Emotional Design for Hotel Stay Experiences: Research on Guest Emotions and Design Opportunities

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ABSTRACT:

Hotel guest emotions and design opportunities in relation to hotel stay experiences are the basis of this study. The three-level model of emotional design for hotels is proposed to clarify the relationships between hotel offerings, design emphases, guest emotions and guest perception, with theoretical basis on a synergy of knowledge in emotional design, experience design, and hospitality. This paper also outlines a design research study that aims to explore sources that evoke guest emotions, uncover concerns and meanings from the travelers’ perspective, and identify design opportunities which will lead to potential innovations in both tangible elements and intangible processes for enhancement of hotel stay experiences. For the purpose of this study, an analytical approach based on appraisal theory in psychology is also introduced for examining hotel guests' emotional experiences and extracting relevant insights for design.

Keywords: Emotion, experience design, hotel
1.0 INTRODUCTION

As businesses are putting increasingly strong emphasis on creating pleasant and memorable experiences for customers (Pine II & Gilmore, 1999; Schmitt, 1999; Shaw, 2005; Diller, Shedroff & Rhea, 2006), emotional design and experience design have become two progressive trends in design research.

Emotional design

Emotional design is a design approach that emphasizes the importance of eliciting users’ positive emotional responses. With this approach, design research and practice are extended beyond function, form and usability, to emotional dimensions that enrich user experience. The majority of research on emotional design concentrates on products and human-computer interfaces. Emotional design is an attractive and rapidly growing research area; its subjects of research range from conceptual models to measurement tools to design methods in relation to emotional responses. Major topics include pleasure, fun, enjoyment, wow, attachment etc (Jordan, 2000; Desmet, 2002, 2006; Blythe & Hassenzahl, 2003; Norman, 2004; Chapman, 2005).

Experience design

The core belief of experience design is grounded on a human-centric paradigm that places the needs and desires of users at the center of the design process. The process often starts with discovering insights about what truly matters to users. Researchers and designers put considerable effort into understanding the richness of real-world experiences from the users’ perspectives. The ultimate goal is to translate the insights into design outcomes that help users achieve optimal experiences. To achieve this goal, a holistic approach to design is needed. Instead of focusing on individual artifacts or the look and feel, designers are concerned with the quality of people’s experiences and devise whole solutions informed by multidisciplinary insights (Margolin, 1997; Shedroff, 2001; Fulton Suri, 2004; Clark, Smith & Yamazaki, 2006).

These rising trends of emotion-driven and experience-driven design imply a shift of focus in design knowledge beyond the design of objects or interfaces to both tangible elements and intangible processes that make experiential impact by evoking positive emotions. Design researchers increasingly assume an integrative stance and take the initiative in synthesizing knowledge from diverse domains, generating cross-disciplinary insight regarding people’s emotions and identifying design opportunities that enhance experiences.
In this paper, hospitality is taken as the research context in which guest emotions and design opportunities in relation to hotel stay experiences are studied. This paper attempts to extend the knowledge of both emotional design and experience design by shedding light on emotion-oriented design for hotels and discovering design insights through research.

The following sections will highlight the increasing importance of hotel guest emotions, propose a model of emotional design for hotels, outline a guest emotion-oriented research study on identifying design opportunities, and introduce an analytical approach for generating insights about improving hotel guest experiences.

2.0 INCREASING IMPORTANCE OF GUEST EMOTIONS

“Emotions” are valenced affective reactions to perceptions of objects and situations. According to Scherer's component process model, an emotion is an affective state that embodies five components: Cognitive appraisal, bodily symptoms, action tendencies, facial and vocal expression, and subjective awareness of the emotion (Scherer, 1982, 2005). My research study described in this paper concentrates on the subjective awareness component and the appraisal component of emotions.

Emotion is acute (limited in duration) and intentional (directed at a certain object). Based on these two characteristics, emotion is differentiated from other affective states such as mood (which is acute but non-intentional) or sentiment (which is intentional but not acute) (Frijda, 1994; Desmet, 2002).

