studied was Size, defined by the number of rooms available for sale. As reported in Chapter 4, significant differences were found in this case only for the largest size hotels, viz., the category with 250 or more rooms. With YPR as the performance measure, high performers here emphasized more on Technological Leadership than low performers. With the explosive growth of new technologies finding hospitality applications, this result is in tune with current industry environment. That this result was significant for the larger size hotels than otherwise is also intuitively appropriate.

In the foregoing discussion on the strategy-performance relationship by control variables, it may appear that significant results were not obtained in many cases not discussed above. However, it should be noted that not finding significant results in all such cases is not

necessarily unexpected once the sample distribution was
known. As analysis becomes more and more detailed in terms
of level, the effective sample size being used for that part
of the analysis becomes too small. In such cases,
significant results cannot be obtained even if a
relationship may, in fact, be true. For example, with
Segment as a control variable, the three categories of All-
Suite, Resort, and Convention hotels together accounted for
less than 10% of the sample. Therefore, no significant
results could possibly here been obtained, even if the
relationship being studied is in general true for these
categories. It is only when this study is replicated with a
larger sample of such segments that any conclusive evidence
can be obtained one way or another.

To summarize, the results discussed above seem to
confirm that, (1) differences in strategy dimensions
emphasized exist between high and low performers in
different categories of the control variables studied, viz.,
Location, Segment, Affiliation, and Size, and (2) whereas
the Push strategy is generally the strategic dimension in
which differences are found, there are other dimensions as
well in which differences do exist. Specifically, Service
Quality Leadership and Technological Leadership have emerged

as the additional strategic dimensions with significant differences.

The Role of Other Variables

Three additional questions this research addressed related to the performance measure hotel managements considered most important, the age of the property, and the rating of a hotel's location. The results of this investigation are discussed next.

PERFMESR

Gross Operating Profit/Income Before Fixed Charges (GOP/IBFC) is the measure considered most important by a majority of the respondents (over 60%). Significant differences in strategy dimensions between high and low performers were found among those who considered either GOP/IBFC or ROS as the most important performance measures.

Among the first group, i.e., those for whom GOP/IBFC was most important, the strategy-performance relationship was not confirmed on ROS, as was expected a priori. Instead, the significant differences showed up on the other two performance measures, viz., YPR and MSI. In contrast,

among those who considered Return on Sales as the most important performance measure, the strategy-performance relationship was found to be significant with ROS and YPR as the performance measures. Specifically, high performers in this group emphasized the Push, Technological Leadership, and Cost Control strategies more than the low performers did.

GOP/IBFC and ROS are really measures of the same thing, viz., profits. The only difference is that the former is an absolute measure, whereas the latter is a relative measure. Respondents seem to prefer the more simplistic absolute measure. Intuitively, one would tend to believe that if profit(ability) is the performance measure considered most important, then managements would strive to maximize their performance on that measure, and differences in strategies should be evident between those who succeeded in this endeavor and those who did not. The results of the analysis here seem to be mixed at best and no conclusions seem to be possible based on this.

Age

The most important result here is in conformity with earlier findings, i.e., high performers emphasized the Push

strategy more than the low performers. Among the less than
7-year old hotels, confirmation on the opposite was also
evidenced. The more than 30-year old hotels did not turn up
any significant evidence of individual strategy differences.

One interesting finding here is that the low performers
in the 8-20-year old hotels emphasized on Cross-Training
more than high performers; whereas the opposite was true for
the 21-30-year old category. In the absence of any way to
establish causality in this study, it is not possible to say
whether these are contradictory results. All that one can
state is that the probable explanation discussed earlier in
this regard could be the reason behind these results.

RATELOC

This variable measured the rating of the respondent
hotel's location vis-a-vis its competition. As an
overwhelming majority (nearly 89%) of the respondents rated
their locations as being most superior to their
competitors', no significant differences could possibly be
discovered in the group which considered their location to
be inferior. This is what turned out to be the case, as
reported previously. As such, the question of whether these

two groups had varying strategy-performance relationships could not be studied with this sample.

The last analysis in this research study concerned the subject of strategic time lag. The results of this analysis are discussed next.

Strategic Time Lag

The existence of strategic time lag was sought to be verified by testing for strategic differences between hotels which experienced a high increase in a performance variable as compared to hotels which experienced a low increase (or decrease, as the case may be) in the same performance variable. It must be noted that it was first confirmed that all performance variables on which these tests are being done show differences between 1992 and 1993. If some strategies are related to high or low increases in performance, while others are not, one may conclude that evidence of strategic time lag has been found. Further, whether such strategies lead to a high or low increase in performance also throws light on the nature of this strategic time lag.

From the results, it appears that the Push strategy has a strategic time lag effect. Hotels emphasizing this strategy achieved a high increase in YPR and ROS, as compared to those who did not. However, these results need to be interpreted carefully, before drawing any sweeping conclusions. For instance, it was found in most of the analysis thus far that Push strategy was associated with more immediate results, in that the 1992 performance differences were associated with emphasizing this strategy. Typically, a lag effect means that the results (effects) are felt only after some time and not immediately. Thus, the results of this section and all the previous analysis, when read together, seem to suggest that emphasizing on Push strategy has both immediate and continuing effects. This is not strictly the meaning of a lag effect.

In contrast, very few tests thus far have related strategy differences with performance differences in ROS, let alone specifically in 1992. Yet, the results of this section show that those who emphasized on the Push strategy showed a higher increase in ROS between 1992 and 1993 as compared to those who did not. This is a more meaningful evidence of strategic time lag. In other words, whereas emphasizing on Push strategy was not associated with a higher performance on ROS immediately (1992) or may be even

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in 1993, yet such an emphasis seemed to lead to a higher
increase in ROS from 1992 to 1993, indicating a strategic
time lag effect.

The other result obtained in this part of the analysis
was that hotels which stressed on Cross-Training achieved
only low increases in YPR, as compared to those who
emphasized less on this strategy. Once again, the lack of
causality evidence complicates the interpretation of this
result. As discussed before, such results are interpretable
in two different ways, and the implications of the results
are somewhat inconclusive.

Thus far in this chapter, the results reported in
Chapter 4 have been discussed and interpreted. Past
theoretical postulations are related to the discussion as
applicable. In the next section, the principal findings are
summarized and normative implications posited.

Conclusions

Over five chapters of this dissertation, the background
literature was reviewed to provide the necessary theoretical
underpinnings to this study, research propositions were
developed, a proposed methodology was described taking care

to improve upon some of the shortcomings in past research, the results of the study described, and finally these results were discussed. It is time to put this all together and state succinctly the principal findings of this study, which are as follows:

1. Through this study, a comprehensive, industry-specific 105-item strategy measurement instrument was developed, tapping a variety of strategic dimensions from the business strategy theory and service management theory, following a comparative approach to the measurement of the strategy construct.

2. By factor analyzing this new strategy scale, a 7-factor solution was identified yielding the following strategic dimensions: Service Quality Leadership, Push, Cost Control, Pull, Group Channels, and Cross-Training.

3. Lodging units classified by different performance measures into high and low performers were shown to emphasize different strategic dimensions. These results have obvious normative implications. Adopting the Push strategy seems to be effective

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in improving YPR in most situations. In contrast,
striving for Service Quality Leadership seems to
have a long-term influence in improving the MSI.
Technological Leadership is a strategy
particularly relevant for larger hotels from the
evidence obtained in this study.

