Impact of Design on Traveler Satisfaction of Small Hotels in Chiang Mai

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Abstract

This research used BED hotels in Chiang Mai as a case study to examine the relations between perceptual satisfaction of travelers and the design of the hotel. The exploratory guest survey, a standard practice of Online Travel Agents (OTA) to measure guest satisfaction, generated a total of 2,751 responses that were evaluated in this study. Extensive in-depth interviews were conducted with guests, staffs, owner and designer on the design satisfaction. The survey was conducted by senior staffs. A total of 200 respondents completed the questions and 124 responses were deemed valid. Hotel designs are typically derived from new behaviors of travelers and from specific aspects of hotel business that provide an enhanced understanding of architecture in relation with the changing environment. The research shows that within the four hotels of the BED brand, each hotel shows their indigenous architecture as a result of synchronization with the new approach of hospitality industry and the ever-changing tourism landscape in Chiang Mai.

*Keywords***:** *Design, branding, traveler, hotel, satisfaction, occupancy rate*
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1. Introduction

A primary goal of architecture is to make a design that satisfies the end-users, as well as the hotel owners who want to build a successful business. In the hospitality industry, customer satisfaction and quality of hotel design have become major areas of attention to practitioners and academic researchers. Both concepts have strong impact on the performance of the business and the right design increases the level of satisfaction. Numerous empirical studies indicate a positive relationship between traveler satisfaction and architectural design, and the need to measure consumer expectations and satisfaction to keep a strong and long-term market position. The case studies are four hotels that operate under the BED brand and that share similar concepts and characteristics. This allows for a narrow focus of the study and a high level of detail, and the combination of objective and subjective data that is necessary for in-depth understanding. Several tools are available for measuring customer satisfaction. In the hospitality industry online guest reviews are the most popular and commonly used tools.

2. Objectives

The overall objective of this research is to conduct a study to determine whether or not design is the key factor of satisfaction in a small hotel. The study aims:
1. To understand the expectations and requirements of the travelers
2. To determine how the design impacts guest satisfaction
3. To examine long-term trends that allow for timely action
4. To establish priorities in evaluating the design impact

3. Literature reviews

Customer satisfaction has been a topic in hospitality industry and academic research since Cardozo's (1965) initial study of customer effort, expectations and satisfaction. Customer satisfaction is typically defined as a post consumption evaluative judgment concerning a specific product or service (Gundersen, Heide & Olsson, 1996). It is the result of an evaluative process that contrasts expectations with perceptions of performance during and after the consumption experience (Oliver, 1980).

The most recommended conceptualization of the customer satisfaction concept is the expectancy disconfirmation theory (Barsky, 1992; Oh & Parks, 1997). The theory was initiated by Oliver (1980),

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he proposed that customer satisfaction is a result of the difference between expected and perceived performance. Satisfaction occurs when product is better than expected. The study shows that customer satisfaction may have direct and indirect impact on business results. The majority of studies have investigated the relationship with customer behavior patterns (Kandampully & Suhartanto, 2000).

Satisfaction can be determined by subjective and objective factors (Churchill & Surprenant, 1982; Oliver, 1980; Barsky, 1992). Applying to the hospitality industry, there have been numerous studies that examine attributes that traveler satisfaction is significant to the hospitality industry. Atkinson (1988) found out that cleanliness, security, value for money and courtesy of staff determine traveler satisfaction. Knutson (1988) revealed that room cleanliness and comfort, convenience of location, high quality of service, and friendliness of employees are important. Barsky and Labagh (1992) found that employee attitude, location and rooms are likely to influence traveler satisfaction. Akan (1995) concluded that the main determinants of hotel guest satisfaction are the behavior of employees, cleanliness and timeliness. Choi and Chu (2001) concluded that staff quality, room qualities and value for the money are the main factors that determine travelers' satisfaction. However, studies reveal that numerous hotel chains use guest satisfaction evaluations of inadequate practices to make significant decisions (Barsky, 1992; Gilbert & Horsnell, 1998). The evaluation methods can be divided into three main areas, namely, quality of the sample, design of the contents, and data collection and analysis (Gilbert & Horsnell, 1998).