Customer emotions have not been given much attention in hospitality research until recent years because traditional research studies about customers' responses to hotels concentrate primarily on satisfaction. The dominant paradigm is the disconfirmation model which states that a customer's level of satisfaction with a hotel's performance is the result of disconfirmation between his or her expectations and perceived service quality of the hotel (Parasuraman, Zeithaml & Berry, 1994).

As hospitality researchers seek alternative approaches in understanding and enhancing customer experience, emotions have recently become the new research frontier. Some studies in hospitality
settings demonstrated the strong impact of emotions on customer satisfaction, loyalty behaviors and willingness to pay more (for example, Mattila, 2001; Barsky & Nash, 2002; Mattila & Enz, 2002; Pullman & Gross, 2004; Tu, 2004). In light of this, emotions have emerged as a theme which is gradually taking precedence over satisfaction in hospitality research (Torres & Kline, 2006).

This paper focuses on studying “guest emotions” which refer to emotions that are experienced by hotel guests and evoked by hotels. The growing evidence in the strong influence of customer emotions has resulted in an increasing recognition on the importance of eliciting positive guest emotions and staging memorable experiences for hotel guests (Gilmore & Pine II, 2002; Erdly & Kesterson-Townes, 2003; Hendrie, 2004; Williams, 2006).

Following this line of research, some researchers advocate the importance of design in achieving emotional impact for hotel stays (Gilmore & Pine II, 2002), guest loyalty (Skogland & Siguaw, 2004) and service excellence (Williams, 2006). Gilmore & Pine II (2002, p.89) state, “Innovative experience design will become a critical component of any successful hotel company’s core capability.” Researchers also call for a more in-depth understanding about guest emotions and guest experiences in order to inform design and decisions that bring about positive guest emotions (Barsky & Nash, 2002; Pullman & Gross, 2004).

Despite growing awareness, little research effort has been devoted to design in relation to hotels and the wide range of guest emotions. Bigne, Ros & Andreu (2004) have proposed a model and an operations engineering method for designing emotion-based service encounters. Gilmore & Pine II (2002) suggested a typology with four types of themes that demonstrates experience-driven design for hotels. In IDEO’s guest-centered research for Marriott International, opportunities for creating memorable impact were identified as “touchpoints” on the guest experience journey (Gunter, 2006). The limited number of relevant studies mentioned above implies that there is still much room for research that generates knowledge in emotion-driven design for hotels.

This paper takes one step in advancing the much-needed knowledge by proposing a model of emotional design for hotels and outlining a study that will generate in-depth, qualitative insights about guest emotions and lead to design suggestions for hotel offerings.
3.0 MODEL OF EMOTIONAL DESIGN FOR HOTELS

In order to address the need for better understanding about emotion-oriented design for hotels, I propose a three-level conceptual model that clarifies the relationships between guest emotions, hotel offerings, design emphases and guest perception (see figure 1). This model is underpinned by theories and knowledge in emotional design, experience design and hospitality. It is broad and general so that it applies to all possible hotel contexts. The three types of hotel offerings stated in my model correspond with levels of tourism or hospitality service product outlined by Reisinger (2001).

Before moving on to the explanation of my model, it must be emphasized that the term “design” in my model refers to the design of tangible elements and intangible processes in the hotel context. “Tangible elements” include any tangible artifacts in hotels, their functions, arrangement and presentation; while “intangible processes” include mechanisms for offering the tangible elements, and the delivery of related service.

Figure 1  Model of emotional design for hotels, proposed by Kathy Lo
The core argument of the proposed model is that design can influence guest experience and elicit positive guest emotions on three levels. The design emphasis increases in complexity with higher levels of hotel offerings, resulting in greater emotional impact that uplifts the level of guest perception from mere acceptance to satisfaction and memorable experience. A level-by-level explanation is provided below.

