Claims

1. A computer-implemented method of processing financial events, the method comprising:

detecting, using a processor, a plurality of events by receiving data associated with the events from a plurality of detection channels;

enriching, using the processor and at least one database, the data corresponding to the plurality of events, wherein enriching comprises locating, in the at least one database, data elements that are determined to be missing in the received data and adding the data elements to the received data;

grouping, using the processor, each of the plurality of events into at least one of a plurality of event groups, wherein each event group includes at least one event and the grouping is based on the events in an event group being associated with a common financial account;

scoring, using the processor, the plurality of event groups to produce an event group score, wherein scoring includes:

obtaining, at least in part from a database, a plurality of predictors including pre-defined risk factors;

collecting training data from stored information regarding existing cases;

running, using the processor, a logistic regression using the training data to obtain weights for the plurality of predictors; and

determining, using the processor, based on the weights and the predictors, a likelihood that establishing the event group as a case for investigation will result in a suspicious activity report,

wherein the scoring is based on the pre-defined risk factors and customer experience data, wherein the customer experience data includes (1) transaction history related to one or more customers associated with an event, (2) prior suspicious activity report (SAR) history associated with the one or more customers and (3) prior cases investigated associated with the one or more customers;

comparing, using the processor, the event group scores to a pre-defined threshold and as a result of the comparing either:

establishing, using the processor, a case for investigation corresponding to the event group, when the event group score is above the pre-defined threshold, or

statistically sampling, using the processor, the events in the event group and applying, using the processor, the statistically sampled events as at least a portion of the customer experience data for subsequent scoring processes, when the event group score is below the pre-defined threshold; and

generating a Suspicious Activity Report (SAR) based on the investigation of the case resulting in suspicious activity that warrants government reporting.

~~2. The method of claim 1 wherein the scoring of the event group further comprises:~~

~~obtaining, at least in part from a database, a plurality of predictors including the pre-defined risk factors;~~

~~collecting training data from stored information regarding existing cases;~~

~~running, using the processor, a logistic regression using the training data to obtain weights for the plurality of predictors; and~~

~~determining, using the processor, based on the weights and the predictors, a likelihood that establishing the event group as a case for investigation will result in a suspicious activity report.~~

~~3~~2. The method of claim 1 further comprising formatting and storing the data regarding the event group as an event group interface record.

~~4~~3. The method of claim 1 wherein the scoring of the event group further comprises using a decision tree methodology.

~~5~~4. A computer program product comprising computer-readable program code embodied on a computer-readable storage medium, the computer-readable program code executable by a computer system to implement a method of processing financial events, the method comprising:

detecting a plurality of events by receiving data associated with the events from a plurality of detection channels;

grouping each of the plurality of events into at least one of a plurality of event groups, wherein each event group includes at least one event and the grouping is based on the events in an event group being associated with a common financial account;

scoring the plurality of event groups to produce an event group score, wherein the scoring includes:

obtaining a plurality of predictors including pre-defined risk factors;

collecting training data regarding existing cases;

running a logistic regression using the training data to obtain weights for the plurality of predictors; and

determining, using the weights and the predictors, a likelihood that establishing the event group as a case for investigation will result in a suspicious activity report,

wherein the scoring is based on the pre-defined risk factors and customer experience data, wherein the customer experience data includes (1) transaction history related to one or more customers associated with the event group, (2) prior suspicious activity report (SAR) history associated with the one or more customers and (3) prior cases investigated associated with the one or more customers;

comparing the event group score to a pre-defined threshold and as a result of the comparing either:

establishing a case for investigation corresponding to the event group when the event group score is above the pre-defined threshold, or

statistically sampling the events in the event group and applying the statistically sampled events as at least a portion of the customer experience data for subsequent scoring processes, when the event group score is below the pre-defined threshold; and

generating a Suspicious Activity Report (SAR) based on the investigation of the case resulting in suspicious activity that warrants government reporting.

65. The computer program product of claim 45 wherein establishing the case for investigation further comprises one of creating a new case and appending to an existing case.

