

# FACULTY OF SOCIAL SCIENCES, NORWEGIAN SCHOOL OF HOTEL MANAGEMENT

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TITLE: "The impact of hotel interiors on customer's loyalty intentions"

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# Abstract

<u>Purpose</u> – The purpose of this master thesis is to examine the role of hotel interiors which are perceived by five atmospheric elements of color, lighting, layout, style, and furnishings on customer's loyalty intentions under the two types of service quality: high and low. Previous research indicates that atmospheric elements, which comprise the perception of physical environment of the hotel, impact on overall guest's perceptions and impressions.

<u>Design/methodology/approach</u> – Data was collected from 50 students from the "Norwegian School of Hotel Management" using a scenario-based approach together with the actual photographs of hotel's lobby/reception area, restaurant and residential room servicescapes. "SPSS Statistics" program was used to analyze the reliability and validity of the obtained data as well as the correlations between the proposed constructs.

<u>Findings</u> – A strong positive relationship was found between the satisfaction with the interiors of each of three servicescapes (except for lobby interiors which revealed quite a low influence power) on respondent's loyalty intentions both under the high and low perceived service quality, as well as between the overall satisfaction with interiors and overall loyalty intentions.

<u>Research limitations/implications</u> – The focus of this research was the hotel's lobby, reception and residential room. While these physical environments are rather important in helping to establish the impressions about the entire hotel, there are other physical spaces within a hotel that may have a large influence on guest's loyalty intentions. A relatively small sample size can also be treated as limitation. Also there is a need to involve real hotel guests and provide a field study within the hotel property. Hotel practitioners need to understand the importance of interiors and their influence on overall guest's loyalty intentions.

<u>Originality/value</u> – This research examines the atmospherics from a hospitality perspective. The topic has received a limited research interest in the past studies but it is gaining more and more popularity in planning the hotel design and construction. This research helps in providing a foundation on which the future studies can be based on.

Key words: Interior, servicescape, color, lighting, layout, style, furnishings, service quality, satisfaction, loyalty.

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# Foreword

The completion of the thesis could not have been possible without the recommendations and support of many people. First and foremost, I would like to thank Mr. Kai Victor Hansen for his assistance as my advisor. Without his guidance, support, and good nature, it would have been difficult to complete this study. Also, I am extremely grateful to all the lecturers of "Norwegian School of Hotel Management" who gave me a necessary knowledge that helped in writing this thesis. I would like to thank all the respondents who took part in this research as well as the administration of "Clarion Hotel Energy", who gave their permission to take the photos required for conducting this study. At last but not the least, I would like to thank my parents and friends for their support and patience throughout the whole process.

# I. Introduction

Psychologists have investigated that the surrounding physical environment has an effect on human behavior and this area of psychology has become known as "environmental psychology" (Cassidy, 2013; Mehrabian & Russell, 1974; Stokols, 1995; Ulrich et al., 1991). Using the theoretical concepts of environmental psychology, Kotler found out that if the physical environment has an effect on human behavior, it would also affect the behavior of individuals within the consumer settings (Kotler, 1973). Bitner (Bitner, 1992) used the concept of atmospherics, proposed by Kotler, in order to develop a framework that covers the effects of the physical environment on customers in service settings. In order to draw a parallel between his framework and Kotler's atmospherics, Bitner (Bitner, 1992) introduced the term "servicescape" to describe the physical environment in which the services are delivered to the customers.

According to the research conducted by Dube and Renaghan (Laurette & RENAGHAN, 2000), the physical property of the hotel is very significant when it comes to driving the hotel client's purchase decision. They also stated that it creates a value for the clients during their stay, thus it is of special importance for people involved in designing the hotel, to pay a closer attention on the effects that certain physical settings are having on customers.

There are many servicescapes that exist within a hotel physical property. Among them, a hotel lobby, restaurant and residential room could be considered as the most important due to their impact on forming the basic customer's impressions about the entire hotel (Ariffin, Nameghi, & Zakaria, 2013; Countryman & Jang, 2006; Orth, Heinrich, & Malkewitz, 2012). It is usually easier to satisfy the customers and gain their loyal attitude if their basic needs and expectations are completely satisfied and the impressions are positive (Knutson, 1988).

A modern interior design of the hotel servicescapes should reflect the rigor, simplicity, consistency and conciseness of its architectural forms and their functional justification (F. R. Lawson, 1995). It should create an environmental, functional and aesthetic comfort, which determine a positive emotional state of the customers (Abercrombie, 1990). This can be achieved by the means and techniques that integrate the individual elements of interior into a coherent balanced picture (Grimley & Love, 2007). In order to define the elements, that comprise the interior, a number of studies were provided: (Countryman & Jang, 2006; Fisk, Brown, & Bitner, 1993; Grimley & Love, 2007; Naqshbandi & Munir, 2011; Rutkin, 2005; Tombs & McColl-Kennedy, 2004). As a result, five basic atmospheric elements of interior design were defined: color, lighting, layout, style, and furnishings.

At the same time a lot of studies that are focusing on these elements are still very conceptual and theoretical (Countryman & Jang, 2006) or consider just one or two of these elements. In addition, author of this thesis didn't find any research that investigates these elements in several servicescapes within one hotel property. Thus, the objective of the current master thesis is to fill that research gap and to create a good basis for future studies. More specifically, this research attempts to identify the extent of influence of each serviscescape interiors and the overall role of these interiors on customer's loyalty intentions towards the hotel.

Thus the following hypotheses were formulated for the current master thesis:

 "The overall level of customer's satisfaction with the hotel interiors has a strong relationship with customer's overall loyalty intentions and significantly influences on them";

- "The level of satisfaction with the hotel lobby/reception zone interiors has a significant influence on customer's loyalty intentions, both under the high and low perceived service quality";
- "The level of satisfaction with the hotel restaurant interiors has a significant influence on customer's loyalty intentions, both under the high and low perceived service quality";
- "The level of satisfaction with the hotel residential room interiors has a significant influence on customer's loyalty intentions, both under the high and low perceived service quality".

In order to support these hypotheses empirically, a scenario-based study was conducted using 50 students from the "Norwegian School of Hotel Management" as a sample. The respondents were shown twelve actual pictures of hotel's servicescapes interiors (four for each servicescape) and were asked to indicate the level of their satisfaction according to five atmospheric elements and by using a five-point scale of satisfaction. The same scale but with different items was used in order to access the likelihood of respondents to choose/return and recommend the hotel, under the conditions of high and low perceived service quality. The overall respondent's satisfaction with the interiors and overall loyalty intentions were calculated and checked for correlation using a Pearson's correlation and linear (including multiple) regression analyses. The obtained results, implications and research limitations are briefly discussed.

#### **II.** Literature review

The effects of physical surroundings on human behavior: environmental psychology, atmospherics and servicescapes.

<u>Purposes of the chapter: to review the relevant literature that describes the influence of</u> <u>physical surroundings on humans as well as the role of atmospherics and servicescapes on</u> <u>customer's behavior.</u>

# 1. Environmental psychology

Environmental psychology - is a specialized field of psychology that studies the relationship between human behavior and environmental conditions in which it takes place (Mehrabian & Russell, 1974). The term "behavior" includes observable and unobservable (thoughts, emotions) human actions, while the environmental conditions are referred to the physical environment, which surrounds the organism. Although, experts of environmental psychology consider in their studies some of the aspects of social environment, like family or reference groups, their primary attention is aimed at studying the influence of the physical environment, which comprises the effects of noise, air pollution, extreme temperatures and different ways of organizing the space by architects (Mehrabian & Russell, 1974).

The first psychologist whose ideas about the "environment" largely correspond to the current interpretation of this term, was Kurt Lewin, who believed that the behavior (B) is largely determined by the characteristics of the individual (R) and the environment (E), thus, that B = f (P, E) (Lewin, 1936). While Levin had in mind mainly the social environment, he still was about the entire environment as such, but not just one factor, extracted from the general context and studied under the controlled laboratory conditions.

The interval between 1950 and 1970 – was the period of gradual development of the concepts of environmental psychology in the direction of strengthening the awareness of its important contextual role in human behavior, which was pointed by Levin. Festinger, Schechter, Beck and their colleagues (Festinger, Back, Schachter, Kelley, & Thibaut, 1950) conducted a study about the emergence of friendly relations between neighbors and development of social groups under the physical context of the residential complex. They found clear effects of the residential complex layout features on both of these social processes (friendly relations and social groups).

Subsequently, the experts in the field of human behavior have begun to analyze the working environment, for example the pilot cabin, and applied environmental psychology approaches in order to determine how the various organizations of the working environment affect the human reactions (Mellert, Baumann, Freese, & Weber, 2008).

By 1970 there were already a lot of researchers who called themselves as environmental psychologists and studied environmental conditions and the behavior, which arises from it (Mellert et al., 2008). Reim, Glass and Singer held a large series of studies about the effects of urban stress. Subsequently, the results of their laboratory experiments have been used to carry out the field research, which resulted with information about the received effects of noise in the metropolis (Reim, Glass, & Singer, 1971). The results obtained in laboratory conditions evidenced that the control of the noise level reduces the risk of stress. These results were extended to other environmental factors. It has been proved the ability to control the level of stress in overcrowded trains and at the workplaces.

Most of the experts in the field of environmental psychology prefer not to be bound to any particular method of research and try to verify the results of laboratory experiments in the field (Gifford, 2007). However, due to the fact that in the real world is not always possible to perform a blank experiment, the exclusion of alternatives and refinement of concepts often requires a laboratory study.

Another characteristic feature of the environmental psychology - is its attention to the interconnectedness of the environment and human behavior. In some cases, the environment forces people to certain actions, sometimes it gives them the right to choose, and sometimes - has less noticeable effect on their behavior. However, people are not always influenced by the environment, but also change it from time to time. In other words, it was found out that people have a sort of influence on it and the relationship between the environment and behavior is constantly changing (Fransson & Gärling, 1999).

Various studies in the area of environmental psychology have a strongly expressed applied nature (Tversky & Hemenway, 1983). They are mainly aimed at solving specific problems, for example, the correction of the effects of environmental stressors (Ulrich et al., 1991). As for the theoretical concepts that guide these studies - their number is small (if it is at all possible to speak about the existence of the theoretical foundations of the environmental psychology) (Mehrabian & Russell, 1974). Of course, there were some proposed conceptualizations about the set of problem areas, but they are treated as exceptions due to their secondary nature in relation to the work, directly aimed at understanding and solving the specific problems. One of them - is the stress model, used for combining the studies of a number of environmental factors, including overcrowding, noise and temperature (Barnes, 2007; Donnerstein & Wilson, 1976; Griffit & Veitch, 1971).

The concept of a non-specific response to stress, according to which people respond to stressors almost in the same way, was formed on the basis of the work of Hans Selye (Selye, 1946), who identified the general patterns of response to various harmful factors and formulated the concept of the "general adaptation syndrome" in order to explain this reaction. Further development of the concept of stress has led to the identification of the subjective assessment as an important mechanism for explaining the specific coping responses (Billings & Moos, 1981). In addition, differences were detected in response to different stressors. However, comparing all the results, the researchers agreed that the general regularities of human reactions towards various stressors are more important than the differences, and at least two environmental factors-tightness and noise, equally influence the behavior of people (Guite, Clark, & Ackrill, 2006).

A more general orientation within the environmental psychology is called determinism. This concept states that physical, behavioral and mental events are not accidental, but rather caused by actions of specific causal factors (Cassidy, 2013). Being rather unpopular, this concept, however, markedly revealed itself in the research of the impact of architecture on people's behavior (Gutman, 2009). The reason for the unpopularity of determinism lies in its excessive attention to environmental factors and the refusal to recognize the fact, that not only the environment affects human, but the human affects the environment. In its extreme form, determinism asserts a direct influence of the environment on certain forms of behavior, denying any sort of interaction between them. Architectural determinism comes from the fact that people are able to adapt to any space organization and their behavior in this environment is determined solely by the features of this space organization (Marmot, 2002). Most of the theoretical approaches towards the treatment of problems of environment and behavior are inconsistent with this point of view (Gardner & Stern, 1996).

Another perspective used by the environmental psychologists is focused on the concept of excitation. Since the excitation is one of the aspects of stress, this pattern is similar to the model of stress (Stevens, 1951). However, it still differs from it: excitement, defined as an increased level of activity of the brain and response of the autonomic nervous system (e.g., heart rate, respiration) may be associated with the events that do not cause stress (Stevens, 1951). The excitation can cause both unpleasant and pleasant incentives, and researchers believe that any environment can be, at least partially, described in terms of those its characteristics, that cause excitement.

Environmental load – is another perspective, used in the study of the environment and behavior, which allows focusing on the "attention" factor, as the main variable in the relationship between the man and the environment (Stokols, 1995). When the amount of information, generated by the environment, overcomes the limit that the individual can process, the phenomenon called "overload", occurs (Bawden & Robinson, 2009). Conversely, if there is a limited amount of information, the person appears in a sort of information vacuum. Using the term "overload", the researchers tried to explain the problems associated with urban life and congestion, while the concept of information deficit was applied for a better understanding of the effects of monotonous environment and isolation (Bawden & Robinson, 2009).