3.1 PRIMARY LEVEL

“Actual Offerings” refer to basic service and tangible products that are provided in hotels and expected by most hotel guests. For example, a comfortable bed, adequate air-conditioning, reliable morning-call service, and clean shower and toilet facilities etc. The design emphasis of Actual Offerings is functional in nature. Design at this level mainly concerns amenities, features and services that enable hotel guests to achieve certain basic goals and provide convenience. For hoteliers and designers who want to evoke positive guest emotions and improve guest experience at this level, the key question to ask is: What tangible elements and intangible processes can be designed to offer guests more functional benefits?

Among the three types of hotel offerings, Actual Offerings have the minimum impact on evoking positive guest emotions and perception. While the presence of Actual Offerings only contributes to guests’ acceptance of the hotel’s adequate performance, weakness in (or absence of) Actual Offerings often produces extremely negative impact on guest emotions and perception.

As guests’ needs are constantly changing and guest expectations are ever increasing, hoteliers and designers need to learn about those needs and expectations in order to provide and design amenities or services just to maintain acceptable performance and thus stay in business.

For example, as Internet connection has become essential in many people’s daily lives, a hotel can increase an Actual Offering by providing convenient Internet access in guestrooms. This involves the design of interface, procedures and support mechanism that enable in-room Internet access.
3.2 MIDDLE LEVEL

“Augmented Offerings” refer to hotel offerings that extend Actual Offerings with value-added features for the benefit of hotel guests. The benefits can be increased degree of comfort, convenience, security, service reliability etc. The list goes on as the possibilities are limitless. An existing example of Augmented Offering is Westin Hotel’s “Heavenly Bed”, a 10-layered luxurious bed designed for the maximum degree of comfort.

Design at this level evokes positive guest emotions and increases satisfaction mainly by exceeding guest expectations. Apart from emphasizing the functional elements, design at this level also emphasizes sensorial elements. That means design adds value not only by improving the functional aspect of hotel offerings but also by delighting one or more of the human senses (visual, auditory, olfactory, gustatory and tactile) through sights, sounds, smells, taste, or touch.

At this level, the key question to ask is: What tangible elements and intangible processes can be designed to offer guests more functional or sensorial benefits beyond the standard offerings?

Augmented Offerings have medium impact on eliciting positive guest emotions and perception among the three levels in the model. Absence of or weakness in Augmented Offerings would not lead to negative guest emotions, but the presence of or strength in Augmented Offerings usually evokes positive guest emotions and enhances guest satisfaction. Designing Augmented Offerings enables a hotel to gain a competitive edge over other hotels that offer standard products or services.

For example, following up on the in-room Internet access mentioned in the previous subsection, a hotel can upgrade this Actual Offering to an Augmented Offering by incorporating more functional benefits. This can be achieved by making in-room Internet access high-speed, free-of-charge and also by offering a wireless option and more user-friendly interfaces.

A more recent example of Augmented Offering that focuses on sensorial benefits is PURE rooms, or allergy-friendly rooms (Brault, 2007). These rooms are designed for high indoor air quality and maintained to be free of air-borne irritants. PURE rooms benefit guests (especially guests with allergies) with greater physical comfort through the senses of touch and smell.
Research has shown that some Augmented Offerings are quickly becoming expected features by guests, such as high-speed Internet access in guestrooms and cheap long-distance calls (Swisscom, 2007). This is worthy of hoteliers’ and designers’ attention.

3.3 TOP LEVEL

“Experiential Offerings” is the topmost level in the proposed model and an integrative level of hotel offerings. This term refers to the combination of various tangible elements and intangible processes that create meaning-centered experiential impact for guests.

