



An importance-performance analysis of hotel selection factors in the Hong Kong hotel industry: a comparison of business and leisure travellers

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Abstract

Using an Importance–Performance Analysis (IPA), this paper examined business and leisure travellers' perceived importance and performance of six hotel selection factors in the Hong Kong hotel industry. The six hotel selection factors identified were: Service Quality, Business Facilities, Value, Room and Front Desk, Food and Recreation, and Security. Both business and leisure travellers held the same perceptions towards all the six hotel selection factors. The IPA grids illustrated that the Value factor fell into the Concentrate Here quadrant; Service Quality, Room and Front Desk and Security in the Keep Up the Good Work quadrant; and Business Facilities and Food and Recreation in the Low Priority quadrant. Room and Front Desk and Security were found to be the determining factors for business and leisure travellers, respectively, in their hotel choice selection. Implications for Hong Kong hoteliers and researchers were discussed. © 2000 Elsevier Science Ltd. All rights reserved.

Keywords: Importance–Performance Analysis; Hotel selection factors; Business and leisure travellers

1. Introduction

1.1. The Hong Kong hotel and tourism industry

Hong Kong has long been Asia's most popular tourist destination. The total visitor arrivals for 1996 reached a record of 11.7 million, representing a remarkable 14.7 per cent growth over 1995, with HK\$84.5 billion (US\$10.8 billion) flowing into the Special Administrative Region's economy in foreign exchange earnings. The 14.7 per cent growth rate in 1996 out-performed the world average of 4.5 per cent, as well as the average growth rates for East Asia/Pacific and South Asia, with 7.9 per cent and 4.0 per cent respectively (WTO, 1997). In addition, approximately 8 per cent of Hong Kong's Gross Domestic Product (GDP) is attributable to tourism (HKTA, 1998). However, since the beginning of 1997, Hong Kong's inbound tourism industry has experienced

an unprecedented decline. As illustrated in Table 1, the Hong Kong Tourist Association (HKTA) revealed that the numbers of visitors declined from 11.7 million in 1996 to 10.4 million in 1997, representing a 12 per cent fall (HKTA, 1998). The fall in visitor arrivals has been aggravated by the regional currency turmoil, which has made Hong Kong an expensive destination to travel in comparison with other Southeast Asian regions (Poole, 1997). The depreciation of the Thai baht, the Indonesian rupiah, the Malaysian ringgit, and the Philippine peso has inevitably attracted international travellers who prefer to seek bargain visits to these cheaper destinations. Hong Kong is now considered less 'vacation-friendly' than previously as high inflation has driven up prices. In 1989, 60 per cent of travellers rated shopping in Hong Kong as 'above average' in value for money, but in 1993 the number fell below 45 per cent (HKTA, 1998). In the early 1990s, Hong Kong suffered from a relatively high inflation rate of about 10 per cent per annum as a result of an increase in labour and land costs. Although inflation fell to 8.7 per cent in 1995, Hong Kong is still at a disadvantage when compared with most industrialised countries, where inflation has been running at 3–4 per

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Table 1
Visitor arrivals to Hong Kong, 1988–1997

Year	Visitor arrivals (1,000,000)	Business travellers (%)	Leisure travellers (%)	Others (%)
1988	5.6	21	62	17
1989	5.4	25	56	19
1990	5.9	25	55	20
1991	6.0	23	59	18
1992	6.9	28	56	16
1993	8.9	31	54	15
1994	9.3	29	58	13
1995	10.2	30	55	15
1996	11.7	29	58	13
1997	10.4	26	61	13

Source: Adapted from A Statistical Review of Tourism, Hong Kong Tourist Association (1998).

cent per annum in recent years (Hueng, 1997). The rising cost of accommodation in Hong Kong and the dwindling number of shopping bargains are continuously affecting the Hong Kong tourism industry (Brevetti, 1995). Such price inflation threatens Hong Kong's reputation as a Shopping Paradise. Looking at the visitor profile, in particular at a comparison of business and leisure travellers, there appears to have not much significant change between the two groups. The leisure segment has constituted almost 60 per cent of total visitor arrivals to Hong Kong over the past ten years, while the business segment contributed up to 30 per cent of total visitor arrivals over the same period (see Table 1).

Regarding the hotel industry in Hong Kong, room rates have long been considered as the prime factor that adds to the cost of a trip, contributing to tourism downturn (Beck, 1997; Schloss, 1997). Schloss (1997) reported that Hong Kong hotels are more expensive to stay in than in Tokyo hotels, even when they offer discounts. Beck (1997) mentioned that Hong Kong hotels are too expensive and that the high cost is the single factor that continues to affect tourism in Hong Kong seriously. Research studies have shown that satisfaction with hotel properties, including services, facilities and price, appears to be one of the major factors leading to the success and repeat patronage of the destination (Shih, 1986; Stevens, 1992).

To be successful in business, one must understand how customers perceive the product or service attributes, their importance and performance when compared with other competitors. The importance of 'being competitive' and 'offering competitive advantage' has been recognised for some years. In the hotel environment, where competition dominates, hoteliers must study the strengths and weaknesses of the product or service they provide and accurately define their importance and performance. To maintain Hong Kong's present status as one of the world's most attractive tourist destinations, hoteliers

must thoroughly understand which hotel attributes are perceived by travellers, and the level of performance of these attributes.

This paper attempts to identify both the importance and performance of hotel selection factors in the Hong Kong hotel industry using the Importance–Performance Analysis (IPA) model. More specifically, the paper intends to compare perceptions of business and leisure travellers, in terms of importance and performance of hotel selection factors. By identifying the needs, desires and expectations of different segments, hoteliers will be in a better position to develop tailor-made marketing strategies to cater for their target customers and to achieve competitive advantages.

2. Literature review

2.1. Importance–Performance Analysis

Importance–Performance Analysis (IPA) conceptually underlies the multi-attribute models that date back to the late 1970s. Martilla and James (1977) applied the IPA technique to analyse the performance of the automobile industry. Hawes, Kiser and Rao (1982) and Hawes and Rao (1985) used the IPA concept in retirement communities and health care applications. Sethna (1982) found the IPA technique to be a valid and powerful technique for identifying service quality areas that require remedial strategic actions. The underlying assumption of the IPA technique is that customers' level of satisfaction with the attributes is mainly derived from their expectations and judgment of the product's or service's performance. IPA has become a popular managerial tool that has been broadly used to identify the strengths and weaknesses of brands, products, services and retail establishments in various industries in recent years (Chapman, 1993; Cheron, McTavish & Perrien, 1989). Hemmami, Strong and Taylor (1994) measured the service quality of hospital services using IPA as an alternative to the traditional SERVQUAL instrument devised by Parasuraman, Zeithaml and Berry (1988). While Evans and Chon (1989) used the IPA to formulate and evaluate tourism policy, Keyt, Yavas and Riecken (1994) and Hsu, Byun and Yang (1997) adopted the IPA technique in restaurant positioning. Lewis (1985) used the IPA as a competitive analysis technique to identify tourists' perceptions of the hotel industry. Lewis and Chambers (1989) reported the effective use of IPA by the Sheraton Hotel in monitoring customer satisfaction. Almanza, Jaffe and Lin (1994) used the IPA matrix to determine means for improving customer satisfaction. Martin (1995) examined service providers' perceptions of customers' expectations of quality service in the hotel industry using the IPA technique. In an increasingly competitive environment, a determination of the strengths and weaknesses of a