Barker's ecological psychology- is another theoretical direction in the study of the relationship between the environment and behavior (Barker, 1968). Barker was mostly interested in the holistic context of the behavior. His research states that each case of behavior has its spatial and temporal context, and the unity of these components, called "behavior setting" - is precisely an appropriate level of the analysis for environmental research (Barker, 1968). These

settings are supported by the actions of the variety of processes that admit alternative viewpoints on the problems associated with the environment.

There is a number of other theories and approaches in ecological psychology, however, this area of research has no serious theoretical base so far. Theories that try to cover all the aspects of the interaction between the environment and behavior are overly complicated and cumbersome. Environmental psychologists has abandoned them and defined their own research within a number of smaller areas, each of which has its own models and literature. These narrower fields of environmental psychology develop their own theoretical and applied aspects. Without going into details, it includes the effects of crowding, the human behavior in certain spaces, the impact of architecture on the behavior, studies about the environment (environmental cognition), environmental stress, the working conditions (working environment) and atmospherics.

#### 2. Atmospherics

The effects of physical surroundings on human behavior within the consumer settings, were firstly investigated by Philip Kotler (Kotler, 1973) who stated that tangible product is just a small part of the whole consumption package, and when it comes to the purchase decision - only the "total product" matters. Under the term of total product, Kotler mentions services, warranties, packaging, advertising, financing, pleasantries, images and one of the most significant features (according to Kotler) - place, where the product is bought or consumed (Kotler, 1973) . Kotler even notes that the place is even more influential item in total product, than the product itself. Kotler also was the first who introduced the term "atmospherics" in order to describe this new

direction of research and gave it the following definition: "conscious designing of space to create certain effects in buyers "(Kotler, 1973).

According to Kotler, the atmosphere of the organization is a decisive factor in customer service and can be the basis for the decision of a customer to buy a certain product or to use certain services offered by organization. The atmosphere is perceived by the human senses. The terms that are used for describing the senses are also applicable for describing the atmosphere of the specific environment (Kotler, 1973). The main human sensory channels of perception of the atmosphere are: sight, sound, scent and touch.

*Sight.* Visual sensory channels of perception include the human perception of light, color, brightness, contrast, size, shape and space organization. The visual aspects of the service become almost crucial, since it is difficult to assess the quality of the services before its acquisition (Hoffman & Turley, 2002). The appearance of various information materials, office equipment, color of the walls and curtains, wallpapers, windows size, staff uniforms and other elements of the interior design of the place comprise the potential evidence of the upcoming service quality. This is also the main reason that explains the peculiarities of the staff recruitment with a specific appearance in the service sector (Gustafsson, Edvardsson, Nickson, Warhurst, & Dutton, 2005).

The second major cause of impact on the visual consumer's sensory channel - is an attempt to create a unique image of the company, recognition and thus differentiation from the competitors. The appearance of the interiors of numerous restaurant chains, like "McDonalds", "Hard Rock Café", "Planet Hollywood", "Republic of Coffee" or popular hotel chains like "Marriott", "Hilton" or "Sheraton" looks almost consistently in all countries and cities, where these companies operate. This is made primarily for the purpose of the "brand recognition",

which allows to create the necessary quality perception of the offered product or service (Porter & Claycomb, 1997).

The third reason - is the ability of the colors to influence on the mood of consumers (Valdez & Mehrabian, 1994). Color solution is also treated as one of the major factors of the customer's interior perception (Countryman & Jang, 2006). The colors are usually divided into "cold" and "warm" ones. Besides that, each color or range of colors can cause certain associations and influence on the creation of a "cold" or "warm" atmosphere of the service (Baker & Cameron, 1996). Discos and night clubs, as a rule, do not use cold colors in their interiors for obvious reasons, while the restaurants which are applying for a romantic image, do not usually use bright warm colors in their interiors (Shen, Yuan, Hsu, & Chen, 2000).

Some of the researchers have also noted an important role of the space organization for the visual perception of the consumer (Haber & Hershenson, 1973). Such things, like unorganized space or clutter on a desktop, according to the results of various studies, have a significant impact on consumer intentions to purchase the services offered by the company. Hotels, beauty salons, restaurants and other similar companies deliberately do not hide their interiors from the potential consumers. Moreover, the interiors tend to be the main promotional material in the development of a company's communications strategy (F. R. Lawson, 1995).

*Sound.* The hearing sensory perception channel includes consumer perception of loudness, pitch, tempo, tone and quality of sound, music or speech (Bruner, 1990). Accompanying sound attracts attention, creates mood and informs the customers about various things. The research shows that music greatly affects the mood and behavior of consumers (Bruner, 1990). For example, the results of monitoring the visitors of restaurants shows that

under the calm music consumers stay longer and spend more money (Stroebele & de Castro, 2006). What is particularly interesting - music has a beneficial effect on the motivation and effective behavior of the staff that provides the service to the consumers (Duncan Herrington, 1996).

The character of music is essential not only for the marketing in the service sector, but also in other fields of business and especially in retail stores. Musical arrangement in retail space is based on the concept of "functional music" (Jones & Schumacher, 1992), which appeared at the beginning of the last century. Functional music - is a specially selected music playback order for a particular purpose. In this case, the task is to stimulate the consumer activity. In addition, the importance is given to the emotional state of the consumer when choosing a product. By itself, functional music is a powerful tool for managing the mood of potential buyers (Jones & Schumacher, 1992). If the person feels a sense of comfort while being in the shop, it significantly increases the likelihood that this person will come back next time and ensures the repeat purchases.

In one experiment (A. C. North, Hargreaves, & McKendrick, 1999), the researchers were broadcasting French and German music in one supermarket during the sales of French and German brands of wines. It turned out that the sound of French music increased the sales of French wine in three times in comparison to the sales of German wine. The subsequent broadcasting of German music instead of French, in its turn, increased the sales of German wine in three times.

Music, considering its influence on human behavior (A. North & Hargreaves, 2009), can also be successfully used in creating an attractive hotel interior. The world's first music hotel ("Hard Rock Hotel Bali,") was opened in 2003 on the shores of Kuta in the south of the Bali Island (Indonesia). Hotel is focused on the contemporary music. Four hundred and seventeen rooms are located within the wings, where each of them are decorated in a particular style of music: rock and roll, blues, reggae and alternative. There is an originally designed open hall in the front of the reception desk, where the walls are decorated with the things of various rock stars, and in the center, there is a screen which constantly displays music videos. Live music concerts are organized on the stage, which towers over the square bar. Thus, the guests of the hotel immediately upon the arrival can find themselves in a "Hard Rock" cafe. Each of the hotel clients can try their vocals in one of the karaoke halls. Guests staying at the hotel can also record their own album in a professional studio. In the center of the pool, located on the beach, there is a sandy island with a stage. Cost of living in the "Hard Rock Hotel Bali" is not cheap, however this hotel is always full of guests.

*Scent.* The smelling sensory channel of perception includes the perception of smell and freshness (Kotler, 1973). Studies suggest that the presence of a pleasant smell in the casino increases the usage of slot machines by 45% (Hirsch, 1995). The smell, as well as the color, can be a part of the overall brand image of the company. For example, the American cinemas without a popcorn smell has very little chance of survival, as the popcorn smell is almost synonymous with the movie watching for a lot of Americans (Lindstrom, 2006). Other examples of the usage of smell for sales promotion can be the following ones: nylon trees and pine deodorant, coffee store and a fan in a shop window which spreads the smell of the coffee, billboard advertising doughnuts and the smell of doughnuts, perfume ads in the magazine and the magazine strip page with the samples of this perfume (Morrin & Ratneshwar, 2003).

*Touch.* Touch - is the ability to perceive the effects of various environmental factors by means of the musculoskeletal system (muscles, joints, tendons, etc.), skin receptors and certain

mucous membranes (on the tongue, lips and etc.) (Peck & Wiggins, 2006). The tactile sensory perception channel includes softness, stiffness, smoothness, roughness and temperature. The perception of the objects in the environment using a tactile sensation enables to estimate their size, shape, texture, surface properties, temperature, humidity or dryness, position in space or movements (Peck & Wiggins, 2006). The simplest example of the impact on the tactile sensor channel - is the usage of air conditioning in the rooms. Other examples include the convenience and quality of the seats or other parts of furniture in airplanes,hotels, cinemas, offices, restaurants and etc (Kotler, 1973).

Physical contact (in certain situations) can also be treated as one of the most important components in the process of making a purchase decision. The lack of physical contact is the main reason for the collapse of a large number of online stores offering clothes, as when it comes to buying clothes, a customer will certainly want to feel it, to check its texture or to try it (Kotler, 1973).

# 3. The determining role of atmospherics in service settings

One of the most popular trends in the development of marketing and branding can be, certainly, the formation of more clear and coherent synesthetic paradigm (Kotler, 1973). The professionals of advertising, marketing, branding and design are coming further away from a fragmented, disjointed management communication and product development, towards more accurate and holistic forms of work (Sureshchandar, Rajendran, & Anantharaman, 2002). Marketing specialists have gained enough experience about the impact on consumer's sensory channels through the atmospherics, as it makes easier for certain companies to control the

behavior of the consumers and to compete in the market. Kotler pointed out some settings, under which the atmospherics will be more influential (Kotler, 1973):

- Place where the product is bought or consumed or where the seller has design options;
- The level of competition between the companies is high;
- Product and/or price differences are small;
- The product/service entries are aimed at distinct social classes or life style buyer groups.

These settings adequately fit the current situation on the market of hospitality and tourism services and on the market of services as a whole (Countryman & Jang, 2006), that's why it is of special importance for the companies, involved in providing high quality services, to pay much of their attention on the atmospherics. The main reason for this lies primarily in the differences which exist between the market of services (intangible products) and the market of consumer and industrial products (tangible products) (Rushton & Carson, 1985). These differences are:

# 1. The difficulties in assessing the quality of the service.

It is difficult for the customer to assess the quality of the services before purchasing, while for the companies it is difficult to prove and to show the quality of the provided services before the provision (Cronin, Brady, & Hult, 2000). When purchasing a tangible product, a consumer sees the visual component of the product - it is possible to touch it, to evaluate its packaging and to smell or test its efficiency. When purchasing services, the consumer has only an understanding of the characteristics of the services and makes the purchase almost "blindly". In general, the purchase of the services in some way can be comparable to the purchase of goods via the Internet, where the quality of goods can only be accessed by the described characteristics,

brand reputation or through the reviews, left by the previous consumers (Butler & Peppard, 1998).

#### 2. The difficulties in estimating the cost of service.

The costs incurred by the company in order to provide a one unit of service, are difficult to assess (Feather & Shaw, 1999). Most companies have difficulties in determining the cost of their services, as a large share of their costs belongs to intangible expenditures. It is also difficult to define the starting point for the calculation of the service price – what has to be taken as a one unit of consumption (comparable to one tangible product, which has its established price) (Feather & Shaw, 1999). Wrong definition of the unit of service consumption leads to the dissatisfaction of the consumers, who may start believing that they have been overcharged.

# 3. Customers are not familiar with the process of service.

Low awareness about the quality of the service hinders the customer to form a correct idea about the cost of the service (Cronin et al., 2000). All the major companies are trying to improve the quality of their services and keep on adding a number of additional free bonuses, but unfortunately, for the ordinary consumer it is very difficult to compare the services among themselves, while for the company it is quite complicated to explain all the benefits of the offered services, especially if it is overpriced (Bawden & Robinson, 2009).

## 4. Low brand awareness.

Low awareness about the companies that provide services is mainly caused by the following factors (Cronin et al., 2000):

Irregular demand. Unstable demand for the company's services prevents a permanent contact with the client.

Changeability. The emergence of new players and changing of the market conditions occurs very often. The client is constantly faced with numerous non-brand offerings.

Promotion difficulties. Some of the services are having limited opportunities for the promotion because of the narrow target audience: limited channels of communication and the high cost of a contact with the target client by using the mass means of communication.

# 5. The full cost of the service is difficult to estimate in advance.

In some industries, the total cost of the service can only be determined after its completion, which creates uncertainty among the consumers, increases the risk of making the wrong choice and reduces the perceived value of the service (Feather & Shaw, 1999).

#### 6. Demand impermanence.

The demand for the certain services (especially in hospitality and tourism industry) can be characterized as unstable and seasonal, which creates low-profitable periods for the companies.

#### 5. High level of fixed costs

Service providers are selling mainly intangible goods and assets, which is related to a high level of fixed costs (costs of maintenance, mandatory staff and etc.) (Coffey & Bailly, 1992). With the high fixed costs of a service, provider needs to have a constant or increasing consumer demand in order to save the profitability.

Hotel and tourist enterprises, operating in difficult market conditions, should be attentive to the questions like whom and how to serve. Any market consists of the consumers who differ from each other by their tastes, desires, needs and motivations (Kotler, 1973). Therefore, the consideration and implementation of atmospheric theories involves taking into account the individual preferences of different consumer categories. The feature of the hotel marketing derives from the features of the hotel product, its fixity in time and space. It is impossible to significantly change the number of rooms in a short period of time and to store them for future sales (Kotler, 1973). As it was mentioned before, the demand for the hotel services is quite unstable and usually depends on the time of year and is susceptible to seasonal fluctuations. Production of the hotel product requires high material costs which do not depend on the number of clients (guests). The lack of funds for fixed costs reduces the quality of the hotel product (Akbaba, 2006). All this, in its turn, sets the hotels new requirements towards improving and implementing of new approaches for doing business. Consequently, there is need for a quick response to the changing consumer attitudes and priorities, thus, it is of great importance to pay a professional attention to investigating and creating a favorable (for the human channels of perception) atmospherics in the hotel (Kotler, 1973).

