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### Efficient Technique for Advertisement in India

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**Abstract:** Advertisement is a type of effectual communication with people in general. It is a sound or visual sort of communication that uses a straightforwardly upheld, non-personal message to promote or offer an item or thought. Advertisement is an intense powerful tool of showcasing and promoting activities. Advertisement may be any sort of presentation, a representation in a day by day paper or magazine, a TV commercial, or a bulletin. The paper and print advertisement are a standout amongst the most widely recognized methods for advertisement since numerous years. But there are few drawbacks related to these advertisements approaches whether its cost issue, manual work or paper wastage. This paper depicts the new technology by which previous advertisement techniques can be supplanted by digital billboards. It highlights its focal points when applied in India. Taking into consideration India's scenario, digital billboards are recommended accounting all the conceivable parameters important, for example, geological conditions, mass population, evading the use of paper and much manual work and most important cost effective.

**Keywords:** Digital, LED, Billboard, Media, Bulletins

#### 1. INTRODUCTION

According to the Advertising Association of the UK[8]. Advertisements are messages paid for by the individuals who send them and are intended to inform or influence people who receive them. Advertising is an idea and technique for offering any item or service or giving information around an action, event and so forth to the consumers or general individuals. In advertising terms, medium is a channel of communication, a few of promoting media are daily papers, magazines, TV, radio, and web. A medium is a vehicle through which a promotion is conveyed to the consumer. It is the go between the maker of the advertisement toward one side and the purchaser at the other. Once the medium has been established it is in a good position to attract its audience effectively.

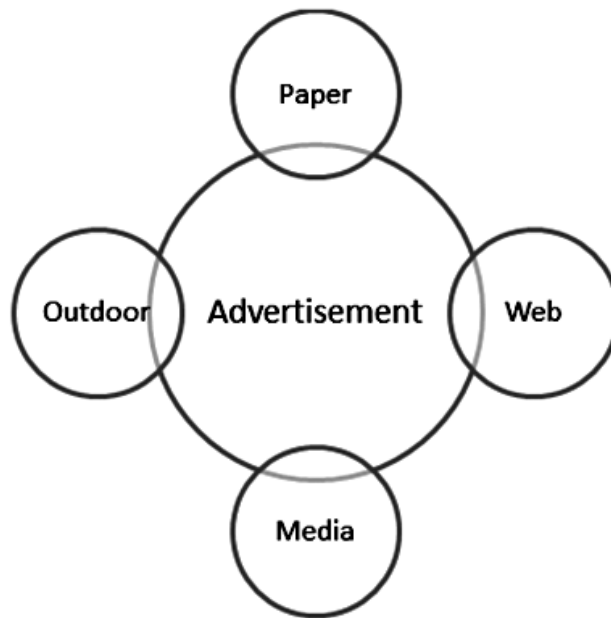
Advertising through hoardings is enormous business. Advanced Billboards are PC controlled electronic presentations with mechanical capacities that are taking out of home advertisement to another level.[1] Organizations want to display their items and data on hoardings as many people tend to view hoardings and route to their work environment or while going home. Hoardings connect with an unfathomable area of society. Owners of buildings including societies attempt to increase their assets by successfully exploiting this source of revenue. Hoardings are

set up on the porch or in the compound or on the dividers of a building. We likewise discover roadside hoardings which by and large have a place with hoardings promoting organizations. As these hoardings are sufficiently enormous and levelled entirely high, they are effectively spotted. Their splendid hues and overwhelming figures catch everybody's eyes. This is the motivation behind why hoardings are such a great amount popular [2].

## 2. LITERATURE SURVEY

There are various types of advertisements through which the products can be reached to its audience such as shown in figure 1.

The above mentioned advertisement types are studied on the basis of some parameters which is shown in the Table 1.



**Figure 1: Types of Advertisement**

### 2.1. Paper Advertisement

Paper advertisement is a type of advertisement that utilizes physically printed media, for example, magazines and daily papers, to achieve buyers, business clients and prospects. Sponsors additionally utilize digital media, for example, banner promotions, mobile advertising, and promoting in social media, to achieve the same target groups of onlookers.[4] Paper advertisements include newspapers, magazine, paper hoardings as shown in Figure 2.

