



THE UNIVERSITY OF NAIROBI

College of Architecture and Engineering

School of The Arts And Design

BDS 413: PROJECT PAPER

(Interior Design Specialisation)

**INTEGRATING EGYPTIAN(ARABIC)GEOMETRIC PATTERNS INTO CONTEMPORARY DESIGN TO CREATE APPEALING INTERIORS**

The Arabian Cuisine Restaurant

**By:**

Saina Mercy Wendy Chebet

B05/44285/2017

**Supervisor:**

Mr. COLLINS MAKUNDA

Project Paper Submitted in Partial Fulfilment of the Requirements for the Bachelor of Art in Design degree submitted to the School of The Arts and Design, University of Nairobi.

Date:14th April 2020

**DECLARATION**

I, Saina Mercy Wendy Chebet, declare that this research paper is my original work and has not been presented for the award of any degree in any other university.

**STUDENT**

**B05/44285/2017**

SAINA MERCY WENDY CHEBET

Signature: 

Date: 14th April 2020

**SUPERVISOR**

MR COLLINS MAKUNDA

Signature.....

Date.....

**DIRECTOR**

SCHOOL OF THE ARTS AND DESIGN, UNIVERSITY OF NAIROBI

DR. LILAC OSANJO Signature.....

Date.....

## **DEDICATION**

I dedicate this paper to God Almighty, my source of inspiration, knowledge and understanding. I also dedicate this work to my mother who has encouraged me all the way and whose encouragement has made sure that give it all it takes to finish that which I have started.

## ACKNOWLEDGEMENTS

I take this opportunity to express my profound gratitude and deep regards to my supervisor Mr. Collins Makunda for his exemplary guidance, monitoring, and constant encouragement through the course of this research paper. The help and guidance given by him from time to time shall take me a long way in the journey life which I'm about to embark.

Profound appreciation is expressed to our respective assistant supervisor Dr. Michael Munene for his never-ending support and advice.

I would also like to thank staff individuals from The Arabian Cuisine restaurant for the important data given by them in their individual fields. I am extremely thankful for their collaboration during the time of my task. I would also like to thank my companions for their steady help and consolation.

In particular, I say thanks to God Almighty for giving me health and enabling me to finish the project.

## ABSTRACT

Designing with culture in mind is a way to express a person's beliefs and lifestyle factors that make you who you are. The main objective of the paper was to investigate Egyptian(Arabic) geometric patterns, art, and designs from Egypt: can be incorporated in the interior and exterior spaces at The Arabian Cuisine restaurant to facilitate the appreciation of Egyptian(Arabian)culture while at the same time improving the experience of users. The study took The Arabian Cuisine restaurant as a case study with the key areas of interest being interior design, furniture design, exhibition and display and landscape architecture. The research approach applied in this study was a combination of qualitative and quantitative approaches. Where the use the qualitative method of research is where the researcher discusses the research methodology using a qualitative and descriptive approach and uses a quantitative method of research that is based on mathematical calculations in various forms. The data collection techniques incorporated included non-participant observation, informal interview guides and a field study that was conducted to determine the current state of The Arabian Cuisine restaurant. Data were analyzed in a descriptive manner including a narrative thereafter drawing conclusions. Tables, graphs and photographs were used to present the issues that were observed. Finally recommendations were drafted towards developing sustainable and culturally based restaurant interiors that could marry the surrounding environment. Even though there were numerous open doors for investigating cultural influences in hotels and restaurant interiors; there were a few obstructions that kept this from occurring including constrained time allotment and absence of assets to make satisfactory excursions to the site at whatever point need to emerge. The research is portioned into five main chapters: chapter one contains the introduction and background, statement of the problem, objectives, research questions, significance and scope of the study. Chapter two entails a critical analysis of theoretical literature in line with the objectives of this study. Chapter three outlines Research Design and Methodology used by the researcher. Chapter four contains site analysis, presentation and interpretation of findings. Finally chapter five gives a summary of the findings and recommendations based on the four major areas of interior design. (Furniture, exhibition and display, landscape and interior architecture).

## LIST OF FIGURES

Figure 2.1:Ahmed Moustafa calligraphy artwork

Figure 2.2:Ahmed Moustafa calligraphy artwork

Figure 2.3:Khofo Egyptian restaurant interiors

Figure 2.4:Khofo Egyptian restaurant

Figure 2.5:Khofo Egyptian restaurant

Figure 2.6:Design thinking process

Figure 3.1:Data collection activities

Figure 3.2:Sample of pie chart

Figure 3.3:Random photograph of a landscape

Figure 3.4:Sample of bar graph

Figure 4.1:Road map

Figure 4.2:Geographical map

Figure 4.3: Climate graph/Weather by month([climate.org](http://climate.org))

Figure 4.4:weather conditions

Figure 4.5:View from entrance

Figure 4.6:Landscape entrance

Figure 4.7:Parking

Figure 4.8:The restaurant

Figure 4.9:Duranta vegetation

Figure 4.10:Interior perspective

Figure 4.11:Interior showing part of the dining

Figure 4.12:Lighting fixture

Figure 4.13:Wooden floor

Figure 4.14:Ceiling

Figure 4.15:Wooden door

Figure 4.16:Wooden floor finish

Figure 4.17:Interior perspective :Exhibition Figure

4.18:Interior perspective showing seats Figure

4.19:Interior perspective showing cabinets Figure

4.20:Cushion seats

Figure 4.21:Exhibition and display room plan

Figure 4.22:Wooden chair

Figure 4.23:Wicker chair with cushion

Figure 4.24:Wooden table

Figure 4.25:Glass table and l-shaped seat

Figure 4.26:Dining room floor plan

Figure 4.27:Pie chart showing consideration of the design of the Arabian Cuisine restaurant

Figure 4.28:Bar graph showing guest experience

Figure 5.1:Spiral led statement light pendant

Figure 5.2:Geometric pendant light

Figure 5.3:Door with the Egyptian -Arabic pattern

Figure 5.4:Wooden window frame in the shape of an arch

Figure 5.5:Wall with indented arches

Figure 5.6:Gypsum ceiling with Egyptian-Arabic pattern

Figure 5.7:Porcelain tiles

Figure 5.8:Sketch of proposed minor space interior

Figure 5.9:Sketch of proposed interiors

Figure 5.10:Sketch of proposed major space interiors

Figure 5.11:Wall arch indented display

Figure 5.12:Arabic screen on the wall

Figure 5.13:Arabic screen on the wall in the shape of an arch

Figure 5.14:Arabic jugs and vases

Figure 5.15:Sketch of proposed plan (Exhibition and display) and wall treatment

Figure 5.16:Sketch of proposed exhibition and display space

Figure 5.17:Egyptian-Arabic geometric pattern design

Figure 5.18:Wood chair with leather seat

Figure 5.19:Glass table with geometric pattern

Figure 5.20:Sketch of proposed dining chair

Figure 5.21:Sketch of proposed dining table

Figure 5.22:Sketch of proposed reception desk

Figure 5.23:Pergola car park roof shade

Figure 5.24:Pergola car park shade

Figure 5.25:Asphalt parking

Figure 5.26:Asphalt on parking



Figure 5.27:French Drain

Figure 5.28:Native plants provide seasonal beauty, support wildlife and conserve water

Figure 5.29:A natural flagstone path flanked by dense plantings makes for a welcoming entrance

Figure 5.30: Chamaecyparis obtusa ‘Nana’ -a close up foliage detail

Figure 5.31:Star jasmine (Trachelospermum jasminoides

Figure 5.32:Sample of container ornamental flowers

Figure 5.33:African tulip tree

Figure 5.34:Silver maple tree

Figure 5.35:Sketch of proposed landscape fountain design

Figure 5.36:Sketch of proposed landscape seating area

Figure 5.37:Sketch of proposed landscape walkways

Figure 5.38:Seating area

Figure 5.39:Outdoor bar

Figure 5.40:Arabic screen on the perimeter wall

Figure 5.41:Night lights

## **LIST OF TABLES**

Table 3.1:Population sampling distribution

Table 3.2:Sample of a table

Table 3.3:Logical Framework

# **CHAPTER 1** **1**

<b>1.0 INTRODUCTION OF THE STUDY</b>	<b>1</b>
1.1 INTRODUCTION	1
1.2 BACKGROUND OF THE STUDY	2
1.3 PROBLEM STATEMENT	3
1.4 GENERAL OBJECTIVE	3
1.4.1 SPECIFIC OBJECTIVES OF THE STUDY	3
1.5 RESEARCH QUESTIONS	4
1.6 SIGNIFICANCE OF THE STUDY	4
1.7 LIMITATIONS OF THE STUDY	5
1.8 SCOPE OF THE STUDY	5
1.8.1 GEOGRAPHICAL SCOPE OF THE STUDY	5
1.8.2 CONCEPTUAL SCOPE OF THE STUDY	5
1.8.3 CONTEXTUAL SCOPE OF THE STUDY	5
1.9 SUMMARY	6

# **CHAPTER 2** **7**

<b>2.0 LITERATURE REVIEW</b>	<b>7</b>
2.1 INTRODUCTION	7
2.2 REVIEW OF THEORETICAL LITERATURE	7
2.2.1 AFRICA DESIGN	7
2.2.2 EGYPTIAN ART	8
2.2.3 How Artists Use Patterns	9
2.2.4 Forms of Patterns	10
2.2.5 Natural Patterns	10
2.2.6 Man-Made Patterns	11
2.2.7 Irregular Patterns in Art	11
2.2.8 Elements of patterns	12
2.2.9 Egyptian Islamic pattern	12
2.3 PROFILE OF WORLD RENOWN DESIGNER ADVOCATING THE PHILOSOPHY	13
2.3.1 AHMED MOUSTAFA	13
2.4 DESIGN EXEMPLAR	13
2.4.1 Khofo Egyptian restaurant.	14
2.5 THE DESIGN PROCESS	15
2.6 ANALYTICAL REVIEW - ARABIC CULTURE	19
2.6.1 ARABIC DESIGN	19
2.6.2 ISLAMIC STYLE	19

## **CHAPTER 3** **22**

<b>3.0 RESEARCH DESIGN AND METHODOLOGY</b>	<b>22</b>
3.1 INTRODUCTION	22
3.2 RESEARCH METHODOLOGY	22
3.3 TARGET POPULATION	23
3.3.1 SIGNIFICANCE OF THE POPULATION SAMPLE	23
3.4 SAMPLING METHODS	24
3.4.1 POPULATION AND SAMPLING	24
3.5 DATA COLLECTION	25
3.5.1 OBSERVATION	26
3.5.2 INTERVIEWS	26
3.5.3 CASE STUDIES	27
3.5.4 RECORDS	28
3.6 DATA ANALYSIS	28
3.7 DATA PRESENTATION	29
3.7.1 PIE CHART	29
3.7.3 BAR GRAPHS	30
3.7.4 TABLES	31
3.8 LOGICAL FRAMEWORK	32
3.9 SUMMARY	33

## **CHAPTER 4** **34**

<b>4.0 SITE ANALYSIS, PRESENTATION AND INTERPRETATION OF FINDINGS</b>	<b>34</b>
4.1 INTRODUCTION	34
4.2 QUALITATIVE ANALYSIS -PICTORIAL AND NARRATIVE	35
4.2.1 LOCATION	35
4.2.2 Services and Facilities	36
4.2.3 Climate	36
4.2.4 LANDSCAPE	37
4.2.5 INTERIOR ARCHITECTURE	39
4.2.6 EXHIBITION AND DISPLAY	42
4.2.7 FURNITURE	43
4.3 QUANTITATIVE ANALYSIS	45
4.3.1 Guest Experience	47
4.4 PRESENTATION OF FINDINGS	48
4.4.1 Interview Discussions	49

## **CHAPTER 5** **50**

<b>5.0 ; SUMMARY FINDINGS ,CONCLUSION AND RECOMMEN- DATIONS</b>	<b>50</b>
5.1:INTRODUCTION	50
5.2 SUMMARY OF FINDINGS	50
5.3 RECOMMENDATIONS	51
5.3.1 INTERIOR ARCHITECTURE	51
5.3.2 EXHIBITION AND DISPLAY	56
5.3.3 FURNITURE	59
5.3.4 LANDSCAPING	62
5.4 CONCLUSION	68
5.5 SUGGESTIONS FOR FURTHER STUDY	69

# CHAPTER 1

## 1.0 INTRODUCTION OF THE STUDY

### 1.1 INTRODUCTION

Culture plays an important role in the design field. When designers design for hotel, and restaurants in Kenya they tend to lean into Africa inspired design that speaks out a specific culture in their designs. This research focuses mainly on design for hotels and restaurants.

Patterns in interior spaces play a role in surface decoration and as a communication tool. Designers have started to lean towards using patterns for their designs. (Hamdy Mahmoud, Heba-Talla, 2017) Egyptian (Arabic) geometric patterns are employed by architects, interior architects and fine art artists to create a wide range of designs including textiles, ceramics, metalwork, architectural elements, and manuscripts. It considers one of the main matching points between architecture and arts through providing a variety of shapes, forms, models and formulas.

The simple forms of the circle, square, and straight line are the basis of the patterns. These elements are combined, duplicated, interlaced, and arranged in intricate combinations. Most patterns are typically based on one of two types of grid, one composed of equilateral triangles, the other of squares. History indicates that the real origins of geometric patterns were found in ancient Egyptian, Chinese, Indian and Greek architecture and arts. Geometric patterns are a common factor in the majority of historical and contemporary architectural and artistic works. Remarkable features showing that in spite of the religious variations between Islam and Christianity, there are many common features in Egyptian society with the same realization and taste in the areas which geometrical patterns work.

With the expansive application of culture as an inspiration to design, culture has not yet been adequately expressed in its context and thus cannot communicate and remains a poor narrative therefore the need to establish ways in which this problem can be solved through design culture.

According to(Hatton, R. 1903) people use patterns for various reasons .Interior spaces provided and continue to provide the physical context for daily activities, and give substance and life to the architecture, which houses them.

The reason why we employ patterns states; “There is at present, a strong desire among persons of taste for plain object, for objects devoid of complication of form, although beautiful in shape, delicate in proportion, and good in color. Such a demand as this, excludes decoration, or ornaments, as an unnecessary addition, as much on the score of beauty as for any other reason.

The methodology of this research mainly used a qualitative and quantitative methods based on descriptive approaches including primary surveys and historical tracing of the existence and usage of (Arabic)geometric patterns' works in Egyptian architecture, interior architecture and arts. The data will be presented in form of bar graphs ,pie charts and tables.

This chapter will cover the background of the study, the problem statement of the research, objectives, significance, limitations and the scope of the study.

## **1.2 BACKGROUND OF THE STUDY**

The Arabian Cuisine restaurant is an Arabic ,vegetarian friendly restaurant located in Kilimanjaro Avenue Upper Hill | opposite Crowne Plaza Hotel, Nairobi, Kenya.Its main customers are mainly Islamic people ,Egyptians and Yemeni people. It offers indoor and outdoor dining. A case study of The Arabian Cuisine restaurant clearly shows how the restaurant lacks cultural representation.

The hotels general outlook does not entail a specific culture or theme. It has incorporated no themes and the color scheme has the space creating a jumbled up effect with low consideration of design consistency as the eye moves from one point to another. Thus this reveals the need for a thorough refurbishment in all the areas from the interior architecture, exhibition and display techniques and furniture with the use of Egyptian(Arabic) geometric pattern art ,design and architecture.

### **1.3 PROBLEM STATEMENT**

There is lack of architectural and artistic feel or authenticity in the design of interior and exterior spaces in The Arabian Cuisine restaurant. The interior and exterior spaces lack a true connectedness to any specific culture.

### **1.4 GENERAL OBJECTIVE**

To incorporate geometric(Arabic) patterns ,art and designs from Egypt in the design of the interior and exterior spaces in The Arabian Cuisine restaurant.