#### 4. Servicescapes

One of the main directions of formation a strategic competitive advantage in the hotel industry is the provision of a higher service quality in comparison with the competing analogs (Anantharanthan Parasuraman, Zeithaml, & Berry, 1985). The key here is to provide the services which would satisfy and exceed the expectations of the target customers. Customer expectations are usually formed on the basis of the already available experience and on the information obtained through the direct (personal) or mass (impersonal) channels of marketing communications (Anantharanthan Parasuraman et al., 1985). On this basis, consumers choose a service provider and when the service is already granted, compare their understanding of its quality according to their expectations. If the perception of the service does not meet earlier expectations, then there is a high chance of losing those customers, at the same time, if the quality of the service meets or exceeds customer's expectations, they can revert to such a service producer and repurchase the service again, thus making customers satisfied with the service, which in its turn and with a high probability leads to their loyal attitude to the organization (Mittal & Lassar, 1998).

Marketing has always been traditionally engaged in solving the problems of customer's satisfaction and loyalty which are now becoming the most dominant factors in the success of most companies (Mittal & Lassar, 1998). Modern marketing has gone from classical concepts formulated in the mid-20th century, by the father of marketing- Philip Kotler. What was good and right in the industrial age is almost meaningless today, in the post-industrial 21st century. This process has begun in the 80ies of the past century, and today even Kotler, in his last works (Kotler, 2012), casts doubt on the basics of classical marketing. Today, the concepts of marketing are developing in several directions, in order to adapt to the new reality and modern features of the economy. There are additions to the marketing - new concepts that go beyond the axioms of classical marketing (such as a widely used today the concept of "brand"). However, with each new attempt to overcome the limitations of the classic tenets of marketing, it weakens as a coherent system of knowledge (Kotler, 2012).

Well-known marketing mix of 4P – which until recently was the main orient helping marketers to develop their programs, specifies four areas to be covered (Goi, 2009):

1. Product - everything that can be offered to the market for customer's attention, acquisition, use or consumption. It may be a physical object, service, person, place, organization or idea.

2. Price - the amount of money or other property that the client changes in order to possess or use the product or service.

3. Promotion – actions aimed at informing the targeted categories of customers about the products, services and their merits, in order to incline the customers to purchase them.

4. Place - all the activities of the company, aimed at making a product or service available to the target group of customers.

In 1981, Booms and Bitner, developing the marketing concept in the field of service settings, offered three additional P (Goi, 2009):

5. People – all the people directly or indirectly involved in the provision of services, for example, hotel staff and clients.

6. Process - procedures, mechanisms and actions that ensure the provision of the services.

7. Physical Evidence - physical environment in which the service is assembled.

An advanced marketing mix of 7P gradually replaces the 4P, because of its better correspondence to the peculiarities of the service sector. One of the major roles here is given to the physical evidence factor, which is also called as "servicescape" (Goi, 2009).

The concept of "servicescape" is a further development of the term "atmospherics", firstly introduced by J. M. Bitner (Bitner, 1992), who explained it as a "physical environment in which the service process takes place". Research suggests that the physical evidence factor may influence the customer's ultimate satisfaction with the service (Bitner, 1990), that's why

companies, which are involved in providing leisure services (like amusement parks, concert halls, theaters, hotels, resorts, and etc.), operating in the conditions of a strong competition, generally pay a lot of attention to their physical surroundings and are trying to keep the customers there as long as possible (Turley & Fugate, 1992). Other research also shows that not only the customers are under the influence of physical environment, but also the people who are providing the service - employees (Baker, Berry, & Parasuraman, 1988). Well-arranged servicescape increases employees' satisfaction, productivity, and motivation, which has a beneficial effect on the quality of the service (Lin, 2004).

The conceptual framework of the servicescape includes three environmental dimensions:

- 1. Ambient conditions;
- 2. Spatial layout;
- 3. Function signs, symbols, and artifacts.

According to this conceptual framework, Bitner also made a number of propositions, where three of them are of a particular interest (Bitner, 1992):

Customers perceive the environments as a whole, where the three dimensions influence the overall perception independently and/or through the interaction with the other dimensions. Positive experience of the perceived servicescape can lead to positive associations about the organization, its employees, and offered products and services.

The physical environment serves as a recognizing tool which helps the customer to differentiate among the companies. The first empirical test of this conceptual framework was made by Wakefield and Blodgett (Wakefield & Blodgett, 1996), by showing a videotape of the

servicescape of a high perceived quality to the participants in a leisure service setting. The results demonstrated a greater participant's excitement level, which, in its turn, leads to greater satisfaction. Another study by Reimer and Kuehn (Reimer & Kuehn, 2005) indicated that the servicescape has a direct and an indirect effect on perceived service quality. Authors proposed a new model for assessing the effects of the servicescape on quality perception based on SERVQUAL (a model that is used to determine the level of customer satisfaction (Arun Parasuraman, Zeithaml, & Berry, 1988)). A multi-dimensional and more social view of servicescape was studied under the context of UK restaurants by Harris and Ezeh (Harris & Ezeh, 2008). They evaluated the linear influences of nine servicescape variables on customers' loyalty intentions and found some significant associations. The problems with the management of the servicescape related to the service failures were studied by Hoffman and his colleagues (Hoffman, Kelley, & Chung, 2003). Among the 1,370 failure critical incidents, 123 were identified as servicescape failures. Cleanliness issues, mechanical problems, and facility design issues were the most likely to occur.

However the research of the servicescapes within the hotel property is quite limited. A statistical support for the positive influence of hotel hospitality on guest satisfaction as well as a positive moderating effect of the servicescape were detected by Ariffin Nameghi and Zakaria in their study of 403 hotel guests in Malaysia (Ariffin et al., 2013). Countryman and Jang (Countryman & Jang, 2006) investigated the effects of hotel lobby servicescape on the customer's impressions and perceptions according to five atmospheric elements of interior (color, lighting, layout, style, and furnishings) which are recognized as common for customer's servicescape perception. The study was conducted through demonstrating the pictures of the hotel lobby to the participants. As a result, three of the atmospheric elements - color, lighting,

and style, where the most influential on the overall customer's impression. Authors admit an important role of lobby, which helps to establish the first impression about the entire hotel since the customer enters it, but also acknowledge the fact that there are more servicescapes within the hotel building, which can spoil or improve that first impression. This limitation is treated by the authors as a gap which should be filled by the future studies, in order to investigate the concepts of servicescape more thoroughly.

# The interior design of the hotel servicescapes

Purposes of the chapter: to review a literature that is relevant to the hotel interiors; to give the main definitions required for the current study; to describe the features of the hotel building and its main servicescapes; to review each of the elements that comprise the interior perception.

# 1. Hotel interior design: definition and specificity

According to various studies (Countryman & Jang, 2006; Lin, 2004; Lucas, 2012; Orth et al., 2012), the perceived quality of any servicescape is largely determined by the quality of its interior design. Design (from the Latin- desing) -is an idea or project. This term denotes various types of activities aiming at the formation of the aesthetic and functional qualities of the surrounding environment (Abercrombie, 1990). According to the style in which the interior is performed, it is possible to see the face of the company, type of its activity, its tastes, image, and character (Abercrombie, 1990). Creating a unique face of the interior together with its style, color, lighting, layout and furnishings, should comprise the main task for the designer (Grimley & Love, 2007). In the narrow sense of the term, "design" means the process of an artistic construction and is directly related to the interior. Interior (from the French- internal) -is an architectural and artistic design of the internal areas of the building, which provides an aesthetic perception and favorable conditions for human life (Blakemore & Rabun, 1997). The interior design solution of the entire building and its separate premises is defined by their functional purposes and the special importance here is given to the interior harmony - a balanced combination of all the elements of the interior, as well as an understanding of its general style (Blakemore & Rabun, 1997).

The existing high culture of the interior design in the modern hospitality companies is linked to the achievement of the people, involved in designing (interior designers) and caused not only by their desire of beauty and harmony, but also because of the positive emotions, which can be achieved through a high level of the interior quality perception - it is well known that the style of the interior largely determines the mood of the visitors and working conditions of the employees (Miwa & Hanyu, 2006; Orth et al., 2012; Reimer & Kuehn, 2005; Rutes & Penner, 1985).

The concept of the "hotel interior design" includes the layout of its premises, their style, decorations, furniture, colors, lighting, architecture and other items that affect the overall customer's interior perception (West & Purvis, 1992). All the components of the interior should be in a close contact with each other. For example, the placement of furniture and lighting must be associated with the size of the area and its purpose. Lighting affects the color scheme of the interior. The color of architectural surfaces is associated with the color of the furniture while the color of the furniture should fit the color of the textiles (West & Purvis, 1992).

The problem of hotel interior design – is a complex problem, and it should be solved using the following regularities: is has to be functional and beautiful at the same time, should create a sense of space, light, proportioning and symmetry (West & Purvis, 1992). The main thing here is the ability of a designer to express his attitude towards the hotel clients through the interior design. Different cultures have their own vision of comfort and luxury, thus there is a big variety of directions in the design of the places of temporary stay (Abercrombie, 1990).

Nowadays, it is not enough to create a standard comfort that meets the needs of the hotel customers. Due to the high competition on the market of hospitality, there is a presence of

different requirements concerning the interior and exterior design of the hotel, which should be catchy and unique, in order to make the guest to choose the same hotel again (West & Hughes, 1991).

The modern hotel design determines the appearance of the hotels, both present and future ones (B. Lawson, 2006). Until recently, the fashion for the interiors within the hotel industry was set by the classic luxury hotels "Ritz". Today, at the forefront of the hotel designing, stand not the corporation or individual designers. It is becoming more and more prestigious if the hotel design is performed by the professionals who have never dealt with it before, for example fashion designers or sculptors (Ransley & Ingram, 2012). Among those who are involved in the hotel designing, it is possible to notice some of the international celebrities, like Brad Pitt or Giorgio Armani. Among the major contemporary designers, Philippe Stark is considered as a leader, who took part in designing the interiors of such a remarkable hotels, like the "Royalton Hotel" in New York and the "Mondrian" in Los Angeles (B. Lawson, 2006). Stark design concept became the basis for the "W" hotel chain, which was introduced to the market by the Starwood Corporation. It is believed that Stark was the founder of such a trend in the hotel business as a "boutique hotel".

Creating the interior design of the hotel – is a responsible project, which contributes to a pleasant rest, ensures a comfortable accommodation, and is made in accordance with all the basic requirements of convenience, beauty and functionality (West & Purvis, 1992). Creating a hotel design - is quite a difficult and ambitious task, which is feasible only for an experienced company, which has to perform such a design solution that it will positively affect the life of people during their stay and will ensure their return. The main design challenge – is to create a

comfortable and cozy leisure at the hotel, satisfy absolutely all the customers and surprise them with interesting design solutions (Wakefield & Blodgett, 1994).

While creating the interiors of the hotel, designers often use a variety of decorative solutions, but do not deviate from the basic style of the hotel. This allows the customers to select the variant, which corresponds to their tastes and demands, raises the status of the hotel and increases the loyal customer base (West & Purvis, 1992).

Among the companies that are considered as a leaders in the hotel designing, worth mentioning are: "HKS", "Wimberly", "Allison Tong & Goo" and "Leo A Daly", whose income comprises tens of millions of dollars. Thus, the HKS Company, located in Dallas, has designed the hotels for such a well-known operators like Ritz-Carlton (Hotel "Ritz-Carlton" in Dallas) and Starwood (hotel "W Dallas Victory Hotel and Residences") also in Dallas (Inc, 2001).

However, in the case of the hotel designs, developed by the large companies for large companies, it is primarily about the mass-produced industrial designs. About the uniqueness of these hotels is possible to mention only within a certain framework, which is, anyway, limited by the policies of the hotel corporations (Riewoldt, 2006).

As for the unique hotel designs, this market is still evolving. However, even now there is a "pantheon" with a dozen of names that are treated as indisputable authorities in their field. In Europe, the reputation of good hotel designers is consolidated by the Italians (Riewoldt, 2006). There is a number of young, but already experienced designers who created the hotels not only in Italy, but also in France and Great Britain, they are: Bruno Borrione, who is working with Stark, and Olga Polizzi. Borrione is known, primarily due to his project of the hotel "Le Placide" in Paris, while Olga Polizzi earned her reputation through the authentic design of the "Tresanton" hotel in English Cornwall (Riewoldt, 2006).

Thus, a professionally designed interior in the hospitality industry - is a creative work, where the mutual conformity of individual elements is caused by a common idea of the author and aimed at attracting, satisfying and keeping the customers.

# 2. The features of the hotel buildings and its main servicescapes: residential room, restaurant and reception/lobby area.

