

Branding of Distinct Character Places

The Use of Advanced Visualization in restoring the cities identity

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Abstract

Branding is a trend has been accelerated in recent years. Cities, regions and countries throughout the world are shifting the focus towards place branding and are increasingly importing the concept and techniques of product and corporate branding. This paper studies the concept of branding in urban spaces in general with special emphasis on the dynamics of branding and places' identity by using advanced visualization technologies e.g. (3D Mapping Projection and Holographic Technique). The paper also explains and discusses the Mapping Projection, Hologram as smart tools to emphasize the places' identity and character through branding.

The paper aims to re-construction for the history of distinct places through the use of advanced visualization solutions, in order to achieving a level of branding, to create a new branding image for these places.

Keywords:

Branding, City Image, City Identity, Visualization, 3D Mapping Projection, Holographic Technique.

Introduction

In recent years cities are in search for new ways to promote themselves. Due to fast changes in technology and the shift from local to a globalized environment, cities are forced to compete with each other in order to be an attractive tourist destination, workplace, cultural rich place and much more. The contemporary city has to be up dated continuously. In that sense cities develop strategies to support, to `sell` and advertise them within the global market according to hankins there are mainly three approaches for promoting cities: cultural mega events, restoration and promoting heritage and the construction of iconic buildings Among these approaches, construction of iconic buildings has been extensively utilized by many cities in order to get attention and attraction. The main motive behind this attempt is to create an identifiable image.

Great Cairo contains many places with unique heritage character, whose features have disappeared over time. However, these places are still holding the same old name despite the changing urban environment and the function of these places. An example of these places are Darb Al Labana (Qalaa), Kobry Al Lamoon (Ramsses) Khan Al Khalily, ... etc.

Therefore, this research attempts to emphasize and strengthen the identity of the heritage areas by “re-constructing” their historical origins on the building façade. This will be achieved through the use of advanced visualization solutions as a strategy to revive the original image in order to strengthen the branding of these places.

What is Branding?

The word "Brand" refers to a company, product name, a logo or trademark, establishing emotional attachment to products and companies. According to the American Marketing Association Branding is defined as *"a name, term, sign, symbol or design or a combination of them intended to identify the goals and services of one seller or group of sellers and to differentiate them from those of competition"*. Hypothetically, branding of cities is similar to branding of products, by link the urban image with the elements of urban forms, historical and cultural identity, to increase the attractiveness of the city as a place to live, work, visit or business¹.

Branding has been developed within the marketing discipline and has grown to a large body of knowledge. It is concerned with the usage of the origin in branding a product Using the qualities, images and, in most cases, stereotypes of the place and the people living in that place to brand a product that is produced in that place is considered an effective strategy. In essence though, it has little to do with the concept of place branding. Interesting as it may be (and useful for product marketing), this practice does not constitute a place branding strategy, in the sense that it cannot be considered a place management strategy.

The possibilities of using branding as an approach to integrate, guide and focus place management. Borrowing from the techniques and ideas developed within general branding, and especially the advent of the increasingly popular concept of corporate branding, (Kavaratzis and Ashworth forthcoming).

City Branding

City branding has various regional variations. While in the US city branding aims to stimulate economic growth, in Europe it is aimed to improve all aspects of socio-economic well-being, it should be emphasized that the ultimate goal of all city branding related activities is to improve the quality of life for local residents (Kavaratzis, 2008).

In generally, city branding understood as a whole set of actions to build the positive image of the city and communicate it among various target groups via visuals, narratives and events locally and internationally. This will provide the city with a competitive advantage among other cities.

The objectives of city branding can be summarized as to.

1. Attract inward investment and tourists.
2. Reinforce local identity and identification of the citizens with their city.

3. Strengthen the reputation of a city and its identity to improve the economic role.
4. Preserve and restore cultural diversity as an important characteristic of cities' life.

Thus, city branding is a means to improve “external” and “internal” images of the city in addition to giving the city with a unique “character” and “identity”².