#### **1.4.1 SPECIFIC OBJECTIVES OF THE STUDY**

- 1.To investigate how geometric art and designs have applied in the design of restaurant spaces.
2. To determine strategies for incorporating Egyptian(Arabic) design to create a more appealing interior environment.
- 3.To establish the current design styles used in The Arabian Cuisine restaurant.
- 4.To propose solutions through the interior architecture , landscape , furniture , exhibition and display for the The Arabian Cuisine restaurant.

## **1.5 RESEARCH QUESTIONS**

1. How has Egyptian(Arabic) art, design and patterns be used to create an appealing interior ?
2. What strategies can Egyptian(Arabic) art, design and pattern be used to create an appealing environment?
3. What are the current design styles applied in the interiors of restaurants?
4. How to incorporate the Aspects of Egyptian(Arabic) art ,design and pattern in exhibition , landscape, interior architecture and furniture designs of restaurants?

## **1.6 SIGNIFICANCE OF THE STUDY**

Discussions inside the design community, have contended that examples structure a premise or a structure obstruct for wholesome design specifically in interior design. The investigation endeavours to give general data on why designers think about utilization of patterns, and how the objectives are met. Patterns should not exclusively be utilized for beautification purposes, yet ought to be utilized to communicate other significant data, for example, culture, religion and time. It is often the case that most artists or designers apply patterns because they are visually attractive without understanding the origins, meaning and essence.

Consequently the outcome of the use of patterns may not fulfil all the desired purposes. The research provides guidelines on the evaluation of patterns before final applications. The body of knowledge provided help to understand and shed light on the rich and diverse application of patterns in The Arabian Cuisine restaurants and can be used as a source of information for more specific studies by other scholars on the subject.



## **1.7 LIMITATIONS OF THE STUDY**

- Sources of information on Egyptian(Arabic) patterns were limited.
- The books provided shallow reference materials hence internet sources are to be relied upon.
- Unwillingness by the respondents to be interviewed.
- Other problems to be encountered will be language barriers since most of the people were Arab speakers.

## **1.8 SCOPE OF THE STUDY**

### **1.8.1 GEOGRAPHICAL SCOPE OF THE STUDY**

The study will be carried out at The Arabian Cuisine is an Arabic ,vegetarian friendly restaurant located in Kilimanjaro Avenue Upper Hill | opposite Crowne Plaza Hotel, Nairobi, Kenya.

### **1.8.2 CONCEPTUAL SCOPE OF THE STUDY**

The concept of the study focuses on human environment, trends and styles in furniture design, interior architecture, interior landscape and exhibition and display techniques.

### **1.8.3 CONTEXTUAL SCOPE OF THE STUDY**

The content of the study will be informed by primary sources obtained from the site and secondary sources which include articles and reviews on similar sites and design concepts. The context of this research is hospitality.

## **1.9 SUMMARY**

In general art patterns and culture are integral assets and, through thoughtful curation and strategy, can be used not only to enhance a visitor's understanding of a space but to showcase an owner's support and taste, mirror the history and taste, reflect the history and identity of a structure and the local area or to embody a very particular tone of voice to help express a setting's exact character.

Egyptian(Arabic) architecture, interior architecture and arts give geometric patterns a great deal of importance and respect. The employment of geometrical patterns in the interior environment that are designed in various materials such as, wood, marble, clay, glass, stone, metal and textile and cultural features Egyptian(Arabic)geometric patterns when applied to an interior space will make the room look more vibrant and alive.

In summary, the chapter introduces the topic of the relationship between culture and interior design. It shows the background of the study, the objectives, significance, limitations and scope of the study in alignment with the problem statement of the study which is the lack of architectural and artistic feel or authenticity in the design of the interior and exterior spaces in The Arabian Cuisine restaurant.

# CHAPTER 2

## 2.0 LITERATURE REVIEW

### 2.1 INTRODUCTION

#### *Overview*

In this chapter, the Egyptian(Arabic) geometric pattern will be discussed as part of Egyptian art. It will be further examined in relation to interior design; stressing on possible techniques and themes that have been incorporated in the discipline Egyptian inspired design will also be looked at under African Design to gain knowledge on how cultural aspects can be incorporated in the design. The chapter will further examine previous applications of the philosophies by using global exemplars while sourcing references ranging from; books, journals, web articles, live interviews among other sources.

### 2.2 REVIEW OF THEORETICAL LITERATURE

#### 2.2.1 AFRICA DESIGN

Trowel (2003) defines African design as the whole planning of the shape and construction of an object using the word in its widest sense; remembering that even when the term is used in the more limited field of decoration or ornament it carries with it this wider connotation. African art and design have a lot of times been viewed as an art collector's hobby and that it would not work in a modern-day space. "...it has been shown that modernism and Africa go hand in hand, and that, in fact, key phrases in the development of western culture –enlightenment, industrialization, modern life were all fuelled by the colonial exploitation of Africa as well as other parts of the world" ( Baraka, 2011). It is also a fact that indeed many solutions in modern-day civilization were adopted from African concepts and design.

The execution of African structure ideas in interior spaces is in a totality that gets the most subtle to the most dominating part of a space catches the most unobtrusive to the most predominant aspect of a space. It covers the nuances and conveys congruity and development to space.

For the purpose of this research paper, the scope of design in Africa will be narrowed down to that of the Egyptian culture with traces of Arabian culture as well.

### **2.2.2 EGYPTIAN ART**

Since as far back as 3000BC, Egypt has always been a cosmopolitan of arts. From exceptionally unique sculptures to beautifully harmonized paintings and distinctive pottery and glass-work; Egyptians have handed down their artistic talents generation after generation to this very day.

Egyptian artists did have a very unique way of doing things. Part of this was the fact that art back then was used for very different purposes than it is today. While our society sees art as more of a luxury, to the Egyptians it was a necessity. Their society was primarily illiterate, and art was one of the main ways that the Pharaoh was able to communicate with the commoners in his kingdom. Because of this, the artwork in ancient Egypt was very tightly controlled. Today, we may think of artists as “free spirits” who experiment with new ways to create their work. That was not the case in ancient Egypt. All of the artwork was commissioned and overseen by the Pharaoh and had strict guidelines to follow. In our day, we would probably refer to these artists more often as “craftsmen”. This is perhaps why their work has such an astonishing quality to it. They had a unique style that was passed on for many generations. Any changes in their artwork were very gradual.

Symmetry and geometry are very prevalent, as is the depiction of common plants and animals that were in their area. A defining characteristic of their artwork is that they created the plants and animals in a very graphic, modern way. Instead of trying to recreate a very lifelike appearance, they emphasized the recognizable characteristics of plants and animals.(Leoneschi, Francesca and Silvia Lazzaris ,2019).

The other major theme throughout their work was that it was driven by religious purposes. This is a natural theme for their work to follow since religion was completely intertwined with their daily life, and their Pharaoh was their political and religious leader and, essentially, their “art director”.

Now, patterns were frequently used in Egyptian artwork, but there isn’t any real evidence that the patterns themselves had great religious significance. It is believed that the Egyptians did see great blank spaces in their work as “unsightly”, and they filled much of it with patterns. However, just because the pattern work didn’t have great significance, doesn’t mean it was done as an afterthought.

### **2.2.3 How Artists Use Patterns**

Patterns can help set the rhythm of a piece of art. When we think of patterns, images of checkerboards, bricks, and floral wallpaper come to mind. Yet patterns go far beyond that: a pattern doesn't always have to be an identical repetition of an element.

Patterns have been used since some of the first art was created in ancient times. We see it in a pride of lions on the walls of 20,000-year-old Lascaux Cave, and on the cord-markings in the first pottery made 10,000 years ago. Patterns have regularly adorned architecture throughout the ages. Many artists over the centuries added pattern embellishments to their work, whether strictly as decoration or to signify a known object, such as a woven basket.

### **2.2.4 Forms of Patterns**

In art, patterns can come in many forms. An artist may use color to signify a pattern, repeating a single or select palette of colors throughout a work. They can also use lines to form patterns such as in Op Art. Patterns can also be shapes, whether geometric or natural (floral patterns), that are found in art.

Patterns can also be seen in an entire series of work. Andy Warhol's "Campbell's Soup Can" (1962) is an example of a series that, when displayed together as intended, creates a distinct pattern.(Warhol ,1962).

Artists tend to follow patterns in their entire bodies of work as well. The techniques, media, approaches, and subjects they choose can show a pattern across a lifetime of work and it often defines their signature style. In this sense, a pattern becomes a part of the process of an artist's actions, a behavioral pattern, so to speak.

### **2.2.5 Natural Patterns**

Patterns are found everywhere in nature, from the leaves on a tree to the microscopic structure of those leaves. Shells and rocks have patterns, animals and flowers have patterns, even the human body follows a pattern and includes countless patterns within it.

In nature, patterns are not set to a standard of rules. Sure, we can identify patterns, but they are not necessarily uniform. Snowflakes nearly always have six sides, but each separate snowflake has a pattern that is different from every other snowflake.

A natural pattern can also be broken up by a single irregularity or be found outside of the context of an exact replication. For instance, a species of tree may have a pattern to its branches but that doesn't mean every branch grows from a designated spot. Natural patterns are organic in design.

### **2.2.6 Man-Made Patterns**

Man-made patterns, on the other hand, tend to strive for perfection. A checkerboard is easily recognizable as a series of contrasting squares drawn with straight lines. If a line is out of place or one square is red rather than black or white, this challenges our perception of that well-known pattern.

Humans also attempt to replicate nature within man-made patterns. Floral patterns are a perfect example because we are taking a natural object and turning it into a repeating pattern with some variation. The flowers and vines do not have to be replicated exactly. The emphasis comes from the general repetition and placement of the elements within the overall design.

### **2.2.7 Irregular Patterns in Art**

Our minds tend to recognise and enjoy patterns, but what happens when that pattern is broken? The effect can be disturbing and it will certainly catch our attention because it is unexpected. Artists understand this, so you will often catch them throwing irregularities into patterns.(M.C Escher ,1938.)

For example, the work of M.C. Escher plays off our desire for patterns and that is why it is so captivating. In one of his most famous works, "Day and Night" (1938), we see the checkerboard morph into flying white birds. Yet, if you look closely, the tessellation reverses itself with black-birds flying in the opposite direction.

Escher distracts us from this by using the familiarity of the checkerboard pattern along with the landscape below. At first, we know that something isn't quite right and that's why we keep looking at it. In the end, the pattern of the birds mimics the patterns of the checkerboard.

The illusion would not work if it did not rely on an uncertainty of pattern. The result is a piece with high impact that is memorable to all who view it.

### **2.2.8 Elements of patterns**

To plainly get designs and designing, it is fundamental to portray a few parts and components that structure examples and how they are interrelated. Ching<sup>16</sup> gives an unmistakable outline of this impact. He depicts the parts and components of example as pursues:

A point or a speck is the generator everything being equal, it denotes an area in space and theoretically, it has no length, width, or profundity. It is static and directionless. Specks without anyone else's input structure designs through various mixes and calculations. As a point moves, it leaves a hint of a line This is known as the principal measurement. In fundamental terms a line is a reiteration of focuses. Line is a fundamental component that encourages us characterise shape, a trademark by which we perceive things.

Lines are additionally used to make surfaces and examples on the surfaces of structures. Shape is the method by which we recognise one structure from another. It might allude to the shape of a line, the framework of a plane or limit of three-dimensional mass.

### **2.2.9 Egyptian Islamic pattern**

Islamic pattern, unique as an art form, is also unitary in its aim and function. Symbols can exhaust verbal explanation but verbal explanation can in no way exhaust symbols and the symbols inherent in Islamic pattern and geometry are directed towards that undifferentiated unity.

The circle and its centre are the point at which all Islamic patterns begin (Plate 3:27). According to the Internet<sup>81</sup> “The circle is an apt symbol of a religion that emphasises one God, symbolising also, the role of Mecca, the centre of Islam, toward which all Moslems face in prayer.



The circle has always been regarded as a symbol of eternity, without being and without end, and is not only the perfect expression of justice-equality in all directions in a finite domain but also the most beautiful parent of all polygons, both containing and underlying them”

Pattern recognition is a fundamental function of the human brain—in fact of all animals, and it can apply to visual images but also sound and smell. It allows us to take in and quickly understand our environments. Pattern recognition is what allows us to do everything from recognising individuals and their emotional states to solving jigsaw puzzles to sense when a storm is due. As a result, patterns in art satisfy and intrigue us, whether those patterns are clearly identifiable, such as Andy Warhol's repeated images of Marilyn Monroe, or must be parsed out, as in Jackson Pollack's seemingly random splatters.

## 2.3 PROFILE OF WORLD RENOWN DESIGNER ADVOCATING THE PHILOSOPHY

### 2.3.1 AHMED MOUSTAFA

Ahmed Moustafa is an Egyptian artist who specializes in Arabic arts. He created rich visual artworks through his innovative mixture of painting and Calligraphy. Many of his artworks include geometrical patterns. "Ahmed Moustafa (1943–) is a perfect example. Many of Moustafa’s works present Koranic verses in three- dimensional forms, and at times he juxtaposes two different traditional scripts—in Still Life of Quranic Solids, he uses geometric Kufic for the background and cursive Thuluth for the three- dimensional shapes" ( Shabout N, 2010).

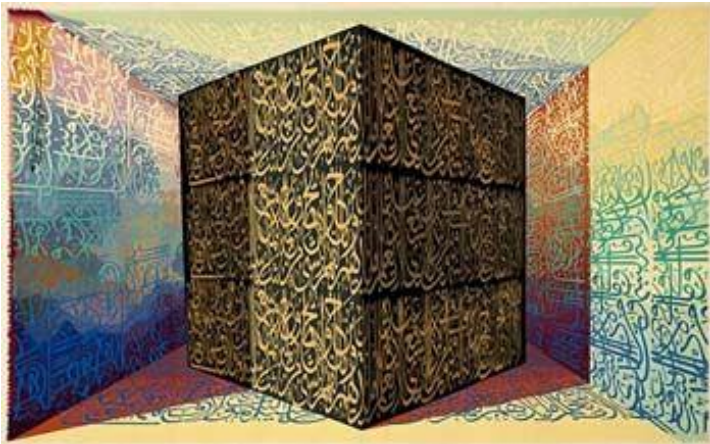


Figure 2.1:Ahmed Moustafa calligraphy artwork

Source ;[www.inceptiongallery.com](http://www.inceptiongallery.com)

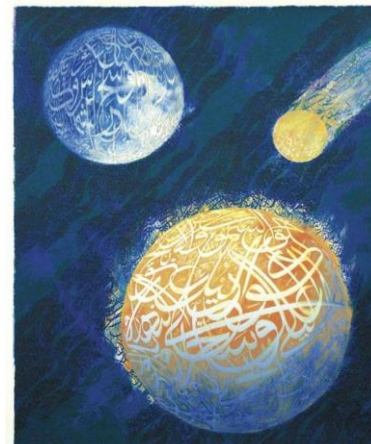


Figure 2.2:Ahmed Moustafa calligraphy artwork

Source ;[www.inceptiongallery.com](http://www.inceptiongallery.com)

### 2.4.1 Khofo Egyptian restaurant.

Located at Al Seef street in Dubai, Khofo Egyptian Restaurant serves up a plethora of meals inspired by Egyptian cuisine. Patrons can enjoy a variety of hot and cold appetizers alongside soups, salads, stews and seafood-based courses. The restaurant's interior is decorated with hieroglyph-inspired murals and columns designed to resemble those present in ancient Egyptian halls.