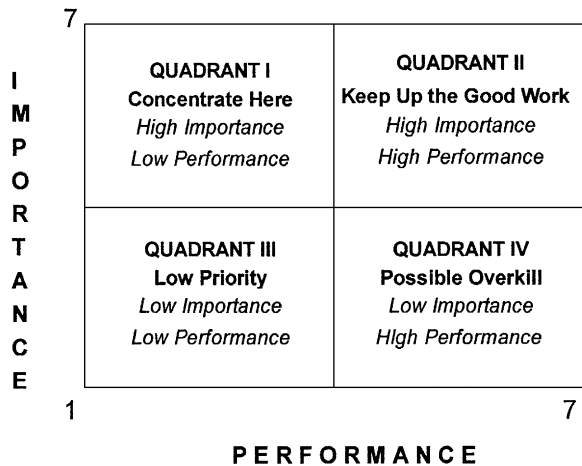


Fig. 1. Importance–Performance Analysis grid.

Quadrant I

Attributes are perceived to be very important to respondents, but performance levels are fairly low. This sends a direct message that improvement efforts should concentrate here.

Quadrant II

Attributes are perceived to be very important to respondents, and at the same time, the organisation seems to have high levels of performance on these activities. The message here is To Keep up the Good Work.

Quadrant III

Attributes are with low importance and low performance. Although performance levels may be low in this cell, managers should not be overly concerned since the attribute in this cell is not perceived to be very important. Limited resources should be expended on this low priority cell.

Quadrant IV

This cell contains attributes of low importance, but relatively high performance. Respondents are satisfied with the performance of the organisations, but managers should consider present efforts on the attributes of this cell as being overutilised.

Sources: Adapted from Evans and Chon (1989), Hemmasi, Strong and Taylor (1994), Keyt, Yavas and Riecken (1994), Martilla and James (1977) and Martin (1995).

product's or service's importance and performance seems an undeniable constituent of success.

The interpretation of the IPA is graphically presented on a grid divided into four quadrants. Fig. 1 illustrates the IPA grid. The Y-axis reports the customers' perceived importance of selected attributes, and the X-axis shows the product's (or service's) performance in relation to these attributes. The four identifiable quadrants are: Concentrate Here, Keep Up the Good Work, Low Priority and Possible Overkill.

In the Concentrate Here quadrant, attributes are perceived to be very important to respondents, but performance levels are seen as fairly low. This sends a direct message that improvement efforts should concentrate here. In the Keep Up the Good Work quadrant, attributes are perceived to be very important to respondents, and at the same time, the organisation seems to

have high levels of performance in relation to these activities. In the Low Priority quadrant, attributes have low importance and low performance. Although performance levels may be low in this cell, managers should not be overly concerned since the attributes in this cell are not perceived to be very important. Limited resources should be expended on this 'low priority' cell. Lastly, the Possible Overkill quadrant contains attributes of low importance, but of relatively high performance. Respondents are satisfied with the performance of the organisations, but managers should consider present efforts on the attributes of this cell as being overutilised (Evans and Chon, 1989; Hemmasi, Strong & Taylor, 1994; Keyt et al., 1994; Martilla & James, 1977; Martin, 1995).

2.2. Perceived importance and performance of attributes

Attribute importance is generally regarded as a person's general assessment of the significance of an attribute for a product. Many studies have attempted to analyse customer satisfaction in terms of both expectations that relate to certain important attributes and judgments of the attribute performance (Myers & Alpers, 1968; Swan & Coombs, 1976). However, there appears to have been diverse conclusions made about how one should relate attribute importance and performance. The concept of 'importance' is viewed by customers the same as satisfaction (Barsky, 1992; Rosenberg, 1956). When a customer perceives an attribute as important, the customer will believe that the attribute will play a significant role in influencing his or her product choice (MacKenzie, 1986). More recently, the term 'importance' has been used to refer to the perceived importance of an attribute and its effect on product or service quality (Carman, 1990). Lilien, Kotler and Moorthy (1993) defined the term 'important attributes' as those considered important by consumers, and that the various brands or products are perceived to differ. Hemmasi et al. (1994), however, stated that performance lies in customer perceptions of performance of the attribute. Thus, the more favourable the perception of performance, the greater the likelihood of the choice from among similar alternatives. Therefore, it is strategically important for hoteliers to understand and to identify the product (or service) attributes perceived by customers as important, and to examine how customers perceive these product (or service) attributes. It is also very likely that a customer's favourable post-purchase experience may lead him or her to repurchase if the customer is satisfied with the hotel performance.

2.3. Hotel attributes in hotel choice selection

Those attributes directly influencing choice are 'determinant attributes': they may arouse consumers' purchase intentions and differentiate from competitors' offerings

(Alpert, 1971). The services and facilities offered by a hotel, or hotel attributes, are those features of products or services that lead consumers to choose one product over others (Lewis, 1983). Wuest, Tas and Emenheiser (1996) defined perceptions of hotel attributes as the degree to which travellers find various services and facilities important to customers' satisfaction. Atkinson (1988) found that cleanliness of the accommodation, followed by safety and security, accommodation value for money, courtesy and helpfulness of staff were identified as top attributes for travellers in hotel choice selection. Wilensky and Buttle (1988) mentioned that personal service, physical attractiveness, opportunities for relaxation, standard of services, appealing image, and value for money were significantly evaluated by travellers. Rivers, Toh and Alaoui (1991) examined the hotel selection decisions of members and non-members of frequent guest programs. Their results showed that convenience of location and overall service received the highest ratings. Ananth, DeMicco, Moreo and Howey (1992) surveyed 510 travellers, asking them to rate the importance of 57 hotel attributes in hotel choice decision. The results showed that 'price and quality' was rated as the most important attribute across all age categories, followed by attributes related to 'security' and 'convenience of location'. LeBlanc and Nguyen (1996), in particular, examined the five hotel factors that may signal a hotel's image to travellers. These five factors were: physical environment, corporate identity, service personnel, quality of services and accessibility. They suggested that marketing efforts should be directed to highlight the environmental cues in order to attract new customers. An extensive review of the literature for the hospitality industry suggests that attributes such as cleanliness, location, room rate, security, service quality, and the reputation of the hotel have been considered by most tourists in hotel choice decision (Ananth, DeMicco, Moreo & Howey, 1992; Atkinson, 1988; Barsky & Labagh, 1992; Cadotte & Turgeon, 1988; Knutson, 1988; LeBlanc & Nguyen, 1996; Lewis, 1984, 1985; Marshall, 1993; McCleary, Weaver & Hutchinson, 1993; Rivers, Toh & Alaoui, 1991; Wilensky & Buttle, 1988).

