J TOWN MEDIA STUDIOS

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Abstract
The proposed project named "J town media studios" is a town that provides everything necessary for the Saudi media industry to be successful. J town media studios host Saudi Arabia talented filmmakers and are also open as a touristic destination for the public. Traditional and cultures themes will be integrated along with advanced technologies to serve as movie sets for an authentic experience rather than a stolen idea from the western culture. Several media centers were used as the case studies to adopt the new trend design. The project consists of the primary zones of public area, private studios, entertainment, administration, and services. The site evaluation criteria used are future development plan, surrounding/land use, access/traffic, shape/proportional, views, and visibility. Thus, the selected project site is located at Obhur Al Shamaliah district. The project developed a modern and creative educational environment that transcended the views of Saudi Arabian citizens.

Keywords—Media Industry, Media Studios, Filmmakers, Educational Environment

INTRODUCTION
Diversification of economic and the development of public service sectors such as health, education, infrastructure, entertainment and tourism are the 2030 Saudi Vision Plan, which aims to reduce Saudi Arabia's dependence on oil [1-3]. Despite the lack of commercial cinemas, film schools or film studios, grassroots film production operations in Saudi Arabia are rapidly emerging. This is mainly driven by the younger generation who are weaned in the American entertainment industry and who are self-taught or study filmmaking abroad, find actors and crew on social media, and distribute their films largely on YouTube.

The first movie studio in the Hollywood area was Nestor Studios, which was established in 1911 by Al Christie for David Horsley [4]. In the same year, another 15 independents settled in Hollywood. Other production companies eventually settled in Burbank, Culver City and other locations in the Los Angeles area, later known as Studio City in the San Fernando Valley [5].

Some studios provide return trips, while Universal Pictures allows visitors to visit the adjacent Universal Studios Hollywood theme park, take a tram to visit the retreat, and once filmed the movies "Psycho" and "Back to the Future". Walt Disney's original concept of the Disney-MGM studio was to operate it as a TV and film production facility and theme park [6, 7]. In 1988, before the facility was completed and opened as a theme park, the first feature film was filmed at the facility [7].

The Ministry of Egypt approved the establishment of the Egyptian Media Production City (EMPC) in 2000 [8]. It is an information and media complex located near Cairo, Egypt. It covers an area of about 35 million square meters. However, EMPC still encountered difficulties in attracting overseas film production.

The main obstacle is the hesitance of the producer to try the new untested photography center. The rise of the Middle East film giant UAE has attracted the attention of global media companies. Among the five media cities established in the past decade, Dubai Media City (DMC) was the first and most important industrial cluster established in 2001 [8]. Therefore, this study proposed a media studio to boost the Saudi media industry.

CASE STUDIES
There are three media centers used to facilitate the design of the project program, also acting as database for important design considerations and site choice criteria. The chosen case studies are:

a) California performance capture studio, Bay Area, California, United States
b) Vakko Fashion and Power Media Center, Istanbul, Turkey
c) Columbia college media production center, Chicago, USA

California performance capture studio, Bay Area, California, United States
California performance capture studio is designed by LorcanO’Herlihy Architects and Kanner Architects (Figure 1) [9]. The large internal project was designed for a highly collaborative and creative film production studio, involving the transformation of the two aircraft hangars at the original Coast Guard base into a complete film production studio. Reflecting the customer’s unique operating process, the project was conceived around the premise of a “strange cycle”, a term commonly used in movies to describe the movement that brings people back to the beginning through interconnected levels. By using an adaptive display wall system, the system can continuously cover various departments, and various art departments and production departments can interact and collaborate in a non-linear manner [9].

The program was located base on the specific level of light and sound control required. By bringing together a large number of required “dark programs” (screening rooms, colour grading stations, theaters, etc.) along a central location, other programs can receive natural light from the outside while providing a flexible open floor plan. Due to the sensitivity of computer monitors, shortcuts are defined throughout the core, which maximizes the efficiency of the cycle and provides “color” opportunities that are not available in other ways. In addition, strategically placed curved vertical nodes facilitate further collaboration between the layers and enhance the experience from the ground to the height of the hanger [9].

Vakko Fashion and Power Media Center, Istanbul, Turkey
REX is the architecture of Vakko Fashion and Power Media Center (Figure 2) [10]. The centre have been built to
accommodate Turkish sisters companies, which are Fashion House Vakko, and Television and Radio Company Power Media (Turkish MTV) [10]. This place can easily hold more than one activity at a time as it is used as a center for fashion designers with show rooms, which are also used for the broadcasting company. This building is interesting in the way that the Architects combined the two functions in the same place and the building is satisfying its users.