At this level, design is a synthesis of the functional, sensorial and meaning-oriented aspects for staging memorable and meaningful guest experiences. Meanings are messages that the hotel wants to communicate to guests. Embodied in multiple tangible elements and intangible processes, these meanings are not only limited to status or identity, but include also meanings that match with guests’ aspirations, such as harmony, accomplishment, individuality, well-being, social responsibility etc. Diller, Shedroff & Rhea (2006) point out that companies can address people’s growing desire for meanings by intentionally designing integrative experiences based on a specific meaning and expressed cohesively through products and services. Designing for guest experience requires a deep understanding about meanings relevant to hotel guests and requires the orchestration of a wide array of tangible elements and intangible processes in order to communicate the desired meanings.

The two main questions to ask at this level are: (1) What are the meanings that the hotel wishes to convey? (2) How can the hotel integrate functional elements, sensorial elements and meanings to evoke memorable guest experiences?

Hotels can create Experiential Offerings by developing hotel stay experience based on themes. According to Gilmore & Pine II (2002, p.92), a theme is “the dominant idea or organizing principle, devotion to which creates a coherent experience for guests.” This implies that the design and orchestration of functional, sensorial and meaning-oriented tangible elements as well as intangible processes are of paramount importance.

Among the three levels in the model, Experiential Offerings have the maximum impact on guest emotions and perception. Since Experiential Offerings communicate meanings robustly with
tangibles and processes through many functional and sensorial means, they usually evoke memorable experiences for hotel guests. In this way, Experiential Offerings contribute to positive emotional impact and loyalty behaviors such as repeat patronage and positive word-of-mouth (Pullman & Gross, 2004). Ideally, hotels try to achieve ultimate excellence by designing unique Experiential Offerings.

An example of theme-based Experiential Offering is Mandarin Oriental Hotel’s “Legendary Quality Experience”. The central meanings conveyed by the hotel chain are extraordinary status and the sense of exclusiveness. These meanings are communicated through various tangible elements and intangible processes ranging from small details like monogrammed towels, a surprise food item that comes with room service, guestroom settings pre-customized according to guests’ preference, to more sophisticated offerings such as unique spa treatments and exquisite dining options etc.

3.4 VALUE AND CHALLENGE

The proposed model of emotional design for hotels clarifies the relationships between types of hotel offerings, design emphases, guest emotions and impact on guest perception. Most importantly, the model shows how design can influence guest emotions with different emphases at three levels of hotel offerings. This understanding is of value for both hoteliers and designers as it facilitates structured attempts to design for emotional impacts for hotel stay experiences.

The challenge of proposing this model is that it has to show enough structure and clarity about the relationships without sacrificing the dynamism of guest experience and the openness for contextual factors. Therefore, the proposed model is a purposefully simplistic and general one so that it applies to all possible hotel contexts.

The following section outlines a guest emotion-oriented research study that will inform design for hotels. It will make use of the proposed model as well as an analytical approach based on psychology for the data analysis to generate design-relevant insights.
4.0 RESEARCH OVERVIEW

To identify design opportunities for improving hotel stay experiences, a guest-centered and emotion-oriented research study is carried out. This study is qualitative and exploratory in nature. Its key objective is to increase in-depth understanding about guest emotions and guest experiences in order to inform design and decisions that elicit positive guest emotions.

The study involves collection of visual and verbal data about the sources that elicit guest emotions and guest’s interpretation of their emotional responses. The data are then analyzed with multiple approaches to uncover concerns and meanings that are important to hotel guests, including an approach based on appraisal theory in psychology. Finally, the generated insights will be matched with the three levels of hotel offerings and design emphases in the model of emotional design for hotels to discover design opportunities for potential innovations, in terms of both tangible elements and intangible processes, for the enhancement of hotel stay experiences.

Female business travelers who travel for purposes of work and stay at hotels are chosen as the target for this study because they are a rapidly growing traveler segment (World Tourism Organization, 2006). Also, when compared with other traveler segments, business travelers tend to spend more time in hotels, have greater need for hotel facilities and services, and spend more money in hotels (Reisinger, 2001).