4. Variations in the strategy-performance
    relationship were related to different
    categorizations of four control variables:
    Location, Segment, Affiliation and Size.

5. From all the empirical evidence obtained in this
    study, there seem to be two broad strategic groups
    in this sample. While one of these groups
    emphasizes the Push strategy, the other follows
    the Pull strategy. Performance differences are
    evident between these two strategic groups, with
    the group emphasizing on the Push strategy
    performing better than the other.

6. Last, preliminary evidence of strategic time lag
    in the strategy-performance relationship was
    found.

In the process, this study found empirical support in
the context of the lodging industry for the postulations on
strategic choice and the strategy-performance relationship.
Notwithstanding the fact that this study achieved its
primary objectives, there are a number of loose ends that
still can and should be tied up in follow-up research. The
ensuing sections, therefore, will enumerate the limitations
of this research, the contributions of this research, and
the future research directions in the wake of the current
study.

Limitations of this Research Study

As is common with most research, this study too had
several limitations. Thus, the results of this study should
be interpreted and used taking cognizance of these
limitations enumerated below:

1. For reasons of parsimony, of time and money,
    associated with almost all doctoral dissertations,
    this study was cross-sectional in nature and
    failed to establish causality in general. More
    specifically, as the results were discussed, this
    shortcoming became more apparent particularly when

trying to interpret the role of the Cross-Training strategy dimension.

2. As with many research studies, this study too got locked in the three-horned dilemma of McGrath (1982). In the effort to balance precision and realism, this research sacrificed generalizability.

3. On a more specific note, of the two financial performance measures proposed to be used, one (ROA) had to be discarded because of contaminated data. While some possible solutions are discussed in this regard in the last section of this dissertation, for the present, this study suffered from this loss of one of the two financial performance measures.

4. Because of poor reliability, one important strategic dimension, Price Policy, was dropped in the scale purification process. Though, technically, this was an appropriate decision, still, pricing is an important element of the strategy mix, and the effects of its loss on the factor solution remain unknown.

5. Last, once again for reasons of parsimony of time
    and money, several other possible statistical
    analyses were not conducted in this study. For
    example, regression techniques could be used to
    model a relationship between the seven strategy
    dimensions identified and the performance
    measures. There are many other possibilities of
    this nature given the rich data set that is
    available from this study.

Contributions of this Research Study

Notwithstanding some of the limitations narrated in the
previous section, this study has achieved several objectives
and makes some very important contributions to the knowledge
accrual process in hospitality strategy research. The major
contributions of this research are as follows:

1. In the first place, by finding positive empirical
    support to most of the research questions being
    investigated, this study broke the deadlock in
    hospitality strategy research, where most recent
    studies have ended with inconclusive results as
    regards the strategy-performance relationship
    (Tse, 1988; Crawford-Welch, 1990).

2. It is acknowledged in strategy research that the strategic characteristics used to tap the strategy construct should be industry-specific (Cool & Schendel, 1987; Mascarenhas & Aaker, 1989). Hospitality strategy research till date has mostly borrowed the strategy measurement instruments from the manufacturing sector. Thus, the single most critical contribution of this research is its pioneering effort in developing a reliable, industry-specific instrument to measure the strategy construct. The 105-item scale developed through this study captures a comprehensive set of strategy dimensions from the business strategy and service management literatures. This process follows the calls of researchers like Venkatraman (1989a) and Whetten (1989), who exhort strategy researchers to take the broadest possible view of the multi-dimensional construct that strategy is.

3. By finding an interpretable, 7-factor solution, this study succeeded in delineating seven lodging strategy dimensions underlying the 105-item strategy scale, thus providing a parsimonious description of the strategy construct in the lodging industry context. This should, hopefully,

end the frustrating experience most hospitality strategy researchers have had with trying to test the applicability of Miles and Snow's (1978) and Porter's (1980) strategic typologies to this industry.

4. Through empirical evidence, the study demonstrated that on different performance measures, high and low performers could be identified to be emphasizing different strategic dimensions. Notably, the Push, Service Quality Leadership, and Technological Leadership dimensions emerged to be the ones associated with higher performance. These results have very important normative implications. This empirical demonstration of the strategy-performance relationship extends the earlier hospitality strategy research efforts of Dev (1988) and others.

5. This research has also produced empirical evidence of important associations between several control variables, such as Location, Segment, Affiliation, and Size, and the strategy-performance relationship.

6. The study has presented, albeit preliminary and simplistic, evidence to support the complex notion of strategic time lag in the lodging industry context. Though there is still much work to be done in this area, this study represents an important step forward from the previous work of Crawford-Welch (1990).

7. Last, this research has corrected several conceptual and methodological limitations of past hospitality strategy research, as in the cases of conceptualizing the strategy construct as intended strategy, as recommended by West and Anthony (1990); adopting the unit of analysis as the individual hotel instead of a firm as Dev (1988) alone has done so far; and, the improvements in the measurement of the performance variables, following the call of Venkatraman and Ramanujam (1986).

Building on the contributions made by this pioneering research study and compensating for some of its limitations, a future research stream is quite clearly in focus. Some of the possible, and much needed, investigations to progress this research agenda are enumerated in the ensuing section.

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Agenda for Future Research

Introspecting on what is possible and what has not been or could not be attempted here, the following research directions emerge for extending the results of this and past hospitality strategy research:

1. Other statistical techniques such as regression analysis, cluster analysis, and discriminant analysis could be performed with either this or a similar data set. Such analyses will help in triangulating the results and in enriching the interpretation of the findings.

2. Concentrating on precision and realism, this study sacrificed generalizability. Replicating it with a random sample of the larger population of the lodging industry will not only verify the generalizability of the results of this study, but also contribute towards further establishing the construct validity of the strategy measurement scale developed in this study.

3. More specifically, future studies should try to achieve a higher representation in the sample of

some of the under-represented segments of this study to strengthen generalizability and construct validity. For example, this study had very few upscale hotels, all-suites, resort hotels and so on, looking at the sample from different perspectives.

4. Financial performances measures have always stymied hospitality strategy research. Even in this study, ROA had to be discarded because leasing and owning hotel properties have got mixed up, with the consequent effect on the Fixed Assets values. One possible solution to the problem with ROA seems to be to gather the data on the market value of assets. However, this is fraught with serious problems due to variations in the real estate climate in different places. Another, more feasible, solution could be to incorporate a question on whether the hotel property is leased or owned. Once this information is available, ROA can be computed for the owned properties and used for analysis as originally contemplated in this research.

5. More importantly, this last solution can help
    answer some new and interesting questions never
    studied before. For example, are lease-holders
    more likely to be longer-term players, because
    they have very little money tied up, in contrast
    to owners who want a quicker return because they
    have locked up their money by investing in the
    property? Or, alternatively, are lease-holders
    the make-a-quick-buck types acquiring properties
    in distress (a most common phenomenon these days),
    as compared to owners who are investing the money
    for the long haul? These questions can be studied
    by analyzing the performance measures preferred by
    these groups and the strategy-performance
    relationships.

6. Pricing is an important element of the strategy
    mix. By dropping out the Pricing Policy dimension
    from the strategy measurement scale, this study
    has probably suffered from its exclusion. A
    replication of this study including this dimension
    will help clarify its importance and also confirm
    the construct validity of the strategy scale.

