# Activate the Economic Side for Saudi Arabia Tourism through the Innovation of Traditional Motifs in Textiles

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ABSTRACT: The research dealt on the idea of linking the authenticity values of Saudi Arabia heritage motifs with the current and future advancement of the techno- development for contemporary creative ideas serving the religious tourism field. The different motifs were examined to create appropriate printing designs for hotel furnishings and acceptable pilgrimage women clothing. The software Photoshop program was applied to design colorful wallpapers to give a sense of multiplicity of colors in the design background that were applied on fabrics with tie and dye natural printing using curcuma, cochineal, hibiscus, henna, tea and coffee extracts. The modified designs from the tradition motifs were formed by only one color and applied on the multiplicity colored background by the flat silk screen printing technique regarding the eco-friendly and economical points of view. As a result, this study is considered as a developed idea for the preparation of small-scale projects to reduce unemployment problem in particular for women, through innovative designs which can be applied on textiles with more or less environmental easiest techniques in reducing effort and cost.

**KEYWORDS:** Eco-friendly, Natural dyeing, Silk screen printing, Saudi heritage, Tourism.

## 1 INTRODUCTION

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The people lifestyle has changed through time course and therefore a diversity of values has occurred through the recent technology which has transformed the slow lifestyles to faster pace (Sadsunk, 2014). The development has added a variety of things to the world; thus the expansion of Saudi Arabia in its topography and climate led to the diversity in the styles of the architectural models for every region. Each area has its own architectural characteristics that give it its identity by different construction methods or different decoration styles (Marzouq 2010).

Tourism in Saudi Arabia is one of the basic pedestals and one of the economic activities that have the elements for attractions (Awad, 2012). Religious tourism is considered one of the important elements since it's the birthplace of the Islamic religion, which makes the place a tourist attraction, where millions of Muslims attend Makkah and the prophet's mosque in Madina to perform pilgrimage. The Saudi government is increasing its support for the tourism representative in the General Authority for Tourism and Antiquities and which of its goals the development and rehabilitation of tourist sites, heritage and development activities and events.

The conventional motifs in the different Saudi Arabia regions are considered as one of the environmental and architectural values. In addition, traditions, culture and heritage clothing are attractive for tourism (Marzouq, 2010). Some People like to purchase souvenirs that because they like to remind themselves of place they have visited. These objects can range from jewelry trinkets and T. shirts to expensive, crafts, artworks, and clothing (Weaver & Lawton, 2006). However, memorabilia can also include items that are not purchased such as a ticket stubs, rocks, and see shells. In many instances the products are locally produced and could be one of kind. When this is not the case, many displays still tend to create the illusion of exclusivity by displaying a small number of items from the same product line.

Using designing software will help in innovation, development, and enhancement of more creative designs. Photoshop is one of the most important programs in this field. It comes with several elements and tools which can create textile with more

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effective patterns and schemes in a very fast and easy manner. This research focuses on using pictures of traditional buildings, clothing, and heritage houses and hand tools of different regions of Saudi Arabia. Computer software can be used to repeat, resize, recolor these pictures and design more creative textile that can be used in tourist facilities and services in a way that represent our national identity. (Hanan, 2012)

The term design is the process of planning and organizing, or placement of a goal, perceived in advance, and is accomplished by different physical means. It is a process that is in a continuous need for exercise that aims to arrive at a form or to achieve a purpose (Fekry, et.al. 2014). The design process in fact, means creative (or innovative) work, which achieves its purpose perfectly. The designer should, of course, be in possession of imagination and creativity talents, and to be able to link between them within an integrated entity that has continuation and innovation to serve specific and defined goals (Fekry, et.al. 2014). The design is not only an expression of creative emotions but it is the ability to achieve response requirements of others, in which the artist substantiates and creates as a form as well.

Printing is rather an ambiguous term. Methods of coloring some areas of fabrics differently to others by using dyes, pigments and paints all tend to be termed as printing although, in fact, some of these are not strictly printing but rather dyeing and coloring techniques, whereas the art of a printing pattern is affected by the selected design and the way of dyestuffs or pigments are applied (Wilson, 2001).