Figure 2.3:Khofo Egyptian restaurant interiors

Source ;[www.thenational.ae](http://www.thenational.ae)

Spread across 7,500 square metres, Khofo features majestic columns, hieroglyphic murals and Egyptian architectural cues throughout, conjuring up the lavish palace of Khufu, who ruled Egypt during the Fourth Dynasty. At the restaurant, guests will find that ancient Egyptian design has been reimagined for a contemporary international audience, with sleek surfaces, stylish furniture and plenty of natural light. The restaurant will also be brought to life with a full entertainment programme and friendly, attentive service, immersing guests in luxury, vibrancy and hospitality of ancient Egypt.(Mahak Mannan,2018).



Figure 2.4:Khofo Egyptian restaurant

Source ;[www.groupon.ae](http://www.groupon.ae)

Figure 2.5:Khofo Egyptian restaurant

Source ;[www.groupon.ae](http://www.groupon.ae)

## 2.5 THE DESIGN PROCESS

Design Thinking is a design methodology that provides a solution-based approach to solving problems. It's extremely useful in tackling complex problems that are ill-defined or unknown, by understanding the human needs involved, by re-framing the problem in human-centric ways, by creating many ideas in brainstorming sessions, and by adopting a hands-on approach in prototyping and testing. Understanding these five stages of Design Thinking will empower anyone to apply the Design Thinking methods to solve complex problems that occur around us — in our companies, in our countries, and even on the scale of our planet.(Friis and Siang Teo ,2020).

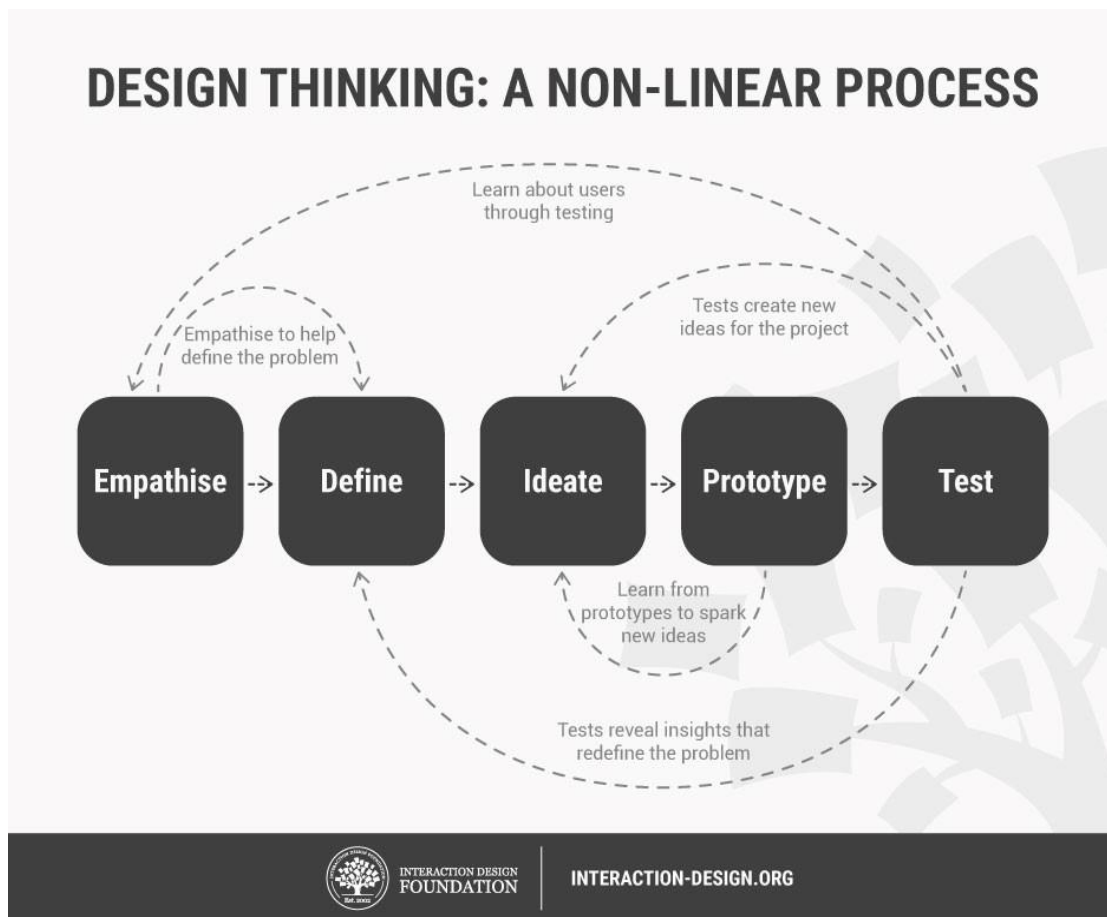


Figure 2.6:Design thinking process

Source ;[www.interaction-design.org](http://www.interaction-design.org)

We will focus on the five-stage Design Thinking model proposed by the Hasso-Plattner Institute of Design at Stanford (d.school). d.school is the leading university when it comes to teaching Design Thinking. The five stages of Design Thinking, according to d.school, are as follows: Empathise, Define (the problem), Ideate, Prototype, and Test. Let's take a closer look at the five different stages of Design Thinking.

### ***1. Empathise***

The first stage of the Design Thinking process is to gain an empathic understanding of the problem you are trying to solve. This involves consulting experts to find out more about the area of concern through observing, engaging and empathizing with people to understand their experiences and motivations, as well as immersing yourself in the physical environment so you can gain a deeper personal understanding of the issues involved. Empathy is crucial to a human-centered design process such as Design Thinking, and empathy allows design thinkers to set aside their own assumptions about the world in order to gain insight into users and their needs.

Depending on time constraints, a substantial amount of information is gathered at this stage to use during the next stage and to develop the best possible understanding of the users, their needs, and the problems that underlie the development of that particular product.

### ***2. Define (the Problem)***

During the Define stage, you put together the information you have created and gathered during the Empathise stage. This is where you will analyze your observations and synthesize them in order to define the core problems that you and your team have identified up to this point. You should seek to define the problem as a problem statement in a human-centered manner.

To illustrate, instead of defining the problem as your own wish or a need of the company such as, "We need to increase our food-product market share among young teenage girls by 5%," a much

better way to define the problem would be, “Teenage girls need to eat nutritious food in order to thrive, be healthy and grow.”

The Define stage will help the designers in your team gather great ideas to establish features, functions, and any other elements that will allow them to solve the problems or, at the very least, allow users to resolve issues themselves with the minimum of difficulty. In the Define stage you will start to progress to the third stage, Ideate, by asking questions that can help you look for ideas for solutions by asking: “How might we... encourage teenage girls to perform an action that benefits them and also involves your company’s food-product or service?”

### ***3. Ideate***

During the third stage of the Design Thinking process, designers are ready to start generating ideas. You’ve grown to understand your users and their needs in the Empathise stage, and you’ve analyzed and synthesized your observations in the Define stage, and ended up with a human-centered problem statement. With this solid background, you and your team members can start to "think outside the box" to identify new solutions to the problem statement you’ve created, and you can start to look for alternative ways of viewing the problem. There are hundreds of Ideation techniques such as Brainstorm, Brain-write, Worst Possible Idea, and SCAMPER. Brainstorm and Worst Possible Idea sessions are typically used to stimulate free thinking and to expand the problem space. It is important to get as many ideas or problem solutions as possible at the beginning of the Ideation phase. You should pick some other Ideation techniques by the end of the Ideation phase to help you investigate and test your ideas so you can find the best way to either solve a problem or provide the elements required to circumvent it.

#### ***4. Prototype***

The design team will now produce a number of inexpensive, scaled-down versions of the product or specific features found within the product, so they can investigate the problem solutions generated in the previous stage.

Prototypes may be shared and tested within the team itself, in other departments, or on a small group of people outside the design team. This is an experimental phase, and the aim is to identify the best possible solution for each of the problems identified during the first three stages. The solutions are implemented within the prototypes, and, one by one, they are investigated and either accepted, improved and re-examined or rejected on the basis of the users' experiences.

By the end of this stage, the design team will have a better idea of the constraints inherent to the product and the problems that are present, and have a clearer view of how real users would behave, think, and feel when interacting with the end product.

#### ***5. Test***

Designers or evaluators rigorously test the complete product using the best solutions identified during the prototyping phase.

This is the final stage of the 5 stage-model, but in an iterative process, the results generated during the testing phase are often used to redefine one or more problems and inform the understanding of the users, the conditions of use, how people think, behave, and feel, and to empathize.

Even during this phase, alterations and refinements are made in order to rule out problem solutions and derive as deep an understanding of the product and its users as possible.

## **2.6 ANALYTICAL REVIEW - ARABIC CULTURE**

Arabic culture is the culture of the Arabs, from the Atlantic Ocean in the west to the Arabian Sea in the east, and from the Mediterranean Sea in the north to the Horn of Africa and the Indian Ocean in the southeast. Language, literature, gastronomy, art, architecture, music, spirituality, philosophy, mysticism (etc.) are all part of the cultural heritage of the Arabs.(Behrens-Abouseif , 1999).

The Arab world is sometimes divided into separate regions including the Mediterranean: (consisting of Libya, Tunisia, Algeria, Morocco, and Mauritania), North Africa (consisting of Egypt and Sudan), the Levant (consisting of Iraq, Lebanon, Syria, Palestine, and Jordan) and the Arabian Peninsula (consisting of south Iraq, Jordan, Kuwait, Bahrain, Qatar, Saudi Arabia, Al Ahvaz Al Arabiya, Oman, and the UAE) and the Arabian Peninsula's Al-Janoub Al-Arabi (consisting of Yemen and Oman).

### **2.6.1 ARABIC DESIGN**

Arabic design is a fruitful combination of the Islamic, Moroccan and Egyptian styles with a dash of the transitional style of Modernism. Each one of these styles has individual characteristics of their own, but when they come together, they can make something unique and different. To understand the holistic nature of the modern Arabic scheme, you need to first take a look at all four of these styles individually.

### **2.6.2 ISLAMIC STYLE**

Islamic style is a combination of strict geometry, careful layouts, and an open space philosophy. Its initial, singular purpose was to display Islamic architecture in a way that seemed grand and majestic. So the Islamic style used sweeping courtyards, large arches with pishtaqs and iwans along with the arcades and porticos. Islamic architecture was all about grandeur, in an understated manner. (Deniz Kaya,2018).

While we study the modern Arabic interior design aspect, it is important to note that Islamic architecture was used in all types of secular and religious buildings – mostly mosques. With the rise of the Byzantine Empire, it seeped into palaces and forts as well. The most notable example of this would be the Palace of Alhambra in Spain.

### **a. Geometry**

Geometry is one of the defining aspects of Islamic interiors and architecture. From the beautifully carved mashraba's to the complicated floor patterns, geometry is an inherent part of this style.

### **b. Proportion**

Proportion of any architecture or interior in this style is set around the dome, but small-scale practices can take the size of the room as standard proportion and design accordingly.

### **c. Design Elements**

Arches

Islamic style introduces a plethora of arch styles, which can be used as a wall centerpiece in modern Arabic interior design with subtle contemporary touches.

Iwans

A square niche outside of the depressed arch, Iwans are a salient Islamic feature. They are a major standout design element in any modern Arabic design and can be merged with a modern vibe.

Calligraphy

Not the most defining design element, but Calligraphy is an important aspect of Islamic design. It reinforces the sense of Arabic culture and sanctity of the religion.



#### *d. Colors*

The colors of Islamic style can be neutral with a tiny hint of bold. Take the Blue Mosque in Turkey as an example – the domes are a bright cascading blue, while the rest is simply neutral gray/brown.

Islamic flairs are common in Arabic style. A modern Arabic interior design can have geometry in the form of laser-cut partition screens and complicated floor tile patterns. The proportion in a modern Arabic setting can be defined by an imposing arch as the center of the design. Calligraphy can be framed on the walls to imply a modern touch. The color palate, of course, needs to be restrained in order to focus on other touches, but the design elements are majorly Islamic. (Deniz Kaya,2018).

## **2.7 CONCLUSION**

The application of culture as an inspiration to design has not yet been adequately expressed in its context and thus cannot communicate and it remains a poor narrative, therefore the need to establish ways in which this problem can be solved through design culture. Arabic design is a fruitful combination of the Islamic, Moroccan and Egyptian(Arabic) styles with a dash of the transitional style of Modernism. The Egyptian(Arabic) design can be used to showcase culture in various forms.

In summary, this chapter has discussed Egyptian(Arabic) geometric patterns as a part of Egyptian art. It has also discussed the different types of patterns and some of the renowned designers who have incorporated the art of using Egyptian(Arabic) patterns in interior design and architecture.

# CHAPTER 3

## 3.0 RESEARCH DESIGN AND METHODOLOGY

### 3.1 INTRODUCTION

This chapter provides the nature of the research, descriptions of the methods used, and the timeline of the research. Principally, this is descriptive research that seeks to address the problem statement under investigation.

### 3.2 RESEARCH METHODOLOGY

Research methodology may be understood as a science of studying how research is done scientifically. In it we study different steps that are usually adopted by a researcher in studying his or her research problems along with the logic behind them.

The researcher used the qualitative method of research where she discusses the research methodology using a qualitative approach. The researcher used quantitative method of research which are based in mathematical calculations in various forms.

The methodology of this research mainly used a qualitative approach and quantitative method based on descriptive approaches including primary surveys and historical tracing of the existence and usage of Egyptian(Arabic) geometric patterns' works in architecture, interior architecture and arts.

### **3.3 TARGET POPULATION**

The target population of the study will be composed of :

The restaurant manager.

The employees

Interior designer

Customers and the residents

According to age groups, 18-25, 26-30, 31-35, over 35 years.

#### **3.3.1 SIGNIFICANCE OF THE POPULATION SAMPLE**

- The residents helped in a having a perspective from most of the age groups.
- Restaurant manager and employees provided useful information about the resort.
- Customers helped in having an understanding of their experience of the hotel.
- The employees gave us a glimpse on the design of the hotel thus helping in contrasting the difference in the designs.

### 3.4 SAMPLING METHODS

Non random/non probability sampling was perfect because of the huge populace of individuals on the site. This approach of testing restricted the analyst to individuals that had information data dependent on the study. Items of test were intentionally chosen by the researcher.

#### 3.4.1 POPULATION AND SAMPLING

This is the process of selecting a sample from the population under study. This is defined as a segment of the population selected for investigation. The strategies for acquiring data might have been based on probability or non-probability approaches.

In this research, the probability sample was applicable method to give each unit of the population a known chance of being selected. This kept the sampling error at minimum. In this study the population was random guests and staff working at the restaurant.

<b>Population category</b>	<b>Frequency</b>	<b>Percentage</b>
Customers	10	50%
Waiters	5	25%
Managers	2	10%
Residents	2	10%
Interior designer	1	5%
<b>Total</b>	<b>20</b>	<b>100%</b>

Table 3.1: Population sampling distribution

### 3.5 DATA COLLECTION

Data collection for this research included both primary and secondary data, where primary data were the ones that were collected afresh from the sample population, and thus happen to be original in character.

Primary data was collected initially through a field survey, taking of photographs and observing of The Arabian restaurant to identify the problem area. Later formal interviews were conducted with hotels top customer care management and the design consultants. Informal interviews were conducted with a number of hotel patrons chosen at random.

The secondary data on the other hand, are those which have already been collected by someone else and which have been passed through the statistical process (Kothari, 2004). Literature review from various sources such as books, journals, magazines, brochures, newspapers and internet provided secondary data on the basic understanding of patterns from a broader perspective as documented by other scholars on the subject.



Figure 3.1: Data collection activities

Source ;[www.slideshare.net](http://www.slideshare.net)

### **3.5.1 OBSERVATION**

Primary data was collected using participant type of observation so as to interact and share with the selected population and experience what the members of the group experience. It is method of data collection done in the qualitative research paradigm to gain a close and intimate familiarity with a given group of individuals.

### **3.5.2 INTERVIEWS**

Another method that was used for this study was non structured interviews. According to (McNamara, 1999) interviews are particularly useful for getting the story behind a participant's experiences. The main reason why the researcher used interviews was because compared to other methods of data collection, one is able to obtain detailed information about personal feelings, perceptions and opinions. Interviews also receive a high response rate. This method was very convenient because the interviewer was allowed much greater freedom to ask, in case of need, supplementary questions or at times she/he may omit certain questions if the situation so requires.

---

#### **3.5.2.1 Advantages of interviews**

- Useful to obtain detailed information about personal feelings, perceptions and opinions.
- They have a high response rate.
- Best collection of data for showing the mood of someone at that point.
- Can reach a large sample
- Can ensure questions are fully understood

### **3.5.3 CASE STUDIES**

Case study method, which involves intensive investigation of the particular unit of study, is as well a form of tool. This method enabled the researcher to locate the factors that account for the behavior patterns of the given unit as an integrated totality (Kothari, 2004). Yin (1993) suggests that the term refers to an event, an entity, an individual or even a unit of analysis. It is an empirical inquiry that investigates a contemporary phenomenon within its real life context using multiple sources of evidence. Case study is not intended as a study of the entire population. Rather is intended to focus on a particular issue, feature or unit of analysis.

This method enables one to understand the complex real-life activities in which multiple sources of evidence were used. The use of case study to probe an area of interest in depth is particularly appropriate. Case studies become particularly useful where one needs to understand some particular problem or situation in great-depth, and where one can identify cases rich in information. As Noor (2008) explains, some the strengths of the case study method are that it enables the researcher to gain a holistic view of a certain phenomenon or series of events and can provide a round picture since many sources of evidence can be used. Another advantage is that case study can be useful in capturing the emergent and immanent properties of life in organizations and the ebb and flow of organizational activity. The case study approach was used in this research as a tool for data collection.

Secondary data was collected from books, newspapers, and journals, unpublished research reports from universities and biographies. Apart from these sources, the researcher might have include reliable websites from the internet that allocated useful information to the ongoing study research.

### **3.5.4 RECORDS**

A record could be of a photo or any other kind of documentary. In this case, once you go online, you find useful information about the hotel and most especially the reviews from other people who have visited the hotel.

### **3.6 DATA ANALYSIS**

Data analysis is the process of evaluating data using analytical and logical reasoning to examine each component of the data provided. The data, after collection, was processed and analyzed in accordance with the outline laid down for the purpose at the time of developing the research plan. This is essential for a scientific study and for ensuring that there is relevant data for making contemplated comparisons and analysis (Kothari, 2004).

Data analysis depended upon the research that the researcher was undertaking. Data analysis involved field notes, records and photographs. Both the quantitative and qualitative approach were utilized in this project.

The quantitative approach focused on obtaining numerical findings and was used with the observation method. The interview on the other hand, made up the qualitative approach of the study as this focuses on personal accounts, observations and description and individual insights of the interviewees.

Through interviews, this coding included identifying themes within the interview notes that relate to the research questions in the study.

Observation was analysed by the researcher reading and reviewing the data, then indicted notes as reviews of field notes.



Photographs taken during the research were analysed by expounding their contents in line with the objectives of the study.

After the data was evaluated, suitable way of presenting it was chosen.

### 3.7 DATA PRESENTATION

#### 3.7.1 PIE CHART

The results from the interviews were presented by a pie chart since the questions given were closed –ended such that the answers given were either yes or no.

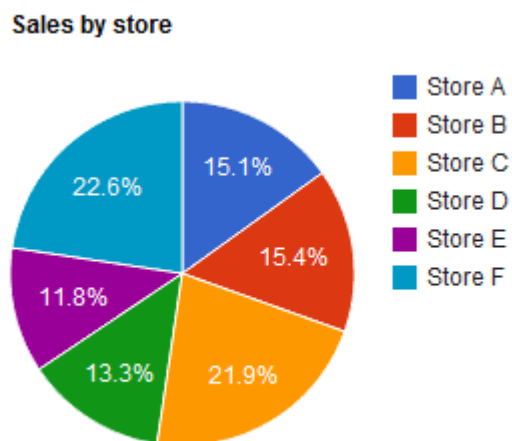


Figure 3.2: Sample of pie chart

Source: Pie charts ([www.google.com](http://www.google.com))

### 3.7.2 PHOTOGRAPHY

The researcher took photos of the site. The photos present the key problems of the site as well as the other areas of the site.



Figure 3.3: Random photograph of a landscape

Source : [www.archdaily.com](http://www.archdaily.com)

### 3.7.3 BAR GRAPHS

Bar graphs were used to present the residents included in the research according to age groups.

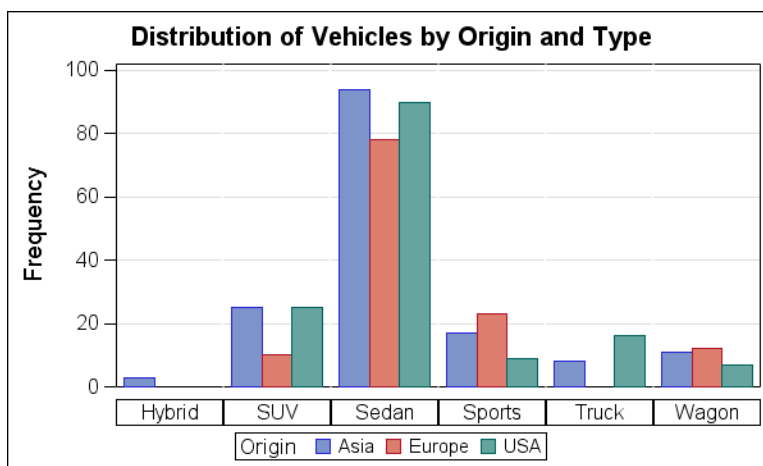


Figure 3.4: Sample of bar graph

Source: Bar charts ( [www.google.com](http://www.google.com) )

### 3.7.4 TABLES

Tables were used to present the target population. It will give a brief description of the sample population and the sum of that particular population.

ID	Year	Region	2017 Revenue	2018 Revenue	% Change
1	2017	East	\$80,191	\$83,115	4% ▲
2	2017	West	\$80,773	\$93,038	15% ▲
3	2017	North	\$59,707	\$75,716	27% ▲
4	2017	South	\$39,796	\$34,293	-14% ▼
5	2018	East	\$68,100	\$68,100	0% —
6	2018	West	\$98,456	\$122,714	25% ▲
7	2018	North	\$84,487	\$30,670	-64% ▼
8	2018	South	\$95,793	\$138,856	45% ▲

Table 3.2: Sample of a table

Source: Tables ([www.google.com](http://www.google.com))

### 3.8 LOGICAL FRAMEWORK

<b>Objective 1 :To investigate how Egyptian geometric art and designs have applied in the design of restaurant spaces.</b>				
Data Needs	Data Source	Data Collection Tools	Analysis Method	Expected Output
Investigate how geometric art and design	Literature	Review of literature	Content Analysis Visual analysis	Gain knowledge on Egyptian geometric art and design.

<b>Objective 2 :To determine strategies for incorporating Egyptian design style to create a more appealing interior environment.</b>				
Data Needs	Data Source	Data Collection Tools	Analysis Method	Expected Output
Egyptian art and design for interiors	Online research Literature	Note taking Review of literature	Visual Analysis	Exemplars and knowledge on Egyptian art and design.

<b>Objective 3: To establish the current design styles used in The Arabian Cuisine restaurant.</b>				
Data Needs	Data Source	Data Collection Tools	Analysis Method	Expected Output

Current design styles/ existing conditions the site	Customer s Case study	Interviews Observation Photograph y	Narrative Analysis Visual analysis	Documentation of existing design styles of the restaurant	
<b>Objective 4: <i>To propose solutions through the interior landscape ,furniture ,exhibition and display for the interiors of The Arabian Cuisine restaurant.</i></b>					
Data Needs	Data Source	Data Collection Tools	Analysis Method	Expected Output	
Determine how Egyptian art can be incorporated into design	Case study	Note taking	Content Analysis	New designs suitable for the restaurant through landscape, Interior architecture, furniture , exhibition and display.	

Table 3.3:Logical Framework

Source :Author,2020

### 3.9 SUMMARY

The methodology incorporated for the research was mainly qualitative and a bit of quantitative to enable the researcher to devise a tangible summary of the findings. Data collection methods were discussed such as photography ,interviews and observation methods. Field notes were analysed and presented as narratives accompanied by graphs ,tables and charts for illustration purposes.- Target population was drawn the restaurant employees and customers ,including the managers.

# CHAPTER 4

## 4.0 SITE ANALYSIS, PRESENTATION AND INTERPRETATION OF FINDINGS

### 4.1 INTRODUCTION

This section enters around separating and showing data that will be obtained from the essential sources of research. The findings are based on observation, photographs and interviews. Discoveries depend on perception, photos and interviews. The data will be investigated utilizing photographs from the site and ordered under the four areas of concern: interior architecture, exhibition and display, furniture and landscape.

This study however, mainly focused on 2 restaurant areas for the purpose of this study research. The researcher concentrated on assembling together data collected and started putting in a form that would enable her to carry out analysis and interpretation. The researcher will also analyse the quantitative data collected from the research on The Arabian Cuisine restaurant. The researcher will do so by use of tables, graphs and charts.

The location of the restaurant in Kilimanjaro Avenue Upper Hill | opposite Crowne Plaza Hotel, Nairobi, Kenya helped the researcher see a great potential in this restaurant given the fact of the population consists of a variety of people from different ethnic communities.

The researcher will present the findings to the research questions from the research objectives.

## 4.2 QUALITATIVE ANALYSIS -PICTORIAL AND NARRATIVE

### 4.2.1 LOCATION

The Arabian Cuisine restaurant is an Arabic ,vegetarian friendly restaurant located in Kilimanjaro Avenue Upper Hill | opposite Crowne Plaza Hotel, Nairobi, Kenya.

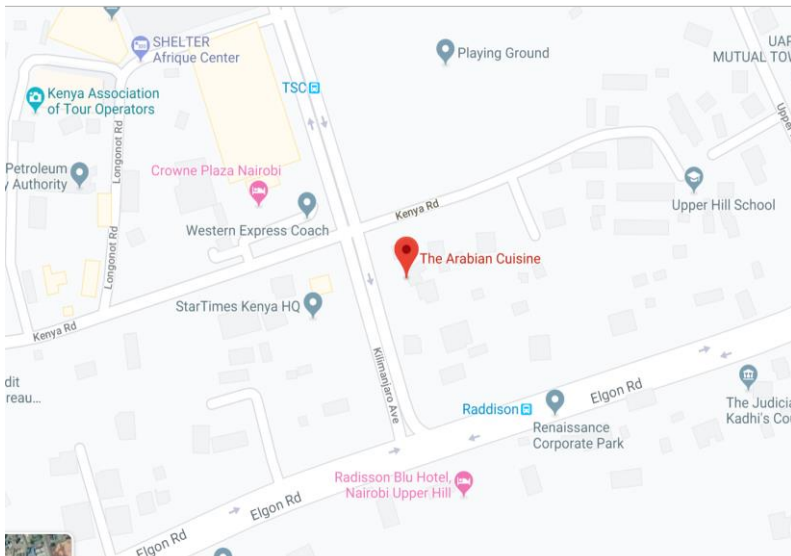


Figure 4.1:Road map

Source ;[www.google.com](http://www.google.com)



Figure 4.2:Geographical map

Source ;[www.google.com/earth/](http://www.google.com/earth/)

## 4.2.2 Services and Facilities

The restaurant initially was a residential house. The manager revamped the place keeping all its room and turned it into an Arabian restaurant. The restaurant has 3 dining areas. Outside the landscape offer quite a large outdoor seating under the tents. It also offer an outdoor prayer room under a tent.

## 4.2.3 Climate

The site's conditions are based on a general view of Nairobi's climatic patterns. According to (Wikipedia) under the Köppen climate classification, Nairobi has a subtropical highland climate (Cwb). At 1,795 metres (5,889 ft) above sea level, evenings may be cool, especially in the June/ July season, when the temperature can drop to 9 °C (48 °F). The sunniest and warmest part of the year is from December to March, when temperatures average in the mid-twenties Celsius during the day. The mean maximum temperature for this period is 24 °C (75 °F).

There are two rainy seasons, but rainfall can be moderate. The cloudiest part of the year is just after the first rainy season, when, until September, conditions are usually overcast with drizzle. As Nairobi is situated close to the equator, the differences between the seasons are minimal. The seasons are referred to as the wet season and dry season. The timing of sunrise and sunset varies little throughout the year for the same reason.

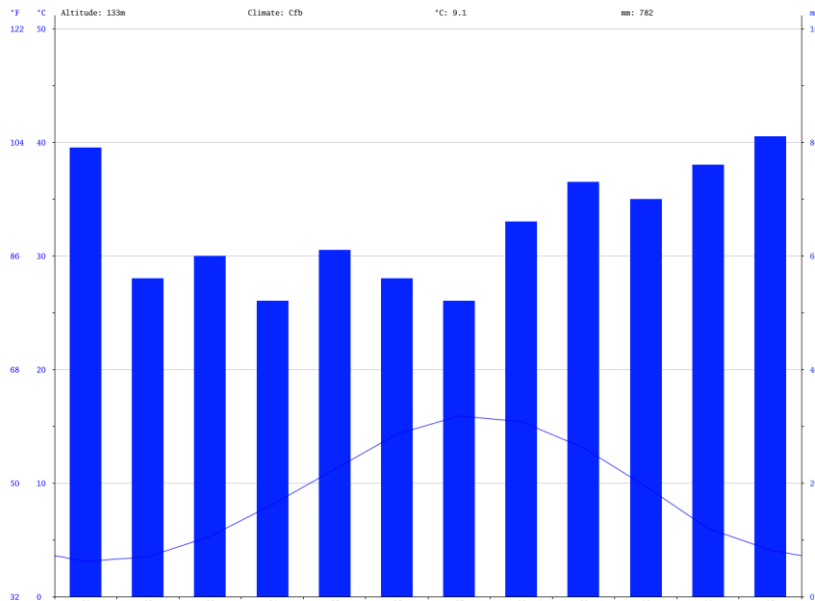


Figure 4.3: Climate graph/Weather by month(climate.org)

Source ; [www.climate.org](http://www.climate.org)



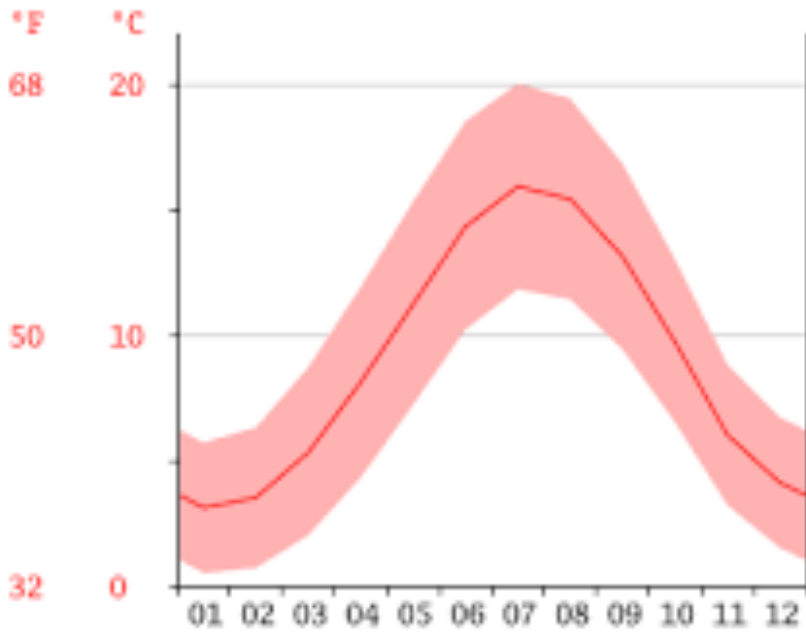


Figure 4.4:weather conditions  
Source ;[www.climate.org](http://www.climate.org)

#### 4.2.4 LANDSCAPE

The premise is 1.9 acres of land.From the entry gate you go straight to the parking area which can accommodate close to 20 acres.The site is well defined by a bamboo perimeter wall.



