Abstract

Saudi Arabia is now heading towards depending on non-oil products. As the fashion industry is one of the largest in the world, Saudi Arabia plans to grow to this area in order to further improve its economic prosperity. Thus, this work present the development of Wassem Fashion District in Jeddah, Saudi Arabia. For this work, three case studies were analysed. Based on the examined case studies, the estimated gross floor area is 20546.4 m². Furthermore, the fashion district is comprised of several zones, which are learning and creative area, administration and faculty, public zone, and incubators. In addition, the Wassem Fashion District will be developed at a site located in New Downtown, Jeddah, with site area of 26800 m². These area includes residential hospitality area, economic area and entertainment venues that give the site more value and security. In terms of architecture, the Wassem Fashion District was designed using general shapes such as spheres rectangles and rounded edge squares, and the building was constructed using stacking techniques. The district is expected to contribute to the economy of Saudi Arabia in the fashion sector.

Keywords—Fashion, district, community, Saudi Arabia

INTRODUCTION

Fashion products are fascinating customer materials that have been mentioned as the latest trends in items with a unique sense of appeal that ensures consistency of deals and causes prudent purchases by individuals [1]. A fashion item is intended to catch the transient mind of a customer, who may be interested in making a purchase to keep up with the latest trends around the globe [2]. In addition, fashion products are influenced by a number of factors, including economic, social, money-related, and even political issues [3]. The fashion business is constantly changing from a number of external and internal powers. While brands, designers and styles have gone back and forth, fashion business remains a major contributor to the success of the country’s economy, which is why many nations around the globe are investing in fashion related business [4].

Saudi Arabia is now moving towards relying on non-oil-based products, underlining innovation to export internationally and developing its economic status [5]. In particular, fashion plays an important role in Saudi culture because of its rich varieties of culture [6]. Since the fashion industry is one of the biggest in the world, Saudi Arabia plans to expand into this area to further develop its economic stability [6]. Moreover, the current involvement of younger generations, especially students in the fashion industry, has led Saudi Arabia to cultivate potency among the students and venture them into the fashion business line [7].

Saudi Arabia’s main objective is to follow the 2030 vision by providing trust and support to younger generation with all the resources they need to grow and build a stable society [8]. Hence, in order to improve the fashion industry in Saudi Arabia, a dedicated fashion hub or district is needed. Therefore, this work presents the development of Wassem Fashion District in Jeddah, Saudi Arabia.

CASE STUDIES

This work has analysed and covered three case studies. The details of the case studies is shown as follow:

- a. Melbourne School of Design - University of Melbourne
- b. Hong Kong Institute of Design
- c. Roy and Diana Vagelos Education Center

Melbourne School of Design - University of Melbourne

Melbourne School of Design - University of Melbourne is located at Australia (Figure 1). This building has an area of 15 772 m². This building is an award-winning facility that houses studios, auditoriums, lecture hall, exhibition hall, research lab, administration office and a library. The building consist of six levels. The studio hall is the core of the building and there is a hanging studio. The façade of the building is wrapped with zinc solar shading system. The middle of the building includes a ceiling of large wooden girders that allow efficient air circulation and dampened light. The ground floor is comprised of lab, library, exhibition, gallery and toilet. The first floor is comprised of multipurpose hall, studios and classrooms, dean’s office and faculty. The second floor is comprised of studios and classrooms, faculty offices, and student workspaces. The third floor is comprised of studio, research office, study room and workshops. The fourth floor is comprised of studio, research offices, faculty offices, study rooms, workshops, lecture hall, Japanese roof garden and kitchen. In addition, all floors are incorporated with toilet and vertical circulation facilities. The space distribution of Melbourne School of Design is comprised of educational area (70%), staff offices (18%), workspaces (7%) and services (5%).