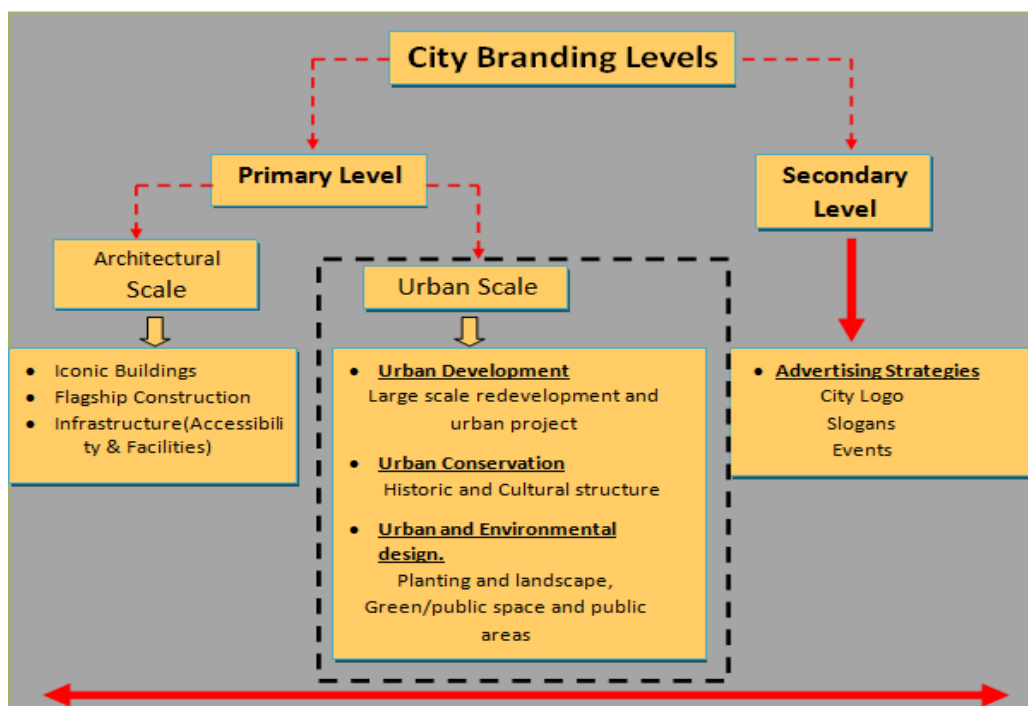
Character/ Identity

These two aspects (Character & Identity) are playing an important role in city branding. Identity is more related to the concept of "unique character", according to Lynch, identity is what makes a place more "identifiable". Cultural Character is mental identification of the "spirit" of the city, where inhabitants construct their internal city image¹.

Constructing iconic buildings is one of the most extensively used strategies followed by many cities in order to create a distinctive image, attention and attraction. Thus, the image of any city is a main character for urbanization and developments in city image can be successful by transforming the urban environment at the level of squares, the main roads, Icon building, Infrastructure, and the landmarks.

Branding through Character and Identity

Culture Character and Identity are sharpen the city's image and they indeed extensively used in Place promotion. In most cases cultural destinations are urban destinations or at least most cities have possibilities and opportunities to emphasis their identity offering in order to promote themselves. As Kunzmann (2004) , “...in times of globalization local identity has become a key concern and the arts are, apart from landscape features, the only local asset to display such difference... the cultural content remains the last bastion of local identity” (2004:387).



This chart clarifies the levels of city branding across split it to primary and secondary, in addition to, focusing on the Urban Scale Which is concerned with the cultural and historical aspect.

Branding in the urban areas is a process of differentiation and diversity in terms of city urban development as cultural facilities, historical buildings, and urban squares to create characteristic image of the place.

Based on the above, we can conclude that there is a strong correlation between the emphases on the identity of the distinct character places in the cities, in order to enhance the city image and reach one of the branding levels on urban scale by “re-constructing” their historical origins on the building façade through the use of advanced media solutions.

Architecture Visualization

The Architecture Visualization is the graphical representation of an architecture model or an architecture view of a model. This can be done on paper / printed (physical) or on a computer screen (digital). Also there are many forms of it like, videos, animation or maquettes. It can be a way to create a channel of communication between urban environment and citizens.