Vakko Fashion Center and Power Media Center changed the abandoned skeleton of an unfinished hotel project in Istanbul and shaped one of the most important new functions for contemporary Turkish architecture. When the CEOs of Vakko and Power Media used the abandoned skeleton design and construction of an unfinished hotel with REX to establish the company’s headquarters in less than a year, the usually required design and construction schedule was impossible imagination [10].

The size, floor height and service concept of this unfinished hotel are the same as the REX designed for the California Institute of Technology Annenberg Center, which had recently been cancelled [10]. Four days after Vakko and Power Media contacted the company, REX guided the start of construction by adapting construction documents to be produced at the Annenberg Center to an abandoned concrete hotel skeleton.

Columbia college media production center, Chicago, USA
Columbia College Chicago Media Production Center is owed by the Columbia college in Chicago, and it is an education facility which teach students what is media and its line of production and what are the behind scenes steps and aspects (Figure 3) [11]. This centre is completed starting from classrooms, computer labs, sound stages, up to the minute editing facilities, which allows the students to see and experience the real work environment while they are still students.

Beyond this building exterior beauty, it is a GOLD LEED certified building, having a green roof garden which creates energy and is serving as natural insulation for the roof [11]. The center is planned as an interdisciplinary meeting place for students and teachers in film, television, game design, performance and other departments. Program of the center are an education facility which includes four classrooms, lounges, viewing areas, motion capture studios, animation labs, lighting studios, directing studios, costumes storage, fabrication shop, equipment area, production offices and the technical support areas.

Figure 1. California performance capture studio, US [9]

Figure 2. Vakko fashion and Power Media Center, Turkey [10]

Figure 3. Columbia college media production center, USA [11]

SPACE PROGRAM
The J town media studios project is divided into 3 main parts. The public production area, which is the filming studios are open along with a city walk, and shops. The private filming studios and office, and the entertainment section containing cinemas and theatres.

Based on the case studies and their analysis, the conclusion is that the ratio of the build-up area to the ratio of the outdoor area is 60% to 40%. As the estimated build up area is equal to 33000m², so the outdoor area assumption is 22000m² and the number of users are 250. Table 1 and Table 2 tabulated the space program and the calculation of parking space of the project. The estimation parking site area is about 8512m².

| Zone          | Percentage (%) | Number of floors | GFA (m²) | Net area (m²) |
|---------------|----------------|------------------|----------|--------------|
| Public Area   | 42             | 2                | 13860    | 9702         |
| Private Studios | 37          | 3                | 12210    | 8547         |
| Entertainment | 5              | 1                | 1650     | 1155         |
| Administration| 6              | 2                | 1980     | 1386         |
| Services      | 10             | 3                | 3300     | 2310         |
| **Total**     | **100**        |                  | **33000**| **23100**    |

| Parking zone | Rules                      | Area (m²) | Total (m²) |
|--------------|----------------------------|-----------|------------|
| Cinema and studies | 1 parking per 5 people | 1400/5 | 280 |
| Restaurants  | 1 parking per 15m²         | 1000/1   | 67         |
| Administration | 1 parking per 2 people     | 175/2    | 88         |
| Private studios | 1 parking per 2 people   | 293/3    | 98         |
| **Total**    | **533**                   |           | **533**    |
| Parking spaces | 533/2=266               |           |            |
| Parking Site  | Area                      | 266x32=8512 |        |

SITE SELECTION AND ANALYSIS
The site area is determined according to space program assumptions approximately 50000 square meters. Figure 4 shows site 4 is located in the north side of Jeddah, Othour Al Shamaliah district, Saudi Arabia. The new master plan of Jeddah city is considering this area to be the new educational center for the city, as it has some of the main universities which do exist now. Figure 5 shows site 5 is located in the southern part of the city, nearby Jeddah municipality, in al Baghdadia Al Gharbiah district, as this area is going to be the cultural hub for Jeddah city. Figure 6 shows site 6 is located in the northern side of Jeddah, in Al Naim district, located on King Abdul Aziz road which is considered to be a residential commercial district.
These building type requirements should be considered during the site selection phase. Therefore the site will be chosen according to some of the parameters that are chosen according to the case studies analysis as well as the building type requirements. The weighting factors are 4 refer to the most important factor, 3 are the important ones, 2 are the neutral factors and 1 is the least important factor. The site selection criteria are future development plan, surrounding/land use, access/traffic, shape/proportional, views, and visibility.