Hotel buildings are having complicated and frequently, unique structures. Their placement in the planning structure of the city is a difficult and responsible process. Architecture and the interior design of any hotel and its servicescapes are dictated by the basic concept of the company, and are determined by the specifics of the hotel, its profile, purpose, number of tourists and their contingent (Riewoldt, 2006). A modern hotel is designed to create a comfortable environment for the overnight stays of clients and to provide them with a number of additional services, that's why the hotel building has a multi-functional structure and must contain technologically sophisticated equipment (Riewoldt, 2006). The major factors that must be taken into account while designing and constructing the hotel, are (Rutes & Penner, 1985):

1. The hotel building should organically fit the environment, without compromising the features of urban, rural or natural landscapes.

2. The designer of the building must consider several climatic factors, like temperature and humidity, proximity to the sea or to other water bodies, direction and speed of the wind and etc. 3. Architectural, structural and design planning of the hotel building should not be overly expensive, in order to ensure its economical operations with a rational combination of constant and one-time costs.

4. The building must conform to the aesthetic, technical, sanitary and environmental standards and guidelines. The possibility of further reconstruction of the building should also be provided.

5. The design of the building should also play an advertising role. The facades of the hotel should emphasize its prestige.

6. Capacity of the hotel and the number of floors must depend on the mode of its operation - seasonal or year-round.

A hotel building can have a rectangular, U-shaped, cross-shaped or other architectural forms, with a gallery or corridor system of rooms placement (Rutes & Penner, 1985). If there is a complex form of the plan - the schematic layout of the hotel can be mixed, which allows increasing the number of rooms and reducing their distance from elevators and stairs. According to the analysis of the best practices of designing and building the hotels - buildings with a rectangular or complex shape are more common (Rutes & Penner, 1985). The residential part usually has a significant number of floors while the public area is projected with a height of 1-5 floors, depending on the number of premises and the composition of its facilities (Rutes & Penner, 1985). High-rise hotel buildings (over eight floors, depending on the local building regulations) - is a very expensive building solution with a long payback period and it also requires an additional investments in the stairwells' heat and smoke vent together with the additional fire extinguishing systems (Ali & Moon, 2007).

When designing the hotel facade, it should be borne in mind that bright facades look nicer and are better visible in the dark. Glazed facades are expensive in their installation than deaf ones and require more expensive air-conditioning systems. Panoramic windows are worth installing only if the view from them is good (Ali & Moon, 2007).

The physical property of the hotel can be divided into the following functional areas: residential, administrative, service zones and utility area (F. R. Lawson, 1995). The composition of the residential area includes rooms and interim premises (recreational areas, corridors and etc.). The administrative area places the hotel's administration and the rest of the staff which is not directly engaged in a contact with the clients. The composition of the utility area comprises warehouses, laundries, linen and ironing rooms, repair and sewing workshops, boiler rooms, commutator area and other technical premises. A structure of a hotel's service zone represents an area or areas, where the services are directly delivered to the customer and may include the following premises:

- reception area and lobby;
- restaurants, cafes, bars, canteens;
- concert halls, night clubs, cinemas and etc;
- hairdresser or beauty salons;
- conference halls/business centers;
- premises for sports, health care or spa-centers;
- tourist offices;
- premises for additional consumer services.

Any hotel, operating in the modern market, has three basic functions: provision of food, provision of a sleeping place and ensuring an adequate level of service quality (Ariffin, Nameghi, & Zakaria, 2013; Countryman & Jang, 2006; Orth, Heinrich, & Malkewitz, 2012 (Akbaba, 2006), subsequently, the special attention of the interior designers should be given to the servicecapes in which these functions are provided: Restaurant, Residential room and Reception and Lobby area.

*Residential room.* Residential room in the hotel – is one of the main elements of the hotel service and represents a multifunctional space intended for guest's resting, sleeping and working (Riewoldt, 2006). The disposition of the hotel living quarters depends on the category of the hotel and may include the following types of residential rooms (F. R. Lawson, 1995):

- "SNGL (single)" is the most commonly used type of room;
- "DBL (double)" -is a room with one large double bed, also called a standard room;
- "TWIN (twin)" is a double room with two single beds;
- "TRPL (triple) is a triple room;
- "4 PAX (quarter)" is a quadruple room;
- "3 ADL" is a five-bedded room;
- "Duplex" is a two-story room;
- "Family Room" is a room of a large area, that can lodge up to 4 people;
- "Studio" is a one room larger than the standard and usually includes a small kitchen;
- "Suite" a superior room of a large size;
- "Mini Suite" is a room of a smaller size than a normal suite;
- "Junior Suite" is a large room with a comfortable fenced off sleeping place;
- "Senior Suite"- is a room which usually consists of two areas: living room and bedroom;

- "Executive Suite" is a suite with two bedrooms;
- "King Suite" is a "royal suite" that usually has two bedrooms, a living room and a meeting room or office;
- "Superior" is a room that has a larger size than a standard room.

The space of a hotel's residential room is usually divided into functional areas. Up to 70% of the total room space (considering a normal single room) belongs to the residential area, up to 14% - to the anteroom and up to 20% - to the bathroom and toilet (F. R. Lawson, 1995).

A single room of a four-star hotel should include the following basic items: bed, table, chair, sofa, support for suitcases, wardrobe for clothing and footwear, TV, radio, refrigerator, air conditioner; minibar, built in safe, telephone and various attributes of comfort (flowers, carpets, pictures, curtains and etc.) (F. R. Lawson, 1995). The furniture in the room is located depending on the size of the room, partitions, heating characteristics, and technical parameters. Furniture should provide a convenience to the user and comply with all the health and ergonomic requirements (F. R. Lawson, 1995).

The room equipment depends on its category and the class of the hotel. Thus, the room of a hotel aimed primarily on business tourists should be of a larger size (that ensures the possibility of inviting business partners) and with a maximum of sound insulation. Specific requirements are also applied for the rooms, where the clients with children, family clients or tourists with animals are staying (F. R. Lawson, 1995). A number of hotels possess transformable rooms, which allows changing the size of the room by uniting two rooms through the sliding partitions of the shared wall (Riewoldt, 2006).

The influence of interior design of the hotel residential room on customers did not receive a lot of research yet. All the studies that mention hotel rooms are mainly about pricing and taxes, however there is one study by Mattila and O'Neill (Mattila & O'Neill, 2003) who examined the relationship between the room prices, occupancy percentage, and guest satisfaction through surveying 3,875 of actual hotel guests. It was found out that room cleanliness, maintenance, and attentiveness of staff together with the room price were the most influential factors that predict the overall guest satisfaction, while the occupancy percentage failed to be a significant predictor.

Thus, the current master thesis proposes the following hypothesis: "The level of satisfaction with the residential room interiors has a significant influence on customer's loyalty intentions, both under the high and low perceived service quality".

*Restaurant*. The structure of a modern hotel usually includes a catering zone, which may consist of restaurants, banquet halls, cafes and bars (West & Hughes, 1991). The choice of its interior style and cuisine largely depends on the specialization of the hotel, and its corporate identity. Catering zone may comprise a group of following areas: main eating area, a zone of food distribution (lunch counters, buffets), production facilities (kitchen), administrative areas and storage rooms (West & Hughes, 1991).

The main eating area is usually made in a classic style without any frills and extravagance that makes it suitable for the banquets and formal events. The color scale should be restrained and relaxed, as a lot of people come in the morning for breakfast or in the evening to relax after a busy day (Abercrombie, 1990). A number of seats in the main sitting areas depends

on the purpose of the hotel, its level of comfort and is usually calculated according to the following standards (Abercrombie, 1990):

- Restaurant: 45-65% of the total room fund;
- Cafes: 13-28% of the total room fund;
- Bars: 13-24% of the total room fund.

Space-planning decisions and the interior design of the catering premises are performed according to the characteristics of each individual hotel, its location, orientation and nature of the surrounding environment (Rutes & Penner, 1985). In addition to its primary purpose, catering premises are used for meetings and conversations (especially during the evening hours), so their architectural and spatial organization of the interior should provide the necessary conditions and atmosphere (Rutes & Penner, 1985).

The practice of the hotel construction indicates that large eating areas are usually divided into separate zones, which reduces their visual size and contributes to the feeling of isolation and comfort among the visitors (F. R. Lawson, 1995). In order to achieve this, the designers are using a variety of options for furniture placement, different types of sliding partitions, which are also frequently used in residential rooms and conference halls, more intensive lightening coverage of the tables in comparison to the general lightening in the area, the allocation of separate eating cabins, usage of artificial and live plants in interior as well as variations of the floor and ceiling planes (F. R. Lawson, 1995).

In comparison to the residential room, restaurant servicescape has always been under the scientists' scrutiny, although, the majority of the studies are mainly about ordinary separate restaurants, than the restaurants within the hotel property, that has a few differences. The

restaurant at the hotel is obliged to feed the hotel guests, therefore it works primarily for the internal customers. This implies the existence of a separate entrance, which is normally unavailable for the customers from the street. However, hotel restaurant do not refuse from the income that can be obtained from the clients that do not live in the hotel, but for them, the hotel restaurant applies a different operational mode.

As for the restaurant interiors, various studies were conducted in order to investigate the impact of physical surroundings on customers' emotions and satisfaction. For example, a study made by Lin and Mattila (Lin & Mattila, 2010) in an actual restaurant setting, indicated that both the servicescape and the service encounter positively influence on customer's pleasure and satisfaction. In addition, the perceived congruency had a positive impact on pleasure level, while such an impact on arousal wasn't significant.

Another study modified the Mehrabian–Russell model and checked how the customers' perceptions of dining environments affect their emotions and behavioral intentions. As a result, such factors like facility aesthetics, ambience, and layout had significant influence on the degree of customer pleasure, while facility aesthetics and employees largely determined the level of arousal. Furthermore, the correlation between pleasure and arousal was supported.

Ryu and Jang, in their research (Ryu & Jang, 2008), developed a "DINESCAPE" scale using the dimensions of the physical environment of upscale restaurants. The scale was identified through the quantitative analyses and comprises the following items: facility aesthetics, ambience, lighting, service product, layout, and social factors.

The customers' meal experiences in the settings of á la Carte restaurants were studied by Hansen and his colleagues (Hansen, Jensen, & Gustafsson, 2005). Authors conducted seven semi-structured interviews with the experienced restaurant customers in two Norwegian cities. As a result, an overall conceptual model that fits the most important meal experience categories (core product, the restaurant interior, the personal social meeting, the company, and the restaurant atmosphere) was developed.

Thus, the current master thesis proposes the following hypothesis: "The level of satisfaction with the hotel restaurant interiors has a significant influence on customer's loyalty intentions, both under the high and low perceived service quality".

#### Lobby and reception area.

A hotel lobby has a responsible option of meeting the guests, creating their first impressions about the hotel (Braun, 2011; Countryman & Jang, 2006) and plays a crucial role in branding and forming the hotel's desired atmosphere (Rutkin, 2005). Therefore, the task for the designer is not only to develop an affective distribution of the streams of visitors, but also to create a bright, memorable and catchy interior (West & Purvis, 1992). As a rule, the lobby has an entrance zone, the reception area (front desk), resting area for a gathering of organized groups (sometimes has an attached lobby bar), information installations, telephones, ATMs, trading booths and is connected to the rest of the service zones directly or through the stairs, elevators or corridors (West & Hughes, 1991). The structure and the size of the lobby's functional areas are determined by the level of hotel's comfort, capacity and specialization.

The largest part of the lobby belongs to the space of guest's active movement and rest. The competent layout of the interior objects within this area ensures a comfortable stay and helps to avoid the most intense flows of visitors, especially if the hotel deals with a big tourist groups (West & Hughes, 1991). By and large, there is a lack of data about the physical environment that emphasizes the attractiveness of hotel lobbies. The most relevant study, as it was already mentioned before, was conducted by Countryman and Jang (Countryman & Jang, 2006), who assessed the perceived quality of the lobby servicescape through a scenario-based study according to five atmospheric elements: Style, Color, Lighting, Layout and Furnishings. Three of them: color, lighting, and style, were the most influential.

Another study, very similar to Countryman and Jang's one was performed by Dhiraj Thapa (Thapa, 2007). Author explored the design features that guests found most attractive in a hotel lobby (facility aesthetics, lighting, interior design and decor, layout accessibility and seating comfort). A significant relationship was found between the following design elements: color, furniture layout, lighting, floor treatment as well as between the interiorscaping and accessibility. It was found out, that separate aesthetic features do not have a strong effect on guests unless the final result creates an effective environment.

Thus, the current master thesis proposes the following hypothesis: "The level of satisfaction with the hotel lobby/reception area has a significant influence on customer's loyalty intentions, both under the high and low perceived service quality".

3. A review of the basic components that comprise the customer's perception of the hotel interiors: Style, Color, Lighting, Layout and Furnishings

The overall quality of the interior design of the servicescapes, according to various studies (Bitner, 1992; Countryman & Jang, 2006; Grimley & Love, 2007; Naqshbandi & Munir, 2011; Ryu & Han, 2010; Ryu & Jang, 2008; Thapa, 2007), can be accessed through its basic

atmospheric elements: Style, Color, Lighting, Layout and Furnishings. Here is a brief overview of each of them:

*Style.* The interior design of any space can be characterized by its style that collects the artistic or ideological traits of the interior, techniques, tools and has an orientation on a certain period of time, direction in architecture or on a particular person (Grimley & Love, 2007). The choice of the style - is one of the most important criteria for the interior design of the hotel and determines not only the appearance of the hotel premises, but also their atmosphere (Abercrombie, 1990).