Table 3.3:Logical framework

Source :Author,2020

Figure 4.5:View from entrance  
Source :Author 2020

The premise has one main gate that serves as the only way into and out of the compound for people, cars and anything that might warrant being taken in and out of the compound.

The parking is enough. It can accommodate up to 15-20 cars at once. From the parking it goes straight to the outdoor dining area which is under the tents. The tents can accommodate around 100 people. The landscape also has a prayer room



Figure 4.6: Landscape entrance  
Source ; Author, 2020



Figure 4.7: Parking  
Source ; Author, 2020

The site has adequate vegetation cover with various of different species of trees and shrubs. Large trees are grown within the site and the compound has concrete pavement, grass and shrubs. The entrance to the restaurant is covered with concrete pavements. The drainage is quite okay. There is no presence of running water or paddles of water.



Figure 4.8: The restaurant  
Source ; Author, 2020



Figure 4.9: Duranta vegetation  
Source ; Author, 2020

#### 4.2.5 INTERIOR ARCHITECTURE

The interior of The Arabian Cuisine restaurant does not show a specific theme that one could relate to. Random decor have been placed around the restaurant miscellaneously. The walls are plain, containing no pattern or interesting features, and are painted in an orange colour creating a feeling of dullness in the restaurant.

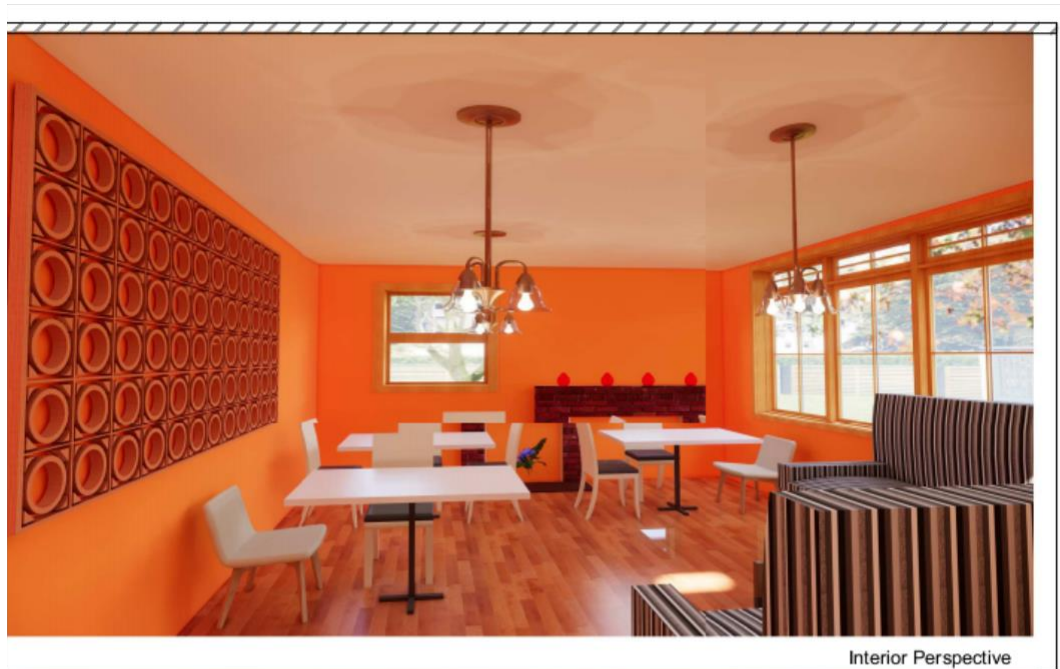


Figure 4.10:Interior perspective  
Source :Author, 2020

**Lighting;** The restaurant has minimal lights. It has tried to incorporate cultural theme in the lighting fixtures but it hasn't come out really well. The dining area has two main lights of which one does not work. It also has a light fixture on the wall on top of the exit door to the rest of the room. A view across the restaurant unveils very impecunious lighting with single bulbs accommodate a sizeably voluminous area and hence inadequate light around the space.

There is no categorical arrangement of the bulbs with a plethora of sun light glaring across from the windows in some spaces while other are coerced to remain with lights on even during the day



Figure 4.11:Interior showing part of the dining  
Source :Author 2020

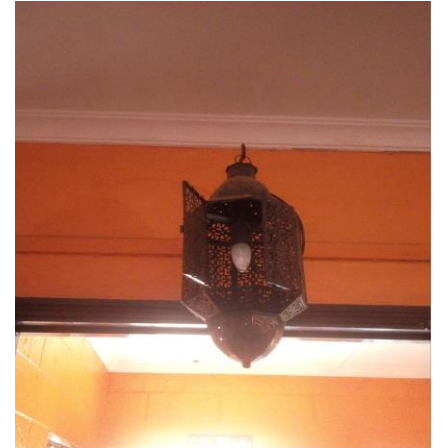


Figure 4.12:Lighting  
fixture  
Source ;Author, 2020

**Flooring;** The current floor type needs to be replaced with newer and appealing floor finish  
The current floor type needs to be replaced with newer and appealing floor finishes.

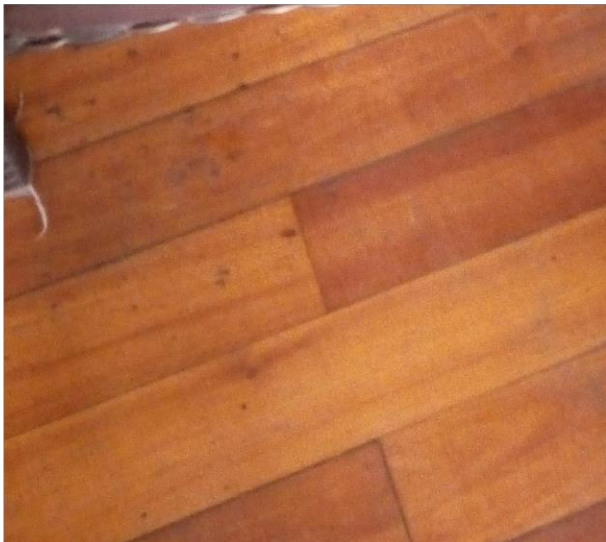


Figure 4.13:Wooden  
floor

**Ceiling** ; On top are the different types that you will see as minimal attention has been given to it, one can describe the proper lighting system of the lounge at a glance.



Figure 4.14:Ceiling

Source:Author, 2020

**Finishes**; The restaurant dining area has used quite a uniform finish for the interiors. The floor and door are made from wood



Figure 4.15:Wood-  
en door

Source :Author,

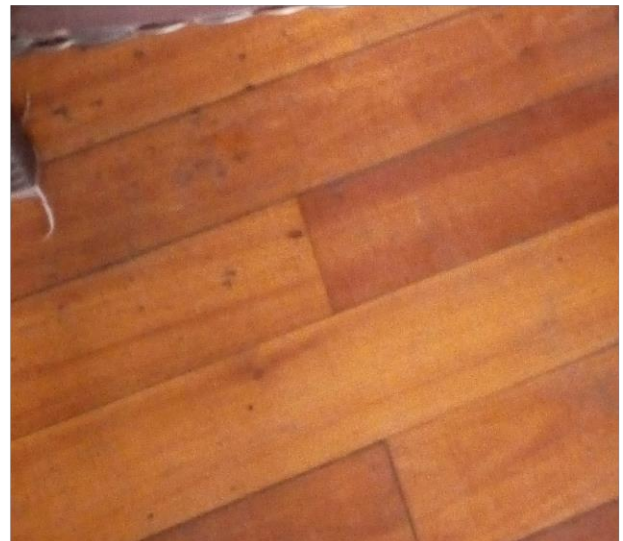
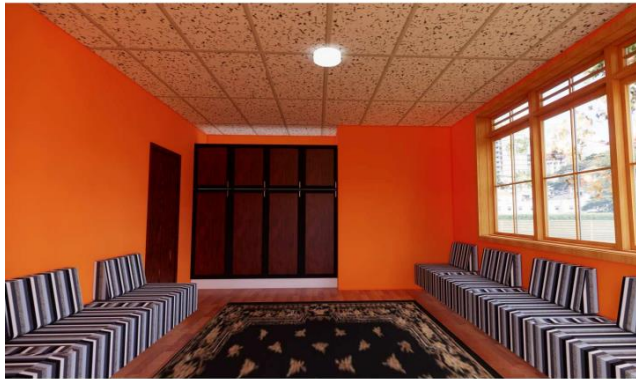


Figure 4.16:Wooden floor  
finish

Source :Author,2020

#### 4.2.6 EXHIBITION AND DISPLAY

The very concerning issue above all is the minimal attention that has been given to the exhibition and display of items. In the restaurant, nothing in specific has been hung on the wall for the exhibition. The restaurant being Arabian has failed to showcase its culture through various exhibitions and displays. The walls are vacant and idle.



Interior Perspective showing the wall cabinets and the Entrance



Interior Perspective/Exhibition

Figure 4.17: Interior perspective ;Exhibition

Source :Author ,2020

Figure 4.18:Interior perspective showing seats

Source :Author ,2020

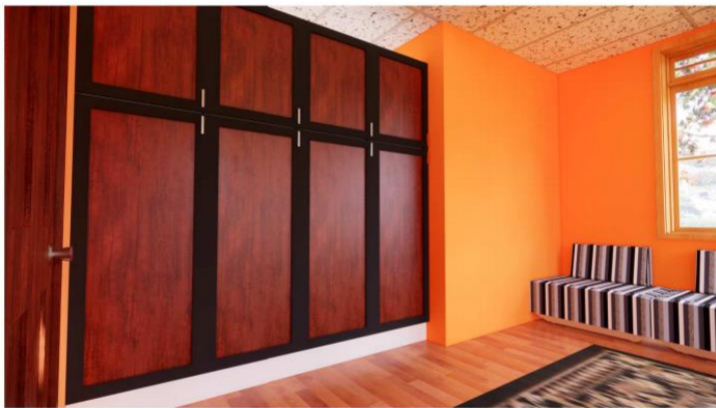


Figure 4.19:Interior perspective showing cabinets

Source :Author ,2020



Figure 4.20:Cushion seats

Source :Author ,2020

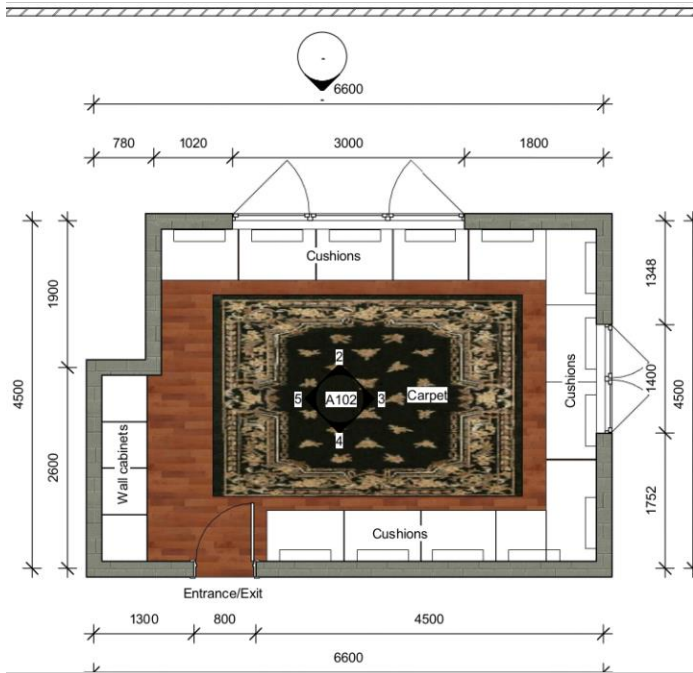


Figure 4.21:Exhibition and display room plan

Source :Author ,2020

#### 4.2.7 FURNITURE

The Arabian Cuisine restaurant does not spot a variety of furniture. They do not have any patterns and the colors are not in harmony or contrast as in asymmetrical visual balance. The chairs in the restaurant area are either black or brown creating a dull feeling in the area. This mixture of colours is not properly executed, resulting in a disorganized look and feel.

The tables are either red in colour or black and white, with no similarity in theme hence creating a lack of uniformity. The chair and table layout is a normal one that would be found in cafeterias thus not providing a four-star standard furniture quality.



Figure 4.22:Wood-en chair

Source :Author ,



Figure 4.23:Wicker chair with cushion

Source :Author, 2020



Figure 4.24: Wooden table

Source :Author ,2020



Figure 4.25: Glass table and l-shaped seat

Source :Author, 2020

As soon as you get in you see the reception which is in the main room as the dining area. There is congestion and poor arrangement of seats, sofas, and armchairs in the dining area. The furniture is not appealing and comfortable and it shows no cultural authenticity.

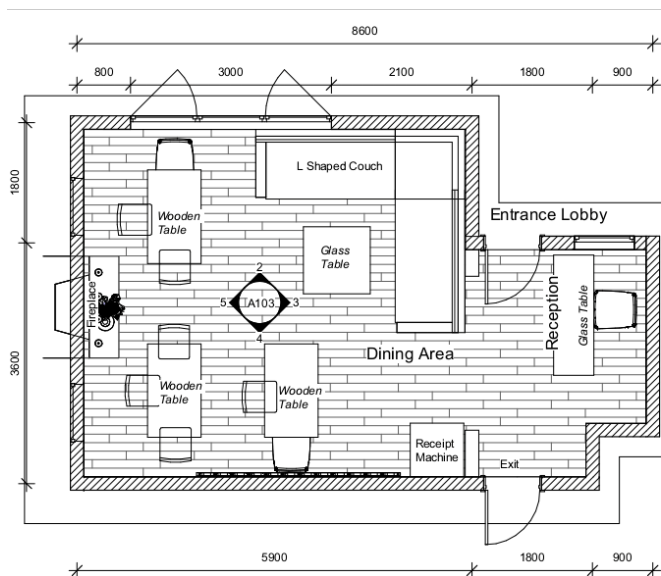


Figure 4.26: Dining room floor plan

Source ;Author ,2020



### **4.3 QUANTITATIVE ANALYSIS**

From the data collected, the researcher established that the hotel had 2 managers(the owner) who oversees the entire restaurant's operations, one receptionist (day and night shift), five cleaners, two baristas, eight chefs, three maintenance staff, five waiters and six waitresses, two security guards but in total the entire hotel staff is approximately thirty-five workers; two of whom make up the managerial staff.

The hotel receives approximately one hundred guests. A big percentage of the guests were Egyptians, Somali and Yemeni people and a small percentage of Nairobi and were trying the Arabian cuisine.

A population of 30 participants was thoughtfully selected so as to, by and large, represent all the characteristics in the population and the end target users. Interviews were employed so as to obtain more detailed information.

The researcher hoped to know and understand the main factors that influence the choice of furnishings in the restaurant and their source of inspiration. Consequently, the researcher sought to establish in what ways the various culture inspirations were applied in the different parameters of interior design: interior architecture, landscaping, exhibition and display and finally furniture design

The researcher asked a series of questions after which she received responses accordingly. The following is a summary of the responses given represented in pie charts and bar graphs.

## DO YOU CONSIDER THE DESIGN OF THE ARABIAN CUISINE RESTAURANT GOOD OR BAD

Five people out of 30 considered it good.

Fifteen people out of 30 considered it bad.

The rest did not bother.