7. The dimension, Group Channels, did not figure in any significant strategy-performance relationships. Whether this is merely a spurious dimension can be investigated by replicating this study without this dimension. Further, a factor analysis after eliminating some of the cross-loadings considered to be "noise" in this study, may reveal new insights into the underlying strategic dimensions.

8. Now that there is a reliable instrument to measure the strategy construct in the lodging industry context, future research can make use of this instrument and extend the nomological net of related variables to include environment, structure, and so on, many of which already have established measurement instruments.

9. Last, though the strategy scale developed here has been specifically tailored to the lodging industry context, it can easily be modified to suit other segments of the hospitality industry, such as the food service segment. Replicating the use of this instrument with such modifications not only strengthens the construct validity of this

instrument, but will also further strategy

research in the other segments of the hospitality

industry.

Summary

This concluding Chapter discussed and interpreted the
results presented in Chapter 4. Normative implications and
relationship to past theoretical underpinnings have been
interwoven into this presentation as appropriate.
Limitations of the study, its contributions to the knowledge
accrual process, and future research directions are
enumerated.

Conclusion

According to McGrath (1982), the cycle of empirical
research is a series of spirals starting with questions
about the real world, and then proceeding through the stages
of problem identification, research design, operational
plan, observations of the real world, data generation,
measurement of variables, and analysis of relations between
variables, finally culminating in conclusions about the real
world. The last step once again raises new questions about

the real world. This research study, as most others, has gone through all this cycle.

In the process, the study has improved upon past research, contributed fresh knowledge, developed new tools, exposed new limitations, and made fresh recommendations for further research.

Though this study has been specifically tailored to the lodging industry, the tools developed and the methods used here are equally applicable to other segments of the hospitality industry with, of course, appropriate modifications. Considering the rigorous process adopted in developing the instrument to measure the strategy construct in this research, with further modifications to suit the industry context, this new tool may also be used with good effect in other service industry settings as well. This is particularly so because of the considerable theoretical input brought to bear from the service management literature in developing this instrument to measure the strategy construct.

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APPENDICES

TO BE COMPLETED BY THE GENERAL MANAGER OF THE HOTEL

1. Considering your property as a whole and using your competitors as a frame of reference, please indicate the extent to which each of the following items was a part of the overall competitive posture (strategy) of your hotel <u>for the years 1990 and 1991 taken together</u>: (Please encircle one chosen response for each item)

> **In responding to this question, please consider as your competition only those hotels which directly compete with you for the same business.**

	Not Part of Strategy . . . . Key Part of Strategy					
Entertaining regular guests to solidify repeat business	1	2	3	4	5	6
Providing regular feedback to employees on their service delivery achievement	1	2	3	4	5	6
Employing rigorous cost control systems/procedures in all areas	1	2	3	4	5	6
Using customer panels to get regular information on customer needs/expectations	1	2	3	4	5	6
Emphasizing on working relationships with local visitor/tourist bureau for referral business	1	2	3	4	5	6
Advertising to create and/or maintain awareness of the hotel	1	2	3	4	5	6
Training departmental managers in the skills needed to lead employees to deliver quality service	1	2	3	4	5	6
Training employees in interpersonal skills	1	2	3	4	5	6
Minimizing overhead through standardization	1	2	3	4	5	6
Adopting user-friendly (to both employees and guests) systems and new technologies which improve the effectiveness of service delivery	1	2	3	4	5	6
Using market research effectively in designing product and/or service strategies	1	2	3	4	5	6
Improving customer participation skills (in self-help services) by simplifying systems and procedures, installing easy-to-understand signage, etc.	1	2	3	4	5	6
Giving overriding (i.e., above normal) commissions to travel trade	1	2	3	4	5	6
Instituting financial incentives for departmental managers linked to behaviors that foster high service quality	1	2	3	4	5	6
Concentrating on direct selling to local businesses	1	2	3	4	5	6
Designing employee incentive/reward/recognition systems based, at least in part, on the delivery of quality service	1	2	3	4	5	6
Increasing the number of self-service operations in as many areas of the hotel as possible (e.g. coffee shops, swimming pools)	1	2	3	4	5	6
Using the uniforms/dresses of guest-contact employees as a means to project image	1	2	3	4	5	6
Using computerized information systems as the basis for setting standards to improve customer service	1	2	3	4	5	6
Catering to the specific needs of individual customers/customer groups	1	2	3	4	5	6
Re-doing service when a customer is dissatisfied	1	2	3	4	5	6
Setting service quality goals which are challenging but realistic, are accepted by the employees, and measured and reviewed regularly	1	2	3	4	5	6
Setting specific service quality goals for employees which emphasize critical service tasks	1	2	3	4	5	6

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Training employees in communication skills	1	2	3	4	5	6
Participating actively in franchise alliance for referral business	1	2	3	4	5	6
Designing facilities to achieve specific image objectives	1	2	3	4	5	6
Using differential scheduling of existing employees to cope with seasonal fluctuation in demand	1	2	3	4	5	6
Developing new products and/or services	1	2	3	4	5	6
Making employees work overtime in peak season	1	2	3	4	5	6
Cultivating competitors to get their overflows	1	2	3	4	5	6
Enhancing the personalization of service in all areas of the hotel	1	2	3	4	5	6
Researching what service standards customers expect from industries similar/related to hotels (e.g. airlines)	1	2	3	4	5	6
Expanding automation/computerization in guest handling	1	2	3	4	5	6
Training employees in the technical aspects of the services they are supposed to provide	1	2	3	4	5	6
Employing automation/computerization to reduce costs	1	2	3	4	5	6
Assuming price leadership (high end pricing in the market) stressing superior quality	1	2	3	4	5	6
Carefully choosing personnel who interact with customers (e.g. assessment of social adaptation skills)	1	2	3	4	5	6
Encouraging free upward communication between guest-contact employees and management	1	2	3	4	5	6
Using guest complaints/suggestions/feedback as a resource in strategic planning	1	2	3	4	5	6
Achieving high operational efficiency levels	1	2	3	4	5	6
Pricing based on what the market is willing to pay	1	2	3	4	5	6
Promoting special rates and/or packages to improve traffic in low season	1	2	3	4	5	6
Ensuring that a single guest-contacting employee can handle customer problems involving interaction between different departments of the hotel	1	2	3	4	5	6
Adopting innovative technologies wherever possible in different areas of the hotel	1	2	3	4	5	6
Searching for new markets/opportunities	1	2	3	4	5	6
Maintaining consistently high quality product and/or service	1	2	3	4	5	6
Promoting the hotel to the travel trade to get bookings	1	2	3	4	5	6
Training guest-contact employees about their customers/customers' expectations	1	2	3	4	5	6
Pricing decisions based on a cost plus approach	1	2	3	4	5	6
Minimizing the use of debt financing	1	2	3	4	5	6
Determining pricing carefully to convey the appropriate quality signals	1	2	3	4	5	6
Negotiating contracts with travel agents and tour operators for volume business	1	2	3	4	5	6
Setting service quality goals that are designed to meet customer expectations	1	2	3	4	5	6
Employing additional part-time workers to maintain service levels in peak demand periods	1	2	3	4	5	6
Ensuring that hotel activities are coordinated to enhance customer satisfaction	1	2	3	4	5	6
Using training and development to raise service quality standards	1	2	3	4	5	6
Developing innovative service ideas/methods	1	2	3	4	5	6