A conspicuous location is needed to attract a large number of people, especially on the main streets, with convenient transportation. If the site involves other buildings, it should be directed to the part of the site with the highest visibility. Regarding the views from the inside of the site into the immediate surroundings, the design should overlook an important factor in the city, which is the red sea. The site evaluation result is tabulated in Table 3.

| Criteria                  | Weighting Factor | Site 1 | Site 2 | Site 3 |
|---------------------------|------------------|--------|--------|--------|
| Future development plan   | 20               | 18     | 15     | 17     |
| Surrounding/land use      | 15               | 14     | 13     | 12     |
| Access/Traffic            | 15               | 13     | 12     | 14     |
| Shape/Proportional        | 15               | 14     | 14     | 14     |
| Views                     | 10               | 8      | 7      | 8      |
| Visibility                | 10               | 8      | 9      | 7      |
| **Total Score**           | **75**           | **70** | **72** |        |

After the analysis have been applied on all the sites with detailed and accurate evaluation and study for each one, the site have been chosen. The selected project’s location is site 1 based on the site evaluation result shown in Table 3. This site is located in the northern side of Jeddah city, Obhur district as it is now moving to be one of the most important and potential areas for the city, as it is moving to be a residential and an educational hub for the city. The site is located in the north side of Jeddah city, Obhur Al Shamaliah district. The site is directly located on Obhur street highway, and as the Jeddah new master plan King Abdul Aziz Road will be extended over the water bay, which will link the northern Obhur to the rest of the city. Having the site near King Abdul Aziz international Airport and Al Hearmen train station which will give the site a chance to be an important spot to grab the people’s attention and involve with the teaching and technology.

Nowadays, Jeddah is expanding to the north aiming to create an international urban identity built on traditional Arabic/Islamic values. The hotels, business towers, recreational facilities, and the educational institutes located in the north side of the city serving the people’s needs. The educational institutions are Batary Medical College, College Of business administration, and IbnSinna Medical College. While in the future plan, King Abdul Aziz University will be establish in Thahban district.

According to the new master plan of the city, the kingdom tower will be built in a district which is adjacent to the site, as it is going to the highest tower in the world, which will improve its surrounding adding a value to the whole district. The other important fact is that the municipality is working on connecting this part of the city to the old city by creating three bridges, which will make the movement easier for all the users. In this area a lot of different academic institutions do exist. Another important fact about this site is having the airport nearby, as for the media centers visitors it will be easy for them to reach their target faster. All of these facts made it the perfect site for this kind of projects.

Jeddah climate is considered to be high humid and hot temperature in summer, while it is warm temperature in winter. Rainfall in Jeddah is generally sparse. The prevailing winds in Jeddah come from northwest winds because they are located along the Red Sea and are usually moderate winds. Although strong winds come from the southeast, these winds sometimes become active, and their wind speed may cause sandstorms and heavy rain.
Any site in the world would most likely have its own positives and challenging points as there is no site that is perfect for each and every single detail. This fact is also applicable on this site as it is not a perfect site from all the aspects. The site potentials are the site is oriented toward the preferable wind direction. The site located in a newly developed area, which is going to be an educational center. The surroundings of the site are mainly residential with educational facilities, which will cause the building to blend with its surroundings. The kingdom city is located near to the site, as well as the existing of the King Abul Aziz Airport for the visitors. The site has a lot of good views as it is located on the costal line of the red sea, as well as the existing of the kingdom tower which will add a value to the area. The site challenges are the site is directly located in the costal line should consider the water features during the design. The accessibility of the site in the current situation is challenging, but according to the future development it will be good linked to the whole city. The site has only one main road, which will cause to propose future secondary roads for this building. Also, there is lack of some of the amenities in the current situation of the area.

ZONING AND PROJECT DESIGN
The concept of this project is to create the number one attraction in Jeddah. The first part is by implementing the most advanced film production technology and equipment. The second part is by creating a unique cultural identity for the place. Figure 7 and Figure 8 demonstrate the initial site zoning and site master plan respectively. Besides that, Figure 9 and Figure 10 show the outdoor view and indoor view of the project respectively. The main perspective view of the project is demonstrated in Figure 11.

CONCLUSION
The main interest of this project is to grow the film industry in Saudi Arabia and places Jeddah on the world’s radar for all the good reasons. The proposed space program consists of several primary zones namely public area, private studios, entertainment, administration, services, and parking space. The selected project site is located at Obhur Al Shamalah district based on the evaluation criteria of future development plan,
surrounding land use, access traffic, shape, proportional views, and visibility. This project creates a new and more creative educational experience for the citizens of Saudi Arabia, also develop a recreational destination that goes beyond the usual restaurants and coffee shops and gives a wider perspective.

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