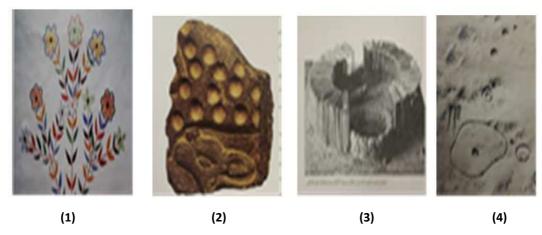
This study is a creative research and the methodology based on collecting heritage Saudi motifs from various sources in terms of artistic and historical background. The findings were used as an inspiration for creating contemporary printing designs for tourism textiles. The procedure of creating printing designs for fabric was implemented based on the art composition of decorative designs for example: point, line, color, light and shade, balance, repetition, movement and dominance or emphasis. Designs were implemented using the dyeing and printing on textiles and clothing by multiple ways that are less pollution to the environment (Janhom et.al, 2006; Al-Amoudi& Osman, 2009; Heba & Gamal, 2011).

### 2 METHOD AND PROCEDURE

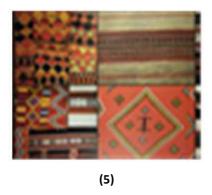
## 2.1 DESIGNS FORMATION

The motifs were altered and manipulated to be more innovative and contemporary through the integration of modern art and the use of technology programs like CNC design consistent with the modern era with the respect of the Islamic religion and the traditions of the community.

• In designs (1) the ornamented motif designed in botanical flowers (shape 1) from the Asir region with some changes in shape and size of the botanical unit. They were blended with the geometrical motifs (shapes 2-4), assembling the two units in one design of longitudinal and vertical lines at the bottom to form a design set of ladies dress "gilbab" and scarf.



• In design (2) the ornamented motifs are borrowed from the archeological shapes (squares and triangles) in Asir region (shape 5). They are blended with parallel and non-parallel lines to form a design set for ladies Hijab dress"gilbab" and bag.



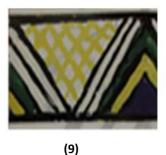
• In design (3) the botanical ornamented units are borrowed from the Asir region shapes (1, 6, and 7). The flowers were stripped in a simple shape and repeated in a linear longitudinal semi-orderly way of different overlapping sizes. The conglomerations of units were controlled in order to find out the relationship between the mass and the empty space to fit in designing ladies' Hijab dress.

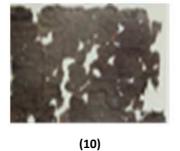






• In design (4), the units are derived from the archeological and heritage ornaments of houses and stones from Asir, Riyadh, and Tabuk regions shape (8-10).







The triangles are stripped simply and regularly in different directions with different sizes of units in particular place. They are filled and emptied for the inspiration of the shape, depending on the gradual coloring effect of the background to form a design suitable for ladies' trousers.

• In design (5) stone units of Riyadh, Qasim and Gulf regions shapes (11-13) are blended. The selection of units is made by using the Photoshop program through (enlarging, minimizing, repetition, deletion, and addition), then moving to filters tools in order to give laniary effects making black and white colored design.







• In design (6) the units are selected from bows, knots and niches of mosques in addition to the metallic coin taken from the eastern region; Al-Baha, Jason and Al-Jouf (shapes14-17). The units are blended and overlapped together while displaying some to the front and some of the back with the shadow and light focusing on the niches and the complete and incomplete circles to form a design suitable for wall hangings.

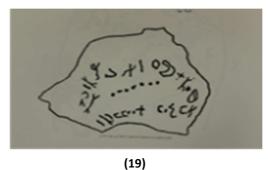




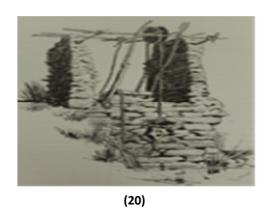




• In design (7) the written ornamented motif are borrowed from the northern region's rocks and stones (shape18). The shape was repeated neatly and clearly in subsequent lines, using tools of enlarging and minimizing to form a design set for hotel furnishing room; wall hanging, curtain, pillow and bedroom sheet.