The results were put in form of percentages in a pie chart.

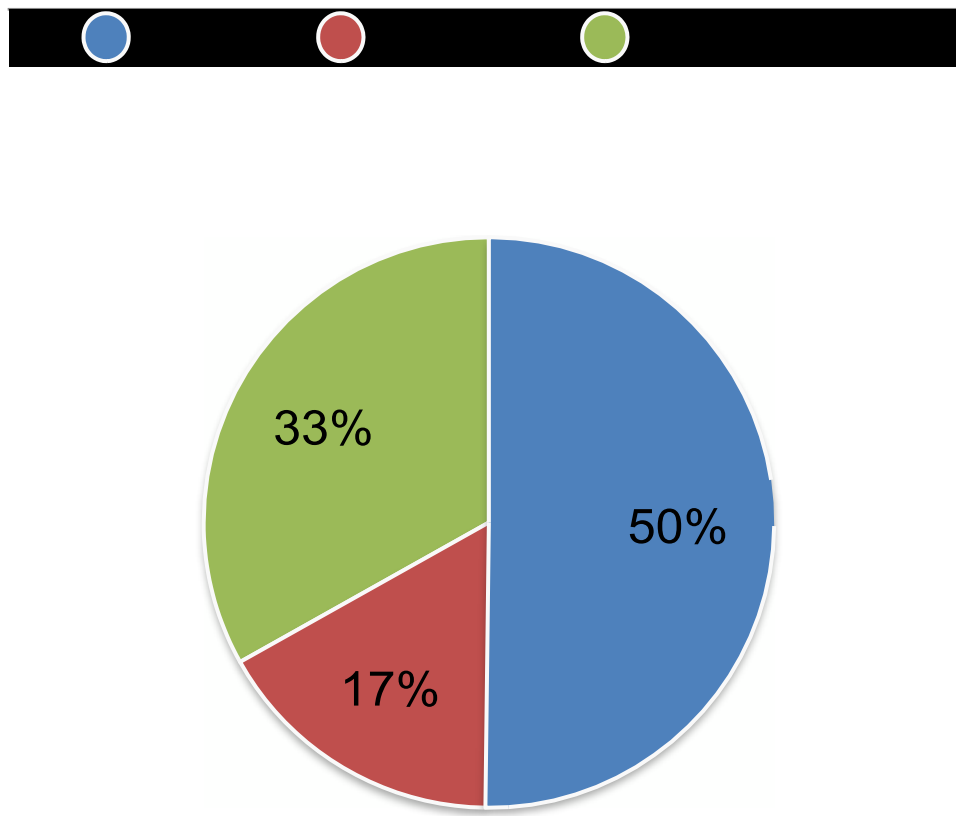


Figure 4.27: Pie chart showing consideration of the design of the Arabian Cuisine restaurant

Source : Author, 2020

### 4.3.1 Guest Experience

The research established that the guests get most out of the experience from the quality services. Prayer facilities are available. Nonetheless the guests raise concerns of the decor and interior architecture. There is no specific colour theme. The restaurant has minimal close to zero decor.

Thus this gives the restaurant an average rating in terms of guest experience.

The researcher asked the customers and employees if they would have a better experience if the restaurant has incorporated the Egyptian and Arabic theme into its Interiors, furniture, exhibition and display.

The results were put in form of a bar graph; where 40 out of the sample said yes and 24 said maybe, 4 said no while 4 said they consider other cultures out of a sample of 72 people.

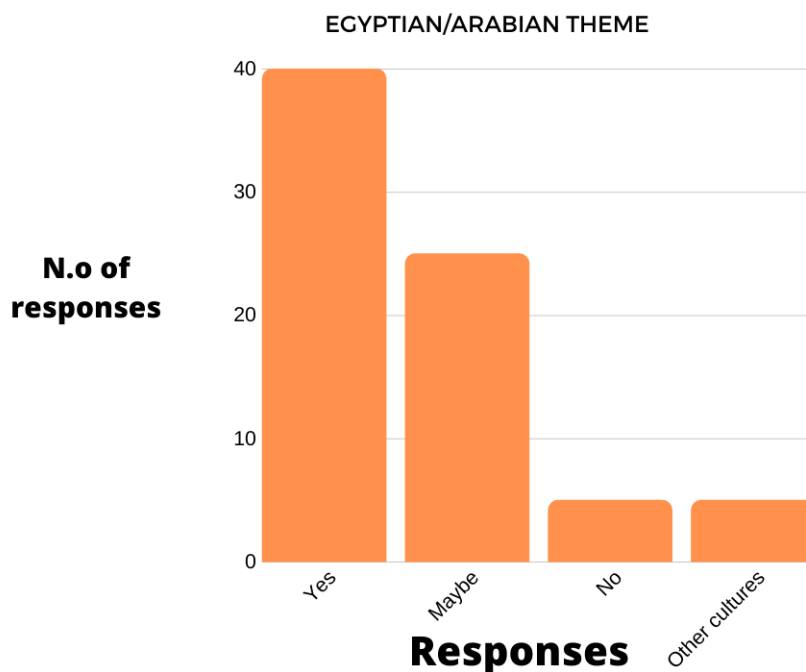


Figure 4.28: Bar graph showing guest experience

Source ; Author 2020

#### **4.4 PRESENTATION OF FINDINGS**

This chapter contains the presentation and analysis of the research findings collected from the target population based on the qualitative and quantitative approaches presented and conducted by the researcher.

The Arabian Cuisine Hotel hardly involves any specific cultural theme which contradicts with its name. It has no theme and the colour scheme lacks connectedness to the hotels' name.

The researcher sought to establish in which ways culture inspiration could be applied in different parameters of interior architecture, exhibition and display, furniture design and landscaping.

The selected samples, the opinions and views of the respondents were compiled into a narrative by the researcher. The manager feels that the restaurant is too plain and would like to use exciting colours and cultural themed decor in the design.

The idea of introducing an Egyptian/Arabian cultural theme into the hotel enabled the introduction of cultural theme that would attract more customers while making the customers feel more at home since they could relate to the theme.

Employees felt that The Arabian Cuisine Hotel was a good place for dining. They felt that the place lacked vibrance and cultural theme. Some felt that the existing furniture needed to be redesigned as they were not appealing.

The customers did not like the general appearance of the hotel, they suggested that the place needed exciting designs. They liked the idea of incorporating an Egyptian/Arabian theme as they could easily identify with it, learn from it and would create a feeling of cultural pride.

#### **4.4.1 Interview Discussions**

From the informal interviews held between the researcher and the selected sample, the views and opinions of the respondents were compiled into a narrative by the researcher. The director and manager are not very pleased with the current state of the hotel. They did not consider parameters to attract customers. The manager voices that a higher percentage of their customers suggested that they at least try to put references to the Arabian culture in the restaurant. Some customers also suggested that the colour scheme be changed as it did not bring out any theme and that they should incorporate the Arabian colour palette.

#### **4.5 CONCLUSION**

From the analysis, it appears that The Arabian Cuisine restaurant has no cultural authenticity. It has not incorporated any particular theme that can be associated with the hotels brand and connect the customers and space itself. Considering all the findings obtained from the research i.e the basic profile of the study; from its design of the interior of the restaurant and exterior, landscape and exhibition and display, the researcher can better understand the core of the problem and establish appropriate ways of solving.

# CHAPTER 5

## 5.0 ; SUMMARY FINDINGS ,CONCLUSION AND RECOMMENDATIONS

### 5.1:INTRODUCTION

Chapter five of this research entails a summarised critical analysis of the site and data collected by the researcher as far as the research objectives are concerned. This summary with the knowledge obtained from the reviewed literature will enable the researcher to come up with appropriate and suitable recommendations that can be sustainably implemented to better the Landscape, Interior Architecture, Exhibition and Display and the Furniture of The Arabian Cuisine restaurant. All recommendations rebased on the facts established by the researcher from the methodology in chapter three of the research in line with sustainable design through the use of sustainable materials and application of Egyptian/Arabic geometric patterns.

### 5.2 SUMMARY OF FINDINGS

The researcher found out that the current design of The Arabian Cuisine restaurant does not completely have any cultural theme or authenticity. A hotel needs to be associated with its users and most importantly make them experience the local cultures of the people. From the analysis, the restaurant has not paid any attention in showcasing its culture being a cultural restaurant.

In regards to Interior Architecture, the researcher established that the interior finishes were not done with acute professionalism. The materials used on the flooring in most areas are wooden floor panels that have cracked and chipped over time. The restaurant being a high-end one does not fit to have such floors.

The exhibition and display techniques are lacking in aesthetics and functionality. The restaurant has not paid any attention to its exhibition and display. They only have one Arabic screen on one of the walls to showcase the culture but that is just not enough since there is a lot that can be showcased in terms of cultural items.

The furniture designs are simple and not appealing. Some of the seats are not quite comfortable and the tables are wobbly.

In terms of Landscaping, the parking space does not have shade for the cars. There outdoor vegetation but not even single indoor plant; this renders the interiors a concrete ensemble void of a touch of nature.

Majority of the customers at The Arabian Cuisine restaurant are business people within the age bracket of 23-48 years who visit the restaurant for drinks and lunch and meetings at times since its located in a corporate setting. This revealed a need to create an environment that encouraged work and at the same time gave that sense of relief and relaxation away from their normal work life as well as promote cultural heritage.

The findings from the research shed light on the poor state of aesthetics, lack of cultural theme or authenticity on the overall design.

## **5.3 RECOMMENDATIONS**

### **5.3.1 INTERIOR ARCHITECTURE**

#### **Lighting;**

Lighting is one of the essential components to making it functional. The lighting in a room changes the mood of a room just as it does the perceived size of a room. Placement and type of lighting are important aspects of interior design as they, and they work in conjunction with colour selections, room size, availability of natural light and furniture selection.

The elements that come together when the right lighting is achieved transform a room into a seamless combination of functionality and style.

Lighting is an important aspect of interior design that gives the room a special look and transforms it into a seamless combination of functionality and style. Besides playing a functional role it creates a visually dynamic space. Lighting can make or break the ambience of a room. Hence proper lighting is an important element of decorating your homes.

The kind of lighting that will best suit the restaurant will be both fluorescent and accent lighting fixtures.

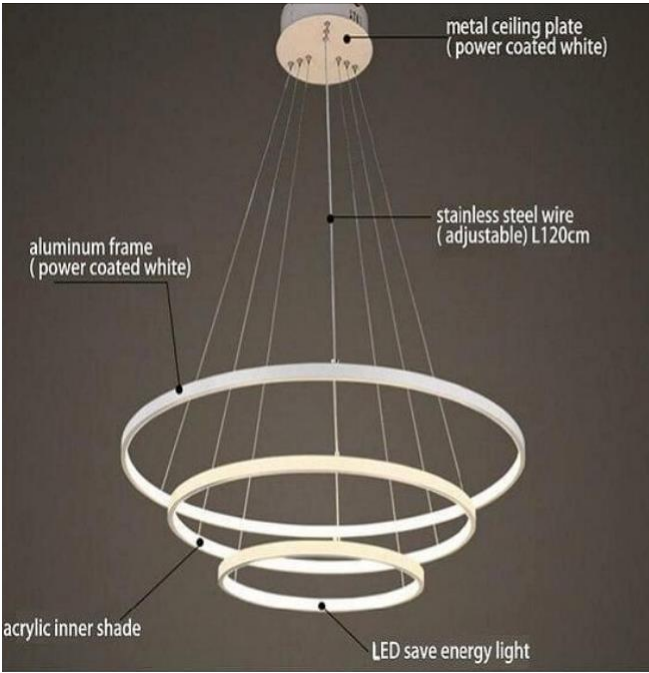


Figure 5.1: Spiral led statement light pendant

Source ; [www.pinterest.com](http://www.pinterest.com)



Figure 5.2: Geometric pendant light

Source; [www.pinterest.com](http://www.pinterest.com)



***Treatments; wall, ceiling, door and window;***

Doors and windows treatment are going to wooden doors with an Arabian pattern painted in a uniform colour scheme and finished with paint varnish to enable durability and maintenance. The windows will have metal grills for privacy plus the window frame will be wood which will be in the shape of an arch.



Figure 5.3: Door with the Egyptian -Arabic pattern

Source; [www.pinterest.com](http://www.pinterest.com)

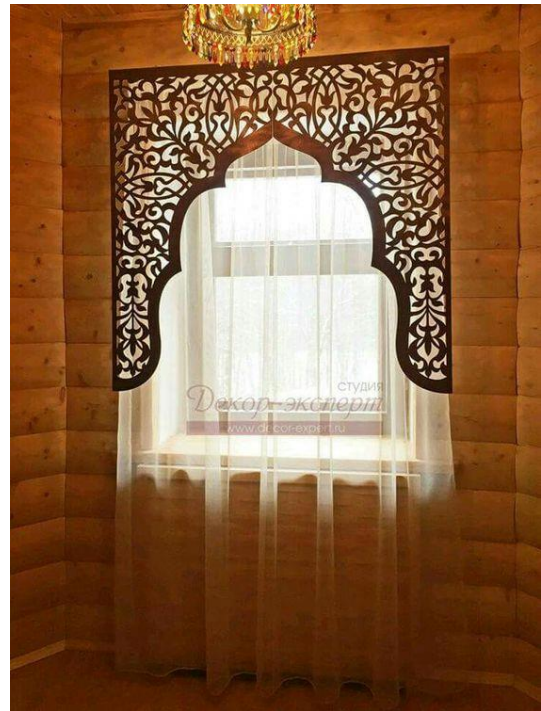


Figure 5.4: Wooden window frame in the shape of an arch

Source ; [www.pinterest.com](http://www.pinterest.com)

***Ceiling and wall;***

The ceiling plan will be enhanced with a luxurious centrepiece lighting fixture with several other lights on the sides. The actual ceiling will be gypsum with the Arabian pattern which will enable consistency and offer an amazing first impression from the entrance of the hotel. The walls will be substituted with neutral bright colours.



Figure 5.5:Wall with indented arches

Source : [www.pinterest.com](http://www.pinterest.com)



Figure 5.6:Gypsum ceiling with Egyptian-Arabic pattern

Source: [www.pinterest.com](http://www.pinterest.com)

### ***Flooring;***

Flooring is a crucial part of any interior design and can easily make or break your space. While our first interaction with a space is visual, the first physical contact a person will have with your space is the flooring. It serves as a foundation for your design and can ultimately impact its overall success.

Tiles best suite this restaurant. Non-slip porcelain tiles are the best since they are not slippery and don't need a lot of maintenance.