Figure 1. Melbourne School of Design - University of Melbourne
Hong Kong Institute of Design
Hong Kong Institute of Design is located at Hong Kong (Figure 2). This building was designed by CAAU architect. This institute has an area of 42000 m$^2$. The building is located in the heart of the area and may provide the community with a meeting place that will energize the social life of the area. The building is constructed using concrete, steel and glass. It has a radical architecture which utilizes natural lighting. The towers of the building function as its structure and vertical distribution. The facilities of this building includes auditorium, exhibition hall, lecture hall, administration offices, café, restaurant, a sports hall and urban park.

Roy and Diana Vagelos Education Center
Roy and Diana Vagelos Education Center is located at New York, United States of America (Figure 3). The size of this education center is 100000 ft$^2$. It is comprised of 14 floor with glass façade. It houses classrooms, sky lounge, study spaces, multi purpose auditorium, lobby, simulation suite, special event space, anatomy quad, administration suites active learning classrooms, meeting rooms, offices, café, outdoor room, and parking spaces. The building is constructed using glass fiber reinforced concrete, ceramic frits, concrete beams and aluminum curtain walls. The space distribution of Roy and Diana Vagelos Education Center is comprised of educational area (50%), staff area (10%), services (10%), workshop (5%), showrooms (10%) and entertainment (15%).

PROGRAM ASSUMPTION AND SPACE DETAILS
For the Wassem Fashion District in Jeddah, Saudi Arabia, the estimated gross floor area is 20546.4 m$^2$. The details of the zone and its gross floor area is shown in Table 1. The fashion district is comprised of several zones, which are learning and creative area, administration and faculty, public zone, and incubators.

| Zone                        | Gross floor area (m$^2$) |
|-----------------------------|--------------------------|
| Learning and creative area  | 3570                     |
| Administration and Faculty  | 12888                    |
| Public                      | 2981.4                   |
| Incubators                  | 1107                     |
| Total                       | 20546.4                  |

PROPOSED SITE AND ANALYSIS
The proposed site is located in New Downtown, Jeddah (Figure 4). This site has an area of 26800 m$^2$. Downtown Jeddah is a new neighborhood in Jeddah that is close to many rich valued areas. These area includes residential hospitality area, economic area and entertainment venues that give the site more value and security.

PROJECT DESIGN
In this work, the Wassem Fashion District has a number of functions, starting with a fashion institute, incubators for emerging local brands and an entertainment area for the public, including the Fashion Runway Hall, retail stores for high-end brands and cafes. The district provides an opportunity for students and emerging fashion brands to showcase their work in concept stores where they can sell their pieces and it is open to the public to come and buy new designs to support local designers. The Institute is an organization with a specific purpose, in particular that is involved in science, education or a specific profession. The Retail store is a place of business usually owned and operated by a retailer. Furthermore, Incubators is a place, in particular with support staff and equipment, made available at low rent to new small businesses. Runway Hall Fashion is a runway, a catwalk or a ramp, a narrow, usually flat platform that runs into an auditorium or between sections of an outdoor sitting area, used by models to show off clothing and accessories during a fashion show. The project concept is primarily aimed at boosting creativity, positivity and, most importantly, productivity, through a fashion journey. For the fashion studio, each student has its own workspace that contains a table, mannequin and sewing machine which means 2.5 m$^2$ per person. For the gallery, the size and height of the display and storage rooms depends on the size of the work and the size of the collection, but the minimum height is 4 m. In terms of the district architecture design, general shapes such as spheres, rectangles and curved edge squares have been used and the building were designed using stacking technique. Figure 5 to Figure 8 shows the overall design of the Wassem Fashion District.
CONCLUSION
This work has presented the development of Wassem Fashion District, in Jeddah, Saudi Arabia. For this work, the estimated gross floor area is 20546.4 m². The fashion district is comprised of several zones, which are learning and creative area, administration and faculty, public zone, and incubators. The development of the Wassem Fashion District is expected to enrich the fashion industry in Saudi Arabia by empowering local fashion designers to produce, export internationally and have international audiences attending major events such as fashion shows that will have a positive impact on the economy of Saudi Arabia.

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