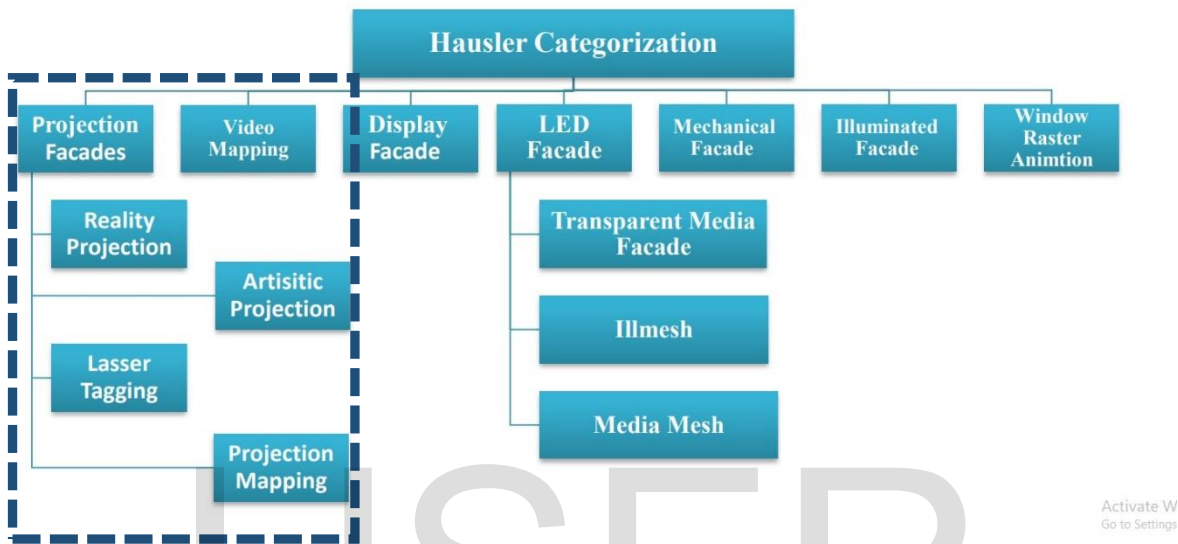
Media Facades

Since we are in the age of evolution, development of technologies and the mobility, it is necessary to keep up with this age to achieving our goal in urban branding through the use of modern technologies, smart interaction and remote information transfer technology. Media architecture is one of the most important driving forces to convert our perception regarding the world around us, leading to a link among architecture, digital space and public space. By media architecture, a building can convey a message which not only seems to be applicable for certain people, but also for universal (Tscherteu, 2008).

Today, buildings are exposing a new face to the city and outline a new phenomenon for the citizens which in fact provides an outfit for the city as a living creature adopting with the cutting edge technology which are of paramount significance in our life style, such as using advertising screens on building's façade.



Haeusler (2009) in his book (Media Facades, History, Technology, Content) decided to categorize “Media Façade” technically. From his point of view, he found that “Media façade” had seven different technical categories: (Projection façade, Video mapping, Display façade, LED façade, Mechanical façade, Illuminated façade and Window raster animation.



animation. The figure below illustrates the seven types and their subtitles

In this paper we are going to discuss 2 techniques for media façade such as projection façade , video mapping façade and a new technology which is holography technique applied on building's façade in some cities, where it allow for dialogue between citizens and stimulate their visual perception of the culture in which they live. So in the next part of this research, these new techniques will be introduced and some architectural examples will be presented to them.

1- Projection facades and video mapping:

projection is a technique implemented in old buildings to renovate the historical places and to encourage the tourism again. This illumination type is used to show the ornaments and the architectural decorations of such a building. This technique has a remarkable advantage such as, no requirement for regular maintenance and preserves energy. There are many ways for applying this technique by adding lights or the façade itself or applying projectors 3D real pictures or even just lights also you can apply laser tagging for just sending messages