• In design (8) the units are derived from the bucket and ancient houses of clay nature from Al-Jouf in shape (20, 21) using the mirror tools to make the front replication and enlarging the units in the middle and minimizing them at the edges to form a design for hotel furnishing room; wall hanging, curtain, pillow and bedroom sheet.





(21)

#### 2.2 PRINTING AND DYEING OF PATTERN DESIGNS

- Cotton: polyester 65:35 blended fabrics purchased from Jeddah were washed with 5 g/l non-ionic detergent and 3 g/l sodium carbonate at 60°C for an hour.
- 10% (v/v) of each of curcuma, hibiscus, tea, henna, cochineal and coffee were extracted for 2 hours at 80° C; the extracts were filtered and used as dyeing bath.
- Dyeing and Tie and dye printing methods were carried out using the mentioned extracts in presence of alum, ferrous sulphate, copper sulphate mordants using simultaneous mordanting with 5 % (o.w.f) metal mordants, keeping the liquor ratio; M:L as 1:40 for the for the weight of the fabric to plant extract.
- Handmade silk screen printing was applied using the following printing paste for each 100 gm.

3 %	Dye / pigment
65 gm.	Sodium alginate thickener (8%)
6 cm <sup>3</sup>	Sodium carbonates (10%)
23 cm <sup>3</sup>	warm water
3 gm.	urea
Total	100

• The printed samples were then dried at 100 °C for 3 min and fixed by superheated steam at 100 °C for 10 min. Printed samples were rinsed with cold water for 20 min. and then hot water at 80 °C for 20 min, followed by soaping agent with an anionic detergent (2 g/L) at 100 °C for 10 min, then rinsed well and air-dried at room temperature.

## 3 RESULTS AND DISCUSSION

The purpose of design is the conveyance of ideas and optical data with the organization of various elements of the decorative expression of a feeling, in order to obtain a total satisfactory which gives the equilibrium and balance to these elements. In this study, a number of design ideas are illustrated. It has been taken into confederation of these ideas, the structural, plastic and aesthetic basics of design that are suitable for printing each kind of applications ( ladies Hijab dress" gilbab", head cover, bag, ladies blouse or trousers, wall hanging, curtain, bed sheet and upholstery).

Design idea (1) was based on the mixing of floral and geometrical motifs to become together in consistency with a
balanced aesthetic appearance, in which the adhesion of the two motifs resulted in a harmony and contrast
relationship to enrich the design.







Graphic pattern design

Ladies Hijab Gilbab

Head cover

Tie and dye printing was carried out using curcuma and cochineal extracts, in addition with navy and blue pigments. This was followed by flat silk screen printing with black color of the floral and geometrical elements.



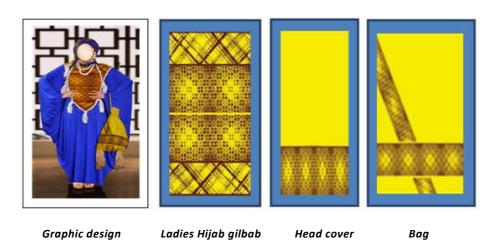




Applied printed design (1)

The floral and geometrical elements are represented in a decorative configuration inside vertical ribbons which are perpendicular on two other ribbons in the bottom of the gilbab design. While the design of the head cover is based on the previous two horizontal ribbons. The diversity in this design has confirmed the values of balance and rhythm in the design through vision (Meleisea, 2005). Colors have been diversified between warmth and coolness, giving unity and balance in general. Also, color transparency, light and shades in the background have played an important role in showing the beauty of each element separately. The repetitions in irregular overlapping shapes to form complete and incomplete circles and flowers were depended on the idea of optical illusion to give not only the inspiration of movement and vibration, but also a line effect in order to present the gradual effect in the background color and the printed design.

• In Design idea (2): Two different patterns of geometrical elements are prevailing in the ladies Hijab dress "gilbab. Each pattern appears separately inside a ribbon in which the creative design was based on a set of paralleled horizontal ribbons.