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APPENDICES

Soliciting guest comments on their stay at the time of departure	1	2	3	4	5	6
Waiting till competitors introduce some new technology before following suit	1	2	3	4	5	6
Tying up with airlines and/or car rental firms to offer integrated reservations	1	2	3	4	5	6
Increasing service offerings to improve the perceived dollar value received by guests (e.g. extra room amenities, free breakfast buffet, providing the best tourist information, etc.)	1	2	3	4	5	6
Promoting horizontal communication between different departments of the hotel (e.g. sales/marketing and operations)	1	2	3	4	5	6
Reducing service levels in high season to restrict demand	1	2	3	4	5	6
Researching sources of business (e.g. travel agents) to understand what guests want	1	2	3	4	5	6
Using sales blitzes in source markets to tap corporate clients	1	2	3	4	5	6
Standardizing service tasks with the help of information databases (e.g. pre-registration)	1	2	3	4	5	6
Testing new marketing ideas and methods	1	2	3	4	5	6
Standardizing routine service tasks through automation, so that time is freed to personalize other service aspects	1	2	3	4	5	6
Stressing tangible cues in all communications (advertising, in-house signage, direct mail, etc.) to define the product/service	1	2	3	4	5	6
Leading the competition in introducing new technologies	1	2	3	4	5	6
Staying close to the customers by reducing the organizational levels between the guest-contact level and management level	1	2	3	4	5	6
Building teamwork by cross-training employees, team-based reward systems, etc.	1	2	3	4	5	6
Adopting competitive pricing (at par with competition)	1	2	3	4	5	6
Gearing much of marketing effort to project a specific image of the hotel	1	2	3	4	5	6
Contracting with hotel representation firms to promote the property	1	2	3	4	5	6
Using technology to enhance product and/or service quality	1	2	3	4	5	6
Deploying a highly visible professional sales force	1	2	3	4	5	6
Using a cost accounting system to establish costs accurately	1	2	3	4	5	6
Emphasizing employee empowerment by pushing decision-making down to the lowest organizational levels of the hotel	1	2	3	4	5	6
Adopting risk management practices	1	2	3	4	5	6
Bargaining with suppliers for lowest prices	1	2	3	4	5	6
Minimizing debt servicing costs through refinancing	1	2	3	4	5	6
Promoting the hotel to incentive houses	1	2	3	4	5	6
Encouraging all departmental managers to interact with customers personally and experience the service delivery process	1	2	3	4	5	6
Using every management decision to reach the goal of achieving the lowest cost of operation among the competition	1	2	3	4	5	6
Viewing customers' demands as challenges and puzzles rather than as problems (i.e., believing in the feasibility of solving any customer problem)	1	2	3	4	5	6
Serving a variety of market segments	1	2	3	4	5	6
Providing better security than competitors	1	2	3	4	5	6

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	Not Part of Strategy . . . . Key Part of Strategy					
Maximizing the use of debt financing	1	2	3	4	5	6
Contacting customers after they have stayed at the hotel	1	2	3	4	5	6
Focusing on few specific market segments and/or geographic markets	1	2	3	4	5	6
Featuring actual employees doing their jobs in external communications (such as advertising)	1	2	3	4	5	6
Constantly and visibly expressing/demonstrating management's commitment to product/service quality	1	2	3	4	5	6
Training employees in risk management	1	2	3	4	5	6
Industrializing the service operation by substituting technology and automation for people wherever possible (e.g. video check-in/check-out)	1	2	3	4	5	6
Adopting joint marketing and distribution along with competitors, local chamber of commerce, etc. to bid for shared business (e.g. conferences)	1	2	3	4	5	6
Being the lowest-priced hotel in the market	1	2	3	4	5	6
Positioning food & beverage outlets to compete with outside competition	1	2	3	4	5	6
Emphasizing in external communications those aspects of service quality (e.g. reliability) which customers consider most important	1	2	3	4	5	6
Treating employees as customers and seeking their input in product/service design	1	2	3	4	5	6
Providing a broad range of products/facilities/services	1	2	3	4	5	6
Cross-training employees to perform other tasks as a means of coping with peak season demand	1	2	3	4	5	6
Trying to increase business in low season by calling on customers	1	2	3	4	5	6
Improving the service orientation of employee behavior (particularly among those in guest-contact positions)	1	2	3	4	5	6
Adopting innovative recruitment and retention methods to foster employee loyalty (e.g. recruiting physically challenged personnel)	1	2	3	4	5	6
Designing marketing programs aimed at developing and enhancing enduring customer relationships, i.e., repeat business	1	2	3	4	5	6
Developing standard operating procedures for all areas of the hotel to ensure consistently high quality service delivery	1	2	3	4	5	6
Employing yield management techniques/systems	1	2	3	4	5	6
Educating customers on their roles in receiving quality service	1	2	3	4	5	6
Communicating service quality guarantees to customers	1	2	3	4	5	6
Setting up sales offices in generating markets	1	2	3	4	5	6
Educating customers to use the hotel during non-peak periods	1	2	3	4	5	6
Introducing latest computer/communication technologies in guest rooms	1	2	3	4	5	6
Effectively using external communications (e.g. advertising) to manage customers' expectations (e.g. advertising only what can be and/or actually is delivered)	1	2	3	4	5	6
Affiliating with hotels located in other markets to build mutual referral business	1	2	3	4	5	6
Offering special rates and/or privileges for repeat guests	1	2	3	4	5	6
Using high quality food & beverage as roomnight generator	1	2	3	4	5	6
Building a good reputation of the property in the community	1	2	3	4	5	6
Making specific effort to encourage customers to tell others about the hotel's good service	1	2	3	4	5	6

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	Not Part of Strategy . . . . Key Part of Strategy					
Renovating and/or refurbishing regularly	1	2	3	4	5	6
Using cross-training of employees to reduce costs	1	2	3	4	5	6
Effectively using computers/automation to improve job scheduling, service delivery, etc.	1	2	3	4	5	6

ATTENTION: *Please check to make sure you have encircled a number for each item above.*

2. Were your hotel's competitive activities as described by your responses to Q.1 significantly different during 1987-1989 as compared to 1990-1991? (Please encircle one response)

Significantly . . . . Not significantly
Different   Different
1   2   3   4   5   6

> **A major objective of this phase of the research study is to ascertain the appropriateness of the strategy measurement scale used in Q.1. Please provide your input in response to the following questions to help us refine this scale, if deemed necessary.**

3. Are any of the scale items in Q.1 lacking in clarity? (Please check one)

___ Yes   ___ No

4. If YES, which items were not clearly worded? (Please indicate the serial numbers of the items from Q.1 in the space below. Please use commas to separate the item numbers)

_____

_____

5. How would you have preferred the wording to be, to improve the clarity of these items? (Please indicate for each item noted in your previous response, your suggested rewording. Please use additional paper if necessary)

Item No.   Your suggestion for rewording

_____   _____

_____   _____

_____   _____

_____   _____

_____   _____

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6. Are there any competitive methods that you have adopted at your hotel that are not covered by the strategy scale in Q.1?