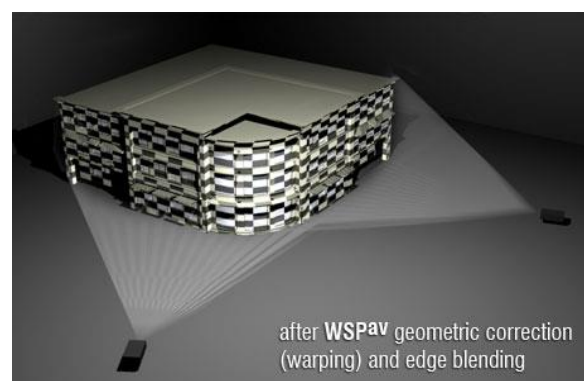
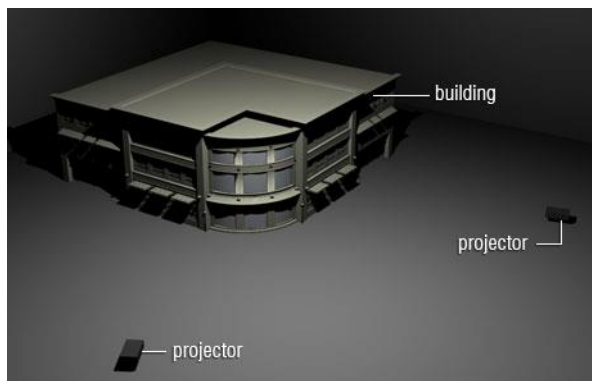
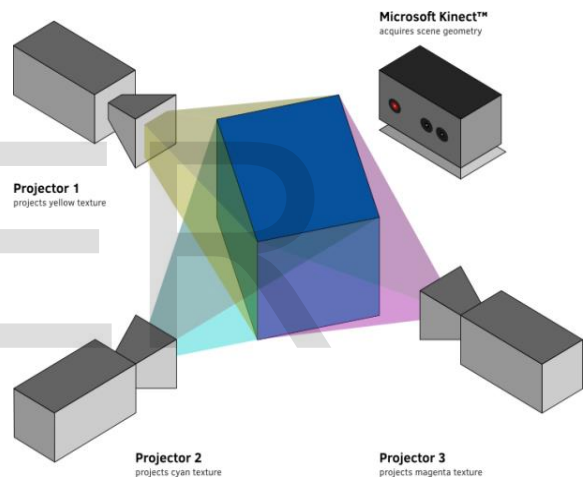


One of the latest techniques in video projection is ‘video projection mapping’ which has the ability to create a dynamic video show on any surface. This technique blends visual and audio elements and generates an audio-visual narrative. Projection mapping is commonly used in events such as concerts, fashion shows, and theatrical performances. Another application of video projection mapping is in the field of architecture where the system is used to attract a larger number of audiences through image display on historical structures in public spaces (Ekim, 2011).

The adaptability and flexibility provided by the use of video projection mapping make it an instrument for architectural purposes, whether the urban architecture, where video projection mapping can be used in parks, public places and shopping centers, or in historical buildings and historical facades which are precious and reveal the essence and origin of any area illustrating the soul of past

How it work?

“Process for creating tailor-made projections for specific objects” allows the focus of a video image to be specifically adapted in line with the various surface characteristics of a façade. In this process, the diverse material and constructional qualities of a façade are programmed into a mask on the computer screen and the specific images are then adapted to the various areas of this mask. The result is that when it is projected onto the actual façade, the image is perfectly adapted to the façade structure which, in turn, becomes the architectural stage set for a theatrical performance



Usage and applying in Architecture

Projection being part of a merger between media and architecture gives space a meaning and forces it to speak as a means of communication for the commissioning institution or advertising client, so projection methods marks a decisive step as the surface of architecture became permanently changeable and a means of communication that goes beyond the “symbolic” way of communicating which has always been a part of the perception of architecture. There are many of examples and applying projects that use this technique, we can summaries its purpose in

- Create a dynamic image.
- Applying sound effects (narrative, music).
- Adaptability and flexibility with buildings.
- Perception of an object from a distance.

example light Festival Fête des Lumières Lyon/France:

from the seventeenth century the Lyon city in France was not considered as a good place to live ,work or even celebrate events as it was swept with an epidemic of plague,always in constant danger of wars threatening its borders.striked by floods .but . In 1998, the old town of Lyon had a new chance through UNESCO World Heritage Site (UNESCO, 1999) by applying attractive light festival every year . The festival has also made the city of Lyon a more attractive and culturally important tourist destination. The marketing strategy “of using” artificial light at night in the form of an annual light festival has changed the city’s image and greatly increased the demand for cultural tourism. This marketing strategy helped the city Lyon to reach high ranks :

