

THE CREATION OF A SIGNAGE SYSTEM TAILOR-MADE FOR UPB'S CAMPUS

Abstract: *It is safe to say that signs are universally understood, by utilizing visual elements, utilized to communicate different information and meanings, they overcome linguistical barriers. The development of these sign systems has been a fundamental step towards clear communication, their main role being that of presenting information in a way in which people can be easily guided towards their destinations. They are currently being used in many domains, from hospitals, schools, airports, to stadiums, supermarkets or amusement parks, mainly in order to streamline traffic using signals, maps, arrows or color-based systems. The purpose of this article is to present the maps created for the interior and exterior signage systems of the Politehnica University of Bucharest's campus.*

Key words: *signage, map, icon, campus, color, building;*

1. INTRODUCTION

Time is one of the most important things in existence, that's why people don't like to waste it wandering about in unfamiliar places, trying to find their destination.

The development of various signage systems was a significant step forward for communication, by being usually utilized in crowded places where verbal communication may be a problem, if people of many different nationalities pass through them. One of such places is the Politehnica University of Bucharest, which is one of the biggest institutions of higher education found in Romania, where thousand of students pass through every day. By being divided in 3 campuses, each one containing tens of buildings, the navigation towards a specific place can become somewhat tedious for the freshly arrived. That's why, a signage system which is simple, pleasing to look at, easily found and understood would be very useful in the organisational aspect of such a prestigious institution. The following article contains the graphic elements of the maps usually found in the signage systems of a given university, but also information about these and the elements which they contain.

2. SIGNAGE SYSTEMS IN UNIVERSITIES

To be able to state that we have a well organized signage system, it needs to contain both interior and exterior signages, which in turn are composed by general signs, which are divided in four main categories.

Information signs are the first we usually see when we need to use signage to reach a new destination. They inform the user about their whereabouts and what they'll find in that particular place (Figure 1). These signs are usually used to give out information about specific zones, that's the reason why visitors won't find more specific information about other places or what they may find nearby within them. An example of this type of signs are information boards [1].

Identification signs are used to highlight certain places that could be points of interest for the visitors, like

signs pointing towards public toilets, refreshment stands or information points [1].

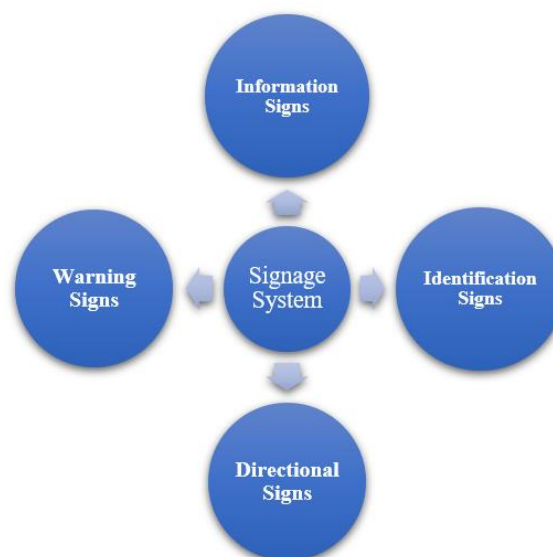


Figure 1 The four types of signs found in a signage system.

Directional signs are the most utilized type of signs, thanks to the fact that they allow the users to have a complete overview of the place they are passing through. These signs are usually represented by maps which can vary depending on the situation. They can be very detailed, including every single route the visitors can take to reach a certain place, or rather simple, including only the main routes, thus being clearer [1].

Warning signs are used solely to raise the awareness of the users regarding restrictions and potential dangers that may surround them. This type of signs have to be extremely visible, not only in order to protect the users, but also because they are required to be visible by law. Some examples of this type of signs are the – no smoking – and the – wet floor – ones [1].

In order to be efficient and complete, a signage system created for the campus of a certain university must contain both an external and an internal signage

system. Thus, every person who may be new to the campus can utilize the exterior signage system to get to a particular building, then utilize the interior signage system to get to a particular room or to find out certain information.

The signage system will be designed to be easy to understand and pleasing to see, and to give the campus a more welcoming aspect, by containing precise information that will not confuse the users [2].

The signage system of an university's campus must be as easy to understand as possible, preferably to utilize many universal icons that are globally understood, thus making life easier for foreign students that might still not completely know the language. In order to be as useful as possible, it needs to be placed keeping in mind the location where the most amount of people usually pass through, these places being crossroads, entrances and exits of the campus, the intersections of the corridors or the halls found at the entrance of a given building. The correct positioning of the signs is crucial, depending on the place many things will vary, including the type of sign utilized, from maps to directional poles, or interior indication arrows.

To be more easily recognized by the users, the signs utilized by the signage system should have the same design and the same material, preferably a durable and sturdy one, which can also make the campus more aesthetically pleasing.

3. MAPS WITHIN A SIGNAGE SYSTEM

One of the most utilized and important methods of directing someone is through the help of maps. That's the reason why they are nearly essential in an effective signage system [3].

Maps type "You are here" are the favourites; they present the users their surrounding, and at the same time inform them about the place they are currently in, they making life easier for them form an orientational point of view. These maps can be divided into exterior maps, useful to both vehicles and pedestrians, and interior maps, which can give insight about the building and its floors.

There are many ways in which a map can be presented, the main ones being the bidimensional and tridimensional ones. Although the latter one is both more pleasing to the eye and easier to understand, it tends to have a higher cost.

Moving forward, I will showcase the examples of interior and exterior bidimensional maps created for the signage system of the "Noul Local" of the Politehnica University of Bucharest's campus.

3.1 Exterior maps

This type of map should be placed in places with good coverage and visibility, near roads, and depending if intended for vehicles or pedestrians, they should be placed in a way in which drivers can get close to them in order to inspect them.

The presented information should have a relatively large font, in order to be easy to read. On this type of map there should be only essential information for the

users, like the location of the main entrances and exits, roads accessible to the public, a sign marking the exact position of the user, parking lots, campus' buildings and buildings' entrances.

To facilitate the navigation within the campus a system utilizing different colors has been utilized, thus, a different color has been linked to each building. By analyzing the map at the campus' entrance, and finding the building to which they want to get to, it will be easier for the users to remember the color of the desired building thus finding it faster in the following directional signs (Figure 2).



Figure 2 Map type "You are here" for a part of the campus "Noul Local".

Legend:



-Faculty of Entrepreneurship, Business Engineering; Faculty of Applied Science;



-Faculty of Material Science and Engineering; Faculty of Transports;



- Faculty of Industrial Engineering and Robotics.

On the map there are also many highlights, including the entrances to each building, parking lots, the exact location of the user and a few key points where directional signs for vehicles and directional poles for pedestrians should be placed.

3.2 Interior maps

Interior maps must contain only essential information for the users, just like the exterior ones. These informations are: a sign or symbol showing the exact location of user, icons showcasing different necessities like toilets, elevators, stairs, shops, banks, exits or certain danger signs.

For a clear orientation within the building a system of colors has been utilized once again, a different color being linked to each classroom, varying depending on its function.

For example, as shown in figures 3-6, the assigned color for the classrooms will be purple, the seminar room will be green, laboratory will be blue, services provider will be yellow, etc.



Figure 3 Map type "You are here" for the ground floor of the BN building.

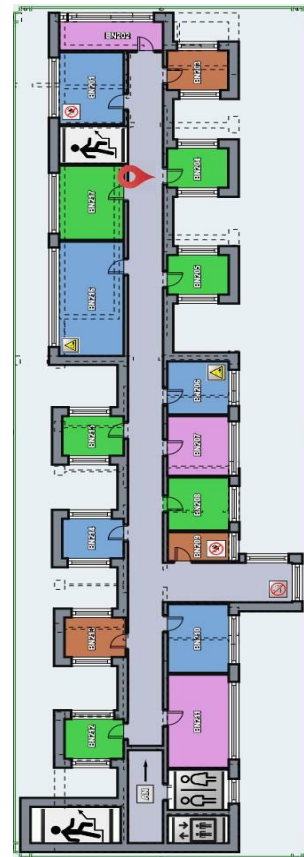


Figure 5 Map type "You are here" for the second floor of the BN building.



Figure 4 Map type "You are here" for the first floor of the BN building.