    ___ Yes   ___ No

7. If YES, please write below all such competitive methods which you recommend being included in our strategy scale.

    _____

    _____

    _____

    _____

    _____

8. Were you in your present position at this hotel in the following years? (Please check below for each year)

    1990:   ___ Yes   ___ No

    1991:   ___ Yes   ___ No

In the space below, please write any additional comments you wish to make relating to any aspect of the questionnaire you have just completed.

If you would like to receive an executive summary of the results of this research study, please enclose your business card with the completed questionnaire.

Thank you very much for your valuable time.

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ID _ _ _ _ _ _

TO BE COMPLETED BY THE GENERAL MANAGER OF THE HOTEL

Several questions below request you to relate your hotel with your "competition" while giving your responses. While responding to this questionnaire, please consider as your competition **ONLY** those hotels which directly compete with you for the same business.

I. **General Information**

The purpose of the following questions is to obtain some general background about your hotel.

1. Please indicate below the category that most closely describes the location of your hotel. **(Please circle one number)**

1	*City-center*	*4*	*Airport*
2	*Suburban*	*5*	*Resort*
3	*Highway*		

2. Location is a very important factor for the success of a hotel. For example, in a beach resort destination, properties located right on the beach are considered to have an advantage over those located far away. Similarly, highway hotels located just off the exits and visible from the highway and/or the exit may have an edge over those which are a mile or two away from the exit. Using such criteria, and considering your competition as a frame of reference, how would you rate your hotel's location? **(Please circle one number below)**

Most superior location against competition				*Most inferior location against competition*	
1	*2*	*3*	*4*	*5*	*6*

3. Please indicate below the segment that most closely describes the type of your hotel. **(Please circle one number)**

1	*Full-service*	*4*	*Resort*
2	*Limited-service*	*5*	*Convention*
3	*All-suite*		

4. Please indicate below the type that most closely describes the ownership and management arrangement of your hotel. **(Please circle one number)**

1	*Independently owned, self-managed*
2	*Independently owned, managed by the franchisor*
3	*Independently owned, managed by a management company (other than the franchisor)*
4	*Chain owned (i.e., part of a multi-unit company), managed by the chain*

1

5	**Chain owned, managed by the franchisor**	
6	**Chain owned, managed by a management company (other than the franchisor)**	
7	**Other than any of the above**	
	Please describe: _____	

5.   When was your hotel first constructed? (Please give the year)

.   _____

II. Your Hotel's Strategy

The following question is about the strategies your hotel has used to compete in the market place.

Please indicate how much each of the following items was a part of the competitive strategy of your hotel <u>in 1991 and 1992 combined.</u> (Please circle one number for each item)

> In responding to this question, please use your hotel's strategies and those of your competition as a frame of reference. Please keep in mind that it is what your hotel **actually did** that we are studying, and **not** what you think it should have done. Please use a scale of **1 = NOT PART OF STRATEGY to 6 = KEY PART OF STRATEGY.**

	Not part of strategy				Key part of strategy	
Entertaining regular guests to solidify repeat business	1	2	3	4	5	6
Providing regular feedback to employees on their service delivery achievement	1	2	3	4	5	6
Using customer panels to get regular information on customer needs/expectations	1	2	3	4	5	6
Advertising to create and/or maintain awareness of the hotel	1	2	3	4	5	6
Adopting user-friendly (to both employees and guests) systems and new technologies which improve the effectiveness of service delivery	1	2	3	4	5	6
Improving customer participation skills (in self-help services) by simplifying systems and procedures, installing easy-to-understand signage, etc.	1	2	3	4	5	6
Giving overriding (i.e., above normal) commissions to travel trade	1	2	3	4	5	6
Concentrating on direct selling to local businesses	1	2	3	4	5	6
Designing employee incentive/reward/recognition systems based, at least in part, on the delivery of quality service	1	2	3	4	5	6
Increasing the number of self-service operations in as many areas of the hotel as possible (e.g. coffee shops, swimming pools)	1	2	3	4	5	6
Using the uniforms/dresses of guest-contact employees as a means to project image	1	2	3	4	5	6
Using computerized information systems as the basis for setting standards to improve customer service	1	2	3	4	5	6

2

Re-doing service when a customer is dissatisfied	1	2	3	4	5	6
Setting service quality goals which are challenging but realistic, are accepted by the employees, and measured and reviewed regularly	1	2	3	4	5	6
Setting specific service quality goals for employees which emphasize critical service tasks	1	2	3	4	5	6
Training employees in communication skills	1	2	3	4	5	6
Developing new products and/or services	1	2	3	4	5	6
Making employees work overtime in peak season	1	2	3	4	5	6
Cultivating competitors to get their overflows	1	2	3	4	5	6
Enhancing the personalization of service in all areas of the hotel	1	2	3	4	5	6
Researching what service standards customers expect from industries similar/related to hotels (e.g. airlines)	1	2	3	4	5	6
Expanding automation/computerization in guest handling	1	2	3	4	5	6
Training employees in the technical aspects of the services they are supposed to provide	1	2	3	4	5	6
Employing automation/computerization to reduce costs	1	2	3	4	5	6
Assuming price leadership (high end pricing in the market) stressing superior quality	1	2	3	4	5	6
Carefully choosing personnel who interact with customers (e.g. assessment of social adaptation skills)	1	2	3	4	5	6
Encouraging free upward communication between guest-contact employees and management	1	2	3	4	5	6
Achieving high operational efficiency levels	1	2	3	4	5	6
Promoting special rates and/or packages to improve traffic in low season	1	2	3	4	5	6
Ensuring that a single guest-contacting employee can handle customer problems involving interaction between different departments of the hotel	1	2	3	4	5	6
Adopting innovative technologies wherever possible in different areas of the hotel	1	2	3	4	5	6
Searching for new markets/opportunities	1	2	3	4	5	6
Promoting the hotel to the travel trade to get bookings	1	2	3	4	5	6
Training guest-contact employees about their customers/customers' expectations	1	2	3	4	5	6
Pricing decisions based on a cost plus approach	1	2	3	4	5	6
Minimizing the use of debt financing	1	2	3	4	5	6
Determining pricing carefully to convey the appropriate quality signals	1	2	3	4	5	6
Negotiating contracts with travel agents and tour operators for volume business	1	2	3	4	5	6
Setting service quality goals that are designed to meet customer expectations	1	2	3	4	5	6
Employing additional part-time workers to maintain service levels in peak demand periods	1	2	3	4	5	6
Ensuring that hotel activities are coordinated to enhance customer satisfaction	1	2	3	4	5	6
Using training and development to raise service quality standards	1	2	3	4	5	6
Developing innovative service ideas/methods	1	2	3	4	5	6
Soliciting guest comments on their stay at the time of departure	1	2	3	4	5	6
Waiting till competitors introduce some new technology before following suit	1	2	3	4	5	6
Increasing service offerings to improve the perceived dollar value received by guests (e.g. extra room amenities, free breakfast buffet, providing the best tourist information, etc.)	1	2	3	4	5	6
Reducing service levels in high season to restrict demand	1	2	3	4	5	6
Researching sources of business (e.g. travel agents) to understand what guests want	1	2	3	4	5	6
Using sales blitzes in source markets to tap corporate clients	1	2	3	4	5	6
Testing new marketing ideas and methods	1	2	3	4	5	6

3

Standardizing routine service tasks through automation, so that time is freed to personalize other service aspects	1	2	3	4	5	6
Stressing tangible cues in all communications (advertising, in-house signage, direct mail, etc.) to define the product/service	1	2	3	4	5	6
Leading the competition in introducing new technologies	1	2	3	4	5	6
Building teamwork by cross-training employees, team-based reward systems, etc.	1	2	3	4	5	6
Adopting competitive pricing (at par with competition)	1	2	3	4	5	6
Gearing much of marketing effort to project a specific image of the hotel	1	2	3	4	5	6
Using technology to enhance product and/or service quality	1	2	3	4	5	6
Deploying a highly visible professional sales force	1	2	3	4	5	6
Using a cost accounting system to establish costs accurately	1	2	3	4	5	6
Emphasizing employee empowerment by pushing decision-making down to the lowest organizational levels of the hotel	1	2	3	4	5	6
Adopting risk management practices	1	2	3	4	5	6
Bargaining with suppliers for lowest prices	1	2	3	4	5	6
Minimizing debt servicing costs through refinancing	1	2	3	4	5	6
Encouraging all departmental managers to interact with customers personally and experience the service delivery process	1	2	3	4	5	6
Using every management decision to reach the goal of achieving the lowest cost of operation among the competition	1	2	3	4	5	6
Serving a variety of market segments	1	2	3	4	5	6
Providing better security than competitors	1	2	3	4	5	6
Maximizing the use of debt financing	1	2	3	4	5	6
Contacting customers after they have stayed at the hotel	1	2	3	4	5	6
Focusing on few specific market segments and/or geographic markets	1	2	3	4	5	6
Featuring actual employees doing their jobs in external communications (such as advertising)	1	2	3	4	5	6
Constantly and visibly expressing/demonstrating management's commitment to product/service quality	1	2	3	4	5	6
Training employees in risk management	1	2	3	4	5	6
Industrializing the service operation by substituting technology and automation for people wherever possible (e.g. video check-in/check-out)	1	2	3	4	5	6
Being the lowest-priced hotel in the market	1	2	3	4	5	6
Positioning food & beverage operations to compete with outside competition	1	2	3	4	5	6
Emphasizing in external communications those aspects of service quality (e.g. reliability) which customers consider most important	1	2	3	4	5	6
Treating employees as customers and seeking their input in product/service design	1	2	3	4	5	6
Providing a broad range of products/facilities/services	1	2	3	4	5	6
Cross-training employees to perform other tasks as a means of coping with peak season demand	1	2	3	4	5	6
Trying to increase business in low season by calling on customers	1	2	3	4	5	6
Adopting innovative recruitment and retention methods to foster employee loyalty (e.g. recruiting physically challenged personnel)	1	2	3	4	5	6
Designing marketing programs aimed at developing and enhancing enduring customer relationships, i.e., repeat business	1	2	3	4	5	6
Developing standard operating procedures for all areas of the hotel to ensure consistently high quality service delivery	1	2	3	4	5	6
Employing yield management techniques/systems	1	2	3	4	5	6
Educating customers on their roles in receiving quality service	1	2	3	4	5	6

4

Item	1	2	3	4	5	6
Communicating service quality guarantees to customers	1	2	3	4	5	6
Setting up sales offices in generating markets	1	2	3	4	5	6
Educating customers to use the hotel during non-peak periods	1	2	3	4	5	6
Introducing latest computer/communication technologies in guest rooms	1	2	3	4	5	6
Effectively using external communications (e.g. advertising) to manage customers' expectations (e.g. advertising only what can be and/or actually is delivered)	1	2	3	4	5	6
Affiliating with hotels located in other markets to build mutual referral business	1	2	3	4	5	6
Using high quality food & beverage as roomnight generator	1	2	3	4	5	6
Building a good reputation of the property in the community	1	2	3	4	5	6
Making specific effort to encourage customers to tell others about the hotel's good service	1	2	3	4	5	6
Renovating and/or refurbishing regularly	1	2	3	4	5	6
Effectively using computers/automation to improve job scheduling, service delivery, etc.	1	2	3	4	5	6
Employing rigorous cost control systems/procedures in all areas	1	2	3	4	5	6
Emphasizing on working relationships with local visitor/tourist bureau for referral business	1	2	3	4	5	6
Training departmental managers in the skills needed to lead employees to deliver quality service	1	2	3	4	5	6
Training employees in interpersonal skills	1	2	3	4	5	6
Minimizing overhead through standardization	1	2	3	4	5	6
Using market research effectively in designing product and/or service strategies	1	2	3	4	5	6
Instituting financial incentives for departmental managers linked to behaviors that foster high service quality	1	2	3	4	5	6
Catering to the specific needs of individual customers/customer groups	1	2	3	4	5	6
Participating actively in franchise alliance for referral business	1	2	3	4	5	6
Designing facilities to achieve specific image objectives	1	2	3	4	5	6
Using differential scheduling of existing employees to cope with seasonal fluctuation in demand	1	2	3	4	5	6
Using guest complaints/suggestions/feedback as a resource in strategic planning	1	2	3	4	5	6
Pricing based on what the market is willing to pay	1	2	3	4	5	6
Maintaining consistently high quality product and/or service	1	2	3	4	5	6
Tying up with airlines and/or car rental firms to offer integrated reservations	1	2	3	4	5	6
Promoting horizontal communication between different departments of the hotel (e.g. sales/marketing and operations)	1	2	3	4	5	6
Standardizing service tasks with the help of information databases (e.g. pre-registration)	1	2	3	4	5	6
Staying close to the customers by reducing the organizational levels between the guest-contact level and management level	1	2	3	4	5	6
Contracting with hotel representation firms to promote the property	1	2	3	4	5	6
Promoting the hotel to incentive houses	1	2	3	4	5	6
Viewing customers' demands as challenges and puzzles rather than as problems (i.e., believing in the feasibility of solving any customer problem)	1	2	3	4	5	6
Adopting joint marketing and distribution along with competitors, local chamber of commerce, etc. to bid for shared business (e.g. conferences)	1	2	3	4	5	6
Improving the service orientation of employee behavior (particularly among those in guest-contact positions)	1	2	3	4	5	6
Offering special rates and/or privileges for repeat guests	1	2	3	4	5	6
Using cross-training of employees to reduce costs	1	2	3	4	5	6

ATTENTION: Please check to make sure you have circled a number for each item above.

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III. Your Hotel's Performance

Next, we request you to provide some information about the operating performance of your hotel. As already stated in the cover letter, this information is for research purposes only, and will be held in the strictest confidence.

1. Listed below are several performance measures applicable to hotels in general. Please indicate the <u>most important</u> of these by which your performance is judged by the owners/management. **(Please circle one number)**

    1   *Percentage of Occupancy*

    2   *Average Room rate*

    3   *Market Share*

    4   *Gross Operating Profit/Income Before Fixed Charges*

    5   *Return on Sales (i.e., Profit/Sales)*

    6   *Return on Assets (i.e., Profit/Fixed Assets)*

    7   *Other than any of the above*

    *Please specify:*_____

2. Please provide in the table below the information requested <u>for the years 1992 and 1993.</u> While the terms used below are fairly universal, we appreciate that you may be using some variations at your hotel. If any of the terms below do not match with your usage, please peruse the clarifications of the terms following the table.

