

WHAT IS CLAIMED IS:

1. An advertisement generation method, comprising:

S1, acquiring click data of the advertisements subjected to advertisement exposure triggered by each user from various predetermined data source servers, and extracting picture style features of advertisement background pictures in the advertisement click data;

S2, during recommendation of advertisements to predetermined users, analyzing the advertisement click data of the various users according to predetermined picture style features and a predetermined first analysis rule to obtain picture style features of advertisement pictures to be recommended corresponding to the various users;

S3, generating recommended advertisements according to the obtained picture style features corresponding to the various users to recommend the recommended advertisements to the corresponding users;

which is characterized in that the first analysis rule comprises:

a1, if a user does not have the advertisement click data, determining a crowd type to which the user belongs according to a predetermined crowd type clustering result, and analyzing the advertisement click data of various users in the determined crowd type according to a predetermined second analysis rule to obtain picture style features of advertisement pictures to be recommended corresponding to the user;

a2, if the user has the advertisement click data, and the click number of times of each advertisement clicked by the user is less than or equal to a first preset threshold value, deeming the user as not having the advertisement click data, and determining the picture style features of the advertisement pictures to be recommended corresponding to the user according to the step a1;

a3, if the user has the advertisement click data, and at least one advertisement in the advertisements clicked by the user has the click number of times greater than the first preset threshold value, sequencing the advertisements having the click numbers of times greater than the first preset threshold value according to the click numbers of times, and analyzing the sequenced advertisements by using a predetermined third analysis rule to obtain the picture style features of the advertisement pictures to be recommended corresponding to the user.

2. The advertisement generation method according to claim 1, which is characterized in that the second analysis rule comprises:

counting the click numbers of times of various advertisements clicked by the various users in the determined crowd type;

sequencing a preset number of advertisements having the click numbers of times greater than a second preset threshold value, and calculating a similarity of the picture style features of the various sequenced advertisements;

if the similarity is greater than a preset similarity threshold value, judging whether the predetermined picture style features are included in the picture style features of all the sequenced advertisements or not, and if the predetermined picture style features are included, determining the predetermined picture style features as the picture style features of the advertisement pictures to be recommended corresponding to the user.

3. The advertisement generation method according to claim 1, which is characterized in that the third analysis rule comprises:

determining the picture style features of the advertisements clicked for the most times as the picture style features of the advertisement pictures to be recommended of

the user; or

calculating a difference between the click numbers of times of two adjacent advertisements; if the calculated difference is less than a preset difference, determining the picture style features of the advertisements clicked for the most times as the picture style features of the advertisement pictures to be recommended of the user; if the difference is greater than or equal to the preset difference, culling out the advertisement clicked for less times in the two corresponding advertisements and advertisements having the click numbers of times less than that of the advertisement clicked for less times; judging whether the predetermined picture style features are included in the picture style features of advertisements remaining after culling operation or not; if the predetermined picture style features are included, determining the predetermined picture style features as the picture style features of the advertisement pictures to be recommended of the user.

4. The advertisement generation method according to claim 1, after the step S3, further comprising:

S4, after the recommended advertisements are recommended to the corresponding users, acquiring advertisement click data of exposed recommended advertisements from the various data source servers, and calculating the click rates of the various users for the recommended advertisements on the basis of the advertisement click data;

S5, if the click rates are less than a preset click rate, readjusting the picture style features of the recommended advertisements to obtain new picture style features;

S6, analyzing the advertisement click data of the various users according to the new picture style features and the first analysis rule to re-obtain picture style features

of the advertisement pictures to be recommended corresponding to the various users, and generating recommended advertisements according to the re-obtained picture style features corresponding to the various users.

5. The advertisement generation method according to claim 1, after the step S3, further comprising:

S4, after the recommended advertisements are recommended to the corresponding users, acquiring advertisement click data of exposed recommended advertisements from the various data source servers, and calculating the click rates of the various users for the recommended advertisements on the basis of the advertisement click data;

S5, if the click rates are less than a preset click rate, readjusting the picture style features of the recommended advertisements to obtain new picture style features;

S6, analyzing the advertisement click data of the various users according to the new picture style features and the first analysis rule to re-obtain picture style features of the advertisement pictures to be recommended corresponding to the various users, and generating recommended advertisements according to the re-obtained picture style features corresponding to the various users.

6. The advertisement generation method according to claim 2 or 3, after the step S3, further comprising:

S4, after the recommended advertisements are recommended to the corresponding users, acquiring advertisement click data of exposed recommended advertisements from the various data source servers, and calculating the click rates of the various users for the recommended advertisements on the basis of the advertisement click data;

S5, if the click rates are less than a preset click rate, readjusting the picture style features of the recommended advertisements to obtain new picture style features;

S6, analyzing the advertisement click data of the various users according to the new picture style features and the first analysis rule to re-obtain picture style features of the advertisement pictures to be recommended corresponding to the various users, and generating recommended advertisements according to the re-obtained picture style features corresponding to the various users.