According to the research (Siguaw & Enz, 1999), the architectural style of the hotel has an impact on its profitability. It was proven that the hotels with unique architectural solutions and designs were able to increase their average daily rate and occupancy. Other studies (Cassedy, 1993; Templin, 1999) support these findings and state, that people feel that the successful operations of the "boutique" hotels are mainly determined by their unique architectural and interior designs.

In today's world there are two main conditional groups of style: historical styles and modern styles. It is often referred to "classic" and "modern", although this type of thinking is logically wrong, as there is a separate historic style- "Art Nouveau" with its own characteristics and without any relation to the modern styles. The first group (historical styles) includes the following styles: ancient Egyptian, Greek, Byzantine, Gothic, Renaissance, Baroque, Rococo, Empire, classicism, romanticism and eclectic, Art Nouveau, Art Deco, Modernism, Postmodernism and Constructivism. While among the modern styles are worth mentioning the following ones: high-tech, country, eco-style, English style, minimalism, ethnic, fusion, pop art and various author's styles.

Style - is the language of the interior design, its project and composition. Since this language is alive, it is peculiar for it to borrow some elements from other language environments. So the style borrows various elements (especially nowadays) and forms a symbiosis. In the right hands, mixing of various style elements forms eclecticism and avoids tastelessness, creates positive emotions and associations (Blakemore & Rabun, 1997).

Here is a brief description of the most commonly used styles in the hotels:

*Baroque style*. This style is characterized by its emotional, bright colors and splendid decorations (Blakemore & Rabun, 1997). The interior is of a deliberate complexity with rounded corners, lots of mirrors, gilded stuccos and ceiling paintings with the effect of "overflowing" of the space to the "heights beyond the clouds". The facades and interiors are richly decorated with bas-reliefs, sculptural groups, vases and etc.

*Rococo style*. Rococo- is a refined, feminine boudoir style, which arose from the Baroque style (Blakemore & Rabun, 1997). It applies the techniques that "break" the constructive algorithms of the building, and uses mirrors, huge murals, smoothing angles between the walls and ceilings. Furniture is graceful and whimsical.

*Classic style.* The classical interior reflects the noble idea about the "golden age", idealization of the heroic rise of the laws of nature and the maintenance of order and hierarchy in the human world (Blakemore & Rabun, 1997). The traditional features of classic interior include the graceful furnishings with strict geometric proportions, and straight lines, which can be observed in everything: columns, door and window frames, balustrades of balconies and terraces.

The basic principle of the classical interior - is rationalism in everything, the tendency to achieve comfort and harmony due to the simplicity and rigor at the same time, logical clarity and completeness.

Empire style. Empire style (from the French - empire) - is the style of the first three decades of the nineteenth century (Blakemore & Rabun, 1997). This style - is the highest point and the final chord of classical style, which became widespread during the reign of Napoleon I. A solemn, triumphant military style imitated the luxury of the Roman Empire. It is characterized by monumental forms and rich decor elements (emblems, ornaments). The decorations use expensive, sturdy materials- silk, mahogany, and bronze. Empire style also includes some of the ancient Egyptian elements. These are massive geometric volumes, ancient Egyptian ornaments and stylized sphinxes. For the Empire style it is very common to use symbols related to the military theme: military armor, laurel wreaths, shields, eagles, etc. In some countries, the Empire style was used to express the ideas of independence. The furniture performed in Empire style, is usually made from mahogany, walnut, as well as from the Karelian birch (in Russia). The thread is almost never used. The supports for the tables, chairs and sofas are made in the form of ancient sphinxes, griffins, lions' paws and columns, which resemble the samples taken from the ruins of ancient Rome and Pompeii excavations. The form of the furniture is rectangular and massive with closed forms and profiles.

*Minimalism style*. Minimalism style emerged in the 60ies of the twentieth century and is especially popular nowadays (Blakemore & Rabun, 1997). The main principle of this style –is nothing extra. The space is organized very succinctly, but with the maximum of functionality and with the usage of simple geometric forms and large surfaces filled with one color. Color solution

is very simple up to monochromatic. However, this style uses only expensive and high-quality materials.

*Neoclassicism style.* Neoclassicism (from the French- Classicisme) –is the general name of art which appeared during the second half of the nineteenth and twentieth centuries and is based on the classical tradition of the art of antiquity, Renaissance and classicism (Qing-hui, 2008). This style is characterized by the emphatic nobility, rigor and clarity. Premises, made in the neoclassical style are characterized by the large size of the rooms and wide staircases. Neoclassical interiors are using the architectural elements referred to the ancient models.

*Eclectic style*. Eclectic style is currently one of the most modern ones. Decorating the hotels in this style is very expensive, especially if there is a relation to any period of time, and this interior does not always fit the modern lifestyles. This style requires a rigorous attitude to its basic elements - a particular color, texture, shape and size. It uses a combination of objects and furniture of different times and origins (Blakemore & Rabun, 1997).

*Modernism style.* Modernism (fr. Moderne - new, modern) –is a stylistic direction in the European and American art, which appeared in the late XIX - early XX centuries, can be described as very decorative and original style (Blakemore & Rabun, 1997). The slogan of modernism -is "back to nature". This style has its typical complex system of ornament, based on a highly stylized flowers, plants and swans. The symbol of this style is a sophisticated form of cyclamen flower.

*Art Deco style*. Art Deco – is the first style of the new era of the twentieth century, which inherited all the desire of innovation (Blakemore & Rabun, 1997). This style combines the modern and exotic technical aesthetics of the twenties, its lightness and elegance decor. The

characteristic features are: rounded corners, strict vertical lines and decorative elements in the forms of zigzags, circles and sun).

*High-tech style*. This style is also quite frequently used nowadays and reflects the current pace of time. It is characterized by the usage of modern polymeric materials, glass and metal (Blakemore & Rabun, 1997). The interior in the style can be distinguished by its sharpness. The surfaces of walls, floors and ceilings are perfectly smooth and clean. Furniture, fabrics, tableware and other accessories also meet the basic requirements of this style: usability, lack of decor and strict geometric shapes.

*Eco style.* This is a new modern ecological style. The desire to create a special atmosphere of unity with nature is achieved by the implementation of natural materials, natural colors, fresh and dried flowers, compositions of wood, clay, amber and birch bark (Blakemore & Rabun, 1997).

*Fusion style.* It is a mix of different styles and is a modern fashion trend (Blakemore & Rabun, 1997). For example, the classicism combined with the other styles, forms a unity of design harmony while the authentic antiques of national cultures can coexist with the high-tech cutting-edge accessories of hi-tech style.

*Ethnic styles*. Ethnic styles (Russian, Chinese, Japanese, Indian, Scandinavian and etc.) are usually used within the territory of one or several countries, closed in their culture, and play a huge role in the creation of a unique national atmosphere (Blakemore & Rabun, 1997). It is also of special importance for the hospitality and tourism industries, as it reflects the cultural authenticity of the nations, which is now, considering the continuous increasing pace of globalization, becomes more and more actual and demanded (Mules, Faulkner, Moscardo, &

Laws, 2001).

*Scandinavian style.* Lately, a lot of popularity in the hospitality sector has acquired the ethnic Scandinavian style (Donnelly, 1992). The typical feature of this style lies in the usage of light woods, all kinds of shades of white, green, light blue and bright red accents. The abundance of light, soft colors and functionality, forms a cozy and comfortable interior without unnecessary frills and luxuries (Donnelly, 1992).

*Color*. One of the most important elements of the interior perception- is the color solution of the space: painting of walls, floors and usage of finishing materials (plastic, ceramic, plasterboard and others) (Portillo, 2010). The color of the interior is created using the principles of contrast and nuance.

According to the research (Guilford & Smith, 1959), it was found out that bright colors tend to produce the pleasant human feelings. Also there is a proof that the appropriateness of the color varies with the function of the room (Slatter & Whitfield, 1977). Colors and color combinations also help people in finding their way in a building (Evans, Fellows, Zorn, & Doty, 1980). In retail settings studies, it was investigated that the color has a feature of attracting the customers and creates their pleasant feelings (Bellizzi, Crowley, & Hasty, 1983; Bellizzi & Hite, 1992). Therefore, colors and color combinations tend to influence on human perceptions and attitudes, and causes certain behavioral differences (Robson, 1999) and their consideration within the interior perception is crucial.

Color is an active mean of interior architecture. A combination of brightness and color forms the plasticity of the interior, and its spatial composition. Color solution of the hotel interiors depends on many factors. Among them are the following ones: natural conditions, the orientation (specialization of the hotel), the architecture of the building and its premises, the purpose of the premises (Portillo, 2010). Depending on the architectural design, interior color must be emphasized on identifying or disguising of some interior elements in order to facilitate and strengthen the visual perception of the space and modify the proportions of the individual parts of the building.

The color of the interior must be chosen according to the hygienic requirements. Premises, painted in bright colors are easier to keep clean, while the horizontal surfaces of the furniture should be dark, which it makes it easier to notice the dust on them. Furniture upholstery and decorative fabrics should exclude gray and brown colors that give the impression of a lack of freshness (Portillo, 2010).

The hotel interior designers are using a large assortment of materials that are different in color and texture. Therefore, the choice of the interior materials and their color scheme should be selected according to the effect that the designer wants to achieve. Thus, the impression of the interior is formed not only on the individual colors, but also on their combinations. Various combinations of colors have different effects on the humans - some of the colors are perceived easily, while others evoke a sense of tension and gravity (Portillo, 2010).

*Lighting.* Undoubtedly, lighting is a very important part of the interior perception. Light sets the tone for the overall style decision of the interior, helps to create a good mood and transforms the most unsophisticated environment into a good looking area (Hill & Bruce, 1996). Studies conducted by Mehrabian and Russell (Mehrabian & Russell, 1974), state that people are drawn to light sources. Another study indicates that the contrast of a bright area with a darker one is treated as glare and is characterized as unpleasant (as referenced in Mehrabian & Russell,

1974). As for the perceived image, soft incandescent lighting creates associations about a higher quality of environment, while the bright fluorescent lighting is mainly associated with an image of discount (Baker, Grewal, & Parasuraman, 1994; Sharma & Stafford, 2000).

Layout. Concerning the layout of various objects within the hotel property, one of the most common errors is noticed in the design of a hotel lobby, where the front reception desk is not visible at once as the guests arrive to the hotel and also a lack of smooth traffic between the front desk and elevators (Caro, 2001). The negative effect of crowding on customers which is caused by the human unwillingness to wait is related to this research (Eroglu, Machleit, & Barr, 2005; Eroglu & Machleit, 1990; Grossbart, Hampton, Rammohan, & Lapidus, 1990; Wakefield & Blodgett, 1999). The layout of the interior objects should be aimed at minimizing the crowding in order to create a favorable impression among the hotel guests. Architectural design studies investigated that the layout depends on several factors, among which are the following ones: the size of the hotel building, grade or standard, patterns of arrivals and departures, tour and convention bookings, length of stay, and seasonality (F. Lawson, 1976; Rutes & Penner, 1985; Seifert, 1977).

*Furnishings*. The modern hotel furniture according to its constructive structure can be divided into three categories: a stationary, combined multi-functional and transformable. The requirements for the furniture are set in accordance with the comfort of the hotels and its specialization. Comfort of the hotel is largely determined by the quality and quantity of the hotel furnishings (Abercrombie, 1990).

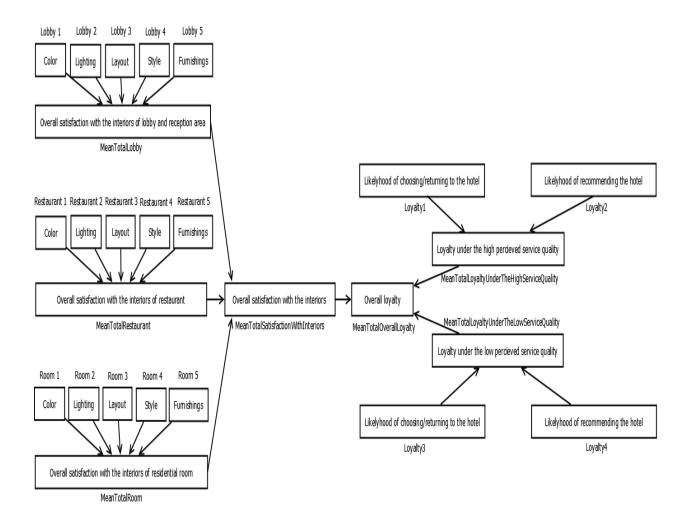
While the furnishings are an important part of the hotel interior, very little research, focused specifically on this one element, has been done. However, furnishings are included in all

the atmospheric and servicescape models (Baker, 1986; Bitner, 1992; Wakefield & Blodgett, 1994, 1996, 1999) but may be described through the usage of different terminology, depending on the physical environment being studied.