	1992	1993
Rooms Available		
Rooms Sold/Occupied		
Net Room Sales	$	$
Total Sales	$	$
Income Before Fixed Charges	$	$
Total Fixed Assets	$	$
Total Rooms Available of Competition		
Total Rooms Sold / Occupied of Competition		

Clarification of Terms used above

Rooms Available   The number of rooms available for sale for the year (eg.: if an average of 100 rooms were available for sale each day of the year, the Rooms Available would be 100x365 = 36,500). Rooms that were out-of-order or under repair should not be included here.

Rooms Sold / Occupied   The cumulative number of rooms sold/occupied in the whole year.

Net Room Sales   Annual revenue from rooms, less discounts, taxes on room sales, and service charges paid to employees, if any.

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Total Sales	Total of all departmental revenues: rooms, food&beverage, telephone, minor operated departments, store rentals, and other income.
Income Before Fixed Charges (IBFC)	Also known as Gross Operating Profit. It is Total Sales, less all departmental and undistributed operating expenses. Thus, IBFC is the total income before deducting rent, insurance & property taxes, depreciation, interest, income tax, and reserve for replacement.
Total Fixed Assets	Net fixed assets value (i.e., after depreciation) from the balance sheet, including: land, building, plant & equipment, furniture & fixtures, and operating supplies.
Total Rooms Available of Competition	Similar to your own Rooms Available (please see above), this figure is the total rooms available for sale of all competition*, including your own.
Total Rooms Sold / Occupied of Competition	Similar to your own Rooms Sold/Occupied (please see above), this figure is the total rooms sold/occupied of all competition*, including your own.

Please remember the definition of competition as first described.

IV.   Your Hotel's Environment

Finally, we would like to understand the business environment in which your hotel has been operating.

Business environments are classified as being STABLE or VOLATILE, based on the degree (rate) of changes experienced in different segments of the environment. Listed below are various segments of the business environment. For each of these, please indicate the degree of change your hotel experienced during the years 1991 and 1992 combined. (Please circle one number for each segment)

> **Please use a scale of**
> **1 = STABLE** (unchanging/steady) to **6 = VOLATILE** (changing/unsteady).

Stable...Volatile

Suppliers of food, beverage and operating supplies

a. prices charged	1	2	3	4	5	6
b. product quality standards	1	2	3	4	5	6
c. product/service specifications	1	2	3	4	5	6
d. introduction of new products	1	2	3	4	5	6

Competitors' actions

a. supply of rooms	1	2	3	4	5	6
b. rates charged	1	2	3	4	5	6
c. renovation and refurbishment	1	2	3	4	5	6
d. new services/facilities offered	1	2	3	4	5	6
e. attempts at differentiating product	1	2	3	4	5	6

Customers' demand

a. for your services	1	2	3	4	5	6
b. for new facilities/services	1	2	3	4	5	6

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APPENDICES

Financial/Capital markets

a. interest rates	1	2	3	4	5	6
b. availability of capital	1	2	3	4	5	6
c. cost of capital other than debt	1	2	3	4	5	6

Labor markets

a. wage and salary rates	1	2	3	4	5	6
b. availability of employees	1	2	3	4	5	6
c. union activities	1	2	3	4	5	6

Government regulations

a. regarding rates you can charge	1	2	3	4	5	6
b. regarding room, food and beverage quality	1	2	3	4	5	6
c. regarding provision of your services	1	2	3	4	5	6
d. affecting personnel/labor decisions	1	2	3	4	5	6
e. affecting sales and marketing	1	2	3	4	5	6
f. affecting accounting/book-keeping	1	2	3	4	5	6
g. imposing new tax measures	1	2	3	4	5	6

Technological developments

a. in the application of computers and communication technologies	1	2	3	4	5	6
b. in the application of expert systems/decision support systems	1	2	3	4	5	6
c. in reservation systems	1	2	3	4	5	6
d. in training and development	1	2	3	4	5	6

In the space below, please write any comments you wish to make relating to any aspect of the questionnaire you have just completed.

Please return the completed questionnaire to Bvsan Murthy, Department of Hospitality and Tourism Management, 362 Wallace Hall, Virginia Tech, Blacksburg, VA 24061-0429, in the postage-paid, self-addressed envelope provided herewith. If you need any clarifications on this questionnaire, please call collect Murthy @ (703) 951-1646.

If you would like to receive an executive summary of the results of this research study, please enclose your business card with the completed questionnaire.

Thank you very much for your valuable time.

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Virginia Tech

Department of Hospitality and Tourism Management
362 Wallace Hall, Blacksburg, VA 24061-0429

February 28, 1994

Dear Colleague:

We wrote to you about a week ago requesting you to participate in a pioneering research study of competitive strategies and performance in the lodging industry. If you have already returned the completed questionnaire we sent you, please accept our sincere thanks. If you have not responded yet, we urge you to do so today.

We realize how busy you are, but without the active participation of industry professionals like you, we cannot hope to advance the knowledge base of our industry. So, if you would like to understand which competitive strategies can help you outperform your competition, which is the principal focus of this important research study, please act upon this request immediately.

If you need any clarifications on the questionnaire, or you did not receive it at all, or it got misplaced, please call Murthy @ (703) 951-1646 now, and we will send you another copy right away.

Thank you for your cooperation.

Michael D. Olsen, Ph.D.
Professor & Chairman, Doctoral Committee

Bvsan Murthy
Doctoral Candidate

Virginia Tech

Department of Hospitality and Tourism Management
362 Wallace Hall, Blacksburg, VA 24061-0429

March 10, 1994

Dear Colleague:

We have still not received your response to the request for your participation in our research study of competitive strategies and performance in the lodging industry.

Perhaps, you have been very busy and couldn't find the time to complete the questionnaire yet. We do appreciate the demands on your precious time posed by the competitive pressures of the market place. In fact, this is precisely what we are researching, i.e., which strategies succeed and which do not in a highly competitive environment. And, we want to share this valuable insight with you in return for your contribution. So, won't you please spare a few moments and participate in this important research?

Or perhaps, you are hesitating to participate because you are not comfortable with disclosing your confidential performance information. If this is the reason for your not responding yet, please note that we consider your input on the rest of our questionnaire equally important. So, we will appreciate it if you would at least complete Sections I, II, and IV of our questionnaire (i.e., leaving out the performance part) and return it to us.

We hope you will act on this request immediately and thank you for your valuable time and input.