2009	voted the most artistic French city,in French art magazine	Source: Fête des Lumières, 2012
2011	ranked 8th globally and 2nd in France in the category of innovation	Source: Innovation Cities”, 2011
2014	the Guardian, another British newspaper, named Lyon one of Europe’s top 10 light art festivals (Source: European city breaks”, 2014
2015	the Telegraph, a British newspaper, reported Lyon to have moved to the first place as a popular short break destination among top European cities	Source: Beanland, 2014
2014\2015	Lyon was also the winner of European Cities and Regions of the Future in the ranking of fDi Magazine of the Financial Times, taking the 2nd place among 25 medium-sized European Cities in general category and the 15th in Top 25 European Cities Overall category	Source:McReynolds, 2014

Later, with the development of lighting technology, the lighting technique of 3D mapping projections became even more popular. Fête des Lumières it is now a light show that positions the city via creativity that attracts visitors enhance the tourism , became an attractive point for investors and stakeholders and added value to the place



3D Projection Mapping performance during Fête des Lumières, Lyon, France (2010)

Example Sydney Opera House:

Our example is Sydney Opera House. It is a land mark of Australia .it is designed by Danish architect called (Jorn Utzon) but it was completed by (Peter Hall) who supervised



the Australian architectural team. The building was officially opened on (1973). The Sydney Opera house has many spaces of performing different types of arts .it is located in Sydney, Harbor. this building is considered the most famous and distinguished building on the 20th century. They used to apply this technique of video mapping on the annual festival of lights every year. The figure no (16) below shows this festival in (2012) and how using this technique illuminate the building and gives impressive image (archdaily,2020)

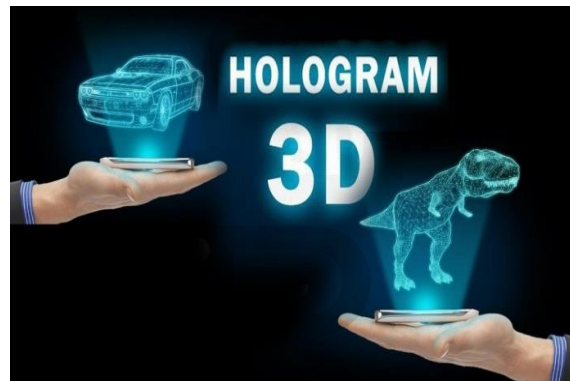
2- Holographic Technique

Holography is the science and practice of making holograms. Typically, a hologram is a photographic recording of a light field, rather than of an image formed by a lens, And it is used to display a fully three-dimensional image of the holographed subject, which is seen without the aid of special glasses or other intermediate optics.

A hologram is a physical structure that diffracts light into an image. The term 'hologram' can refer to both the encoded material and the resulting image. It based on the principle of interference. A hologram captures the interference pattern between two or more beams of coherent light (i.e. laser light). One beam is shone directly on the recording medium and acts as a reference to the light scattered from the illuminated scene.

How 'holograms' work

While not truly 3-D, stage holograms use a high-tech spin on a 19th-century trick to make projections of celebrities look like the real thing.

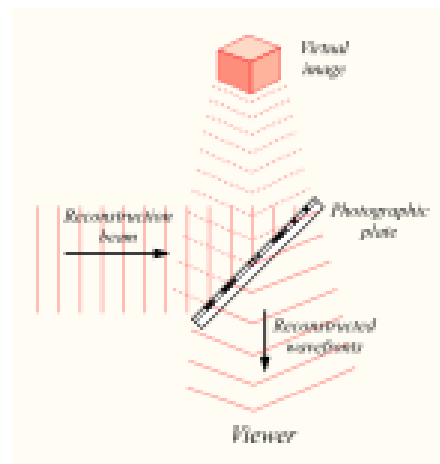
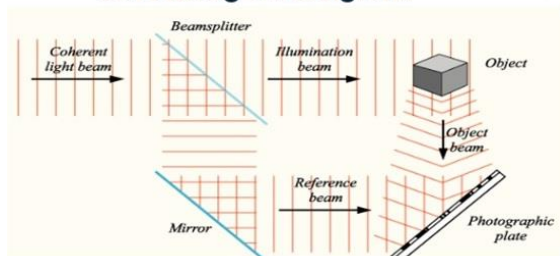


How it work?

Holography is a technique that enables a light field, which is generally the product of a light source scattered off objects, to be recorded and later reconstructed when the original light field is no longer present, due to the absence of the original objects.