# **III.** Methodology

The study attempts to measure the role of customer's overall satisfaction with the hotel interiors on customer's overall loyalty towards the hotel, as well as the individual degree of influence of each servicescape on the overall customer's satisfaction with the interiors and on overall customer's loyalty. The model of the research looks as follows:





According to the Figure  $N_{21}$ , the overall satisfaction with interiors comprises the means of customer's satisfaction with each of three servicescapes within the hotel: residential room,

restaurant and reception/lobby area. According to the examination of previous studies, five atmospheric elements were used in order to access the level of customer's satisfaction with the interiors of each servicescape: style, layout, colors, lighting and furnishings, while the overall loyalty comprises the means of two types of perceived service quality: high and low. Each type of perceived service quality measures the likelihood of customers to choose/return and recommend the hotel.

## 1. Research design, data collection and measurements

As it was applied in many other atmospheric and servicescape studies (Bitner, 1990; Countryman & Jang, 2006; Perez-Rivera, 1998; Ritterfeld & Cupchik, 1996; Tombs & McColl-Kennedy, 2004), a scenario based approach was chosen for conducting the current research. Color photographs of the hotel's three servisescapes (Residential room, restaurant and reception/lobby area) were taken by the author and used for the scenario (see appendix B). Respondents were told that they are attending a conference with an overnight stay in the hotel, which interiors are shown on the pictures. The name of the hotel was not given and no identification was visible on the photographs in order to control the influence of branding.

All the respondents were asked to look carefully through all the pictures and, on the basis of what they saw, to indicate the level of their satisfaction with the interiors of three servicescapes through five atmospheric elements.

A 5-point Likert scale, which is considered to be common for measuring the attitudes or opinions (Likert, 1932; McLeod, 2008), was used to access the level of respondent's satisfaction:

- 5 is "very satisfied";
- 4 is "satisfied";

- 3 is "neither satisfied nor dissatisfied";
- 2 is "dissatisfied";
- 1 is "very dissatisfied".

The level of loyalty (both under the high and low perceived service quality) was measured through the questions of likelihood of the respondents to choose/return and recommend the hotel. A 5-point Likert scale but with different items was also used here:

- 5 is "Very likely";
- 4 is "Somewhat likely";
- 3 is "Neither likely nor unlikely";
- 2 is "Somewhat unlikely";
- 1 is "Very unlikely".

While some may argue that scenario-based approach is not an appropriate method of measuring the atmospherics or servicescapes, this approach may still have some unique benefits. It provides some sort of control in regards to the research study. If this study was conducted directly in real physical environment, then the researcher might have difficulties in controlling for those factors that do not represent the physical environment, for example the prior respondent's experience or branding (Countryman & Jang, 2006). People may appear in a physical environment for different purposes, which can lead to evaluations from various perspectives. Another advantage is that this research approach may have some practical value, as the photographs can easily be replaced with real architectural renderings or virtual design solutions in order to evaluate the interiors of a physical environment before it is built - it can be helpful for the companies, who want to investigate in advance, whether their interiors will have a

positive effect on costumers behavior and loyalty intentions (Countryman & Jang, 2006). As for the other elements that can be considered as a part of physical environment, such as temperature or noise, these factors tend to be unnoticed or not even considered while evaluating the physical environment, unless they are significant (for instance the temperature is too hot or too cold) (Baker, 1986).

# 2. Sample

The sample comprises 50 actual international and Norwegian master students from The Norwegian School of Hotel Management, both from the first and second year. All the respondents are studying the "International Hotel and Tourism Leadership" program, having tourist backgrounds, are not younger than 18 and at least once had an overnight stay in a hotel, which makes the sample to be an appropriate and closed to the desired population (real hotel guests attending the conference), according to the context of the current research.

Age, gender, religion and other demographic factors did not reveal any significant influence concerning the results of various atmospheric and servicescape studies (Ariffin et al., 2013; Bitner, 1992; Countryman & Jang, 2006; Harris & Ezeh, 2008; Lucas, 2012; Orth et al., 2012; Reimer & Kuehn, 2005; Tombs & McColl-Kennedy, 2004), therefore, they were not taken under the consideration in the current research.

The reason for a relatively small sample size of the current research lies in the individual approach of data collection. At the same time, it is a widespread belief among the researchers that the bigger sample leads to a greater quality of the study, while various studies (Jain & Zongker, 1997; Raudys & Jain, 1991) suggest that in some situations it is much better to increase the accuracy of data collection than the sample size.

The hotel, which interiors were used in the scenario, was chosen by the author randomly. It is a newly-build "Clarion Energy" hotel which possesses 400 rooms and is aimed primarily on customers that are attending various big events or conferences that are happening nearby. Hotel is located in the city of Stavanger near one of the Norway's largest conference and exhibition centers. The hotel occupies quite an impressive area, which offers picturesque views from the hotel windows.

Hotel lobby represents quite large and rather dark space, and is directly connected to the restaurant (according to the "Clarion Living Room" concept). While being in the lobby, author had a feeling that there is a lack of furniture and too much unused empty spaces, which usually do not contributes to the creation of coziness.

Hotel restaurant, despite the fact that it is basically a part of lobby, represents completely opposite picture. It is a spacious area performed in bright colors. Interiors are nicely decorated in such a way that it creates a feeling of a homely atmosphere. Furnishings are adequately and harmonically fit the overall concept of the space.

Standard double room is quite small  $(16 \text{ m}^2)$ , where the bulk of the space is taken by the large king size double bed. It also has the tea & coffee making facilities, a Smart TV, minibar, high narrow window, chair and a bedside table. Interiors are fairly simple with minimal number of decorations. Walls are mainly white except for the bedside wall, which is green.

# **IV. Results**

#### Descriptive statistics

In order to analyze the obtained data for the current research, an "SPSS Statistics Standard" program was used. Table 1 (appendix A) comprises the descriptive statistics. In summary, it consists of 19 items, 15 of them belong to the respondent's satisfaction with the interiors (five atmospheric elements of interior for each servicescape) and four are used in order to access the respondent's loyalty intentions under the high and low perceived service quality. The study comprises 50 valid cases. The lowest number of scores was received by the respondent's loyalty intentions under the low perceived service quality: likelihood to recommend the hotel (120 scores) and to choose/return to the hotel (123 scores), these items also possess the lowest mean scores: 2.40 and 2.46 respectively. The highest number of scores belongs to the respondent's loyalty intentions under the high perceived service quality: likelihood to recommend the hotel (230 scores) and to choose/return to the hotel (229 scores). Among the items that measure the satisfaction with the interiors, the highest number of scores (230) was obtained by the respondent's satisfaction with the restaurant furnishings, while the lowest (184) belongs to the respondent's satisfaction with the residential room's layout.

#### Reliability

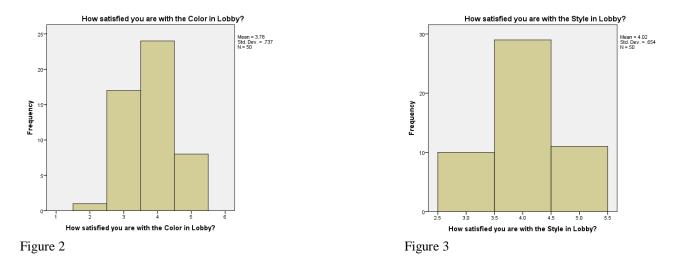
In order to test the efficiency of satisfaction and loyalty scales for the current research, a Cronbach's alpha analysis was performed. A Cronbach's alpha coefficient ( $\alpha$ ) indicates the internal consistency of the characteristics that describe a certain object and is one of the most common reliability analysis used in sociological, psychological and other studies (Santos, 1999).

As for the present research, the general Cronbach's alpha coefficient for the scale that measures the level of respondent's satisfaction with the interiors of three servicescapes (15 items), is:  $\alpha = 0.537$  (see tables 2-3 in appendix A), which can be treated as "poor" but still not "unacceptable", according to the commonly accepted rule for describing the internal consistency (Mallery, 1999), where  $\alpha \ge 0.9$  is excellent,  $0.7 \le \alpha < 0.9$  is good,  $0.6 \le \alpha < 0.7$  is acceptable,  $0.5 \le \alpha < 0.6$  is poor and finally,  $\alpha < 0.5$  is treated as unacceptable. Reliability analysis also showed that the deletion of any item will not significantly increase the alpha coefficient (see table 3 in appendix A).

The main reason for such a low Cronbach's alpha coefficient of the interior satisfaction scale, lies primarily in the low correlation between its items (see table 2 in appendix A), as according to the formula used for calculating the standardized alpha coefficient (Mallery, 1999), a low average inter-item correlation results in low alpha.

In its turn, the low correlation between the items can be easily explained in the following way: five atmospheric elements, that were used in order to estimate the respondent's satisfaction with each of the three servicescapes, are covering different aspects of interior, thus, obtain various levels of satisfaction. For example in the case of hotel lobby, if to compare the histograms of frequencies of its Color and Layout (see figures 2-3), we can visually notice some significant differences between them. The same situation could be observed in comparing the other atmospheric elements. Thus, a comparatively low alpha coefficient for the scale that measures respondent's satisfaction with the hotel interiors in the current research, does not necessarily mean that the scale is not reliable, thus all the items proceeded for further analyses. At the same time, the scale used to access the respondent's loyalty intentions, showed quite a satisfactory level of reliability:  $\alpha = 0,767$  (see tables 4-5 in appendix A). As in the case with

satisfaction scale, all the loyalty items were taken for further analysis, as their deletion will not have a significant effect on alpha coefficient (see table 5 in appendix A).



#### Correlation analysis

In order to check whether the constructs are measuring what they are supposed to measure (construct validity), a Pearson's correlation analysis was chosen. Before its conduction, the average mean scores for each of the constructs were calculated (see table 6 in appendix A). The following items were received:

<u>"Mean Total Lobby</u>"- the average level of respondent's satisfaction with the lobby interiors. Mean score is 3.81;

<u>"Mean Total Restaurant"</u>, - the average level of respondent's satisfaction with the restaurant interiors. Mean score is 4.37;

<u>"Mean Total Residential Room"</u>- the average level of respondent's satisfaction with the residential room. Mean score is 4.04;

<u>"Mean Total Satisfaction With The Interiors"</u>- the overall respondent's satisfaction with the interiors, which comprises the means scores of "Mean Total Lobby", "Mean Total Restaurant" and "Mean Total Residential Room". Mean score is 4.08; <u>"Mean Total Loyalty Under The High Service Quality"</u>- is the average level of respondent's overall loyalty in the case of high perceived service quality. Mean score is 4,59;

<u>"Mean Total Loyalty Under The Low Service Quality"</u> - is the average level of respondent's overall loyalty in the case of low perceived service quality. Mean score is 2.43;

<u>"Mean Total Overall Loyalty"</u> - is the overall level of respondent's loyalty which comprises the means scores of "Mean Total Loyalty Under The High Service Quality" and "Mean Total Loyalty Under The Low Service Quality". Mean score is 3.51.

In order to measure the strength and direction of possible associations on the construct level (construct validity) of the items listed below, a Pearson's Product-Moment Correlation (Pearson's correlation) analysis was performed.

First of all, the correlation was checked within the satisfaction constructs ("Mean Total Lobby" "Mean Total Restaurant", "Mean Total Residential Room" and "Mean Total Satisfaction With The Interiors"). As shown in table 7 (appendix A), a significant correlation was found between the overall satisfaction with interiors ("Mean Total Satisfaction With The Interiors") and the satisfaction with the lobby ("Mean Total Lobby") - 0.721. The correlation with residential room ("Mean Total Residential Room") is a bit less - 0.673 and restaurant ("Mean Total Restaurant") - 0.486. At the same time, the constructs that are measuring the satisfaction with lobby, restaurant and residential room did not reveal any substantial correlation among themselves - as they are measuring the interior perception of three different hotel servicescapes that are various in their atmospheric elements and are not interconnected with each other, except for the fact that they are located within one hotel physical property.

In short, the correlation analysis of satisfaction constructs showed that the mean scores of satisfaction with the interiors of three servicescapes are adequately comprising the overall

satisfaction with the hotel interiors (considering the fact that the correlation is significant starting from 0.5 (Mallery, 1999)), and that the "Mean Total Satisfaction With The Interiors" item can be taken for further correlation analysis with the loyalty constructs.

But before checking the correlation between the respondent's overall satisfaction and loyalty intentions, there is a need to perform a correlation analysis within the loyalty constructs: "Mean Total Loyalty Under The High Service Quality", "Mean Total Loyalty Under The Low Service Quality" and "Mean Total Overall Loyalty", in order to define whether they are truly measuring the respondent's loyalty promptings.

As a result (see table 8 appendix A), a more than satisfying correlation coefficients were revealed between all the loyalty constructs, thus, all of them can be taken for further analysis.

Finally, in order to check whether there is a correlation between the satisfaction with interiors and loyalty, two correlation analyses were performed. The first analysis checked the general correlation between the two main constructs: "Mean Total Overall Loyalty" and "Mean Total Satisfaction" (see table 9), while the second verifies more thoroughly the specific individual correlations between the items of overall satisfaction ("Mean Total Lobby", "Mean Total Restaurant" and "Mean Total Residential Room"), and overall loyalty ("Mean Total Loyalty Under The High Service Quality" and "Mean Total Loyalty Under The Low Service Quality") (see table 10 in appendix A).