Hotel design is a subjective and abstract concept. It creates different perceptions amongst different travelers. On the aspect of researchers, Amanda and Elizabeth (1989) put forward some elements should be used to design guestroom, lighting and color scheme on the base of people oriented theory. Wen-Jung Chen (2011) thought the main problems were imperfect function, waste of material and unbalanced design. He revealed that the design of culture location was performed by hotel surroundings and decorations. There were disjunctions between design and hotel satisfaction. The most common definition of good design is the positive comparison that travelers make between the expectations and the actual experiences with the hotel. Quality of design is a multi-dimensional perception defined by physical perception, functional quality and corporate image. Applying to the study, a level of satisfaction or dissatisfaction with a given item is rated on a 10-point Likert scale. The results are used to identify positive and negative responses measured by the difference between expectation and experience scores that indicate the level of satisfaction. The following sections will highlight the increasing importance of hotel design and introduce an analytical approach for generating insights related hotel design expectation.

4. Materials and Methods

The exploratory survey, comprising of several components to guest measure satisfaction and consequences, was conducted between 2017 and 2019. A total of 2,571 responses generated primary date that were subsequently evaluated in personal conversations and in-depth interviews with focus groups included owner, architect and 20 staffs in January 2019. To collect accurate and relevant information from the travelers, the researcher used face-to-face interviews. The interview consisted of open and closed questions. Closed questions included gender, age, and purpose of the trip, booking type, hotel selection, and reasons for selecting the particular hotel. The survey had five categories covering physical perception, functionality and usability of space and recognition of corporate identity. A statistical analysis was carried out using statistical software and Microsoft Excel. The survey used the 10-point Likert-scale; an adequate method to measure design satisfaction and the subsequent behavioral intentions.

5. Results and Discussion

The four properties of BED hotels are all located in the city of Chiang Mai. The primary data are derived from a survey on perceptual satisfaction that was conducted amongst both domestic and international travelers, as well as in-depth interviews with staff, owner and designer.

Table 1 Overview BED Hotels

Property	Distance from center	Number of rooms	Stories high
Changkian	3.8 km.	40	5
Phrasingh	0.3 km.	29	3
Nimman	1.5 km.	56	8
Chiangmai Gate	0.4 km.	28	3

Table 1 lists the four BED hotels with a total of 153 guest rooms. The four properties range in size from 28 to 56 rooms. All BED hotels maintain an Adult Only policy and offer similar products and facilities.

BED Changkian is located at 10/2 Moo 1 Soi Bed, Chang Phueak, Chiang Mai Thailand nearby Chiang Mai University. The property is 3.9 KM away from the landmark Tha Pae Gate. The 5-stories hotel has a modern design and offers 40 guest rooms with limited amenities. The facilities include a breakfast lounge, leisure spaces, private parking and outdoor gardens. The property has three different room types with Standard Twin Rooms, Standard Double Rooms and Triple Rooms with 1 double and 1 single Bed.

Figure 1 BED Changkian

BED Phrasingh is located at 1/1 Rachamankha Soi 8, Phra Singh, Muang, Chiang Mai next to Wat Phra Singh which is at the beginning of the Sunday market. The property is 1.3 km away from Tha Pae Gate. The 3 storey hotel is designed in a contemporary Lanna style, in compliance with new and stringent city rules and regulations. The property has 29 guest rooms with full amenities. The hotel facilities include a breakfast lounge, leisure space, private parking and a small outdoor swimming pool with sun deck. There are four room types including Standard Twin Rooms, Standard Double Rooms, Standard Twin Rooms with Pool Access and Triple Rooms with 1 Double Bed and 1 Single Bed.