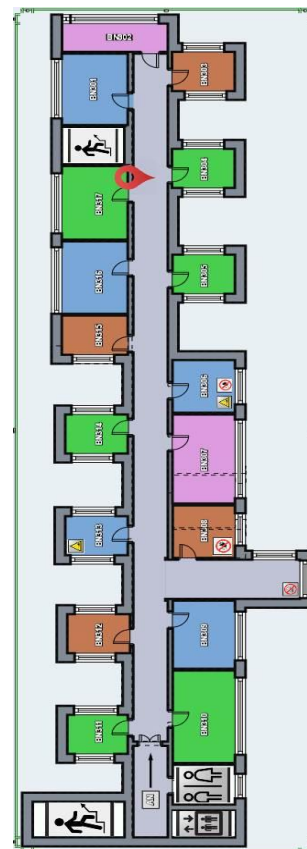


Figure 6 Map type "You are here" for the third floor of the BN building.

This type of maps should be placed in visible and accessible places, near entrances, elevators or stairs; these being the most circulated places within the building. The font should be relatively large in order to make it easier for user to read it from a distance.

Interior maps can be placed separately, there should be one placed on every floor reflecting that particular floor, or a map type "exploded views" could be created, in which all the floors are contained, being presented as layers (Figure 7).

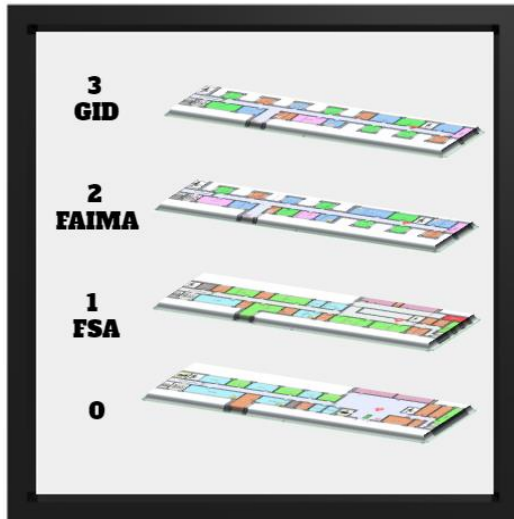




Figure 7 Map type "Exploded View" for the BN building.

Legend:

	- Classroom		- Services Provider		
	-Seminar Room		-Secretary		
	-Laboratory		-Deposit		-Office

On the maps found on every different floor icons can be observed indicating the location of the bathroom, stairs, elevators, food stands, photocopying, the bank, but also some warning signs, like that for no smoking or the presence of hazardous substances in the laboratory.

Another type of map vital in every institution is that depicting the evacuation plan. It informs the users about their current location, but also the location of the emergency exits, stairs, elevators, the placement of extinguishers etc.. Other types of superfluous information that may confuse the users in a situation of emergency mustn't be contained.

The positioning of this particular type of map is given by law, thus they must be present on every floor of the building, in the entryways and in every room, in the internal part of the door.

3.3 Digital maps

As a result of the evolution of technology, signage systems have changed as well. In order to satisfy the ever growing needs of the users, a digital variation of signage has taken form, and it presents information with the help of an electronic display.

Digital maps type „You are here” can be often times found in the shape of monitors touchscreen, and they can show the users the correct way in which they can reach their wanted destination from where they currently are. This type of maps should be placed in key points of the buildings, but not in such a way in which they would obstruct the circulation.

Likewise, certain apps can be created with the map of a certain place and, utilizing the gps location on the users, they can be directed to their destination.

Digital maps have many advantages, one of such being the really fast exchange of information and simultaneously on many devices. But one of the main disadvantages is the high maintenance cost and the fact that elderly people tend to find this type of devices hard to understand and follow.

4. CONCLUSIONS

The world has become a crowded place, ever moving. Every day thousands of students or visitors waste precious time wandering about on universities' campuses trying to find a particular building or a particular classroom, or shop, because there isn't a proper signage system in place. The same can be said about the Polytechnic University of Bucharest.

Being an international university, in which a very large number of foreign students are participating, a signage system which utilizes a large number of icons and universal signs is a necessity. Such a system would not only facilitate the circulation of many students throughout the campus, but it would also have a positive effect on the university's aspect and reputation, making it a more welcoming one.

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Author:

Eng. Ionela CÎRJĂ, Master student, University Politehnica of Bucharest, Faculty of Aerospace Engineering, Department of Engineering Graphics and Industrial Design, E-mail: Ionela.Cirja@yahoo.com