2.4. Hotel attributes as perceived by business and leisure travellers

Many studies have looked into a comparison between business and leisure travellers in their hotel selection criteria. These studies indicated that the important attributes affecting business travellers' hotel choices were cleanliness and location (Lewis & Chambers, 1989; McCleary et al., 1993; Taninecz, 1990), whereas security, personal interactions, and room rates were considered as important by their leisure counterparts (Clow, Garretson & Kurtz, 1994; Lewis, 1985; Marshall, 1993; Parasuraman et al., 1988). Taninecz (1990) found that cleanliness,

comfort of mattresses and pillows, and quality of towels received the highest ratings from business travellers. Lewis and Chambers (1989) and McCleary et al. (1993) also found that location was the most important factor influencing hotel selection by all business travellers. However, they argued that a hotel's catering facilities were not important in hotel selection, as there are often many alternative dining choices nearby.

Leisure travellers seem to be more concerned with room rates and value in their initial hotel selection (Lewis, 1985). Parasuraman et al. (1988) found that the quality of personal interactions with employees was a critical component of the service quality evaluation. Employees' service quality has been cited as important to leisure travellers when selecting overnight accommodation (Parasuraman et al., 1988). Knutson (1988) mentioned that leisure travellers were mainly concerned with a hotel's safety and security. This concern might stem from the idea that leisure trips often involve families, and these travellers have a high sensitivity to what may occur around them when their families are involved. Marshall (1993) and Clow et al. (1994) revealed that security was cited as one of the most important criteria in selecting a hotel. Tourists want to be safe and secure in their accommodation, and are willing to pay for this. The safety and security system may differentiate one property from its competition, hence becoming a competitive strategy that helps a hotel to gain tourists' confidence and trust. Ananth et al. (1992) found that leisure travellers were likely to express concern with regard to a hotel's reputation and name familiarity.

Other studies have suggested that some hotel attributes are seen as important by both business and leisure travellers. Knutson (1988) examined the differences between business and leisure travellers in an attempt to determine the attributes that initially attract these two types of travellers to a hotel, and that bring them back. Her findings suggested that the following factors were considered by both business and leisure travellers when selecting a hotel for the first time or for repeat patronage: (1) clean, comfortable, well-maintained rooms, (2) convenient location, (3) prompt and courteous service, (4) safe and secure environment, and (5) friendly and courteous employees. Lewis (1984, 1985) tested 66 hotel attributes to determine the basis of hotel selection by 1314 business and leisure travellers in six hotels. The findings showed that location and price were the determinant attributes for hotel selection for both business and leisure travellers. Cadotte and Turgeon (1988) examined data from members of the AH & MA (American Hotel & Motel Association) on the relative frequency of 26 categories of compliments. Survey results found that the five most frequent compliments were: (1) helpful attitude of employees, (2) cleanliness of establishment, (3) neatness of establishment, (4) quality of service, and (5) employee knowledge of service. Barsky and Labagh (1992) found

three attributes that both business and leisure travellers considered as important in affecting hotel selection. They were: (1) employee attitude, (2) Location, and (3) rooms. To evaluate a hotel's performance from the customers' point of view is likely to improve management's understanding of customer satisfaction, and could ultimately lead to repeat business (Atkinson, 1988).

3. Methodology

3.1. Research instrument

The questionnaire for this study included two main sections. The first section of the questionnaire consisted of 33 hotel attributes, for which travellers were asked to indicate the perceived importance of the attributes when they choose a hotel, and their perceptions of actual hotel performance during their hotel stay. These 33 hotel attributes were identified based on a review of relevant literature and three focus group discussions. To identify the relevant hotel attributes, a list of 45 hotel attributes was screened out in the first stage. This list of hotel attributes was then sent to three identified groups for comments. The three identified groups were: academic staff, hotel and travel agents, and potential travellers who were to leave Hong Kong via the Hong Kong International Airport in the next three months. Members of the three groups were asked to rate each of the 45 hotel attributes in terms of importance when choosing a hotel, on a 7-point Likert scale ranging from 'extremely important' to 'extremely unimportant'. After a careful screening analysis and advice from academic professionals, 33 of the 45 attributes were selected. These 33 attributes were regarded as the influential factors in hotel selection.

The questionnaire was structured so that each hotel attribute was rated using a 7-point Likert scale, ranging from 1, least important to 7, most important, in the Importance part, and from 1, strongly disagree, to 7, strongly agree, in the Performance part. To capture a wider range of respondents, the questionnaire was printed in three languages: English, Chinese, and Japanese. The second part of the questionnaire was designed to elicit demographic and travelling information about the respondents.

Prior to the main survey, a pilot study, consisting of 63 travellers of different nationalities departing from the airport, was conducted. Several items were reworded after the pilot exercise to improve the comprehensibility and clarity of the questionnaire instrument.

3.2. The sampling method

The sample chosen in this study included international travellers departing by air from the Hong Kong International Airport over a period of nine days in August 1996.

Data were collected from travellers in the departure hall of the Hong Kong International Airport.

Using a systematic sampling approach, every fifteenth traveller passing through the security entrance after check-in was approached and given a questionnaire for self-completion over a three-phase survey period per day. The sample was composed of 60 travellers each day for each of the nine days, generating a total of 540 responses for the study. Respondents who completed the questionnaire were given a Chinese-style paper fan as a souvenir.

3.3. Data analysis

In this study, descriptive statistics including simple frequencies and mean ratings were computed on the respondents' demographic and travelling profiles, and on the 33 hotel attributes.

Exploratory factor analysis with VARIMAX rotation was employed on the data about the perceived importance of the 33 hotel attributes. The primary objectives of using factor analysis were: (1) to create correlated variable composites from the original 33 hotel attributes so as to identify a smaller set of dimensions, or factors that explained most of the variances among the attributes; and, (2) to apply the derived factors in the subsequent IPA. The determination of including a variable (attribute) in a factor was based on the factor loadings, eigenvalues and the percentage of variance explained (Hair, Anderson & Black, 1995). First, the factor loadings represented the correlation between an original variable and its respective factor, and only factor loadings equal to or greater than 0.50 were included in a factor. Second, only factors with eigenvalues equal to or greater than 1 were considered significant. The reason for this was that an individual factor should account at least the variance of a simple variable. Finally, the result of the factor analysis should explain at least 60 per cent of the total variance. To assess the reliability of the measures, Cronbach's Alpha was calculated to test the stability of variables retained in each factor, and only those variables having coefficients greater than or equal to 0.50 were considered acceptable and a good indication of construct reliability (Nunnally, 1967).

IPA was then employed to compare the business and leisure travellers' perceptions of the derived factors (from factor analysis). In this study, factor means of the perceived importance and performance of each factor were calculated and plotted into a graphical grid. Cross-hairs (vertical and horizontal lines), using the mean values of the Importance and Performance parts for business and leisure travellers, were calculated to separate the derived factors into four identifiable quadrants (see Fig. 1). The data was then presented on a grid where each factor was plotted according to its perceived importance and performance. The two-dimensional grid displayed the importance of attributes on the vertical axis from high (top) to

low (bottom) and the performance of attributes on the horizontal axis from high (right) to low (left). Fig. 1 illustrates the resultant graphical representation of the data that produced the four quadrants (cells).

Paired sample *t*-tests were performed to find whether any significant difference existed between the business and leisure travellers' perceived importance and perceptions of performance of the hotel factors. An independent sample *t*-test was conducted to find whether any significant difference existed between the business and leisure travellers' perceived importance of hotel factors in hotel choice selection.

4. Results and discussion

4.1. Demographic and travelling characteristics of the respondents

A total of 343 out of 540 travellers completed the questionnaire in the nine-day survey period (13–23 August 1996), representing a response rate of 63.5 per

cent. Of this 343 respondents, 173 (50.4 per cent) were leisure travellers and 170 (49.6 per cent) were business travellers. Tables 2 and 3 show the demographic and travelling characteristics of the respondents, respectively. According to Table 2, the majority of the respondents interviewed were male, with businessmen accounting for more than 75 per cent of the business segment, and male leisure travellers 50 per cent of the leisure segment. Ninety per cent ($N = 153$) of the business travellers and 83 per cent ($N = 144$) of the leisure travellers were aged under 50, and senior (aged over 50) business and leisure travellers accounted for 10 per cent and 17 per cent respectively. The country of residence seemed to be evenly distributed between the two groups. More than 50 per cent of the business and leisure travellers were of the Asian origins (China, Taiwan, Japan and South East Asia), while the Western business and leisure counterparts (North America, West Europe, Australia and New Zealand) accounted for approximately 40 per cent of their respective group. With regard to the education level, the results showed that the majority of business (75.3 per cent) and leisure (65.9 per cent) respondents had

Table 2
Demographic characteristics of respondents

Sex	BT (%)	LT (%)	Age	BT (%)	LT (%)
Male	76.5	53.2	20 or below	0.6	5.2
Female	23.5	46.8	21–30	17.1	29.5
			31–40	35.9	25.4
Country of residence	BT (%)	LT (%)			
China	24.1	8.7	41–50	35.9	23.1
Taiwan	11.2	15.0	51–60	9.4	14.5
Japan	6.5	16.8	61 or above	1.2	2.3
South East Asia	11.8	16.2	Education Level	BT (%)	LT (%)
North America	14.7	8.7	Primary	/	2.9
West Europe	19.4	24.9	Middle	5.9	2.9
Australia/New Zealand	5.3	5.2	High School	18.8	28.3
Others	7.1	4.6	University/College	61.2	58.4
			Postgraduate	14.1	7.5
Occupation	BT (%)	LT (%)	Annual income	BT (%)	LT (%)
Management/Administration	32.9	12.1	≤ US\$10,000	18.2	24.9
Professional	21.8	22.5	US\$10,001–\$20,000	1.8	11.6
Self Employed	20.0	6.9	US\$20,001–\$30,000	6.5	17.3
White Collar Worker	5.3	16.8	US\$30,001–\$40,000	8.8	13.3
Blue Collar Worker	/	2.3	US\$40,001–\$50,000	5.9	7.5
Sales	9.4	5.8	US\$50,001–\$60,000	8.2	5.2
Civil Servant	4.7	3.5	US\$60,001–\$70,000	10.0	5.2
Student	0.6	15.0	US\$70,001–\$80,000	12.4	1.7
Retired/Not in Work Force	1.2	8.1	US\$80,001–\$90,000	7.6	5.8
Others	4.1	6.9	≥ US\$90,001	20.6	7.5

Note: Business travellers (BT): $N = 170$;
Leisure travellers (LT): $N = 173$.

Table 3
Travelling characteristics of respondents

Type of Hotel Stay	BT (%)	LT (%)	No. of times visit to HK	BT (%)	LT (%)
High-tariff A hotel	14.7	13.3	First time	53.5	87.3
High-tariff B hotel	41.2	41.0	More than 1 time	46.5	12.7
Medium-tariff hotel	44.1	45.7			
No. of nights spent in hotels	BT (%)	LT (%)	Source of information	BT (%)	LT (%)
1 night	20.0	11.6	Travel agencies	34.1	56.1
2–3 nights	42.9	45.7	Airlines	3.5	6.4
4–5 nights	30.0	28.3	Travel brochures/magazines	1.2	11.0
6–7 nights	1.8	12.1	TV/radio commercials	—	2.3
> 7 nights	5.3	2.3	Friends/relatives	12.4	12.7
			Business associates/companies	42.9	6.9
			National tourist organisations (e.g., HKTA)	1.2	1.7
			Others	4.7	2.9

Note: Business travellers (BT): $N = 170$;
Leisure travellers (LT): $N = 173$.

a university/college or postgraduate education. The survey also indicated that 54.7 per cent of the business respondents held a management/administration or professional position, whereas about 40.5 per cent of the leisure respondents were either professionals or white collar workers. The income level, however, showed a difference between business and leisure segments. While more than 50 per cent of the business respondents had an annual income over US\$60,001, only 20.2 per cent of their leisure counterparts accounted for the same income level. Respondents with an annual income between US\$20,001 and US\$60,000 were 29.4 per cent for business segment and 43.3 per cent for leisure segment. Those with an annual income of less than US\$20,000 were 20 per cent for business segment and 36.5 per cent for leisure segment.

Table 3 illustrates the travelling characteristics of the respondents of the two groups. Forty-five per cent of the respondents of the two groups had stayed at Medium-Tariff hotels, 41 per cent of the two groups had stayed at High-Tariff B hotels, and less than 15 per cent of the two groups had stayed at High-Tariff A hotels. Nearly 90 per cent of the leisure respondents were first-time visitors to Hong Kong, whereas 54 per cent of their business counterparts were first-time visitors. More than 70 per cent of business and leisure travellers had stayed for 2–5 nights in hotels. While most of the business respondents had obtained hotel information from business associates/companies (42.9 per cent) and travel agencies (34.1 per cent), more than 50 per cent of the leisure respondents collected their hotel information from travel agencies.

