

**THE CHARACTERISTICS OF A G.I.S DATABASE IN THE
MANAGEMENT OF ADVERTISING.
AN APLIED EXAMPLE TO ORADEA**

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Abstract. - Until recently, the advertising activity was not regulated thus being conducted without many restrictions. Starting with 1998 the Oradea Municipality has developed a reglementation code to organize, authorize and direct the advertising activities. According to this code no company is allowed to place publicitary adds over the territory administrated by the Oradea Municipality unless it is among the companies accepted by the City Hall. However this did not apply to tax payers if the advertisement was located where the company holds its activity.

1. THE ADVERTISING ACTIVITY IN ORADEA MUNICIPALITY

In Oradea advertising is based on the following supports:

- a) the public or private domain of the Oradea Municipality Local Council ;
- b) on buildings (facades, dead walls, roofs, terases, domes) on private property lands;
- c) OTL poles, Electrica;
- d) public spaces (squares – the inner spaces and the vovered markets, the stadiums, the sport courts, the public means of transportation, traffic refuges, public timers;
- e) other types of supports.

Placing advertisements on the Oradea Local Council's private or public domain is based solely on public auctions. Since October 2004 until present the Oradea's Mayor Office has not organized a public auction despite the existing requests from companies. Practically the central area of the city is forbidden for advertising , if we exclude the temporary adds, namely the banners, used for a fortnight, during cultural, artistic or temporary events, during the campaigns for introducing new products, shop openings etc. However this is also conditioned on obtaining a certiffcate from the city planning office and on aquiring the acceptance of the building owners. Another exception are the publicitary panels whose design is inspired from the stylistic architecture of the place, created in accordance with the law in force. Practically, the city center is made of historic buildings, part of the architectural patrimony of the city Fig.1). For the other areas of the city, on buildings intended for commercial and service utilities, the adds can be placed should a building authorization be obtained. Neon panels or architectural lighted panels, lighted moving inscriptions, applied letters (lighted or not), neon or architectural lighted company logos, parallel or perpendicular on the facades (places on the main traffic arteries) are also allowed on these buildings. No mixed panels, logos and advertisements, are allowed.

Advertising adds are admitted on the safety nets of the buildings under repair or construction, but only in connection with construction or the materials used for the interventions. For the dead walls only equal dimension (same width and lenght) panels are allowed in concordance with the building's volumetry and only if the proportions of the facade are mantained. The panels will be without exception neons and architecturally lighted. Should the dead wall destined to be the support for the advertisng panel is highly degraded (deteriorated plaster or walls without plaster) it is compulsory that the wall is repaired before the panel is installed.

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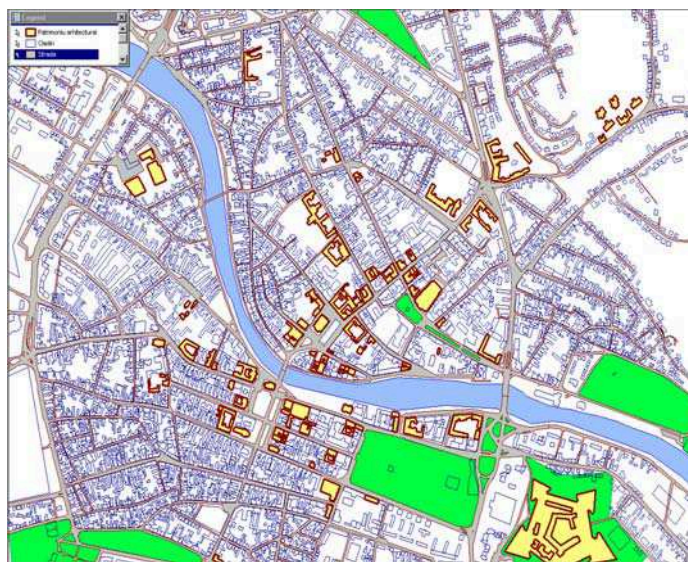


Fig. 1. Buildings having restriction for advertising marked on the digital map.

It is not allowed to place adds on buildings destined for public authorities, on the fences of churches, cemeteries, public gardens, on the traffic posts and on the carriage way. Advertisements can not be placed on low visibility spots, on trees nor is allowed to use the trees as anchoring supports. Advertisements whose texts and images may infringe the law in force or may offend the moral are forbidden. The advertisements which by their shape, colors or content can be mistaken with road signs, which are placed at crossroads or within 50 m from one and which can hinder the traffic in any way are not allowed.

2. CREATING THE DATABASE

Currently, in Romania, both the small and big outdoor advertising companies have no exact standards in conducting their managerial activity and do it mainly intuitively rather than based on rational criteria. This affects their clients too. Usually an advertising company makes a media plan which allows for a sum of money for an outdoor advertising campaign based on the clients' overall budget destined for the entire campaign. The general purpose of the advertising companies is to attract clients from big cities and therefore they chose the cities in a more or less arbitrary fashion.

The decision to chose an advertising support or another is based on Excel-like sheets for storing the data supplied by the company who has the supports. Such a support although providing a lot of information on the location of an advertising support, is still not enough in evaluating the advantages of a location. This is the reason for which nowadays, photos of the sites are being used. Such an example is shown below:

PICTURE	08.12.2005
Crt. no.	County
8	BIHOR
Owner	Town
PROMOTION MEDIA	ORADEA
Campaign	Location
TOYOTA-CLASMOTOR	ORADEA
Size	Address
0,63 X 0,63	NUFARULUI LOTUS MARKET

This photos are filed in catalogues and are presented to the clients who have ordered them and also to other potential clients. All this is very useful but it does not offer a complete image of the situation and therefore no complete answers to a client's possible questions, such as: how many people can notice these commercials, how many of these are clients or potential clients, which is the impact of these commercials, where is best to locate them etc.

The decisions on where to place the advertising supports and what type of supports (backlit, lighted boxes, billboard etc) should be placed are taken by the management of the outdoor companies based on the informations received from the employees residing in those areas or by the management of the client companies, which insist on certain areas. The proposal initiated by the employees are then confronted with the ongoing restrictions and against the experience gained in time (they chose locations considered to have a more intense traffic, a better visibility). Generally speaking, nobody considers the density of advertisements from a particular area, therefore some areas become saturated with similar panels, and thus the effects which may have resulted from distinct panels are lost. Considering all the above mentioned elements we intend to develop new techniques which can result in a better management of the outdoor advertising and also in the creation of a more rational decision-making system. precum si creerea unui sistem decizional cat mai obiectiv pentru clientii acestor firme.



08.12.2005 15:41:12

Thus we realise a geographic management of the spatial information, which in this case is represented by the different advertising supports. A combining of the existing database with the graphical database will be accomplished, based on a common cartographic support: the digital map of the Oradea Municipality and with the use of the GIS geographical elements. The attribute database was compiled through the construction of a complex table comprising several lines and columns. The lines represent the address of the advertising panel, its code, the date when a campaign begins etc.

The application is made of a digital map, the Internet Apache Server, the MySQL database server, a Java support for publishing the map and the PHP written pages.

It can be used for browsing operations (Fig.2), distance calculus, complex visual and attribute queries. It allows for zooming in and out, too as well as for the entire display of the map. An arrow-shaped pointer is used for navigation. A hotspot is the point which marks the location of the object of interest and it can have different sizes and shapes. With the aid of the search option different criterias can be used to locate a new advertising panel on the map, such as: the address, the code, the front code, product, beginning date for the campaign, ending date, company, lightening.



Fig. 2. The window for the browsing operations in the advertising management project.

3. CONCLUSIONS

The data represent a highly important part in a GIS project. By using the GIS technology the advertising activity is enriched with new managerial methods which conduct to an increase of efficiency in the economical activities, under the conditions of a competitive environment. This concern is justified also because there is a lack of satisfactory measuring and control systems from a market point of view. By using GIS old data can be combined into new information, by using geographical and economical data implemented in computer algorithms

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