Blueimage™ MLPM1.0

Blueimage Machine Learning Proximity Marketing

Blueimage™ Smart Advertising

A special, microwave advertising, marketing and information system with machine learning support.

Proximity marketing means the wireless transfer of advertising contents in a defined area.

Machine learning is a branch of machine intelligence, it is a data analysis method that is able to automatically set up analytical models. The system is capable of detecting regularities, based on examples and/or data or samples collected, autonomously or with human assistance. It not only learns the input samples, but also has the ability to generalize them, based on which, at the end of the learning phase, it is able to make more and more well-grounded decisions relating to unknown data as well.

Smart Advertising introduces the more and more developing machine learning in the world of microwave-based POS advertising. Based on an algorithm, it evaluates the imagery and video materials of the uploaded advertisement, and as a result, based on its scores/weight, it regulates the lengths and frequencies of their appearance.
Feedback/data collection, inevitable for learning, are facilitated by Wi-Fi and Bluetooth capacities integrated into a given PMS system. By monitoring the direct accesses made through them, they can determine to what extent a given content has “moved” the customers.
Besides the content of the advertisement materials, their format, quality and size are also parts of the evaluation.

The system prompts the advertisers to formulate CTA (call to action) messages in the contents to be displayed on the screen, which encourage the customers to open the contents directly accessible through Wi-Fi or Bluetooth. The operators are motivated to operate devices in a way that the audience would interact with them as frequently as possible.

An example is a coupon system mutually developed by the two parties:

- The advertiser places a coupon amongst the Bluetooth contents, which provides a 5% discount on a given product at a particular point of sale
- The advertiser places an image amongst contents displayed on the screen, which prompts the audience to download a Bluetooth content
- A member of the audience switches on Bluetooth and downloads all the contents, also the coupon, amongst others, then validates the coupon at the cashier

The process results is the following:

- The product is purchased on site.
- Sale is implemented from the “product” (the advertisement itself) of the advertiser.
- As a part of the agreement, the operator receives reimbursement from the advertiser after downloading the contents as per content.
- The advertisements of the advertiser are permanently uploaded to the customers’ mobile phones and, in most of the cases, are displayed e.g. in the gallery.
- The “result” is integrated into the learning process (the advertisement becomes “more valuable”).

The learning algorithm is hosted by a dedicated server and works based on the contents of all other servers, which acquire the relevant information from the individual devices.

When creating campaigns, the uploader may view a preliminary score in respect of each content, and as a result, even before the start of the campaign, he may select the contents that promise the most success. The video contents are evaluated based on several stills taken from the video, and the scores of the contents are re-evaluated by the system several times a day in order that the new trends may also prevail in the contents uploaded earlier.

Advertisement sharing, quasi “cluster service”.

The advertisement campaigns broadcast in the Blueimage MLPM systems operated by the individual APMS1.0 devices on sale, are input in the central database on the dedicated servers. The learning process of the system takes place on the dedicated server, as a result of which the given advertisement material is continuously evaluated. Sensibly, the more successful an advertisement material is, the higher score it will acquire. Success, besides the content of an advertisement material, also depends on how “valuable” a given advertising site is (number of visitors, their composition, etc.), thus, when weighting, this factor should also be taken into account.

The dedicated server, besides performing a smart evaluation, is capable of providing another service. This is the sharing of the so-called “Cluster Service” contents (campaigns) with each other, with the individual system operators, or other advertisers and/or the sharability of the advertisement devices themselves and the advertisement broadcasting sites, respectively.
The advertisers have the opportunity to advertise on the devices of other owners, while the owners of the devices can find advertisers easier, or, by aggregating their resources, can create together a more significant advertising capacity.

On the MLPM central online management interface, advertisers may upload their materials and compose their campaigns. They may define a maximum download price for the uploaded campaigns and/or a maximum budget. In the actual price of an advertisement, its evaluation also plays a role. (Relevant advertisements, moving many people, may be displayed even cheaper. Therefore, the better composed a campaign is, the more cost-effective it is for the advertiser, and the better utilization it may mean for the operator.)

The operators may set the contents to be displayed on this interface quickly, simply and in real time. They may monitor their operation based on statistics and also compose their own campaigns.

Blueimage™ MLPM is the newest product of proximity marketing, with United States trade mark protection. The system contains the individual APMS1.0 systems devices (1-14 EA), together with the server devices necessary to operate them (in the case of purchasing minimum four devices, they are free of charge), furthermore, through the central, dedicated server, it ensures the weighting of advertisements through machine learning support, and also facilitates the sharing of capacities and advertisement materials (advertisement sharing, Cluster Service).

The APMS1.0 devices comply with the MLPM1.0 standard individual APMS devices; their detailed technical specifications are identical to the ones of the current APMS1.0 device.