4.2. Hotel selection factors derived from factor analysis

The perceived importance of the 33 hotel attributes was factor-analysed, using principal component analysis

with orthogonal VARIMAX rotation, to identify the underlying dimensions, or hotel selection factors. The exploratory factor analysis was conducted in order to gain a better understanding of the underlying structure of the data (Pitt & Jeantrout, 1994). It also served to simplify the subsequent IPA procedures. The results of the factor analysis, which suggested a six-factor solution, included 26 hotel attributes and explained 56.8 per cent of the variance in the data with eigenvalues greater than 1.0, and factor loadings greater than 0.50. The factor analysis in this study proved to be acceptably valid with the following four observations. Firstly, the result of the one-tailed significance test of the correlation matrix showed that more than 50 per cent of correlation coefficients were greater than 0.30 in absolute value, indicating that the inter-correlations among the 33 attributes were strong (Noursis, 1994). Secondly, the overall significance of the correlation matrix was 0.000 with a Bartlett Test of Sphericity value of 5551.023, suggesting that the data matrix had sufficient correlation to factor analysis. It appeared unlikely that the population correlation matrix was an identity and the use of factor analysis was considered appropriate. Thirdly, the Kaiser–Meyer–Olkin (KMO) overall measure of sampling adequacy was 0.87, which was meritorious (Kaiser, 1974). Since the KMO value was above 0.80, the variables were interrelated and they shared common factors. Lastly, the communalities ranged from 0.41 to 0.83 with an average value above 0.65, suggesting that the variance of the original values were fairly explained by the common factors.

The results of the factor analysis produced a clean factor structure with relatively higher loadings on the appropriate factors. Most variables loaded heavily on one factor and this reflected that there was minimal overlap among factors and that all factors

Table 4

Factor analysis results with varimax rotation of the importance of hotel attributes in Hong Kong — as perceived by travellers

Hotel selection factor ^a	Factor loading	EV ^b	Pct of variance ^c	Communalities
<i>Factor 1 — service quality (N = 6) ($\alpha = 0.86$)^d</i>		9.3	28.2%	
Staff provide efficient services	0.818			0.770
Staff understand your requests	0.743			0.681
Staff are helpful	0.727			0.697
Staff are polite and friendly	0.704			0.721
Staff have neat appearance	0.652			0.621
Staff have multi-lingual skills	0.568			0.414
<i>Factor 2 — business facilities (N = 4) ($\alpha = 0.87$)</i>		3.2	9.8%	
Business-related meeting rooms are available	0.867			0.824
Business-related facilities are available	0.858			0.777
Secretarial service is available	0.835			0.780
International direct dial (IDD) service is available	0.654			0.513
<i>Factor 3 — value (N = 5) ($\alpha = 0.74$)</i>		1.8	5.5%	
Hotel room is value for money	0.722			0.644
Hotel food and beverage is value for money	0.719			0.754
Hotel location is convenient	0.594			0.492
Hotel provides comfortable ambience	0.592			0.623
Hotel is part of a reputable chain	0.518			0.436
<i>Factor 4 — room and front desk (N = 5) ($\alpha = 0.73$)</i>		1.7	5.1%	
Bed/mattress/pillow are comfortable	0.696			0.581
Room is clean	0.683			0.646
In-room temperature control is of high quality	0.670			0.607
Hotel check-in/check-out service are efficient	0.539			0.563
Hotel reservation system is reliable	0.507			0.625
<i>Factor 5 — food and recreation (N = 4) ($\alpha = 0.76$)</i>		1.5	4.5%	
Hotel food and beverage facilities are of great variety	0.863			0.832
Hotel food and beverage are of high quality	0.834			0.796
Leisure facilities are available	0.504			0.551
Mini-bar is available	0.502			0.638
<i>Factor 6 — security (N = 2) ($\alpha = 0.74$)</i>		1.2	3.6%	
Loud fire alarms are reliable	0.834			0.782
Security personnel are responsible	0.726			0.758

^a26 hotel attributes captured in six factors.^bEV: Eigenvalue.^c56.8% of cumulative variance explained.^d α = Cronbach's alpha.

were independently structured. The higher loadings signalled the correlations of the variables with the factors on which they were loaded. Reliability analysis (Cronbach's Alpha) was conducted to test the reliability and internal consistency of each factor. The results showed that the Alpha coefficients of the six factors ranged from 0.73 to 0.87, well above the minimum value of 0.50 that is considered acceptable as an indication of reliability for basic research (Nunnally, 1967). Table 4 shows the results of the factor analysis in terms of: the factor name, the retained items, the factor loadings, the eigenvalues, the variance explained by the factor solution, the communalities, and the Cronbach's Alphas. The six hotel selection

factors were named: Service Quality — F1, Business Facilities — F2, Value — F3, Room Quality and Front Desk — F4, Food and Recreation — F5, and Security — F6.

4.3. Importance–Performance Analysis (IPA) grid — business and leisure travellers

Tables 5 and 6 show the mean scores of the six hotel selection factors and their retaining hotel attributes for business and leisure travellers in relation to Importance and Performance. The data was then transferred to the IPA grid presentation (Figs. 2 and 3). In Figs. 2 and 3, the

Table 5
Mean ratings of importance and performance of hotel selection factors — as perceived by business travellers

Hotel selection factors	Importance		Performance	
	Mean ^a	Std. Dev.	Mean ^b	Std. Dev.
<i>F1 — service quality</i>	6.11	0.17	5.66	0.25
Staff provide efficient services	6.20	1.06	5.75	1.22
Staff understand your requests	6.27	0.99	5.50	1.39
Staff are helpful	6.25	1.05	5.76	1.14
Staff are polite and friendly	6.16	1.09	5.80	1.24
Staff have neat appearance	5.87	1.08	5.92	0.99
Staff have multi-lingual skills	5.91	1.21	5.22	1.45
<i>F2 — business facilities</i>	5.41	0.80	5.32	0.38
Business-related meeting rooms are available	4.88	1.90	5.09	1.59
Business-related facilities are available	5.63	1.60	5.44	1.40
Secretarial service is available	4.68	1.86	4.95	1.62
International direct dial (IDD) service is available	6.45	1.27	5.81	1.23
<i>F3 — value</i>	5.71	0.70	5.17	0.52
Hotel room is value for money	6.04	1.17	5.01	1.41
Hotel food and beverage is value for money	5.41	1.40	4.76	1.44
Hotel location is convenient	6.44	0.75	5.99	1.26
Hotel provides comfortable ambience	6.03	1.17	5.36	1.50
Hotel is part of a reputable chain	4.64	1.73	4.74	1.77
<i>F4 — room and front desk</i>	6.22	0.23	5.74	0.17
Bed/mattress/pillow are comfortable	6.15	1.02	5.61	1.12
Room is clean	6.61	0.85	6.04	1.05
In-room temperature control is of high quality	6.11	1.06	5.70	1.22
Hotel check-in/check-out service are efficient	6.25	0.92	5.65	1.27
Hotel reservation system is reliable	6.01	1.01	5.68	1.21
<i>F5 — food and recreation</i>	4.74	0.49	4.94	0.38
Hotel food and beverage facilities are of great variety	4.75	1.53	5.02	1.40
Hotel food and beverage are of high quality	5.19	1.55	5.18	1.19
Leisure facilities are available	4.83	1.85	4.37	1.66
Mini-bar is available	4.20	1.68	5.19	1.46
<i>F6 — security</i>	6.06	0.00	5.58	0.11
Loud fire alarms are reliable	6.06	1.20	5.50	1.09
Security personnel are responsible	6.06	1.22	5.66	1.14

^aMean scale: 1 — least important to 7 — most important.