Figure 5.7:Porcelain tiles

Source : [www.pinterest.com](http://www.pinterest.com)

## Sketches of proposed interior designs

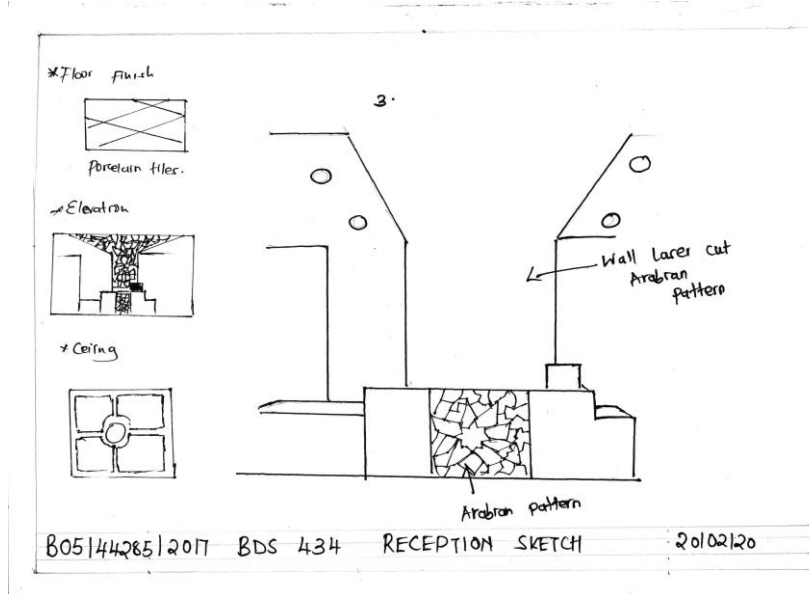


Figure 5.8: Sketch of proposed minor space interior

Source: Author, 2020

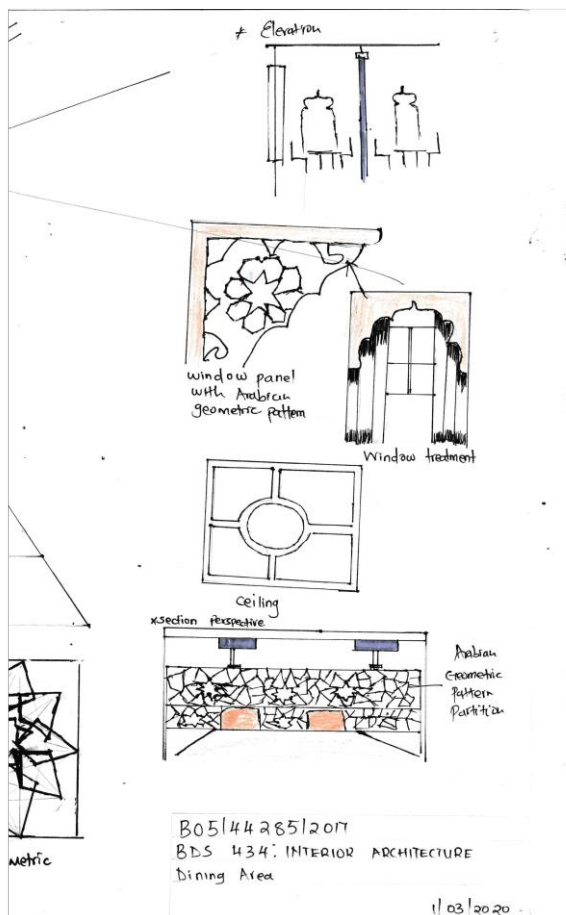


Figure 5.9: Sketch of proposed interiors

Source: Author, 2020

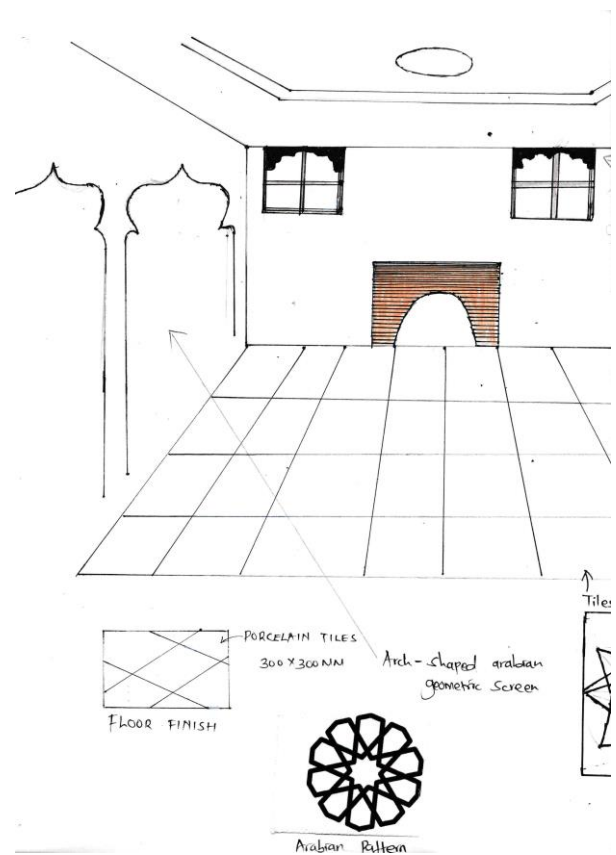


Figure 5.10: Sketch of proposed major space interior

Source: Author, 2020

### 5.3.2 EXHIBITION AND DISPLAY

The researcher will use one of the dining areas to conceptualise module exhibition and display techniques within the restaurant. The researcher considered the following when making recommendations.

**Display units;** The researcher noted that the room did not have any display unit whatsoever. The researcher recommends the introduction of interactive and appealing wall arch indented display units.



Figure 5.11: Wall arch indented display

Source : [www.interiordev.com](http://www.interiordev.com)

**Space;** Modular exhibition space is well circulated to promote sensual interaction. The researcher will apply exhibition techniques that are applied in interactive spaces such as restaurants and hotels. The researcher is going to incorporate applications of different hues on the walls to bring out a warm ambience. The researcher will use bright and warm colours on the walls.

*Accessories;*

Interior design accessories are decorative or functional items that add the finishing touches to a chosen home style. Decorating a room with accessories means that exactly the right objects have to be selected and displayed so that they make a focal point and enhance the style of that room.



Figure 5.12:Arabic screen on the wall

Source; [abiya-store.com](http://abiya-store.com)



Figure 5.13:Arabic screen on the wall in the shape of an arch

Source :Jeddah daily photo



Figure 5.14:Arabic jugs and vases

Source :[www.dreamstime.com](http://www.dreamstime.com)

## Sketches of proposed exhibition and display designs

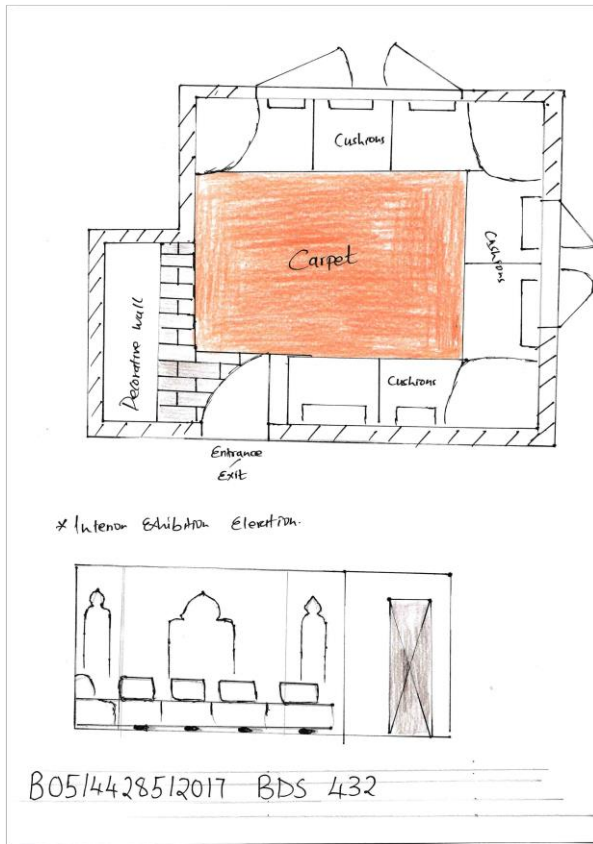


Figure 5.15: Sketch of proposed plan (Exhibition and display) and wall treatment

Source: Author, 2020

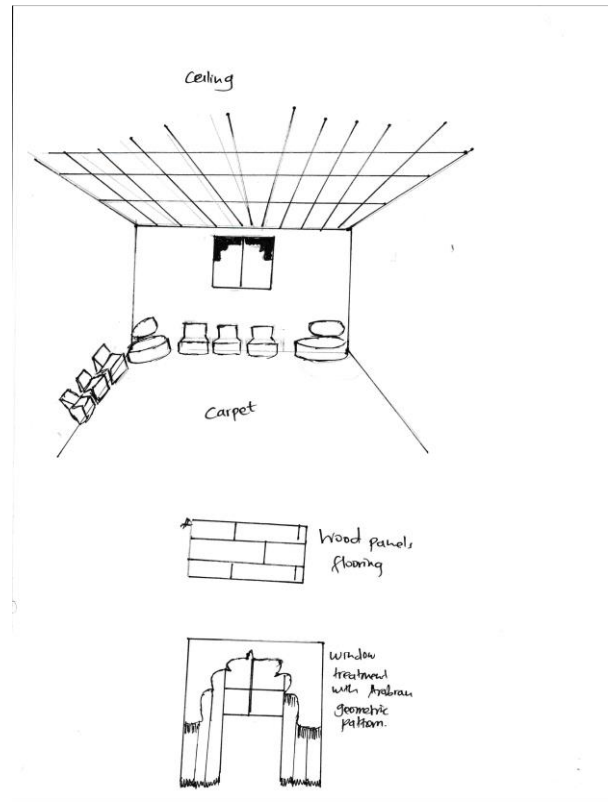


Figure 5.16: Sketch of proposed exhibition and display space

Source: Author, 2020

### 5.3.3 FURNITURE

*Design;* The researcher recommends the application of Egyptian Arabic geometric patterns on the different types of furniture to create more aesthetically and modular furniture designs. The researcher recommends the application of a specific pattern to be incorporated in the furniture in different designs.

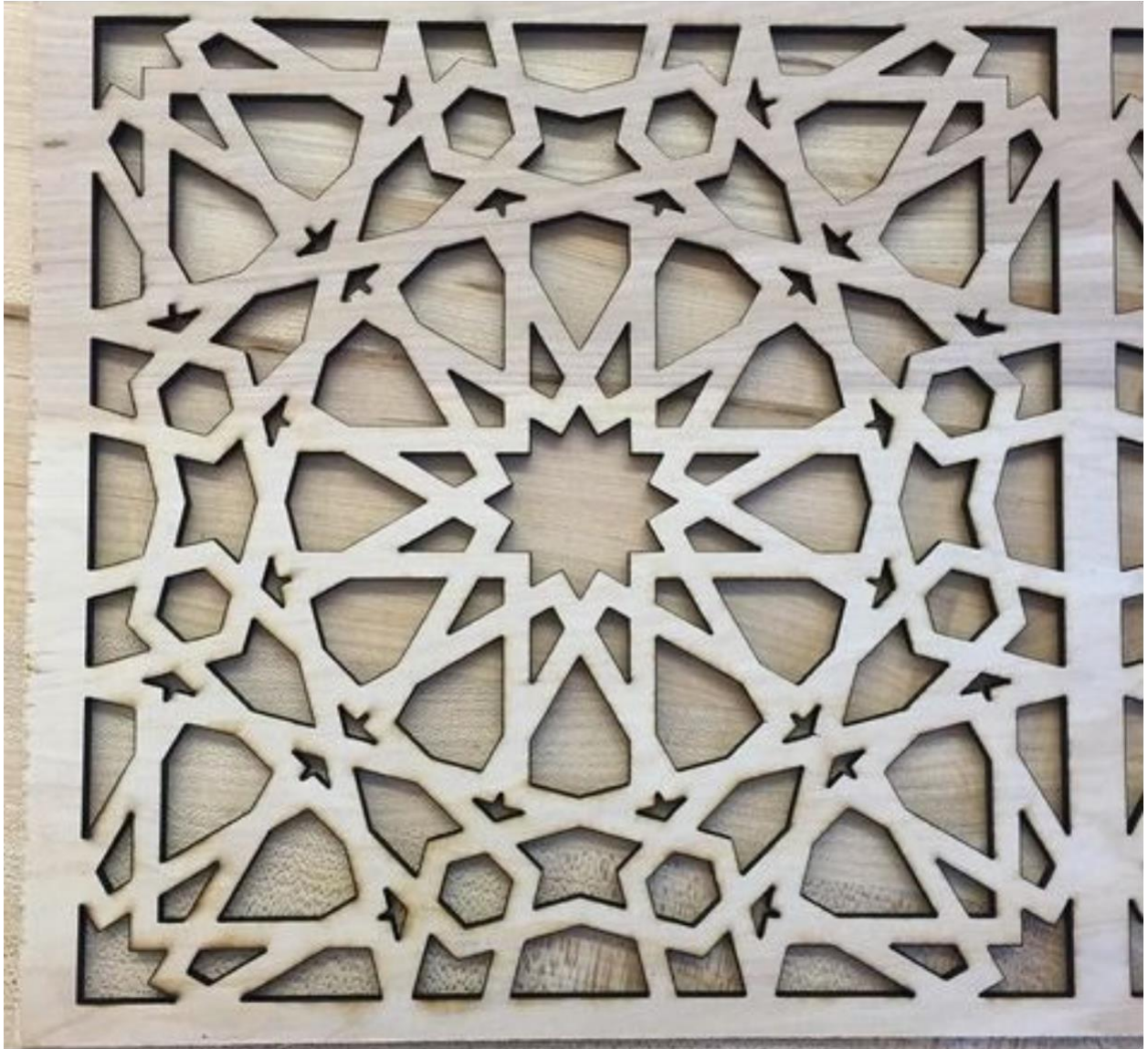


Figure 5.17: Egyptian-Arabic geometric pattern design

Source : [www.pinterest.com](http://www.pinterest.com)

**Material;** The researcher recommends the use of wood with protective finishes such as lamination and painting. The researcher will also use glass to portray elegance since its a high market restaurant. The furniture pieces will be very hard-wearing considering that the researcher will use hardwood.



Figure 5.18: Wood chair with leather seat

Source : [www.pinterest.com](http://www.pinterest.com)



Figure 5.19: Glass table with geometric pattern

Source : [www.pinterest.com](http://www.pinterest.com)