In laser holography, the hologram is recorded using a source of laser light, which is very pure in its color and orderly in its composition. Various setups may be used, and several types of holograms can be made, but all involve the interaction of light coming from different directions and producing a microscopically fine interference pattern which a plate, film, or other medium photographically records. A more flexible

Recording a hologram



arrangement for recording a hologram requires the laser beam to be aimed through a series of elements that change it in different ways. The first element is a beam splitter that divides the beam into two identical beams, each aimed in different directions:

- One beam (known as the illumination or object beam) is spread using lenses and directed onto the scene using mirrors. Some of the light scattered (reflected) from the scene then falls onto the recording medium.
- The second beam (known as the reference beam) is also spread through the use of lenses, but is directed so that it doesn't come in contact with the scene, and instead travels directly onto the recording medium.

Reconstructing

a hologram

Usage and applying in Architecture

Since the beginning of holography, amateur experimenters have explored its uses in many different fields like,

- Storing data through store information at high density inside crystals or photopolymers.
- Arts and theater's shows.
- Sensors or biosensors, that interacts certain molecules generating a change in the fringe periodicity or refractive index
- Security and scanners.

And there are many applications of hologram, at the level of architecture and urban scale there are some attempts to use, but not in widely use.

Local examples in Egypt:

the Temple of Horus in Edfu

Lighting the Temple of Horus in Edfu by the technique of projecting light towards the main gate from a distance of 70m, as shown in figures (no 6,7). Two temperature controlled cabinets encase the projectors, as these equipments s are affected by the high temperature. This technological presentation which uses the LED screens transforms the original site into an artistic space that attracts visitors from all over the world. The spectacular show narrates the historical story of the temple, the audio visual show interprets the architectural jewels of the building of the temple. The show presents a day in the life of a temple dweller, from sunrise to sunset, and tells the mythological story of Isis, Osiris, Horus and Set Interpreting this technique of lighting encourages the tourism and spreads the culture and history of this site. Moreover, this technique enhances the country's economy due to the introduction of



night visits to historical places rather than limiting visits to day time

<https://avstumpfl.com/fr/showcase/horus-tempel-edfu>

The Cairo Tower Cairo Tower

The Cairo Tower Cairo Tower, figure (no.8) symbolizes the industrial civilization in Egypt. It was constructed between 1956 and 1961. In order to renovate this land mark again. The Egyptian government introduced color-changing LED lighting to the building's facade. This lighting system was chosen to decorate the tower's lotus-like exterior facade and sequentially enhances the building's value. The rich colors used contributed to the building's view by updating and changing its skyline in addition to creating changeable appearance for the same building. Moreover, this new technology requires minimum



maintenance and consumes low energy due to the use of environmental LED lights.

The Citadel area, Cairo, Egypt

The Mosque of Muhammad Ali at the Citadel area is one of the most visited places in Egypt. The Egyptian government carried out the installation of LED lighting following their work illuminating the Pyramids touristic area in Giza. LED fixtures have been chosen to light up the building due to its small environmental impact with no ultraviolet radiation and infrared



emanation, low power consumption and a reduced maintenance requirement.

Bibliotheca Alexandrina' library, Alexandria, Egypt

A 3D video mapping show which was projected on the façade of Egypt's Bibliotheca Alexandrina in May 2014, the major library and cultural center in the Mediterranean area is a good example of the application of this category of media façade in Egypt (shown in Fig. 1). The performance entitled "Augmented Reality: 3D Video Mapping Show on Ancient Alexandria" was organized to promote tourism and archaeological sites development, students and citizens. The theme of the projection, which shared sound and lighting effects with virtual and digital elements, is the history of the city of Alexandria from its foundation till the end of the Classical Period, with a special emphasis on the main attraction sites of the city. The show included beside



the classical Video Projection also Lasers, intelligent lighting, DMX controlled flames and a Water curtain (Aref Y., 2014).

Conclusion:

From this paper we can conclude that for applying city branding plans and strategies one of the main points that has major effect in this strategy is reviving the historical buildings and using iconic buildings . this can be happened by applying the new technologies for the facades such as (projection facades and video mapping) .

Adding these techniques has great influence on the economic aspects and tourism.as these techniques created new image for the old historical buildings with new sense and image that will attract tourists and therefore enhance the tourism in the city .also creating this new image will attract investors and stakeholders to Build new investments in this city



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