^bMean scale: 1 — strongly disagree to 7 — strongly agree.

X-axis represents the perception of Performance scores relating to business travellers' experience of hotel services and facilities. The Y-axis represents the relative weights of the six Importance items relating to hotel choice selection. The four quadrants are constructed based on the mean scores of the Importance and Performance ratings (Hemmasi et al., 1994). For business travellers (Fig. 2), the mean Importance rating for the pooled data was 5.70 and the mean Performance rating was 5.40. The mean Importance rating for the pooled data for leisure travellers (Fig. 3) was 5.42, and the mean Performance rating was 5.25. The mean Importance and Performance ratings derived from our data provided the grid cross-hairs presentation on which the four quadrants were identified.

Figs. 2 and 3 illustrate the results of the Importance–Performance grids for business travellers and leisure travellers, respectively. As shown in Figs. 2 and 3, both business and leisure travellers had similar perceptions towards the six hotel selection factors, with one hotel selection factor identified in the Concentrate Here quadrant, three in the Keep Up the Good Work quadrant, two in the Low Priority quadrant and none in the Possible Overkill quadrant. The following provides some meaningful insights about the 'quadrant' presentation.

4.4. The Concentrate Here quadrant

The Concentrate Here quadrant captured a single factor for both business and leisure travellers — 'Value'.

Table 6
Mean ratings of importance and performance of hotel selection factors — as perceived by leisure travellers

Hotel selection factors	Importance		Performance	
	Mean ^a	Std. Dev.	Mean ^b	Std. Dev.
<i>F1 — service quality</i>	6.14	0.20	5.68	0.18
Staff provide efficient services	6.17	0.97	5.75	1.21
Staff understand your requests	6.31	0.91	5.58	1.41
Staff are helpful	6.34	0.82	5.86	1.18
Staff are polite and friendly	6.24	0.96	5.76	1.29
Staff have neat appearance	5.91	1.14	5.79	1.23
Staff have multi-lingual skills	5.86	1.30	5.35	1.40
<i>F2 — business facilities</i>	3.86	1.06	4.20	0.80
Business-related meeting rooms are available	3.06	1.90	3.55	1.72
Business-related facilities are available	3.64	2.05	4.10	1.90
Secretarial service is available	3.31	1.96	3.79	1.78
International direct dial (IDD) service is available	5.42	1.44	5.35	1.12
<i>F3 — value</i>	5.74	0.69	5.24	0.45
Hotel room is value for money	6.25	0.97	5.42	1.47
Hotel food and beverage is value for money	5.75	1.36	4.84	1.54
Hotel location is convenient	6.18	1.09	5.79	1.49
Hotel provides comfortable ambience	5.95	1.12	5.46	1.49
Hotel is part of a reputable chain	4.55	1.85	4.71	1.85
<i>F4 — room and front desk</i>	6.01	0.28	5.69	0.21
Bed/mattress/pillow are comfortable	6.19	1.01	5.56	1.43
Room is clean	6.31	0.93	6.05	1.13
In-room temperature control is of high quality	6.10	0.91	5.60	1.47
Hotel check-in/check-out service are efficient	5.83	1.17	5.74	1.30
Hotel reservation system is reliable	5.60	1.50	5.52	1.50
<i>F5 — food and recreation</i>	4.53	0.60	4.72	0.32
Hotel food and beverage facilities are of great variety	4.55	1.85	4.83	1.70
Hotel food and beverage are of high quality	5.05	1.76	5.01	1.58
Leisure facilities are available	4.84	1.82	4.26	1.90
Mini-bar is available	3.67	1.92	4.78	1.84
<i>F6 — security</i>	6.25	0.21	5.95	0.04
Loud fire alarms are reliable	6.40	1.02	5.98	1.12
Security personnel are responsible	6.09	1.15	5.91	0.97

^aMean scale: 1 — least important to 7 — most important.

^bMean scale: 1 — strongly disagree to 7 — strongly agree.

Five hotel attributes were identified in this factor. They were: hotel room value for money, hotel food and beverage value for money, convenience of location, comfort of ambience, and reputation.

The results shown above suggest that special attention should be directed to the Value factor. Since the 1990s, travellers have appeared to be more practical, taking a cautious approach to discretionary spending by cutting back their travel budgets and looking for ways to pay less for more (Sellers, 1991). High inflation rate has long been threatening Hong Kong's goodwill as a Shopping and Food Paradise. The year of 1997 was a year of turmoil not only to Hong Kong's tourism and hotel industry, but also to the whole economy (HKTA, 1998). The comparatively low cost

of travelling to other Southeast Asian destinations resulted from the Asian currency crisis, had undermined Hong Kong's competitiveness. Worse still, discriminatory pricing charged to Japanese travellers and the outbreak of the H5N1 bird flu virus have created adverse publicity, deteriorating the reputation of Hong Kong as a travel destination. In order to attract travellers, the HKTA, together with some regional airlines, hotels and hundreds of restaurants, shops and tourist attractions, had launched a special scheme to offering discounts on travelling, accommodation, shopping and dining in Hong Kong in early 1998 (Poole, 1997). This program aimed to increase Hong Kong's competitiveness as a 'value for money' travel destination in relation to other Asian regions.

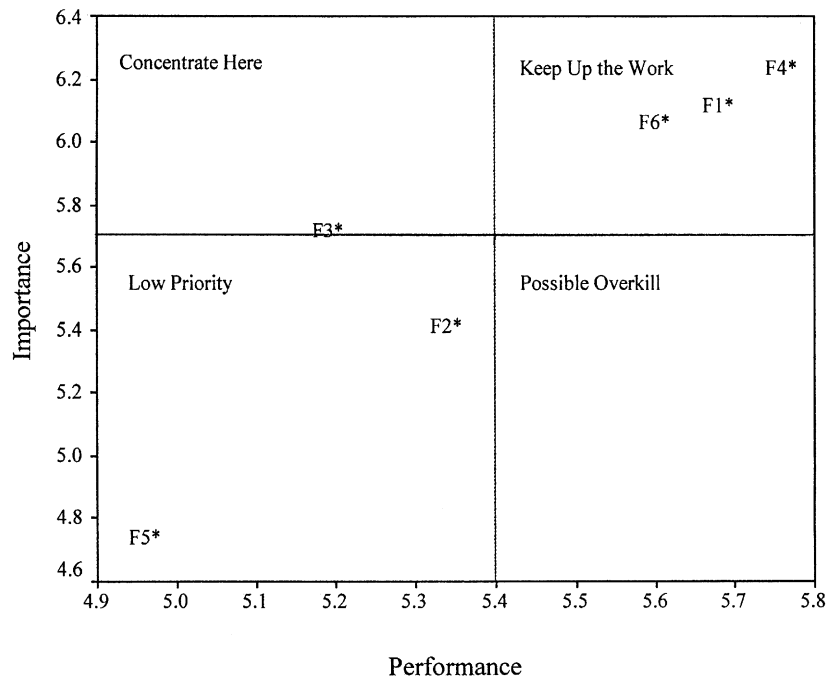


Fig. 2. Importance-Performance Analysis grid — business travellers. F1 — service quality, F2 — business facilities, F3 — value, F4 — room and front desk, F5 — food and recreation, F6 — security.