4.1 RESEARCH QUESTIONS

The research study addresses three specific research questions:

1. What are the sources that evoke guest emotions in hotel stay experiences?
2. From the perspective of travelers, why and how do those sources evoke their emotions?
3. What are the design opportunities (regarding tangible elements and intangible processes in hotels) that will enhance hotel stay experiences?

4.2 DATA COLLECTION METHODS

This research study employs two data collection methods: photo elicitation and in-depth interviews.
4.2.1 PHOTO ELICITATION

To capture contextual data about guest emotions, female business travelers who travel for work and stay at hotels are invited to participate in the photo elicitation study. Each research participant is briefed before departing for a business trip. Each participant is asked to complete a photo-taking task during hotel stay: To take photos that show things, places and events in the hotel that evoke her emotions. The researcher collects the photos from research participants after they return from business trips. Each case is followed up with a one-on-one interview between the researcher and the participant to discuss the collected images in detail.

Photo elicitation is a research technique that combines the use of photographs with interview (Harper, 2002). Its key strength is the integration of visual and verbal data (Rose, 2007). With this research technique, robust data about guest emotions in the form of visual and verbal materials can be obtained. While the photos taken by research participants show the sources of guest emotions, the verbal data from follow-up interviews offer rich interpretation of the hotel guest’s emotional experience. These two types of data together offer a deep understanding about research participants’ emotional experiences during hotel stays.

This study requests participants to take photos as contextual data for three main reasons. Firstly, it is important for experience-centered research to appear delightful to encourage participation (Gaver, Dunne & Pacenti, 1999). The photo-taking task is used in this study to induce interest and increase guests’ intention to capture the sources that evoke their emotions. Secondly, the photos can serve as effective memory aid in the follow-up interviews. Lastly, photos convey a casual and friendly sense that can prompt participants to share more personal thoughts and feelings about their emotions during the follow-up interviews.

As research participants are on business trips, the photo-taking task is designed to be compact so as not to be burdensome. While participants can feel free to put as much effort as they want into the task, they are encouraged to take as many pictures as possible. The photo elicitation study is now in progress and the targeted number of successful cases is 20.

4.2.2 IN-DEPTH INTERVIEWS

The second data collection method is in-depth interviews. One-on-one, semi-structured interviews with female business travelers are conducted to understand memorable hotel stay experiences. The questions are open-ended and focus on six broad topics related to hotel stays: pleasant
experiences, unpleasant experiences, specific emotions, overall impressions, expectations and anticipated experiences. Respondents’ feelings and thoughts regarding emotions experienced during hotel stays will be probed through the technique of laddering (Diller, Shedroff & Rhea, 2006) to gain a deep understanding about meanings related to interviewees’ motivations and aspirations concerning hotel stays. The targeted number of interviewees is 25. The duration of interviews normally lasts from 40 to 90 minutes. The recorded and transcribed interview data will be analyzed with strategies indicated in the following section.

The combination of photo elicitation and in-depth interviews will not only yield robust data, but will also enable understanding guest emotions and experiences from both “micro” and “macro” perspectives. This is because field-based data on specific cases of guest emotions are obtained through photo elicitation, while broader views about hotel stays based on research participants’ past experiences can be solicited through in-depth interviews.

5.0 ANALYTICAL APPROACH

This research study uses multiple analytical approaches to examine hotel guests’ emotional experiences. This paper introduces one approach based on appraisal theory in psychology. Appraisal theory originates from the cognitive tradition of emotion research in psychology. The core argument of appraisal theory is that an emotion involves an evaluation process (appraisal) that assesses the benefit or harm of a stimulus or situation (Lazarus, 1991; Smith & Lazarus, 1993; Roseman & Smith, 2001).

Appraisal theorists contend that a person appraises a stimulus or situation in relation to his or her relevant concerns, hence every emotion embodies at least one concern (Frijda, 1993; Roseman & Smith, 2001). Types of concerns include goals (states of affairs that people want to achieve), standards (the ways people believe things should be) and attitudes (people’s preferences) (Ortony, Clore & Collins, 1988). A stimulus or event that matches or fulfills the person’s concern(s) is appraised as beneficial and leads to positive emotion(s). On the contrary, a stimulus or event that mismatches or contradicts one’s concern(s) is appraised as harmful and results in negative emotion(s).