Newspapers target diverse readerships with a blend of substance, regularly including sports, excitement, business, style and governmental issues notwithstanding nearby, national or world news. Publicists can purchase distinctive sizes of promoting space, from little characterized advertisements with content just, to show promotions including content, photos, delineations and illustrations in sizes up to a full page or even a twofold page spread [4]. Magazines offer publicists broad decisions of readership and recurrence. Buyer magazines cover an extensive variety of interests, including sport, diversions, style, wellbeing, current undertakings and neighbourhood themes.

### 2.2. Web Advertisement

Web Advertisement, likewise called as online marketing or Internet Advertisement, is a type of promoting and publicizing which utilizes the Internet to convey limited time advertising messages to shoppers. It incorporates



**Figure 2: Paper Advertisement [9]**

email promoting, web crawler showcasing (SEM), online networking showcasing, numerous sorts of presentation publicizing (counting web flag promoting), and portable promoting. Like other publicizing media, web promoting as often as possible includes both a distributor, who coordinates commercials into its online substance, and a sponsor, who gives the ads to be shown on the distributor's substance. [2] An increasingly popular form of Advertisement, Web advertisement has a high consumer reach who access internet regularly. It is very flexible and intelligently adaptive to modify. It is also rich in content and can also be referred as the Digital Modern form of advertising. Web Advertisement includes Email, Display Ads [4].

The first widely publicized example of online advertising was conducted via electronic mail. mail advertising is straightforwardly sending a business message, commonly to a gathering of individuals, utilizing email. It for the most part includes utilizing email to send promotions, demand business, or request deals or gifts, and is intended to fabricate reliability, trust, or brand mindfulness[12]

Display advertising is a sort of internet publicizing that comes in a few structures, including banner advertisements, rich media and much more. Not at all like content based advertisements, has display advertising depended on components, for example, pictures, sound and video to impart a publicizing message [13].

The Internet, as a worldwide correspondences medium, gives publicists one of a kind and regularly practical methods for achieving promoting crowds. Similarly as with all media, be that as it may, promoting on the Internet has one of a kind advantages and disadvantages.

### **2.3. Media Advertisement**

It is the most popular form of advertisement amongst the target consumers. It involves visuals or audio advertisements through Television, Cinemas or Radio. It is also rich in content and represents an accurate business description. Advertising media determination is the way toward picking the most practical media for promoting, to accomplish the required scope and number of exposures in an intended interest group. Media advertisement includes Television advertising, Radio advertising, and cinema advertising.

TV advertising offers the advantage of reaching large numbers in a single exposure. However in light of the fact that it is a mass medium equipped for being seen by almost anybody, TV does not have the capacity

**Table 1**  
**Types of Advertisement with their Advantages and Disadvantages**

S. No.	Media Type	Parameter	Advantages	Disadvantages	Reference
1.	Print	Paper	Simple medium to spread awareness or advertise to a specific geological territory.	Only reading material, no sound or visuals to attract customers. Usage of similar formats and designs. High manual work required. High risk of loss. High paper waste.	Ian Linton [3]
2.	Web	Internet	Advertise on a large scale with minimal expense. Support various types of contents: visual, audio, images, designs.	Security issues. Requirement of software and hardware devices. Short Lived.	David Ingram [4]
3.	Media	Audience	Most effective in attracting customers Most innovative using various types of contents. Highly adaptive.	Require Huge investment for hiring specific people for acting or having verbal communications.	Shruthi R [5]
4.	Outdoor	Billboards	Tremendous and eye catching. Large and guaranteed audience. Expanded customer expose.	Affected by weather conditions. Short time advertising tool. Visibility issue.	Roberto Fulgham [10]

to convey a notice to very focus on clients contrasted with other media outlets. Telecom companies are endeavouring to enhance their focusing on endeavours. Specifically, organizes working in the compensation to-access field, for example, those with stations on link and satellite TV, are presenting all the more barely themed programming (i.e., TV indicates adapted to particular vested parties) intended to speak to particular groups of onlookers. In any case, TV remains a choice that is best for items that focused to an expansive business sector [5].

Advancement through radio has been a suitable promoting alternative for more than 80 years [5,14]. Radio is the main genuine portable medium. In the car, at work, and at play, radio is there..the partner and the advertising power your clients bring with them wherever they go. In your own life, when you have something essential to impart to somebody, which would you favor - to demonstrate to them a photo, to keep in touch with them, or to chat with the closeness and feeling of the human voice? Radio offers with closeness.

## 2.4. Outdoor Advertisement

Any promoting done outside that announces your business' items and administrations. Types of outside advertisements incorporate billboards, transport seats, insides and outsides of transports, taxicabs and business vehicles, and signage posted on the outside of your own block and-mortar area. It includes Billboards/Banners, Digital Hoardings, Transit Advertising. Outdoor Advertisement will be discussed in detail in further section.

The modern age of digital revolution and improving technology requires a form of advertisement or an improvement in the existing way of advertising that is cost effective and yet reaches the mass and target consumers with limited investment. It should also be easy to create and flexible to manage.

## 3. PROPOSED WORK

A light-emitting diode (LED) is a semiconductor device that radiates visible light when an electric current goes through it [7]. LED advertisement display is also known as Digital Advertising or Digital Billboards. The concept



**Figure 3: Billboard Advertisement [11]**

of advertising about any product, service or event to the public on led display panel is very attractive and easy. It uses the latest technology to give advertising sector a new name and standard. This technology is going to be very competitive in future.

The advertising LED screens are intended for indoor and outdoor use and are in trend for long viewing distances as shown in figure 3. The LED displays PLUG and PLAY framework is incredibly straight forward and makes advertising digital billboard easy to use even for the first time users[7]. Digital Billboard setup requires some hardware, software. The initial infrastructure, hardware or work load might be higher in installing



**Figure 4: Outdoor LED Display Advertising [10]**

and setting the panel. Once it is installed, this form of advertising would be very easy to manage and cost effective as compared to any of the other available forms of Advertising.

LED advertising screens are the most effective outdoor advertising medium, but their adaptability made them well known for some alternate applications, such as sports and Events. LED screens are Flexible, you no more need printed system. You can plan distinctive ADS to keep running at various times and you can make a few unique ads to rotate. Therefore Digital billboards are time sensitive and cost effective[7].

The video or electronic LED billboards, while having been around for quite a long as a functional animated outdoor media format, is still in its early stages as a creating medium of video message sheets for outside promoting. As a rising media framework, LED video bulletins offer a more noteworthy adaptability of utilization than ordinary billboards would ever give[6].

### 3.1. Working of LED Display Advertisement

The technology which is required for the Digital out of home or popularly known as DOOH to work, may be divided into two sections, one is the software and the other the hardware. LED display advertisements or Digital Billboards are mostly controlled by a remote computer and the advertisement details are shared to the image display units or billboards through cellular/data networks. Based on the size of the display screen, these billboards can transmit images to short clips and even text messages. If a sequence of images or information is transmitted to the receiver unit in the digital billboard, these static messages or images are flashed to the display unit in a pre-defined time interval. These billboards are geographically controlled using remote scheduling software that can manage a single or a group of billboards across a geographic spread. The full unit of a digital billboard contains a power supply that runs a controller board. This controller board has the ability to engage with a remote computer using cellular network to download images and other information. More advanced versions of these electronic billboards can also be run on rechargeable solar powered batteries. These are more ecofriendly but they need optimum hardware support to sustain the power generated by these batteries. The digital billboards also have a display unit, a media player and a system software that controls or manages the controller board. The media player is responsible to read the media data content provided by the controller board and render it on the display unit. The controller board also provides other information like time span of display, repeat intervals, graphical information etc. All these components are integrated to each