Figure 2 BED Phrasingh

BED Nimman is located at 20 Soi Jumpee Sirimangkalajarn Road, Nimmanhaemin 17, Tambon Suthep, Amphoe Muang, Chiang Mai in the vibrant Nimman Haemin district. The property is 2.8 km away from Tha Pae Gate. This 8 storey hotel has a modern design and offers 56 guest rooms with full amenities. The hotel facilities include a breakfast lounge, leisure space, private parking and an outdoor swimming pool with sun deck. There are three room types including Standard Twin Rooms, Standard Double Rooms and Triple Rooms with 1 Double Bed and 1 Single Bed.

Figure 3 BED Nimman

BED Chiang Mai Gate is located at 9 Suriyawongse 1 Haiya, Muang Chiang Mai, Chiang, Hai ya, Chiang Mai nearby Chiang Mai Gate which is at the beginning of Saturday market. The property is 1.0 km away from Tha Pae Gate. This 3 storey hotel is designed in a contemporary Lanna style, in compliance with new and stringent city rules and regulations. The property has 28 guest rooms with full amenities. The hotel facilities include a breakfast lounge, leisure space, parking space and outdoor swimming pool with sun deck. There are four room types including Standard Twin Rooms, Standard Double Rooms, Standard Twin Rooms with Pool Access and Triple Rooms with 1 Double Bed and 1 Single Bed.

Figure 4 BED Chiang Mai Gate

The unique feature of BED hotels is the black-and-white design theme that contributed to the strong corporate identity that BED has built since the first hotel opened in 2014. The lobby is designed as a multi–purpose area with public and private areas. The spatial organization of BED hotel is not sophisticated. The architecture is designed with the simple principle of plan and minimal decoration. The building layout is divided into Front and Back of the House. The ground floor is the main area for social activities whereas other areas as available if guests require more privacy.

The Old City is widely considered an ideal location for a hotel in Chiang Mai. The area is known as one of the most popular travel destinations in Chiang Mai. The site of BED Phrasingh rests in the heart of the old town around Wat Phra Singh. BED Chiangmai Gate is at the southern gate of the Old City, which resembles traditional Chiang Mai and its exotic past. The composition of the area mainly consists of local residences, restaurants, temples, museums and historical buildings. Famous attractions include ancient temples such as Wat Chedi Luang and Wat Phra Singh, and the Saturday and Sunday night market, all of which within walking distance from the hotel site.

Nimmanhaemin is the latest development in Chiang Mai and separated from the Old City. Nimmanhaemin district or "Nimman" is most famous for its shopping and entertainment venues. Due to its vast attractions and landmarks, Nimman has become one of the most visited neighborhoods in Chiang Mai. It attracts different groups of domestic and international travelers. BED Nimman is located at Nimman soi 17/ 1. BED Changkian is located 1.2 km. away from Nimman.

Figure 5 Location of Case Study

The sampling analysis provides a representative subset of the larger population which is taken to ensure the representation of each traveler group. The travelers are classified in five groups: families, couples, groups of friends, solo travelers and business travelers. The data drawn from the survey are averages across all four hotels. The survey shows the number of reviewers in each category. Most respondents are in the category Couples, followed by Families, Groups of Friends, Solo Traveler and Business Traveler. It is expected that families and couples are at the top because the hotels were originally designed for these particular groups. Solo travelers and groups of friends are on average. Business travelers represent the smallest number of respondents.