# Sketches of proposed furniture design

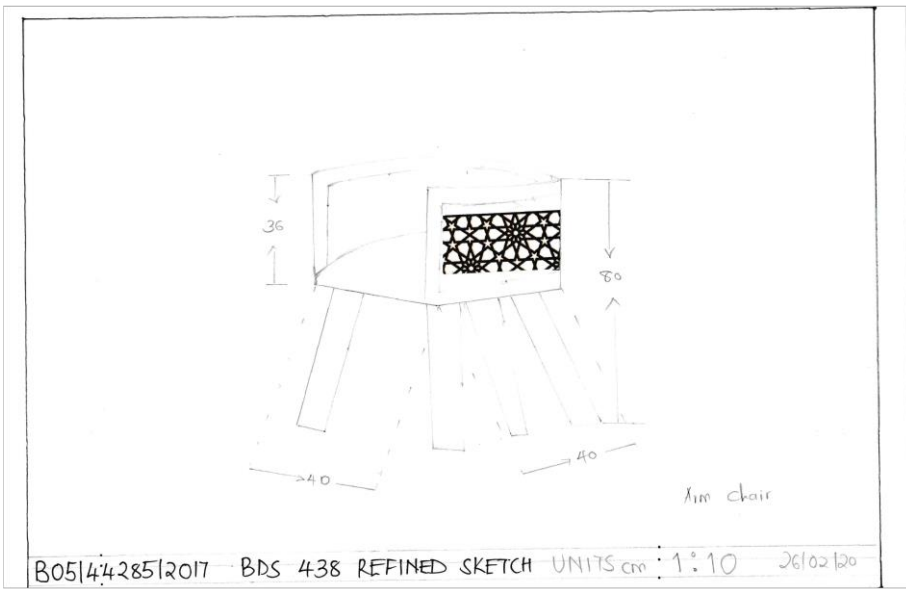


Figure 5.20: Sketch of proposed dining chair

Source: Author,2020

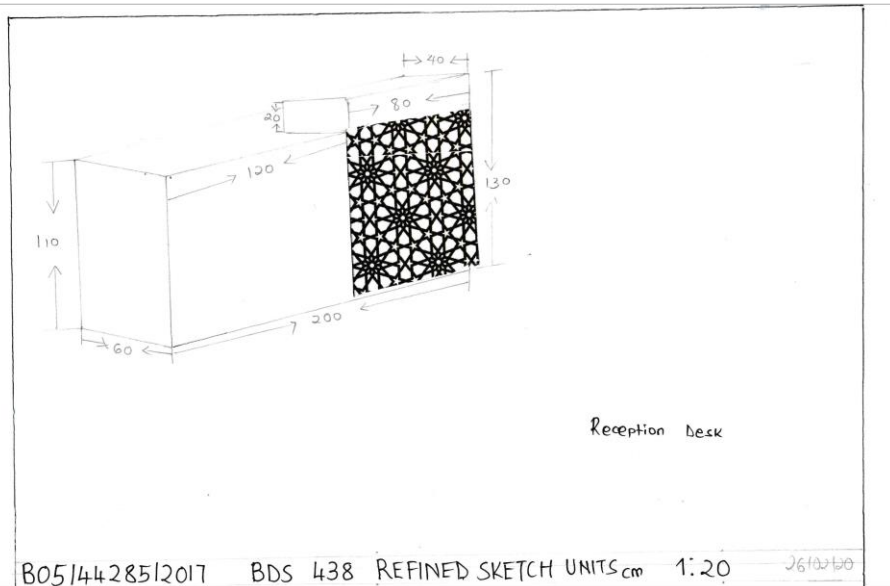


Figure 5.21: Sketch of proposed dining table

Source: Author,2020

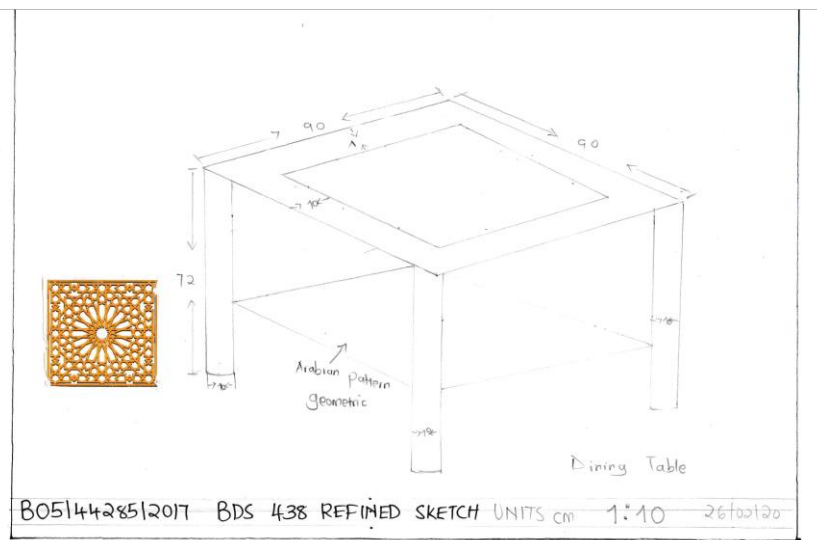


Figure 5.22: Sketch of proposed reception desk

Source: Author,2020

### 5.3.4 LANDSCAPING

In landscape design, thoughtful use of elements provides a sense of comfort and an aesthetic that is pleasing to the eye. Plants, lighting, and hardscape features can be arranged in such a way as to elicit a sense of balance and rhythm that can greatly affect the style and purpose of outdoor space. This helps a well-balanced landscape design achieve a simple elegance while remaining visually interesting. The landscape has the potential to provide space for relaxation and fun activities. The main factor to be considered in designing the landscape at The Arabian Cuisine restaurant is to seek to invite guests to enjoy the landscape. The researcher seeks to create an interesting environment throughout the landscape.

**Parking;** The researcher recommends defining the parking area by introducing asphalt with permit division and presenting pergolas that go about as shade since the parking zone needs shade. The researcher likewise proposes acquaintance of lights which light up the parking region around evening time.



Figure 5.23:Pergola car park roof shade

Source ;[www.pinterest.com](http://www.pinterest.com)



Figure 5.24:Pergola car park shade

Source; [www.pinterest.com](http://www.pinterest.com)



Figure 5.25:Asphalt parking

Source :[www.medium.com](http://www.medium.com)



Figure 5.26:Asphalt on parking

Source :[www.md paving.com](http://www.md paving.com)

### **Drainage;**

The researcher recommends the use of a french drain. It is the most well-known type of outdoor drainage system. While the specifics vary, a French drain is usually comprised of a perforated pipe which is surrounded by gravel then wrapped in filter fabric to keep mud and particles out. A French drain directs water to a drain rather than dispersing it within the landscape.



Figure 5.27:French Drain

Source :[www.alconcrete.com/french-drains](http://www.alconcrete.com/french-drains)

### *Vegetation;*

Plants play an important role in the aspects of landscape design. Plants have horticultural characteristics, such as height and spread, branching habit, flowers, fruit, and foliage; they have design qualities, such as form, colour, texture, and mass; and they have cultural requirements for growth in the landscape. Whereas, trees often serve as a focal point of a mature landscape because of their imposing height and sometimes their far-reaching branches. They also define spaces, act as barriers, provide color and texture, and much more.

Beyond simply enriching our lives with beauty and wonder, plants provide key environmental benefits: They make oxygen and clean the air we breathe, purify water, regulate temperature, control erosion, and serve as habitat for wildlife; plants are essential to the functioning of healthy home gardens and surrounding landscapes. Selecting and installing plants that are adapted to site conditions, climate and garden design require fewer resources and less maintenance to thrive.

### *Flowering trees*



Figure 5.28: Native plants provide seasonal beauty, support wildlife and conserve water

Source: Lady Bird Johnson Wildflower Center



Figure 5.29: A natural flagstone path flanked by dense plantings makes for a welcoming entrance.

Source: <https://inlandvalleygardenplanner.org/>



Figure 5.30: Chamaecyparis obtusa  
'Nana' -a close up foliage detail

Source :Photo by Iseli Nursery



Figure 5.31:Star jasmine  
(Trachelospermum jasminoides)

Source: Inland Valley Garden Planner

***Container plants -ornamental flowers***

These are many specimen trees that are planted and enjoyed just for their visual appeal. They are often slower growing and more expensive, but their beauty earns them a place of distinction in the landscape trees.



Figure 5.32:Sample of container ornamental flowers

Source :[www.inlandvalleygardenplanner.org](http://www.inlandvalleygardenplanner.org)

*Shade trees*



Figure 5.33:African tulip tree

Source ;ramanarunachalam.github.io



Figure 5.34:Silver maple tree

Source ;Tennessee Wholesale Nursery

**Sketches of proposed landscape design**

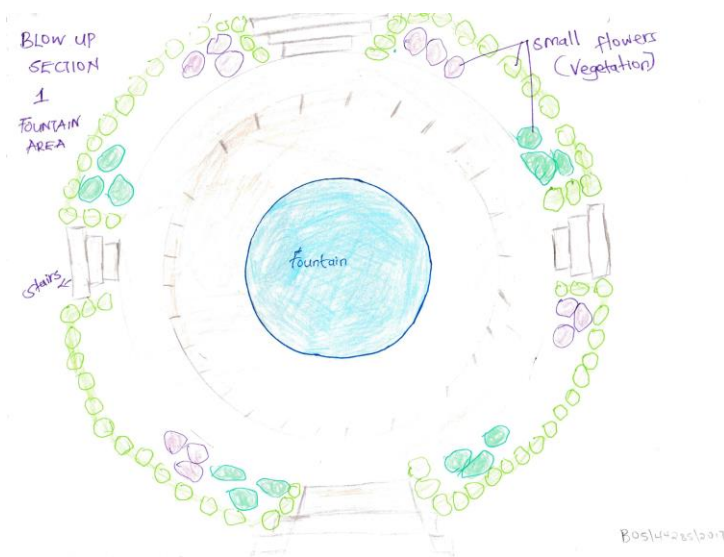


Figure 5.35:Sketch of proposed landscape fountain design

Source: Author,2020



Figure 5.36:Sketch of proposed landscape seating area

Source: Author,2020

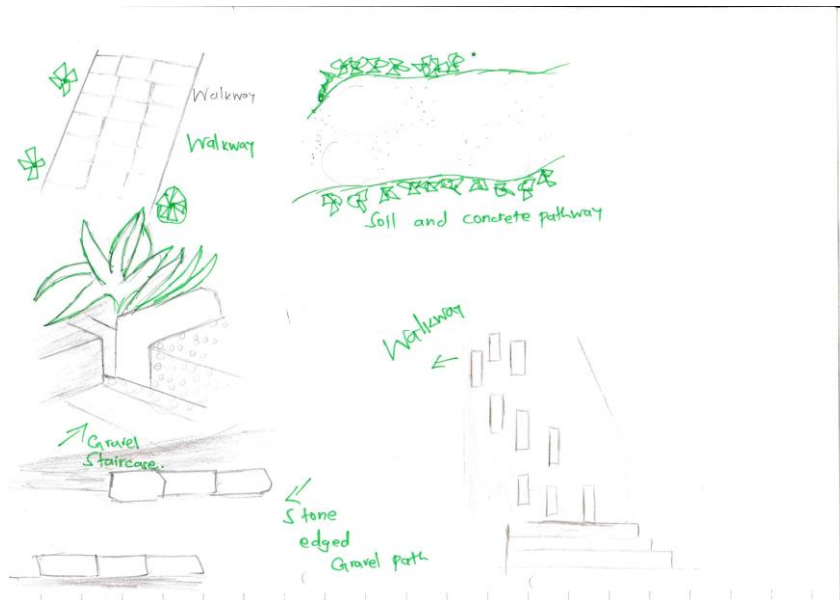


Figure 5.37: Sketch of proposed landscape walkways

Source: Author, 2020

### Outdoor decor:



Figure 5.38: Seating area  
Source: [www.thespruce.com](http://www.thespruce.com)



Figure 5.39: Outdoor bar  
Source: [www.wikihow.com](http://www.wikihow.com)



Figure 5.40:Arabic screen on the perimeter wall

Source: [www.bipdecor.com](http://www.bipdecor.com)



Figure 5.41:Night lights

Source :[www.americasjoblink.org](http://www.americasjoblink.org)

## 5.4 CONCLUSION

Grounded on the respondents' criticism and examination of the contextual investigation, a few variables have been pinpointed which shapes the finish of this exploration. On the off chance that these elements are mulled over, they may improve the manner in which structures are done in lodgings in Kenya by including the neighbourhood individuals through their cultures. The primary end comparable to this contextual investigation was that The Arabian Cuisine restaurant needs an exhaustive re-design of their premises as talked about before in the research. The current design is pointlessly packed and unappealing to both in-house clients and the individuals who just go there during their mid-day breaks. Insignificant consideration has been given to the colour scheme of the restaurant. Safety and working conditions likewise don't appear to support both the clients and the representatives because of the quality of uncovered wires and high issue inside the working limits individually.

The furniture also does not meet the four-star standards of a hotel and instead makes space appear more like a cafeteria than a dining area. However, the restaurant has opportunities that could be used in favour of the suggested Egyptian /Arabian theme. Some of the opportunities include:



incorporating a better-coordinated colour scheme, incorporating the coincidental Arabian interior design features noted by the researcher, plain ceiling, well-coordinated furniture layout. From the interview discussions, other openings surfaced which is the customers' craving for the Arabian experience and culture.

All in all, this study has enabled the researcher to propose the application of culture in the design of the restaurant for the benefit of the local people and generally the hotel industry in Kenya.

This choice will enable more natives to appreciate and even become more interested in their cultures and use their local resources when they intend to design their spaces or anything in particular.

## **5.5 SUGGESTIONS FOR FURTHER STUDY**

This research was not comprehensive and has opened up different open doors for additional research. It has been set up that there are region tremendous chances of incorporating culture in the design structure of eateries and inns just as boundaries that may keep this from being accomplished. This study needs more effort in terms of increasing the number of respondents and selecting neighbouring respondents so that they may also give their responses to the research. The researcher puts forward the following key areas as a continuation of the current study ;

- An exhaustive investigation of the Egyptian - Arabic examples should be done. This is a direct result of the recognised gaps during the examination which just gave the scientist data on for mostly laser-cut geometric Arabic patterns.
- Awareness of design and its relation to buildings needs to be expanded through the greater association of individuals by incorporating culture in the process of designing restaurants. This was because of the analyst's discoveries on how the vast majority were less worried about design.
- Research on designs incorporated in other alike restaurants.

## **APPENDICES**

### **INTERVIEW GUIDE**

#### **Consideration of the design by the people**

- What do you think about the current restaurant's design?
- Do you consider the design of the restaurant good or bad?
- Do you come to eat at the restaurant mainly because you enjoy the design?

#### **Experience based on the customers**

- How would you rate your experience at the restaurant?
- Would have a better experience if the restaurant has incorporated the Egyptian(Arabic) culture to its design?
- Do you like the appearance of the design of the restaurant?

## REFERENCES

Behrens-Abouseif, D. (1999). *Beauty in Arabic culture*.

Briggs, John.(1992). "Fractals: The Patterns of Chaos: a New Aesthetic of Art, Science, and Nature." New York: Touchstone.

Gaztamide-Fernández, R. A., Kraehe, A. M., Carpenter, B. S. I., & Gaztamide-Fernández, R. A. (2018). *The Palgrave Handbook of Race and the Arts in Education*.

Hamdy Mahmoud, H. T. (2017). *Geometric Patterns in Egyptian Architecture & Interior Design*.

Harris, D. (2017). A material world: A comparative study of flooring material influence on patient safety, satisfaction, and quality of care. *Journal of Interior Design*, 42(1), 85-104.

Hershey, D. R. (1990). Container-soil physics and plant growth. *Bioscience*, 40(9), 685-687.

Kothari, C. R. (2004). *Research methodology: Methods and techniques*. New Age International.

Kuhns, M. R. (2012). *Conifers for Utah*.

Leoneschi, Francesca and Silvia Lazzaris.(2019). "Patterns in Art: A Closer Look at the Old Masters." Abbeville Press.

Mahmoud, H. T. H. (2017). Geometric patterns in egyptian architecture & interior design. *The Academic Research Community publication*, 1(1), 11.

Marmor, M. F., & Wagenaar, W. A. (2003). Escher and the Ophthalmologist. *Survey of ophthalmology*, 48(3), 356-361.

Mattson, Mark P.(2014)."Superior Pattern Processing Is the Essence of the Evolved Human Brain." *Frontiers in Neuroscience* 8: 265–65. Print.

Mouse, H., & NM\_007126, R. (2008). From Wikipedia, the free encyclopedia. *Population*, 8(9), 10.

Noor, K. B. M. (2008). Case study: A strategic research methodology. *American journal of applied sciences*, 5(11), 1602-1604.

Norman, Jane.(1986). "Patterns East and West: Introduction to Pattern in Art for Teachers with Slides and Materials." Metropolitan Museum of Art.

Phillips, David.(1991)."Patterns in Pictures for Art and Science." *Leonardo* 24.1: 31-39. Print.

Quad, A. D. J. P. (2016). Research tools: Interviews & Questionnaires. *Research Methodology in Education*, 7.

Raj, D. (2013). HEDGES, EDGES, TOPIARY AND BONSAI. *Ornamental Plants for Gardening*, 161.

Rodemann, P. (1999). Patterns in interior environments: Perception, psychology, and practice. John Wiley & Sons.

Schattschneider, D. (1994). Escher's metaphors. *Scientific American*, 271(5), 66-71.

Shabout, N. M. (2010). The Arabic connection in articulating North African modernity in art. *South Atlantic Quarterly*, 109(3), 529-543.

Swan, Liz Stillwaggon.( (2013)."Deep Naturalism: Patterns in Art and Mind." *The Journal of Mind and Behavior* 34.2: 105–20. Print.

Teuber, M. L. (1974). Sources of ambiguity in the prints of Maurits C. Escher. *Scientific American*, 231(1), 90-105.1.(2019).

Wolniak, R. (2017). The Design Thinking method and its stages. *Systemy Wspomagania w Inżynierii Produkcji*, 6.