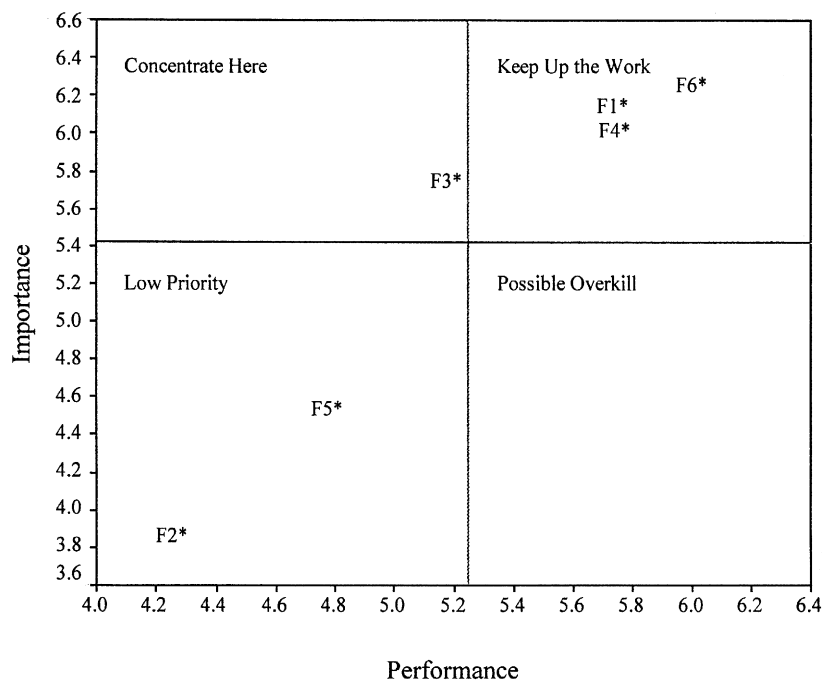


Fig. 3. Importance-Performance Analysis grid — leisure travellers. F1 — service quality, F2 — business facilities, F3 — value, F4 — room and front desk, F5 — food and recreation, F6 — security.

In addition to the value for money on hotel accommodation and food, customers are demanding the right combination of product quality, fair prices, and good services. As convenience of location is the prime factor for most businesses, marketing efforts should be empha-

sised on promoting the accessibility or ease of convenience of a hotel's location (Lewis & Chambers, 1989; Taninecz, 1990). Promotional messages should be effectively communicated to potential travellers via the media. These include addressing a hotel's proximity to city

centres, shopping malls, main routes, or providing airport and round-the-city limousines, all of which are identified as value related. Ananth et al. (1992) mentioned that leisure travellers are more concerned with a hotel's reputation and name familiarity. In this regard, hoteliers of international chains should keep up with the uniformity and standardisation of the services and facilities offered to the customers around the world. For example, travellers who have experienced with the Sheraton hotels in the United States may also expect the same facilities provided in Hong Kong, including swimming pool, king size beds, spa, fitness centre and so forth. A hotel group's directory that introduces different categories of hotels with availability of facilities could be placed in each hotel room in order to keep the guests well informed of the hotel chain.

4.5. *The Keep Up the Good Work quadrant*

Service Quality (F1), Room and Front Desk (F4), and Security (F6), were identified in this quadrant illustrated in Figs. 2 and 3. These three factors were considered satisfactorily in meeting both business and leisure travellers' needs in relation to these three aspects.

Room and Front Desk, with a mean rating of 6.22, appears to be the top criterion in determining hotel choice for business travellers. This sends a meaningful message to hoteliers, in that they should concentrate on these aspects from their customers' point of views. Resources should be directed to improving and maintaining the quality of rooms, including room design, cleanliness and temperature control. Hoteliers need to ensure that their hotels reflect their positioning well, and they should emphasise environmental cues when planning promotional activities. This should help them to attract new customers and gain market share (LeBlanc & Nguyen, 1996). Efficient check-in and check-out systems and reservation systems should also be maintained. This is particularly true for business travellers, who consider that time is money. They may not be expected to spend too much time on checking in and out. Hoteliers may enhance their competitive advantage by offering express check-in and check-out services for this market segment. Computerised reservation systems such as reservations on the Internet could be developed so that business travellers can make reservations via the hotel's website.

In contrast, Security was the top priority rated by leisure travellers, followed by Service Quality, and Room and Front Desk. Leisure travellers gave a higher mean importance score (6.25) on the Security factor than their business counterparts (6.06). In fact, safety and security have been reported to be the main concern of leisure travellers when patronising a hotel (Clow et al., 1994; Knutson, 1988; Marshall, 1993). This concern is likely to stem from the idea that pleasure trips often involve other family members, and most leisure travellers seem to have

a heightened sensitivity to what may happen to them and their families. For hoteliers, a safety and security system may differentiate one property from its competition, hence becoming a winning device for a hotel to gain leisure travellers' confidence and trust (Marshall, 1993). In addition to the installation of security facilities such as electronic key cards, safe deposits and fire alarms, customers should be educated about security and safety. Andorka (1996) commented that to be safe and secure in a hotel environment, travellers should have a shared responsibility with the hotel for their safety. For example, hotels could display travel safety tips in hotel rooms to remind travellers to check everything before they leave the room.

Service Quality was the next important factor as perceived by both types of travellers in hotel choice selection. The hotel industry is highly competitive, as the products and facilities are relatively homogenous. What differentiates one setting from another is not only the actual rooms, food and facilities, but also the quality of the service provided by hotel personnel. All aspects of service quality, including service efficiency, understandability, helpfulness, politeness and friendliness, appearance and language skills should be maintained and consistently reviewed to see whether any improvements are required. Hoteliers should devote more resources to staff training. For instance, in-house training programs could be arranged to improve employee courtesy, helpfulness, understandability, language skills, appearance, check-in/check-out efficiency, and reservation skills. Furthermore, hoteliers should ensure that all employees are required to become involved in setting quality standards, and all employees should realise that maintaining service quality is part of their jobs (LeBlanc & Nguyen, 1996).