7. An advertisement generation system, comprising:

an extraction module, which is used for acquiring click data of the advertisements subjected to advertisement exposure triggered by each user from various predetermined data source servers, and extracting picture style features of advertisement background pictures in the advertisement click data;

an analysis module, which is used for analyzing the advertisement click data of the various users according to predetermined picture style features and a predetermined first analysis rule during recommendation of advertisements to predetermined users to obtain picture style features of advertisement pictures to be recommended corresponding to the various users;

a first generation module, which is used for generating recommended advertisements according to the obtained picture style features corresponding to the various users to recommend the recommended advertisements to the corresponding users;

which is characterized in that the first analysis rule comprises: a1, if a user does not have the advertisement click data, determining a crowd type to which the user belongs according to a predetermined crowd type clustering result, and analyzing the

advertisement click data of various users in the determined crowd type according to a predetermined second analysis rule to obtain picture style features of advertisement pictures to be recommended corresponding to the user; a2, if the user has the advertisement click data, and the click number of times of each advertisement clicked by the user is less than or equal to a first preset threshold value, deeming the user as not having the advertisement click data, and determining the picture style features of the advertisement pictures to be recommended corresponding to the user according to a1; a3, if the user has the advertisement click data, and at least one advertisement in the advertisements clicked by the user has the click number of times greater than the first preset threshold value, sequencing the advertisements having the click numbers of times greater than the first preset threshold value according to the click numbers of times, and analyzing the sequenced advertisements by using a predetermined third analysis rule to obtain the picture style features of the advertisement pictures to be recommended corresponding to the user.

8. The advertisement generation system according to claim 7, which is characterized in that the second analysis rule comprises:

counting the click numbers of times of various advertisements clicked by the various users in the determined crowd type; sequencing a preset number of advertisements having the click numbers of times greater than a second preset threshold value, and calculating a similarity of the picture style features of the various sequenced advertisements; if the similarity is greater than a preset similarity threshold value, judging whether the predetermined picture style features are included in the picture style features of all the sequenced advertisements or not, and if the predetermined picture style features are included, determining the predetermined

picture style features as the picture style features of the advertisement pictures to be recommended corresponding to the user.

9. The advertisement generation system according to claim 7, which is characterized in that the third analysis rule comprises:

determining the picture style features of the advertisements clicked for the most times as the picture style features of the advertisement pictures to be recommended of the user; or calculating a difference between the click numbers of times of two adjacent advertisements; if the calculated difference is less than a preset difference, determining the picture style features of the advertisements clicked for the most times as the picture style features of the advertisement pictures to be recommended of the user; if the difference is greater than or equal to the preset difference, culling out the advertisement clicked for less times in the two corresponding advertisements and advertisements having the click numbers of times less than that of the advertisement clicked for less times; judging whether the predetermined picture style features are included in the picture style features of advertisements remaining after culling operation or not; if the predetermined picture style features are included, determining the predetermined picture style features as the picture style features of the advertisement pictures to be recommended of the user.

10. The advertisement generation system according to claim 7, further comprising:

a calculation module, which is used for acquiring advertisement click data of exposed recommended advertisements from the various data source servers after the recommended advertisements are recommended to the corresponding users, and calculating the click rates of the various users for the recommended advertisements on

the basis of the advertisement click data;

an adjustment module, which is used for readjusting the picture style features of the recommended advertisements if the click rates are less than a preset click rate to obtain new picture style features;

a second generation module, which is used for analyzing the advertisement click data of the various users according to the new picture style features and the first analysis rule to re-obtain picture style features of the advertisement pictures to be recommended corresponding to the various users, and generating recommended advertisements according to the re-obtained picture style features corresponding to the various users.

11. The advertisement generation system according to claim 7, further comprising:

a calculation module, which is used for acquiring advertisement click data of exposed recommended advertisements from the various data source servers after the recommended advertisements are recommended to the corresponding users, and calculating the click rates of the various users for the recommended advertisements on the basis of the advertisement click data;

an adjustment module, which is used for readjusting the picture style features of the recommended advertisements if the click rates are less than a preset click rate to obtain new picture style features;

a second generation module, which is used for analyzing the advertisement click data of the various users according to the new picture style features and the first analysis rule to re-obtain picture style features of the advertisement pictures to be recommended corresponding to the various users, and generating recommended

advertisements according to the re-obtained picture style features corresponding to the various users.

12. The advertisement generation system according to claim 8, further comprising:

a calculation module, which is used for acquiring advertisement click data of exposed recommended advertisements from the various data source servers after the recommended advertisements are recommended to the corresponding users, and calculating the click rates of the various users for the recommended advertisements on the basis of the advertisement click data;

an adjustment module, which is used for readjusting the picture style features of the recommended advertisements if the click rates are less than a preset click rate to obtain new picture style features;

a second generation module, which is used for analyzing the advertisement click data of the various users according to the new picture style features and the first analysis rule to re-obtain picture style features of the advertisement pictures to be recommended corresponding to the various users, and generating recommended advertisements according to the re-obtained picture style features corresponding to the various users.

13. The advertisement generation system according to claim 9, further comprising:

a calculation module, which is used for acquiring advertisement click data of exposed recommended advertisements from the various data source servers after the recommended advertisements are recommended to the corresponding users, and calculating the click rates of the various users for the recommended advertisements on

the basis of the advertisement click data;

an adjustment module, which is used for readjusting the picture style features of the recommended advertisements if the click rates are less than a preset click rate to obtain new picture style features;

a second generation module, which is used for analyzing the advertisement click data of the various users according to the new picture style features and the first analysis rule to re-obtain picture style features of the advertisement pictures to be recommended corresponding to the various users, and generating recommended advertisements according to the re-obtained picture style features corresponding to the various users.

14. A computer readable storage medium, which is characterized in that the computer readable storage medium stores a computer program of an advertisement generation system; the computer program is executed to implement the following steps:

S1, acquiring click data of the advertisements subjected to advertisement exposure triggered by each user from various predetermined data source servers, and extracting picture style features of advertisement background pictures in the advertisement click data;

S2, during recommendation of advertisements to predetermined users, analyzing the advertisement click data of the various users according to predetermined picture style features and a predetermined first analysis rule to obtain picture style features of advertisement pictures to be recommended corresponding to the various users;

S3, generating recommended advertisements according to the obtained picture style features corresponding to the various users to recommend the recommended advertisements to the corresponding users;

which is characterized in that the first analysis rule comprises:

a1, if a user does not have the advertisement click data, determining a crowd type to which the user belongs according to a predetermined crowd type clustering result, and analyzing the advertisement click data of various users in the determined crowd type according to a predetermined second analysis rule to obtain picture style features of advertisement pictures to be recommended corresponding to the user;

a2, if the user has the advertisement click data, and the click number of times of each advertisement clicked by the user is less than or equal to a first preset threshold value, deeming the user as not having the advertisement click data, and determining the picture style features of the advertisement pictures to be recommended corresponding to the user according to the step a1;

a3, if the user has the advertisement click data, and at least one advertisement in the advertisements clicked by the user has the click number of times greater than the first preset threshold value, sequencing the advertisements having the click numbers of times greater than the first preset threshold value according to the click numbers of times, and analyzing the sequenced advertisements by using a predetermined third analysis rule to obtain the picture style features of the advertisement pictures to be recommended corresponding to the user.

15. The computer readable storage medium according to claim 14, which is characterized in that the second analysis rule comprises:

counting the click numbers of times of various advertisements clicked by the

various users in the determined crowd type;

sequencing a preset number of advertisements having the click numbers of times greater than a second preset threshold value, and calculating a similarity of the picture style features of the various sequenced advertisements;

if the similarity is greater than a preset similarity threshold value, judging whether the predetermined picture style features are included in the picture style features of all the sequenced advertisements or not, and if the predetermined picture style features are included, determining the predetermined picture style features as the picture style features of the advertisement pictures to be recommended corresponding to the user.

16. The computer readable storage medium according to claim 14, which is characterized in that the third analysis rule comprises:

determining the picture style features of the advertisements clicked for the most times as the picture style features of the advertisement pictures to be recommended of the user; or

calculating a difference between the click numbers of times of two adjacent advertisements; if the calculated difference is less than a preset difference, determining the picture style features of the advertisements clicked for the most times as the picture style features of the advertisement pictures to be recommended of the user; if the difference is greater than or equal to the preset difference, culling out the advertisement clicked for less times in the two corresponding advertisements and advertisements having the click numbers of times less than that of the advertisement clicked for less times; judging whether the predetermined picture style features are included in the picture style features of advertisements remaining after culling

operation or not; if the predetermined picture style features are included, determining the predetermined picture style features as the picture style features of the advertisement pictures to be recommended of the user.

17. The computer readable storage medium according to any one of claims 14 to 16, which is characterized in that after the step S3, the following steps are also implemented:

S4, after the recommended advertisements are recommended to the corresponding users, acquiring advertisement click data of exposed recommended advertisements from the various data source servers, and calculating the click rates of the various users for the recommended advertisements on the basis of the advertisement click data;

S5, if the click rates are less than a preset click rate, readjusting the picture style features of the recommended advertisements to obtain new picture style features;

S6, analyzing the advertisement click data of the various users according to the new picture style features and the first analysis rule to re-obtain picture style features of the advertisement pictures to be recommended corresponding to the various users, and generating recommended advertisements according to the re-obtained picture style features corresponding to the various users.