Only one from the last mentioned two patterns appears in the ribbon at the edge of the head cover while the same ribbon is repeated twice in the bag, one horizontally and the other was intersecting with the horizontal ribbon. The fabric was dyed with a mixture of curcuma: cochineal extract using alum mordand, followed by flat screen printing with dark brown pigment for the geometrical elements.







Applied printed design (2)

Simplicity is realized in this idea when the design contains the necessary indispensable elements. Therefore, the basic artistic elements necessary to build this design were chosen, and all other elements that do not meet any point in use were ruled out. It is featured in the design the usage of repetition as one of the aesthetic basis of design and there is no dout that the hot background color helped in focusing on the main elements.

• In design idea no. (3), the constitution of the design was a decorative floral element which were reformed and appeared repeatedly in slightly different sizes that are suitable to be printed for a ladies Hijab dress "gilbab".





Graphic design

Pattern design

Lines are used in the spaces between the elements in order to connect them to each other. Repetition is one of the principles of aesthetic construction of the design and rhythm fulfillment throughout this repetition, which grants an unlimited extension form.





Applied printed design (3)

The fabric was first dyed with a mixture of henna, hibiscus and tea extract mordanted with ferrous sulphate to produce the brownish olive green color background. This was followed by silk screen printing using dark brown pigment.

The colors were used to give the design unity arising out of the relationship between shape and background. Shape is the main content intended to be expressed. While the background stands for the atmosphere suitable for the shape, through which the shape features and conveys its message.

• In design ideas no. (4); the elements manifest themselves through an internal combination. The Idea is divided into three semi vertical equal parts; each one contains a semicircular shape at the lowest third of the design, free lines exit from the edges of that shape in a way emphasizing the sense of ancient torn fabrics to form a design suitable for ladies trousers.







pattern design





Applied printed design 4

The coloring idea was contributed with a significant part in the organization of visual perception of the design. So, black color came as a background that included work elements which varied in colors as a link connecting the elements of design together and emphasizing the unity as well as balance of these elements. Tia and dye printing was applied on the background with a combination of curcumin, henna, tea extracts in addition to a pink color pigment. This was followed by printing the main design with black color using silk screen.

• In design idea no (5); it represented a sample of innovative suggestions for textile printed wall hangings. The creative process in the design idea was based on forming landscape scene elements. It was benefited of the different linear and formal values in the design thereby creating a sense of value to the recipient. Thus, forms has ranged between being shapes taking curved and oblique directions, adding a sort of gentleness, tenderness, and leniency, and have also differed among themselves in size and thickness. Increasing the roundness led to identify the areas and add a sense of relaxation unlike its dynamic nature. The usage of black background helped to emphasis the white foreground.





Graphic design

Applied printed design 5

Flat screen printing was carried out on black background fabric using silver white printing paste. Colors and shades are used carefully to emphasis the main form. It has been taken into account the combination between each part of the general shape to achieve unity through good organization in relationship between the parts of the design to each other, and the relationship of each part to the whole composition.

• In design idea no. (6); the introduced printed textile wall hangings was based on integrating a number of circular, semicircular, curved and semi curved elements that were distributed in a decorative formation through which the elements appear as if they are rising from below to upward.