4.6. *The Low Priority quadrant*

This quadrant identifies those items where hotels are performing adequately but travellers perceive them as less important when compared with other hotel attributes. The hotel selection factors were identified in this quadrant: Business Facilities and Food and Recreation. Although the result showed that both business and leisure travellers did not perceive these attributes important, this does not mean that hoteliers should reduce their efforts to improve such services. On the contrary, these service categories are often considered as the basic facilities to travellers. In particular to business travellers, they might simply consider these facilities as necessary service provisions without considering their importance. Results indicated that business travellers considered Business Facilities more important to them than their leisure counterparts. Hotels that focus on corporate accounts should be alert to this message. Maintaining advanced business facilities is of the utmost importance, e.g., providing Internet services, electronic mail accounts,

and teleconferencing services in the Business Centre to facilitate E-commerce. Publicity of such facilities should be the focus of commercial enterprises' marketing efforts. Advertising on the Web to highlight the advanced technologies a hotel is able to provide, and the benefits that a hotel can offer to its customers, could be effective. One possibility would be to combine the Business Facilities and Room and Front Desk. Computers could be installed into rooms for business travellers, so that they can handle their businesses and meetings electronically. They could even make reservations for their next destinations, and complete express check-out formalities, via the computer system.

Business travellers rated Food and Recreation more important in hotel selection, too. The results here confirmed with the study by McCleary et al. (1993) who found that location of a hotel's catering facilities were not important in hotel selection, as there are often many alternative dining choices nearby. Though the presence of the food and beverage and recreational facilities may not lead to customer satisfaction, the absence of them will definitely upset the customers. Business travellers may expect to have the food and beverage outlets or banquetting facilities to entertain the business partners, or they may want to have some exercises for refreshment after a fatigue day. Hoteliers should maintain the standards with these factors in order to meet the basic needs of travellers.

Furthermore, hoteliers need to re-educate the customers to make them better appreciate why the maintenance of high performance are important. If customers are satisfied with the quality of services and facilities they received, such satisfaction outcome may act as a reinforcement of their future repurchase intentions and lead them to spread favourable word-of-mouth publicity (Fornell, 1992; Halstead & Page, 1992).

4.7. *The Possible Overkill quadrant*

Our analysis did not identify any attributes by both leisure and business travellers as being low 'importance' with relatively high 'performance'. One possible explanation is that most travellers simply perceived that all attributes presented to them were important and that they would not settle anything for less as far as the hotel's performance was concerned.

4.8. *Results of t-tests on business and leisure travellers in relation to their perceived importance and performance of hotel selection factors*

To assess significant differences between business travellers' perceived importance and perceptions of hotel performance on the six hotel selection factors, a paired sample *t*-test was conducted. The results revealed that Room and Front Desk ($t = 9.52, p \leq 0.01$), Service Qual-

ity ($t = 3.82, p \leq 0.01$), and Value ($t = 2.91, p \leq 0.05$) were found to be statistically significant. Another paired sample *t*-test found that Service Quality ($t = 5.69, p \leq 0.01$) and Value ($t = 2.84, p \leq 0.05$) were statistically significant between leisure travellers' perceived importance and perceptions of hotel performance in relation to these two hotel selection factors. An independent sample *t*-test was performed to identify the significant difference on perceived importance of hotel selection factors between business and leisure travellers. The results showed that no statistically significant difference was found on the six factors as perceived by business and leisure travellers in their hotel choice selection.

5. Conclusion

This study has categorised the 26 hotel attributes into six hotel selection factors: Service Quality, Business Facilities, Value, Room and Front Desk, Food and Recreation, and Security. Using IPA, this study has compared the importance and performance of the hotel selection factors, as perceived by business and leisure travellers. Both business and leisure travellers have the same perceptions towards all the six hotel selection factors. The IPA grids have illustrated that the Value factor fell into the Concentrate Here quadrant; Service Quality, Room and Front Desk and Security in the Keep Up the Good Work quadrant; and Business Facilities and Food and Recreation in the Low Priority quadrant. No attribute has been identified in the Possible Overkill quadrant. Though the results of independent sample *t*-test did not indicate any significant difference on the perceived importance of hotel selection factors between business and leisure travellers, the two groups did differ from each other in hotel selection. In choosing a hotel, business travellers considered Room and Front Desk to be the most important to them, whereas their leisure counterparts rated Security to be the most important to them.

The use of IPA has contributed to the literature and the industry. Academically, the use of IPA to investigate the differences between the importance of hotel selection factors as perceived by travellers, and their perceptions of a hotel's actual performance in relation to these factors, could contribute to further research studies in the area of consumer decision-process theory. For example, several areas regarding possible applications of IPA should be addressed. This includes applying the IPA technique to a comparison of hotel selection criteria for male and female tourists, Asian and Western tourists, and for hotels of different categories. Analysing perceptions of quality in terms of different segments can help hoteliers to develop and formulate marketing strategies to meet the needs of each specific segment (LeBlanc, 1992). By identifying the proper hotel segments, hoteliers can

tailor-make their marketing tactics and strategies to best meet tourists' needs and expectations.

In practical terms, the IPA technique has helped to divide the hotel selection factors (services and facilities) into four identifiable quadrants, so that hoteliers are better able to understand how customers perceive their products and services. There are two explicit advantages for hotel managers in applying IPA to their management know-how. First, IPA is a relatively inexpensive and easily understood technique. Using a simple quadratic presentation, one can display the results graphically on a two-dimensional grid that explicitly shows the strengths and weaknesses of the hotel attributes being studied. Second, using the results provided by IPA, hotel managers can tailor-make marketing strategies based on the importance and perception of performance revealed in each quadrant, from the perspective of customers. This is a useful and effective way for management to identify what problems exist, and why.

Intensified competition is not unique to the Hong Kong hotel industry — hotels throughout the world must deal with it. How hotels position themselves and differentiate themselves from competitors is critical to their success. By identifying customers' needs and expectations, hoteliers will be better able to prioritise tasks, allocate their resources, and develop tailor-made marketing strategies for their target segments (Hsu et al., 1997). Once customers' requirements are clearly identified and understood, hoteliers are likely to be in a better position to anticipate and cater for their customers' desires and needs, rather than merely reacting to their dissatisfaction (Oberoi & Hales, 1990). To evaluate a hotel's performance from the customer's point of view would improve hotel managers' understanding of customer satisfaction, and ultimately lead to repeat business. Customers who are satisfied with their hotel stay are more likely to become repeat customers, and to spread favourable word-of-mouth publicity (Fornell, 1992). Knowing how travellers perceive the quality of services and facilities is the means by which hoteliers can achieve a competitive advantage, differentiate themselves from competitors, increase customer loyalty, enhance corporate image, increase business performance, retain existing customers, and attract new ones (Lewis, 1993; Watson, McKenna & McLean, 1992).

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