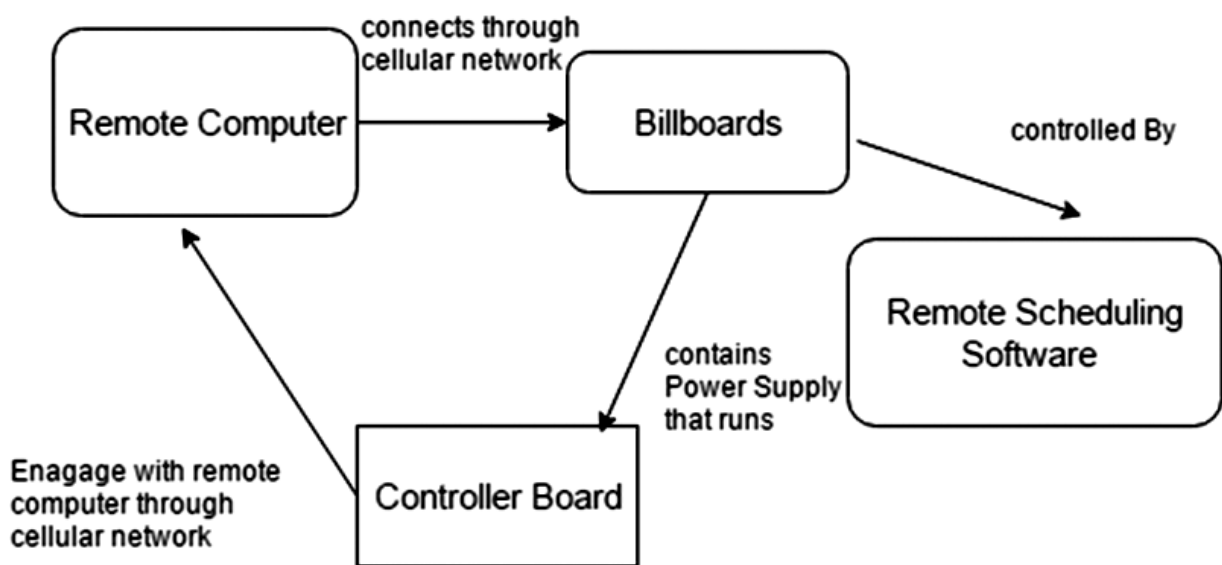


Figure 5: Working of LED Display Advertisement



other using the controller unit which is the Central Processing Unit of the Digital Billboard System as shown in Figure 4.

## **3.2. Characteristics of LED Display Advertisement**

### **3.2.1. Flexible**

Engage and develop a dialogue with consumers through boundless creative executions, using a variety of digital outdoor signs.

### **3.2.2. Brightness of the Digital Billboard**

Careful and sensible control of the night time brightness of computerized LED signage is basic. A audit of the lighting professional literature indicates that drivers should be subjected to brightness levels of no greater than 10 to 40 times the brightness level to which their eyes are adjusted for the basic driving assignment. As roadway lighting and car headlights gives lighting levels of about one nit, this suggests signage ought to show up no brighter than around 40 nits. Standard industry practice with past technologies for floodlit billboards averages less than 60 nits, and once in a while surpasses 100 nits. It is prescribed that the new advancements ought not surpass 100 nits.[8]

### **3.2.3. Time-Sensitive**

Digital enables instantaneous creative updates and the capacity to react continuously to current occasions and economic situations.

### **3.2.4. Power consumption**

LED lighting is quite energy-efficient. The power of a digital billboard depends upon the kilowatt costing across different locations, and the screen display technology that is used in it. It is also controlled by the screen size that is used in the LED display panel.

### **3.2.5. Cost of Digital Billboards**

LED display advertisements are costlier than the any other type of advertisements or hoardings but are significantly cheaper than other forms of advertising. The overall price of the implementation of a digital billboard depends on size and location of the panel. The cost of execution or advertising depends on event, service or product that is to be advertised. The initial cost is higher as compared to the overall cost.

## **3.3. Comparison with Traditional Advertising Media**

If we compare the traditional media with the latest LED based advertising there are certain points that clearly distinguish between them. There are some points that are highlighted below.

In traditional media, It only contains reading material while LED based advertising contains reading, audio as well as video. Traditional media require labour every time and also results in wastage of time whereas LED media are very quick and can be easily operated hence it is easy to operate them whenever required. Paper print advertisements can be seen everywhere therefore, they have become quite boring but Since, LED media use the idea of new technologies in advertising sector they are very attractive. Traditional advertisement cause harm to the nature as they require very large amount of papers. LED display advertisement is ecologically very important as it does not cause any harm to the nature.

The comparison as shown in Table-2 clearly compares both the advertising media based on some features.

**Table 2**  
**Comparison with Traditional Advertising Media**

<b>Feature</b>	<b>Traditional</b>	<b>Digital</b>
Dynamic	No	Yes
Attractive	No	Yes
Convenience of Programme and edit	No	Yes
Cost	Low	Not High
Flexible	No	Yes
Efficient	No	Yes
Return on Investment	Less	High

#### 4. CONCLUSION

LED display advertising is more effective in changing people's decisions and making them buy the product. The concept of LED advertising display is going to be an emerging technology and it is being successfully implemented and used globally with a wider spread. The digital billboards are more attractive and efficient as compared to the other forms of advertisements. Flexibility is the most important feature of digital billboard which makes it different from the paper advertisements. Although it has some disadvantages such as it causes drivers distraction but rather than it is going to be very successful especially in India. Hence, if this idea of smart advertisements on roads using digital billboards in India is going to be implementing it would be a whole new thing for the public and would be giving a lot of attention and appreciation by them.

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