CLAIMS

[Claim 1]

A prediction task assistance apparatus, comprising:

a storage device that stores a piece of information on a predetermined index value and pieces of information on predetermined events used in a financial institution; and

a computation device that performs

processing of reading the pieces of information on the index value and the events from the storage device, executing correlation analysis between the piece of information on the index value and the pieces of information on the events by using the read pieces of information as inputs, determining the event that gives a predetermined effect on the index value, and generating a first regression formula used to estimate the index value based on the pieces of information on the determined event,

processing of generating a question screen including an interface that allows giving an answer to a selective type question on trend prediction of the event configuring a variable in the first regression formula,

processing of distributing the question screen to terminals of a predetermined financial institution, obtaining answers of the trend prediction from the terminals via the

question screen, inputting values of the answers into the variable of the event corresponding to the answers in the first regression formula, and calculating a first prediction value of the index value, and

processing of outputting information on the first prediction value to a predetermined device of the predetermined financial institution,

wherein

in the generation of the question screen, the computation device further performs processing of generating a histogram by categorizing the pieces of information on the determined event according to magnitudes of the values of the determined event, depending on the number of selectable choices in the interface, and holding range information on ranges of the values of the predetermined event in the storage device in association with the choices, the ranges corresponding respectively to classes in the histogram, and

in the processing of generating the first regression formula, the computation device compares each of the pieces of information on the event determined to give the predetermined effect with the range information and determines one of the choices corresponding to the piece

of information to convert the piece of information on the event to a value of the one of the choices and obtain a converted value, gives the obtained converted value and the index value to a predetermined machine learning algorithm, and generates the first regression formula by determining a combination of a variable and a coefficient of the variable in the first regression formula.

[Claim 2]

The prediction task assistance apparatus according to claim 1, wherein the computation device performs

processing of calculating a model value of the index value by setting a value of one of the choices, obtained by comparing an actual value of the event in a predetermined period with the range information and converting the actual value, as an input to the variable in the first regression formula, comparing the model value and the first prediction value, and, when a divergence between the model value and the first prediction value exceeds a predetermined criterion, obtaining information on a new predetermined event that is not used for the generation of the first regression formula from an input device or the storage device, and regenerating a second regression formula while adding the information on

the new event,

processing of generating a question screen including an interface that allows giving an answer to a selective type question on trend prediction of the event configuring a variable in the second regression formula,

processing of distributing the question screen to the terminals of predetermined financial institution, obtaining answers of the trend prediction from the terminals via the question screen, inputting values of the answers into the variable of the event corresponding to the answers in the second regression formula, and calculating a second prediction value of the index value, and

processing of outputting information on the second prediction value to the predetermined device of the predetermined financial institution.

[Claim 3]

The prediction task assistance apparatus according to claim 1, wherein, in the generation of the question screen, the computation device compares frequencies of the respective classes, determines the classes whose frequencies are equal to or higher than a predetermined criterion, sets the number and contents of the choices to the number of the classes

determined to have frequencies equal to or higher than a predetermined criterion and the ranges of the values of the predetermined event in the respective classes, and generates the question screen including the interface depending on the set number and contents of the choices.

[Claim 4]

The prediction task assistance apparatus according to claim 1, wherein the computation device further performs processing of receiving an information presentation request relating to another financial institution different from the predetermined financial institution from any of the terminals of the predetermined financial institution and outputting at least one of pieces of information on the values of the answers of the trend prediction and the first prediction value of the index value that have been already obtained from the other financial institution, to the terminal of the other financial institution.

[Claim 5]

A prediction task assistance method comprising causing an information processing apparatus, including a storage device that stores a piece of information on a predetermined index

value and pieces of information on predetermined events used in a financial institution, to perform:

processing of reading the pieces of information on the index value and the events from the storage device, executing correlation analysis between the piece of information on the index value and the pieces of information on the events by using the read pieces of information as inputs, determining the event that gives a predetermined effect on the index value, and generating a first regression formula used to estimate the index value based on the pieces of information on the determined event,

processing of generating a question screen including an interface that allows giving an answer to a selective type question on trend prediction of the event configuring a variable in the first regression formula,

processing of distributing the question screen to terminals of a predetermined financial institution, obtaining answers of the trend prediction from the terminals via the question screen, inputting values of the answers into the variable of the event corresponding to the answers in the first regression formula, and calculating a first prediction value of the index value, and

processing of outputting information on the first

prediction value to a predetermined device of the predetermined financial institution,,

wherein

in the generation of the question screen, the information processing apparatus further performs processing of generating a histogram by categorizing the pieces of information on the determined event according to magnitudes of the values of the determined event, depending on the number of selectable choices in the interface, and holding range information on ranges of the values of the predetermined event in the storage device in association with the choices, the ranges corresponding respectively to classes in the histogram, and

in the processing of generating the first regression formula, the information processing apparatus compares each of the pieces of information on the event determined to give the predetermined effect with the range information and determines one of the choices corresponding to the piece of information to convert the piece of information on the event to a value of the one of the choices and obtain a converted value, gives the obtained converted value and the index value to a predetermined machine learning algorithm, and generates

the first regression formula by determining a combination of a variable and a coefficient of the variable in the first regression formula.

[Claim 6]

The prediction task assistance method according to claim 5, wherein the information processing apparatus performs

processing of calculating a model value of the index value by setting a value of one of the choices, obtained by comparing an actual value of the event in a predetermined period with the range information and converting the actual value, as an input to the variable in the first regression formula, comparing the model value and the first prediction value, and, when a divergence between the model value and the first prediction value exceeds a predetermined criterion, obtaining information on a new predetermined event that is not used for the generation of the first regression formula from an input device or the storage device, and regenerating the second regression formula while adding the information on the new event,

processing of generating a question screen including an interface that allows giving an answer to a selective type question on trend prediction of the event configuring a

variable in the second regression formula,

processing of distributing the question screen to the terminals of predetermined financial institution, obtaining answers of the trend prediction from the terminals via the question screen, inputting values of the answers into the variable of the event corresponding to the answers in the second regression formula, and calculating a second prediction value of the index value, and

processing of outputting information on the second prediction value to the predetermined device of the predetermined financial institution.

[Claim 7]

The prediction task assistance method according to claim 5, wherein, in the generation of the question screen, the information processing apparatus compares frequencies of the respective classes, determines the classes whose frequencies are equal to or higher than a predetermined criterion, sets the number and contents of the choices to the number of the classes determined to have frequencies equal to or higher than a predetermined criterion and the ranges of the values of the predetermined event in the respective classes, and generates the question screen including the interface

depending on the set number and contents of the choices.

[Claim 8]

The prediction task assistance method according to claim 5, wherein the information processing apparatus further performs processing of receiving an information presentation request relating to another financial institution different from the predetermined financial institution from any of the terminals of the predetermined financial institution and outputting at least one of pieces of information on the values of the answers of the trend prediction and the first prediction value of the index value that have been already obtained from the other financial institution, to the terminal of the other financial institution.