As a result a satisfactory level of correlation (r = 0.807) (see table 9) was found between the two main constructs of the current research: overall satisfaction with interiors and overall loyalty, which means that these two items are quite strongly related to each other. The second analysis specifies the first one and shows in detail, which items of overall satisfaction with interiors and overall loyalty are of special correlation among each other (see table 10 in appendix A). Table 11 represents a summary of this analysis:

	Mean	MeanTo	MeanTotal	MeanTotalLoyalty	MeanTotalLoyalty
	TotalL	talResta	Residential	UnderTheHighServ	UnderTheLowServ
	obby	urant	Room	iceQuality	iceQuality
MeanTotalLobby	1	.154	.118	.313*	.453**
MeanTotalRestaura nt	.154	1	.052	.469**	.441**
MeanTotalResident ialRoom	.118	.052	1	.618**	.530**
MeanTotalLoyalty UnderTheHighServ iceQuality	.313*	.469**	.618**	1	.619**
MeanTotalLoyalty UnderTheLowServ iceQuality	.453**	.441**	.530**	.619**	1
<ul> <li>*. Correlation is significant at the 0.05 level (2-tailed).</li> <li>**. Correlation is significant at the 0.01 level (2-tailed).</li> </ul>					

Table 11. Correlations between the overall interior satisfaction items and overall loyalty items

As shown in table 11, the most significant correlation was revealed between the satisfaction with room interiors and loyalty intentions. Under the high perceived service quality this correlation is 0.618, while under the low perceived service quality it is 0.530. The restaurant interiors are having a bit lower correlation: 0.469 and 0.441 respectively. Finally, the lowest but still weighty relationship can be observed in the case of lobby: 0.313 and 0.453.

# Regression analysis

The final data analysis for the current research is the linear regression analysis, which is one of the most common statistical methods used for studying the influence of one or more independent variables on the dependent variable (Mallery, 1999). While some statisticians may say that the regression analysis do not perfectly fits the Likert scales, it can still be useful for checking the extent of influence of one or several items on another item - which is crucial for the current master thesis.

According to the context of the research, the regression analysis was performed primarily in order to check the degree of influence of the overall satisfaction with interiors ("Mean Total Satisfaction With The Interiors") on respondent's overall loyalty ("Mean Total Overall Loyalty"). In addition, two more specified multiple regression analyses were done in order to define the individual degree of influence of each servicescape ("Mean Total Lobby", "Mean Total Restaurant" and "Mean Total Residential Room") on two separate loyalty constructs ("Mean Total Loyalty Under The High Service Quality" and "Mean Total Loyalty Under The Low Service Quality").

The results of the first regression analysis can be observed in tables 12-14 (Appendix A). Table 12 provides the R and R Square values. The R value represents a simple correlation and is 0.807 (the "R" Column), which indicates a high degree of correlation. The R Square value (the "R Square" column) indicates how much of the total variation in the dependent variable "Mean Total Overall Loyalty", can be explained by the independent variable "Mean Total Satisfaction With The Interiors". In this case, 65% can be explained (R<sup>2</sup>: 0.650), which is quite much.

Table 13 is the ANOVA table, which shows how well the regression equation fits the data (predicts the dependent variable). This table indicates that the regression model predicts the

dependent variable significantly well. The "Sig." column indicates the statistical significance of the regression model that was run. Here, p is less than 0.05, which means that the regression model statistically well predicts the outcome variable ("Mean Total Overall Loyalty").

Table 14 shows that the expected value of the dependent variable (Mean Total Overall Loyalty) will be less than 0 (-3.527) if the independent/predictor variable (Mean Total Satisfaction With The Interiors) is set to 0. Despite the fact that it is theoretically impossible, as the scale does not have a zero, it can still show how these two items are strongly correlated. The Table also shows that with the increase of the independent variable (overall satisfaction with interiors) on one point, the dependent variable (overall loyalty) will increase on 1.725 points. The standardized coefficient Beta is 0.807 and is equal to the correlation coefficient (R).

Thus, the first regression analysis supports the main hypothesis proposed for the current study: "The overall level of customer's satisfaction with the hotel interiors has a strong relationship with customer's overall loyalty intentions and significantly influences on them".

The results of the second (multiple) regression analysis (independent variables: "Mean Total Lobby", "Mean Total Restaurant" and "Mean Total Residential Room"; dependent variable - "Mean Total Loyalty Under The High Service Quality") are presented in tables 15 - 17 (appendix A).

As it was observed in the first regression analysis, here the R Square is also quite satisfactory:  $R^2 = 0.605$  (see table 14). Which means that the satisfaction with the interiors of three servicescapes explains the loyalty intentions under the high service quality on 60,5%. The coefficient table (table 16), shows that if the satisfaction with the interiors will be set to 0, the loyalty intentions, even if the perceived service quality is high will still be negative (-1.259), although not as significantly as in the first analysis (-3.527). The most influential item, when it

comes to the high level of service quality - is the satisfaction with the restaurant interiors. When it is increased on one point, the "Loyalty Under The High Service Quality" will be increased on 0.654. A bit less influential (but not significantly) is the satisfaction with the room interiors: 0.571, while the lowest influence belongs to the lobby interiors: 0.177.

The results of the third multiple regression analysis (independent variables: "Mean Total Lobby", "Mean Total Restaurant" and "Mean Total Residential Room"; dependent variable-"Mean Total Loyalty Under The Low Service Quality") are presented in the tables 18-20 (appendix A).

According to the table 18, the third regression analysis also has a good R Square:  $R^2$ = 0.564, nonetheless it's the lowest coefficient in comparison to the two previous analyses (see tables 12 and 15). It can be interpretated in the following way: when the respondents are faced with low service quality, the satisfaction with interiors can explain their loyalty intentions on 56,4%, while the rest 43,6% belong to other factors that are not investigated in the current study.

In its turn, table 20 shows that if the satisfaction with the interiors is set at 0 level, the loyalty intentions will have an extremely low score (-7.314). The most influential item is still the satisfaction with restaurant interiors (0.992), then the residential room (0.799) and lobby (0.567).

Thus, the second and third regression analyses partially supported the following hypotheses:

1. "The level of satisfaction with the hotel lobby/reception zone interiors has a significant influence on customer's loyalty intentions, both under the high and low perceived service quality".

This hypothesis is the least supported one in the current research. The lobby showed quite a low (in comparison to other items) influential power on loyalty intentions both under high and low service quality: 0.177 and 0.567 respectively. But there is still an influence (but not significant), so the hypothesis can be treated as partially supported.

2. "The level of satisfaction with the hotel restaurant interiors has a significant influence on customer's loyalty intentions, both under the high and low perceived service quality". According to the regression analyses, the satisfaction with restaurant interiors was the most influential item towards the loyalty intentions both under the high and low service quality: 0.654 and 0.992 respectively. Thus the hypothesis if fully supported.

3. "The level of satisfaction with the hotel residential room interiors has a significant influence on customer's loyalty intentions, both under the high and low perceived service quality". This hypothesis is also supported quite well. Residential room interiors' influential power on loyalty intentions both under the high and low service quality is 0.571 and 0.799 respectively. Thus this hypothesis can also be treated as fully supported.

# V. Discussions and conclusion

The objective of this master thesis was to investigate the role of hotel interiors on customer's loyalty intentions. For this purpose, four hypotheses were proposed:

- "The overall level of customer's satisfaction with the hotel interiors has a strong relationship with customer's overall loyalty intentions and significantly influences on them";
- "The level of satisfaction with the hotel lobby/reception zone interiors has a significant influence on customer's loyalty intentions, both under the high and low perceived service quality";
- "The level of satisfaction with the hotel restaurant interiors has a significant influence on customer's loyalty intentions, both under the high and low perceived service quality";
- "The level of satisfaction with the hotel residential room interiors has a significant influence on customer's loyalty intentions, both under the high and low perceived service quality".

In order to support these hypotheses empirically, a scenario-based study was conducted. Fifty students from the "Norwegian School of Hotel Management" were shown the photographs of the interiors of three actual servicescapes within the one hotel physical property (reception/lobby area, restaurant and residential room) and were asked to indicate the level of their satisfaction with those interiors taking into the account five atmospheric elements, that comprise the interior perception (color, lighting, layout, style and furnishings). Then the respondents were asked to indicate their loyalty intentions towards the hotel by imagining that the perceived service quality was high and low.

Two different five-point Likert's scales were used in on order the estimate the

respondent's satisfaction with interiors and loyalty intentions. The coefficients of reliability of the items were checked by Cronbach's alpha, while the validity of the constructs was measured using Person's correlation analysis and linear regression.

As a result, all the items proceeded for further analyses, even despite the fact that items that are measuring the satisfaction with the interiors received quite a low alpha coefficient ( $\alpha = 0.537$ ). This was explained by the low inter-item correlation that was observed between these items, which in its turn due to the heterogeneity of the atmospheric elements that comprise the interiors of servicescapes. At the same time loyalty items received quite a satisfactory alpha:  $\alpha = 0.767$ .

In order to perform a correlation and regression analyses, the mean scores were calculated for each of the constructs, together with the overall customer's satisfaction score and overall loyalty score. Correlation analysis was done mainly in order to check whether there is a relationship between the constructs before doing the regression analysis, which is crucial for the current research as it can show whether the satisfaction with interiors determines the loyalty intentions.

A strong correlation was found between all the items were it was expected - the constructs measuring the satisfaction with the interiors were not supposed to correlate between each other as they represent different parts of hotel physical property. The satisfaction constructs showed a good relationship with loyalty constructs and, what is of special importance, a significant correlation was found between the overall satisfaction with interiors and overall loyalty: r = .807.

In its turn, the regression analysis supported all the hypothesis proposed at the beginning, except for the lobby case, which showed quite a low (in comparison to other items) influential power on loyalty intentions both under the high and low service quality, thus this hypothesis was supported partially. The Regression analysis showed, that the overall satisfaction with interiors can explain 65% of the overall loyalty intentions ( $R^2$ = 0.650), which is quite much. As for the rest 44%, this belongs to the factors that were not under the focus of the current research and may be investigated by the future studies.

The present master thesis is not free from limitations. In the present research, the physical property of the hotel is presented by lobby, reception and residential room. While these physical environments are among the most important in helping to establish the impressions about the entire hotel, there are still other physical spaces within a hotel that may have an influence on guest's loyalty intentions, as for example conference halls, business centers, gyms, or spacenters. Another limitation is a relatively small sample size, which may lead to the low probability of finding the true effects and prevents performing some of the statistical analyses that may be important for better data analysis or data reduction (such as factor analysis). Also, for a better data quality there is a need to involve the real hotel guests and provide a field study within several hotels. The research also doesn't cover some other elements that may influence the interior perception, such as cleanliness, seating comfort or electronic equipment. The scale used to measure the customer's satisfaction with interiors can also be improved by the future studies, as it doesn't specifies the features of each of the atmospheric elements and gives just the scores.

The present master thesis provides a basis that can be used in future studies of the hotel physical environment and its influence on customer's behavior. It can also be helpful from the managerial standpoint for the hoteliers who may want to investigate the extent of influence of their interiors on customer's loyalty promptings.

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# Appendix A. SPSS output

# Table 1. Descriptive Statistics

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
How satisfied you are with the Color in Lobby?	50	2	5	189	3.78	.737
How satisfied you are with the Lighting in Lobby?	50	2	5	164	3.28	.784
How satisfied you are with the Layout in Lobby?	50	3	5	202	4.04	.699
How satisfied you are with the Style in Lobby?	50	3	5	201	4.02	.654
How satisfied you are with the Furnishings in Lobby?	50	3	5	198	3.96	.638
How satisfied you are with the Color in restaurant?	50	3	5	212	4.24	.555
How satisfied you are with the Lighting in restaurant?	50	4	5	218	4.36	.485
How satisfied you are with the Layout in restaurant?	50	3	5	216	4.32	.513
How satisfied you are with the Style in restaurant?	50	3	5	218	4.36	.525
How satisfied you are with the Furnishings in restaurant?	50	4	5	230	4.60	.495
How satisfied you are with the Color in residential room?	50	3	5	198	3.96	.669

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
How satisfied you are with the Lighting in residential room?	50	3	5	218	4.36	.563
How satisfied you are with the Layout in residential room?	50	3	5	184	3.68	.683
How satisfied you are with the Style in residential room?	50	3	5	205	4.10	.735
How satisfied you are with the Furnishings in residential room?	50	3	5	207	4.14	.606
How likely you are to choose/return to the hotel if the perceived service quality is high?	50	4	5	229	4.58	.499
How likely you are to recommend the hotel if the perceived service quality is high?	50	4	5	230	4.60	.495
How likely you are to choose/return to the hotel if the perceived service quality is low?	50	1	4	123	2.46	.813
How likely you are to recommend the hotel if the perceived service quality is low?	50	1	4	120	2.40	.700
Valid N (listwise)	50					

### Reliability of satisfaction scale

Cronbach's Alpha: .537; Cronbach's Alpha Based on Standardized Items: .508; N of Items: 15.