Appraisal theory is chosen because it shows a clear relationship between trigger, cognitive evaluation and emotional response. Also, appraisal theory has proven to be revealing for design
research as some researchers who studied emotional design developed conceptual models or conducted design research with reference to appraisal theory (for example, Desmet, 2002; Hiort af Ornäs, 2006; Ludden, Hekkert & Schifferstein, 2006; Ramirez, 2006; Desmet & Hekkert, 2007). This cognitive approach to emotion hopefully can shed light on emotional design for hotels by revealing the sources and concerns that influence guest emotions.

Figure 2 outlines the structure of this analytical approach based on appraisal theory. Collected data will be analyzed and coded with reference to this approach in order to extract relevant insights for design.

Figure 2  Analytical approach based on appraisal theory

Each case of reported guest emotion will be coded and analyzed by organizing information into five components:

1. Emotion
   The particular type of emotion experienced by the guest.

2. Trigger
   The source that triggered the guest emotion, including objects, places or events in the hotel context.

3. Appraisal
   The guest’s interpretation of why the reported emotion was experienced. This narrative is essentially the guest’s account of her appraisal that led to the emotional response.

4. Concerns
   The above components will be analyzed to identify the guest’s main underlying concerns (goals, standards, attitudes). The three categories of concerns originate from the cognitive
structure of emotions by Ortony, Clore & Collins (1988). When applied to the hotel context, “goals” include guests' needs; “standards” involve guest expectations; and guests' aspirations are considered as concerns in the sense of high-order “goals”.

(5) Insight groups
Concerns and other design-relevant findings will be organized into major insight groups. These insight groups will then be matched with the three levels in the model of emotional design for hotels to discover design opportunities regarding the three types of hotel offerings.

It is anticipated that this research study will generate three types of design suggestions:
(1) Improvements on Actual Offerings and Augmented Offerings;
(2) Potential innovations regarding Actual Offerings and Augmented Offerings;
(3) Theme-based scenarios at the level of Experiential Offerings.

The scope of this research study includes both positive and negative emotions. On one hand, positive guest emotions are studied mainly for understanding fulfilled guest concerns and desirable meanings that contribute to positive guest experiences. On the other hand, negative emotions are studied to reveal unfulfilled concerns and inappropriate meanings that underlie bad experiences. Both types of findings will lead to insights that inspire design opportunities in the form of new or improved hotel offerings.

6.0 CONCLUSION
This paper has proposed the model of emotional design for hotels and outlined a research study in progress that aims to address the need for in-depth understanding about guest emotions and the need to discover design opportunities that elicit memorable guest experiences.

The three-level model shows the interconnections between types of hotel offerings, design emphases, guest emotions and guest perception. At the primary level, design of Actual Offerings focuses on functional aspects. At the level of Augmented Offerings, design adds value through functional and sensorial benefits that exceed guest expectations. At the Experiential Offerings level, design involves the orchestration of functional, sensorial and meaning-oriented elements based on themes to reflect meanings valued by hotel guests. The three types of design emphases contribute to progressive levels of impact on guest emotions and perception.
The research study described in this paper uses photo elicitation and in-depth interviews to explore the sources of guest emotions and guests’ interpretation of their emotional responses. To generate design-relevant insights, collected data will be examined with multiple analytical approaches, including one based on appraisal theory. Resulting insights will be grouped to identify design opportunities with reference to the model of emotional design for hotels. At the levels of Actual Offerings and Augmented Offerings, research findings will help to generate design suggestions for innovations and improvements; while theme-based scenarios will be envisioned at the level of Experiential Offerings. These design suggestions and scenarios will inspire hoteliers on possible ways to enhance guest experiences.

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REFERENCES:


