CLAIMS

1. A computer-implemented merchant evaluation method, comprising:

acquiring, by a processor, a merchant black sample and a merchant white sample;

establishing, by the processor, a merchant evaluation model for evaluation indexes in multiple dimensions based on the merchant black sample and the merchant white sample, wherein the merchant evaluation model is established based on supervised machine learning;

acquiring, by the processor, multi-dimensional evaluation index data of a merchant to be evaluated;

obtaining, by the processor, a health portrait and a health score of the merchant to be evaluated using the merchant evaluation model, wherein the obtaining comprises: for the multi-dimensional evaluation index data, obtaining, by calculation based on standard normal distribution, the health portrait of the merchant to be evaluated, and obtaining, by calculation based on a geometric mean, the health score of the merchant to be evaluated, wherein the health portrait is an image graphically presenting a probability value of evaluation index data in each dimension of the multiple dimensions, and the health score is a comprehensive score based on probability values of the evaluation index data in the multiple dimensions; and

displaying, on a screen, the health portrait and the health score of the merchant to be evaluated.

2. The method according to claim 1, wherein establishing, by the processor, a merchant evaluation model comprises:

establishing a logistic regression model as the merchant evaluation model .

3. The method according to claim 2, wherein obtaining, by calculation based on standard normal distribution, the health portrait of the merchant to be evaluated comprises:

inputting the multi-dimensional evaluation index data into the merchant evaluation model, obtaining, by calculation based on standard normal distribution, the probability value of the evaluation index data in each dimension, and synthesizing the probability value of the evaluation index data in each dimension to obtain the health portrait of the merchant to be evaluated, wherein the health portrait of the merchant to be evaluated reflects normal distribution of the merchant to be evaluated in merchant evaluation historical data.

4. The method according to claim 3, wherein obtaining, by calculation based on a geometric mean, the health score of the merchant to be evaluated comprises:

obtaining the health score of the merchant to be evaluated, by way of taking an evaluation geometric number of the probability value of the evaluation index data in each dimension of the merchant to be evaluated.

5. The method according to any one of claims 1-4, wherein the multi-dimensional evaluation index data comprises any combination of merchant background identity evaluation index data, merchant operation history evaluation index data, merchant operation capability evaluation index data, merchant business relationship evaluation index data and merchant operation characteristics evaluation index data.

6. The method according to claim 5, further comprising:

obtaining the evaluation index data in each dimension from original evaluation index description information, wherein the original evaluation index description information is

inputted into an index model preset for the index to obtain evaluation index data used for describing a score of the index.

7. A merchant evaluation system, comprising:

a sample acquisition module for acquiring a merchant black sample and a merchant white sample;

a model establishment module for establishing a merchant evaluation model for evaluation indexes in multiple dimensions based on the merchant black sample and the merchant white sample, wherein the merchant evaluation model is established based on supervised machine learning;

a data acquisition module for acquiring multi-dimensional evaluation index data of a merchant to be evaluated;

a portrait evaluation module for obtaining, by calculation based on standard normal distribution, a health portrait of the merchant to be evaluated for the multi-dimensional evaluation index data, wherein the health portrait is an image graphically presenting a probability value of evaluation index data in each dimension of the multiple dimensions;

a score evaluation module for obtaining, by calculation based on a geometric mean, a health score of the merchant to be evaluated, wherein the health score is a comprehensive score based on probability values of the evaluation index data in the multiple dimensions; and

an output module for displaying, on a screen, the health portrait and the health score of the merchant to be evaluated.

8. The system according to claim 7, wherein the system further comprises:

an index determination module for determining the evaluation indexes in the multiple dimensions;

wherein the model establishment module establishes a logistic regression model as the merchant evaluation model .

9. The system according to claim 8, wherein the portrait evaluation module is specifically used for inputting the multi-dimensional evaluation index data into the merchant evaluation model, obtaining, by calculation based on standard normal distribution, the probability value of the evaluation index data in each dimension, and synthesizing the probability value of the evaluation index data in each dimension to obtain the health portrait of the merchant to be evaluated, wherein the health portrait of the merchant to be evaluated reflects normal distribution of the merchant to be evaluated in merchant evaluation historical data.

10. The system according to claim 9, wherein the score evaluation module is specifically used for obtaining the health score of the merchant to be evaluated by way of taking an evaluation geometric number of the probability value of the evaluation index data in each dimension of the merchant to be evaluated.

11. The system according to any one of claims 7-10, wherein the multi-dimensional evaluation index data comprises any combination of merchant background identity evaluation index data, merchant operation history evaluation index data, merchant operation capability evaluation index data, merchant business relationship evaluation index data and merchant operation characteristics evaluation index data.

12. The system according to claim 11, wherein the evaluation index data in each dimension is obtained from original evaluation index description information, wherein the

original evaluation index description information is inputted into an index model preset for the index to obtain evaluation index data used for describing a score of the index.