Table 2. Satisfaction scale. Summary inter-item correlation statistics

	Mean	Minimu m	Maximu m	Range	Maximum / Minimum	Variance	N of Items
Inter-Item Correlations	.064	302	.563	.865	-1.862	.023	15

Table 3. Satisfaction scale. Item - total statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
How satisfied you are with the Color in Lobby?	57.42	10.657	.150	.333	.531
How satisfied you are with the Lighting in Lobby?	57.92	10.238	.213	.242	.516
How satisfied you are with the Layout in Lobby?	57.16	9.933	.340	.332	.485
How satisfied you are with the Style in Lobby?	57.18	10.232	.301	.263	.496
How satisfied you are with the Furnishings in Lobby?	57.24	10.758	.180	.155	.522
How satisfied you are with the Color in restaurant?	56.96	10.651	.264	.326	.507
How satisfied you are with the Lighting in restaurant?	56.84	11.158	.162	.217	.526
How satisfied you are with the Layout in restaurant?	56.88	11.455	.058	.200	.543

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
How satisfied you are with the Style in restaurant?	56.84	11.484	.044	.244	.545
How satisfied you are with the Furnishings in restaurant?	56.60	11.959	083	.425	.564
How satisfied you are with the Color in residential room?	57.24	10.635	.192	.424	.520
How satisfied you are with the Lighting in residential room?	56.84	11.647	012	.359	.556
How satisfied you are with the Layout in residential room?	57.52	10.296	.264	.276	.504
How satisfied you are with the Style in residential room?	57.10	9.276	.469	.571	.449
How satisfied you are with the Furnishings in residential room?	57.06	10.507	.266	.448	.505

### Reliability of loyalty scale

Cronbach's Alpha: 0.767; Cronbach's Alpha Based on Standardized Items: 0.771; N of Items: 4

Table 4. Loyalty scale.	Summary inter-item	correlation statistics
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		Minimu	Maximu		Maximum /		
	Mean	m	m	Range	Minimum	Variance	N of Items
Inter-Item Correlations	.457	.298	.638	.340	2.143	.015	4

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
How likely you are to choose/return to the hotel if the perceived service quality is high?	9.46	2.784	.507	.300	.748
How likely you are to recommend the hotel if the perceived service quality is high?	9.44	2.823	.486	.293	.756
How likely you are to choose/return to the hotel if the perceivedservice quality is low?	11.58	1.759	.675	.510	.661
How likely you are to recommend the hotel if the perceived service quality is low?	11.64	2.031	.679	.509	.647

## Table 5. Loyalty scale. Item - total statistics

### Correlation analyses

### Table 6. Mean scores statistics

		MeanTotal Lobby	MeanTotal Restaurant	MeanTotal Residentia lRoom	MeanTotal Satisfactio nWithTheI	LoyaltyUn derTheHig	MeanTotal LoyaltyUn derTheLo wServiceQ uality	MeanTotal OverallLo
	Valid	50	50	50	50	50	50	50
N	Missin g	0	0	0	0	0	0	0

	MeanTotal Lobby	MeanTotal Restaurant	MeanTotal Residentia lRoom	MeanTotal Satisfactio	derTheHig	LoyaltyUn	MeanTotal OverallLo yalty
Mean	3.8160	4.3760	4.0480	4.0800	4.5900	2.4300	3.5100
Median	3.8000	4.4000	4.0000	4.0667	4.5000	2.5000	3.5000
Mode	3.60	4.40	4.40	4.00	5.00	2.00	3.50
Range	2.00	.80	1.80	1.20	1.00	3.00	2.00
Minimum	2.60	4.00	3.20	3.33	4.00	1.00	2.50
Maximum	4.60	4.80	5.00	4.53	5.00	4.00	4.50

		MeanTotalL obby	MeanTotalR estaurant	MeanTotalR esidentialRo om	MeanTotalS atisfaction WithTheInt eriors
	Pearson Correlation	1	.154	.118	.721**
	Sig. (2-tailed)		.286	.414	.000
MeanTotalLobby	Sum of Squares and Cross-products	8.307	.779	.962	3.349
	Covariance	.170	.016	.020	.068
	Ν	50	50	50	50
	Pearson Correlation	.154	1	.052	.486**
	Sig. (2-tailed)	.286		.720	.000
MeanTotalRestauran t	Sum of Squares and Cross-products	.779	3.091	.258	1.376
	Covariance	.016	.063	.005	.028
	Ν	50	50	50	50
	Pearson Correlation	.118	.052	1	.673**
	Sig. (2-tailed)	.414	.720		.000
MeanTotalResidentia lRoom	Sum of Squares and Cross-products	.962	.258	7.965	3.061
	Covariance	.020	.005	.163	.062
	Ν	50	50	50	50
	Pearson Correlation	.721**	.486**	.673**	1
	Sig. (2-tailed)	.000	.000	.000	
MeanTotalSatisfactio nWithTheInteriors	Sum of Squares and Cross-products	3.349	1.376	3.061	2.596
	Covariance	.068	.028	.062	.053
	Ν	50	50	50	50
**. Correlation is sign	ificant at the 0.01 leve	el (2-tailed).			

### Table 7. Correlations between the interior satisfaction constructs

		MeanTotalLo	MeanTotalLo	
			yaltyUnderTh	
			eLowService	MeanTotalOv
		eHighService		
		Quality	Quality	erallLoyalty
MeanTotalLoyaltyUnde		1	.619**	.837**
rTheHighServiceQuality	Sig. (2-tailed)		.000	.000
	Sum of Squares and	7 945	0.215	0.000
	Cross-products	7.845	8.315	8.080
	Covariance	.160	.170	.165
	N	50	50	50
MeanTotalLoyaltyUnde	Pearson Correlation	.619**	1	.948 <sup>**</sup>
rTheLowServiceQuality	Sig. (2-tailed)	.000		.000
	Sum of Squares and	8.315	23.005	15.660
	Cross-products	0.515	23.003	13.000
	Covariance	.170	.469	.320
	Ν	50	50	50
MeanTotalOverallLoyal	Pearson Correlation	.837**	.948**	1
ty	Sig. (2-tailed)	.000	.000	
	Sum of Squares and	0 000	15 660	11.970
	Cross-products	8.080	15.660	11.870
	Covariance	.165	.320	.242
	N	50	50	50
**. Correlation is significant a	tt the 0.01 level (2-tailed).			

### Table 8. Correlations between the loyalty constructs

Table 9. Correlations between the overall satisfaction and overall loyalty

		MeanTotalSatisf actionWithTheIn teriors	llLoyalty
	Pearson Correlation	1	.807**
	Sig. (2-tailed)		.000
MeanTotalSatisfactionWithT heInteriors	Sum of Squares and Cross- products	2.596	4.477
	Covariance	.053	.091
	Ν	50	50
	Pearson Correlation	.807**	1
	Sig. (2-tailed)	.000	
MeanTotalOverallLoyalty	Sum of Squares and Cross- products	4.477	11.870
	Covariance	.091	.242
	Ν	50	50

### \*\*. Correlation is significant at the 0.01 level (2-tailed).

		MeanTotal Lobby	MeanTotal Restaurant	MeanTotal	MeanTotal LoyaltyUn derTheHig hServiceQ uality	LoyaltyUn
	Pearson Correlation	1	.154	.118	.313*	.453**
	Sig. (2-tailed)		.286	.414	.027	.001
MeanTotalLobby	Sum of Squares and Cross- products	8.307	.779	.962	2.528	6.256
	Covariance	.170	.016	.020	.052	.128
	Ν	50	50	50	50	50
	Pearson Correlation	.154	1	.052	.469**	.441**
	Sig. (2-tailed)	.286		.720	.001	.001
MeanTotalRestaur ant	Sum of Squares and Cross- products	.779	3.091	.258	2.308	3.716
	Covariance	.016	.063	.005	.047	.076
	Ν	50	50	50	50	50
	Pearson Correlation	.118	.052	1	.618**	.530**
	Sig. (2-tailed)	.414	.720		.000	.000
MeanTotalReside ntialRoom	Sum of Squares and Cross- products	.962	.258	7.965	4.884	7.168
	Covariance	.020	.005	.163	.100	.146
	Ν	50	50	50	50	50
	Pearson Correlation	.313*	.469**	.618**	1	.619**
MaanTatali avalty	Sig. (2-tailed)	.027	.001	.000		.000
MeanTotalLoyalty UnderTheHighSer viceQuality	Sum of Squares and Cross- products	2.528	2.308	4.884	7.845	8.315
	Covariance	.052	.047	.100	.160	.170
	Ν	50	50	50	50	50
MeanTotalLoyalty	Pearson Correlation	.453**	.441**	.530**	.619**	1
UnderTheLow	Sig. (2-tailed)	.001	.001	.000	.000	

Table 10. Correlations between the overall satisfaction items and overall loyalty items

ServiceQuality	Sum of Squares and Cross- products	6.256	3.716	7.168	8.315	23.005			
	Covariance	.128	.076	.146	.170	.469			
*. Correlation is significant at the 0.05 level (2-tailed).									
**. Correlation is si	**. Correlation is significant at the 0.01 level (2-tailed).								

### Regression analyses

### Table 12. Regression 1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate					
1	$.807^{1}$	.650	.643	.29400					
	1     .007     .000     .043     .2040       1. Predictors: (Constant), MeanTotalSatisfactionWithTheInteriors								

# Table 13. Regression 1: ANOVA<sup>1</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.			
	Regression	7.721	1	7.721	89.328	$.000^{2}$			
1	Residual	4.149	48	.086					
	Total	11.870	49						
	1. Dependent Variable: MeanTotalOverallLoyalty								
	2. Predictors: (Constant), MeanTotalSatisfactionWithTheInteriors								

# Table 14. Regression 1: Coefficients<sup>1</sup>

		Unstandardize		Standardized Coefficients					
Model		В	Std. Error	Beta	t	Sig.			
1	(Constant)	-3.527	.746		-4.730	.000			
	MeanTotalSatisfaction WithTheInteriors	1.725	.182	.807	9.451	.000			
1. Depe	1. Dependent Variable: MeanTotalOverallLoyalty								

### Table 15. Regression 2. Model Summary<sup>2</sup>

				Std. Error of the
Model	R	R Square	Adjusted R Square	Estimate
1	$.778^{1}$	.605	.579	.25960
	· · · · ·	,	ialRoom, MeanTotalResta derTheHighServiceQualit	

Table 16. Regression 2. ANOVA<sup>1</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.745	3	1.582	23.468	$.000^{2}$
	Residual	3.100	46	.067		
	Total	7.845	49			

1. Dependent Variable: MeanTotalLoyaltyUnderTheHighServiceQuality

2. Predictors: (Constant), MeanTotalResidentialRoom, MeanTotalRestaurant, MeanTotalLobby

Table 17. Regression 2. Coefficients<sup>1</sup>

		Unstandardize Coefficients	ed	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	-1.259	.760		-1.656	.105
	MeanTotalLobby	.177	.092	.182	1.928	.060
	MeanTotalRestaurant	.654	.150	.411	4.377	.000
	MeanTotalResidentialR oom	.571	.093	.575	6.157	.000
1. Dep	endent Variable: MeanTo	talLoyaltyUnd	lerTheHighSer	viceQuality		

Table 18. Regression 3. Model Summary

				Std. Error of the
Model	R	R Square	Adjusted R Square	Estimate
1	.751 <sup>1</sup>	.564	.535	.46712
	. , , , , , , , , , , , , , , , , , , ,		ialRoom, MeanTotalRestanderTheLowServiceQualit	, <b>.</b>

# Table 19. Regression 3. ANOVA<sup>1</sup>

19.810	2
19.010	$.000^{2}$

Table 20. Regression 3. Coefficients<sup>1</sup>

		Unstandardize	d Coefficients			с.				
Model		В	Std. Error	Beta	t	Sig.				
1	(Constant)	-7.314	1.368		-5.345	.000				
	MeanTotalLobby	.567	.165	.341	3.438	.001				
	MeanTotalRestaurant	.992	.269	.364	3.689	.001				
	MeanTotalResidentialR oom	.799	.167	.470	4.793	.000				
1. Depe	1. Dependent Variable: MeanTotalLoyaltyUnderTheLowServiceQuality									

## Appendix B. Photos of hotel interiors given to the participants

1. Lobby and reception area:





Figure 4

Figure 5



Figure 6



Figure 7

# 2. Restaurant







Figure 10



Figure 11

# 3. Residential room



Figure 12



Figure 13



Figure 14



Figure 11

### Appendix C. Questionnaire given to the respondents

#### Satisfaction with the interiors

Please indicate the level of your satisfaction with the interiors of 3 hotel servicescapes (Lobby, Restaurant and Residential room) according to 5 atmospheric elements (Color, Lighting, Layout, Style and Furnishings) by using a 5-point scale, where 5 is "very satisfied", 4 is "satisfied", 3 is "neither satisfied nor dissatisfied", 2 is "dissatisfied" and 1 is "very dissatisfied".

Hotel				
servicescapes:	Atmospheric elements:			
	Color	Lighting	Layout	Style
Lobby				
Restaurant				
Residential room				

#### Loyalty intentions

Please indicate your loyalty intentions towards the hotel if the level of perceived service quality was high/low, using 5-point scale, where "Very likely" is 5, "Somewhat likely" is 4, "Neither likely nor unlikely" is 3, "Somewhat unlikely" is 2 and "Very unlikely" is 1.

Level of perceived service quality:	How likely are you to continue to choose/return to this hotel?	How likely are you to recommend this hotel to a friend or family member?
High		
Low		