Bvsan Murthy
Doctoral Candidate

VITA

BVSAN MURTHY

Terrace View Apts., # 101 G
1200 Toms Creek Rd., Blacksburg, VA 24060
Ph. : (703) 951 1646

EDUCATION

Ph.D. in Hospitality and Tourism Management, 1994
Virginia Polytechnic Institute and State University
Major: Strategy; Minor: Marketing
QCA: 3.65

M.B.A. in Marketing and Quantitative Methods, 1969
Indian Institute of Management, Ahmedabad, India

M.Sc. (Technology) in Applied Geology, 1967
Andhra University, Waltair, India

B.Sc. (Honours) in Geology, 1965
Andhra University, Waltair, India

INDUSTRY EXPERIENCE

General Manager - Marketing, and Member of the Board of
Directors, Dalmia Resorts International, India, 1986 - 1989

Corporate Marketing Planning Manager, Oberoi Hotels, India,
1981 - 1986

Marketing Manager, Lupin Laboratories Pvt. Ltd., India,
1978 - 1979

Marketing Manager, Ranbaxy Laboratories Pvt. Ltd., India,
1976 - 1978

Marketing Manager, Ganesh Mills Co. Ltd., India, 1974 - 1976

Market Research and Systems Executive, The Coca-Cola Export
Corporation, India, 1971 - 1974

Marketing Executive, The Coca-Cola Export Corporation,
India, 1969 - 1971

ACADEMIC EXPERIENCE

Research Associate, Michael D. Olsen & Associates, Blacksburg, U.S.A., 1993 - 1994

Project Co-ordinator, USAID Peace Fellowship Program, VPI&SU, Blacksburg, U.S.A., 1993

Graduate Assistant / Graduate Teaching Assistant, 1990 - 1992 Department of Hotel, Restaurant and Institutional Management, VPI&SU, Blacksburg, U.S.A.

- GTA to Dr. Michael D. Olsen (HRIM 5414: Chain Management in the Hospitality Industries, HRIM 5514: Contemporary Problems in the Hospitality Industry, and HRIM 4534: Hospitality Management Policy), 1992 - 1993
- Research Associate, The Center for Hospitality Research and Service, 1992 - 1993
- GTA to Dr. Mahmood A. Khan (HRIM 4964: Field Study in HRIM), Fall 1990 - Summer 1992
- GTA, HRIM 4414: Food and Beverage Management, Summer 1992
- Assistant Manager, Cochran Dining Hall, Spring 1990
- Assistant to Dr. Deloris J. Pourchot, Assistant Director, Virginia Cooperative Extension Service, Summer 1990, '91, and '92

Faculty Member, Advanced Management Development Program, Department of HRIM, 1992. I was the only student member of the faculty for this international program conducted for members of the Swiss Hotel Association. I put together the curriculum for the Program and was also the Coordinating Assistant.

Instructor, HRIM 4454: Hospitality Marketing Management, Fall 1991

Member, Faculty Research Committee, 1991

Adjunct Instructor, Marketing Planning and Marketing Information Systems, Oberoi Hotel School, India, 1981 - 1986

PUBLICATIONS

Murthy, Bvsan and Murrmann, S.K. (1993, Jun). Employee Leasing: An Alternative Staffing Strategy. The Cornell H.R.A. Quarterly.

Murthy, Bvsan and Dev, C.S. (1993). Average Daily Rate. In M.D. Olsen, et al (Eds.), <u>Encyclopedia of Hospitality and Tourism</u>. New York: Van Nostrand Reinhold.

Murthy, Bvsan and Olsen, M.D. (1992). Merlin Hotels, Inc. (case study). In M. D. Olsen, et al, <u>Strategic Management in the Hospitality Industry</u>. New York: Van Nostrand Reinhold.

Murthy, Bvsan and Murrmann, S.K. (1992, Spring). Employee Leasing: An Alternative Staffing Strategy. <u>Canadian Hospitality Institute Journal</u>, <u>20(1)</u>, 2-5 (Reprint from The Annual CHRIE Conference Proceedings, 1991).

Holtzman, Warren L., Murthy, Bvsan and Gordon, J.C. (1991, Oct). Cultural Bridging with the Japanese. <u>The Cornell H.R.A. Quarterly</u>, 52-59.

"Dalmia Resortimes" (a consumer education newsmagazine on Vacation Timesharing), Founding Editor and Publisher, 1988 - 1989.

CONFERENCE PRESENTATIONS AND REFEREED PROCEEDINGS

"Employee Leasing - An Alternative Staffing Strategy", The Annual CHRIE Conference, Houston, TX, July, 1991, co-presented with Dr. Suzanne K. Murrmann.

"Environment, Strategy, Structure and Performance - A Literature Review of Statistical Techniques Being Used", The Annual CHRIE Conference, Houston, TX, July, 1991, co-presented with Dr. Pamela Weaver.

Conducted a Marketing Information Systems Workshop for Oberoi Hotels International, 1982

Assisted in planning and conducting a Marketing Planning Conference for Oberoi Hotels International, 1982

OTHER SCHOLARLY ACTIVITIES

REFEREE

International Journal of Hospitality Management

The Cornell Hotel and Restaurant Administration Quarterly

RESEARCH GRANTS

"The International Hospitality and Tourism Research Register." Team member with Dr. Michael D. Olsen, and Dr. Richard Teare, Bournemouth University, U.K. Research process was underwritten by The Hotel, Catering & Institutional Management Association (HCIMA). A database of research studies specific to the hospitality and tourism industry has been developed to be released in a CD-ROM format in June 1994. The first release of this CD-ROM captures the academic research from 1988 to 1994 and work in progress, leading to Master's and Doctoral dissertation studies, in academic institutions across the USA, Canada, the UK, South Africa, and select countries in Western Europe. Planned to be updated annually, the 1994-95 release, already under planning, will extend the scope of coverage of the Register to the Asia-Pacific region and all of Western Europe, and also capture research studies in non-academic settings, such as studies conducted by industry associations; governments and multilateral organizations; and industry firms, consultants and analysts.

"Environmental Scanning for Strategic Planning in the Multinational Lodging Industry." Team member with Dr. Michael D. Olsen. A report on the research study conducted for the International Hotel Association, Paris, being distributed by the IHA to CEOs of all lodging companies around the world. Planned to be a continuing research program to be updated every year, the 1994 study is in the final design stage.

PROFESSIONAL CONSULTING

Krisch Hotels, Roanoke. Strategic planning for financial restructuring and corporate repositioning of the 35-hotel chain. Team member with Dr. Michael D. Olsen. Also conducted independently a 2-day Workshop on Strategic Marketing Planning for the management group of the chain.

PROFESSIONAL ASSOCIATIONS

PRESENT

Council on Hotel, Restaurant, and Institutional Education (CHRIE), since 1991
South East CHRIE, since 1990
Travel and Tourism Research Association, 1992

PATA Research Authority
All India Management Association
Delhi Management Association
Federation of Hotel and Restaurant Associations of India
Punjab, Haryana and Delhi Chamber of Commerce and Industry
Computer Society of India
Indian Society of Advertisers

HONORS/AWARDS/POSITIONS

Selected to serve on the Graduate Honor System Investigative
    Board / Judicial Panel, Virginia Tech, 1992 - 1993
Outstanding Graduate Student, Dept. of HRIM, 1992
Member of Board of Directors, TTRA - VT Chapter, 1992 - 1993
President, Graduate Hospitality and Tourism Association,
    1991 - 1992
Statler Foundation Scholarship, 1991 & 1992
HRIM Departmental Scholarship, 1991 & 1992
Travel Grant from the College of Human Resources, 1991
Travel Grant from the GSA Travel Fund, 1991
Eta Sigma Delta International Hospitality Honor Society,
    1991 - present Kappa Omicron Nu Honor Society, 1991 -
    present
Founding Affiliate of Students for Tourism and Hospitality
    Research (STAHR), 1990 - present
University Grants Commission Merit Scholarship (Government
    of India), 1965 - 1967

COMMUNITY SERVICE

Lions Club International, India, 1988 - 1990; 2nd Vice
President, 1989 - 1990

REFERENCES

Available upon request