Table 2 Five group of the sampled travelers

Traveler type	Changkian	Phrasingh	Nimman	Chiangmai Gate	Total
Families	163	142	199	52	556
Couples	195	342	270	218	1025
Groups of friends	68	43	59	30	200
Solo travelers	65	77	89	28	259
Business travelers	34	4	32	9	79
All reviewers	660	772	876	443	2751

Table 2 was derived from an online survey that records traveler satisfaction levels. The survey drew on 2,751 travelers from various countries. Despite its appearance, the table above is not a traditional mathematical one. Instead, a change in the quantity of one ingredient can have a dramatic impact on the end result. This method of calculation is a measure of traveler satisfaction because it only takes into account the possible response ratings between: "satisfied" and "unsatisfied". Studies have shown that feedback surveys are the most accurate at predicting traveler retention. Only a traveler who booked online and actually stayed at the property is allowed to review the property. The reviews comes from real guests and provides relevant content without limiting expression of strong opinions. The result is as follows:

Table 3 Breakdown of satisfaction score by hotel (scale 1-10)

Category	Changkian	Phrasingh	Nimman	Chiangmai Gate	Average
facilities	9.1	9.2	9.2	9.3	9.2
cleanliness	9.3	9.5	9.4	9.5	9.4
comfort	9.2	9.2	9.1	9.3	9.2
value for money	9.3	9.2	9.0	9.3	9.2
location	8.2	9.4	9.1	9.2	9.0
Staff	9.6	9.7	9.7	9.7	9.7
Average Score	9.2	9.4	9.3	9.4	9.3

The level of traveler satisfaction can be analyzed as follows:

Satisfaction with the facilities of the hotel. Travelers were satisfied with the facilities provided in the hotels although they preferred to have facilities such as markets, restaurants and shops in the surrounding area, within walking distance of the hotel.

Satisfaction on the cleanliness of the hotel is highlighted as one of the most important elements of satisfaction and is influenced by what the travelers can see, smell and feel. The score shows that among all the hotel experiences, clean rooms have the greatest positive impact on satisfaction.

The score for Comfort in all 4 hotels is also high as travelers appreciate the design that provides large communal tables in semi-open areas with views on gardens and pool. The design takes advantage of its location to match the surrounding context.

The score for Value-for-Money is defined as the most advantageous combination of cost and quality. The reviews indicate that the hotels can meet the requirements of travelers about services and facilities.

Location is one of the keywords in hotel related web searches. With the exception of BED Changkian, the score for the location is high as BED hotels are located in primary tourist spots. BED Changkian is located at 1.2 km distance from Nimman yet caters successfully to a specific group of travelers that actually appreciate to be somewhat away from the usually busy tourist areas.

The score for Staff is outstanding in all BED hotels and amongst all travelers. Staff receives the highest score in all categories which reflects the comprehensive understanding of staff of the behavior, needs and requirements of guests on a highly individual level. Travelers from every market segment are treated as individuals rather than as a group which allows each traveler to uniquely feel at home. The hospitality concept of BED is indeed unique in its simplicity. To achieve the desired level of personalized service BED is organized without any structured form of training, management and supervision. Instead the organization relies on the common sense, and the sense of genuine care of people, within each individual staff member. The satisfaction with Staff could be further driven by the design satisfaction (see table 4).

The secondary data are derived from a survey on design satisfaction that was conducted amongst both domestic and international travelers by personal conversations and in-depth interviews. In order to enhance internal validity, questions were tested before the survey was conducted. 10 guests were interviewed in each hotel resulting in some adjustments in the questions. The survey was administered by senior staffs in the hotels. A total of 200 respondents completed the questions and 124 responses were deemed valid. All respondents were interviewed during their stay in the hotel. The respondents were classified by male (40.8%) and female (59.2%). The majority of the respondents were Couples (39.6%), followed by Families (25.5%), Groups of Friends (20.2%), Solo Travelers (8.4%) and Business Travelers (6.3%). 68.7% of respondents were international travelers and 88.5% made their reservation online through Booking or Agoda.com. The purposes of the trip were classified by leisure, recreation and holidays (82.0%) followed by visiting friends and relatives (12.6%), and Business (5.4%). Adults between the ages of 20 and 64 were represented in this survey sample, while young adults ages 20-34 were represented the majority of the respondents (54%), followed by adults ages 35-50 (24%). The results are shown in Table 4.