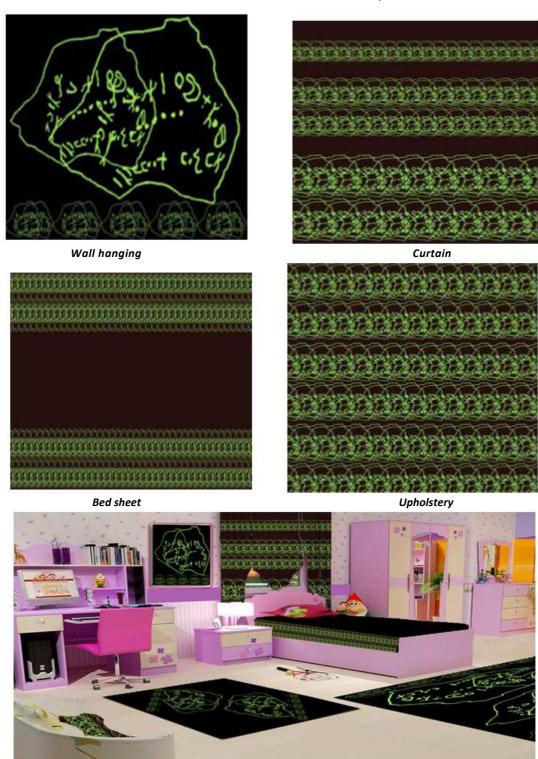


Graphic design

Applied printed design 6

The overlapping and synergy of these elements together have confirmed their unity and connectivity with the rest of the artwork. The hot background color emphasized the design elements in a creative shape in order to give the feeling of movement and continuity. The fabric was dyed with a mixture of curcumin and cochineal extract mordanted with alum, followed by flat screen printing with black color. The design was lightened with red colors in some places using stencil printing technique.

• The main idea in designs no (7 and 8) is creating a relationship between different furnishing textile styles; wall hanging, curtain, bed sheet and upholstery in order to be matching with each other using similar elements. The repetition of elements through stripes was shown in all design ideas; some ideas depend on the usage of different sizes as seen in wall hangings and curtains to help the eye to move through the design from large to small elements gradually. Resemblance between both sides; the right and the left side are attained in these designs. This resemblance provides beauty to the idea. Resemblance acts as a source of enjoyment and individual. The analogous and semi-analogous elements relate to each other with a firm tie which is their resemblance. So; all elements constitute a whole unit.



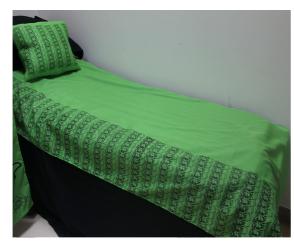
Graphic design (7)





Wall hanging







Bed sheet

Upholstery



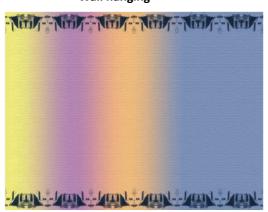
Applied printed design (7)

While using cheerful colors in the background of idea no (8), it helped in focusing on the elements. Making the effect of blending, minimizing and enlarging of the units gave the effect of radiation through the relationship between the model and empty spaces.





Wall hanging



Curtain



**Bed sheet** 





Graphic design (8)

Stencil printing was carried out on the fabric using the background colors (Rose, brownish yellow and navy blue). The brownish yellow was prepared from the mixture of curcuma and coffee extract using alum mordant. This was followed by direct flat screen printing using black pigment.



Wall hanging





Bed sheet and upholstery



Curtain

Applied printed design (8)

The designs (7, 8) in general are balanced and harmonious. This can be attributable to the relationship of portion-portion; namely the style through which each portion of the design corresponds to the other to create the sense of continuous bond between the portions. We mean by the portions those lines, shapes, colors and textures....etc. As for the relationship between portion-totality; it is the style which combines the portion separately and the general formation. It was taken into consideration that each good distribution contains internally a repetition of its rhymes, harmonies; while the repetition of shape results in an emphasis upon it.

### 4 CONCLUSION

This study aims to find scientific solutions required to support tourism enterprises to stimulate economic side and reduce the negative aspects of society such as unemployment and environmental pollution and depletion of energy wasted where

This study addresses three main axes first axis deals with the dimension Technical inherent heritage Saudi through the application of its units decorative taken from folklore in various regions of the Kingdom of pieces of art work printed on various textile carrying Saudi identity of these units belong to the tourist side of where the furniture hotels and Accessories art posters, etc., in addition to the requirements of the Hajj and Umrah from bags and Scarves and subtract..... etc.

The second axis in search deals with the economic dimension for how to activate religious tourism, which is characterized by the Kingdom as well as its significance economic in providing job opportunities for youth and women Saudi Arabia through the most suitable and Acer road alignment to tradition Arabia finally touches axis latter to the practical side of which is based on last reached the world of eco-friendly technology and energy saving while providing an economic feasibility study familiar with all aspects of different themes

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