Table 4 Questions related to satisfaction with the design (scale 1-10)

Category	Changkian	Phrasingh	Nimman	Chiangmai Gate	Average
Physical perception	9.8	9.2	8.1	7.1	8.6
Corporate Identity	9.8	9.1	9.7	9.2	9.5
Functional quality	9.2	7.2	8.7	9.4	8.6
Comfortable room	8.0	7.1	8.5	9.0	8.2
Usability of space	9.4	8.0	8.2	7.6	8.3
Average score	9.2	8.1	8.6	8.5	8.6

The survey identified a close relationship between hotel design and satisfaction, as shown in Table 4. Composition measure created for each observation on each factor extracted in the factor analysis. The factor weights are used in conjunction with the original variable values to calculate each observation's score.

Satisfaction on the Physical Perception of the hotel is highlighted as one of the most important elements of satisfaction and is influenced by what the travelers can see and feel. The highest satisfaction is Changkian (9.8), followed by Phraingh (9.2), Nimman (8.1) and Chiang Mai Gate (7.1).

Corporate Identity has effect on the brand and reviews indicate that the hotels can meet the requirements in these categories. The highest satisfaction is Changkian (9.8), followed by Nimman (9.7), Chiang Mai Gate (9.2) and Phrasingh (9.1).

Functionality is defined as the quality of a design that best suits the purpose of the hotel, and therefore the needs and requirements of its guests. Most hotels created spaces and areas where travelers can optimally carry out their activities. With the exception of BED Phrasingh (7.1), the score is lower than the other properties due to the low-cost renovation and the limitations of the existing structure.

The category Comfortable Room refers to adequate and well-designed guest rooms that meet the expectations and makes travelers physically relaxed during their stay. It is expected that Chiang Mai Gate is at the top because the hotel was newly built. Nimman and Changkian are average (8.0-8.5). Phrasingh has the lowest satisfaction in the group (7.1).

The score for Usability of Space in all 4 hotels is also high as travelers appreciate the design that provides large common space and integration with the surroundings that takes full account of site features and local characteristics. The highest satisfaction is Changkian (9.4), followed by Nimman (8.2), Phraingh (8.0) and Chiang Mai Gate (7.6).

Table 5 The hotel satisfaction compared to design satisfaction. (scale 1-10)

Category	Changkian	Phrasingh	Nimman	Chiangmai Gate	Average
Design Satisfaction	9.8	9.1	9.7	9.2	9.5
Hotel Satisfaction	9.2	9.4	9.3	9.4	9.3

The design satisfaction is the combination of space aesthetics, functionality, and comfortable room, usability of space and recognition of corporate identity (Table 4). The hotel satisfaction is the combination of facilities, cleanliness, comfort, location, staff and price (Table 3). It can be concluded that guests are generally satisfied with the design of the hotels. The survey indicated that when the perceived quality of the design was above average guests would feel that their level of satisfaction increased. However, the scores for Phrasingh show an interesting and significant reversed trend. Due to financial limitations at the time of the renovation and the constraints of the existing structure, as expected the level of satisfaction with Functionality and Room Comfort is the lowest (Table 4) yet the all-over satisfaction with the hotel is the highest amongst all four properties.

6. Conclusion

The study identifies a clear relationship between the quality of hotel design and the satisfaction levels of guests. The results of this study indicate that satisfaction in fact can be increased through enhanced design. The most basic objectives that should be met in any surveying tool include understanding of the expectations and requirements of travelers, determining how well the design satisfies this, examining trends in order to take action on a timely basis, and establishing priorities to evaluate how well the design meets the expectations and requirements. High-quality design not only enhances positive perceptions and expectations but also the level of satisfaction during the actual stay. Consequently, the study indicates that design is a key factor in the level of traveler satisfaction, and an undervalued yet significant opportunity for hotels to increase this satisfaction if they proactively develop a design that is based on traveler expectations and requirements.

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