~~7. The computer program product of claim 5 wherein the scoring of the event group further comprises:~~

~~obtaining a plurality of predictors including the pre-defined risk factors;~~

~~collecting training data regarding existing cases;~~

~~running a logistic regression using the training data to obtain weights for the plurality of predictors; and~~

~~determining, using the weights and the predictors, a likelihood that establishing the event group as a case for investigation will result in a suspicious activity report.~~

8~~6~~. The computer program product of claim 5~~4~~ wherein the method further comprises formatting the data regarding the event group as an event group interface record.

9~~7~~. The computer program product of claim 8~~6~~ wherein establishing the case for investigation further comprises one of creating a new case and appending to an existing case.

~~10. The computer program product of claim 9 wherein the scoring of the event group further comprises:~~

~~obtaining a plurality of predictors including the pre-defined risk factors;~~

~~collecting training data regarding existing cases;~~

~~running a logistic regression using the training data to obtain weights for the plurality of predictors; and~~

~~determining, using the weights and the predictors, a likelihood that establishing the event group as a case for investigation will result in a suspicious activity report.~~

~~11~~8. The computer program product of claim ~~10~~ 4 wherein scoring of the event group further comprises using a decision tree methodology.

~~12~~9. An apparatus for processing financial events comprising:

means for detecting a plurality of events;

means for grouping each of the plurality of events into at least one of a plurality of event groups, wherein each event group includes at least one event and the grouping is based on the events in an event group being associated with a common financial account

means for scoring the plurality of event groups to produce an event group score, wherein the means for scoring includes:

means for obtaining a plurality of predictors including pre-defined risk factors;

means for collecting training data regarding existing cases;

means for running a logistic regression using the training data to obtain weights for the plurality of predictors; and

means for determining a likelihood that establishing the event group as a case for investigation will result in a suspicious activity report,

wherein the scoring is based on the pre-defined risk factors and customer experience data, wherein the customer experience data includes (1) transaction history related to one or more customers associated with the event group, (2) prior suspicious activity report (SAR) history associated with the one or more customers and (3) prior cases investigated associated with the one or more customers;

means for comparing the event group score to a pre-defined threshold;

means for establishing a case for investigation corresponding to the event group when the event group score is above the pre-defined threshold; and

means for providing for statistically sampling the events in the event group and applying the statistically sampled events as at least a portion of the customer experience data for subsequent scoring processes, when the event group score is below the pre-defined threshold; and

means for generating a Suspicious Activity Report (SAR) based on the investigation of the case resulting in suspicious activity that warrants government reporting.

~~13. The apparatus of claim 12 further comprising:~~

~~means for obtaining a plurality of predictors including the pre-defined risk factors;~~

~~means for collecting training data regarding existing cases;~~

~~means for running a logistic regression using the training data to obtain weights for the plurality of predictors; and~~

~~means for determining a likelihood that establishing the event group as a case for investigation will result in a suspicious activity report.~~

~~14~~10. The apparatus of claim ~~12~~ 9 further comprising means for formatting the data regarding the event group as an event group interface record.

~~15~~11. The apparatus of claim ~~13~~ 9 further comprising means for formatting the data regarding the event group as an event group interface record.

~~16~~12. A system for processing financial events comprising:

an instruction execution platform enabled by executable computer program code to (1) detect events, (2) group each of the plurality of events into at least one of a plurality of event groups, wherein each event group includes at least one event and the grouping is based on the events in an event group being associated with a common financial account, (3) score event groups by obtaining a plurality of predictors including pre-defined risk factors, collecting training data regarding existing cases, running a logistic regression using the training data to obtain the weights for the plurality of predictors, and determining, using the weights and the predictors, a likelihood that establishing the event group as a case for investigation will result in a suspicious activity report, wherein the scoring is based on the pre-defined risk factors and customer experience data, wherein the customer experience data includes (a) transaction history related to one or more customers associated with the event group, (b) prior suspicious activity report (SAR) history associated with the one or more customers and (c) prior cases investigated associated with the one or more customers, (4) establish a case for investigation corresponding to the event group when an event group score is above a pre-defined threshold, (5) provide for statistically sampling of the events in the event group and applying the statistically sampled events as at least a portion of the ~~case investigation~~ customer experience data for subsequent scoring processes, when the event group score is

below the pre-defined threshold, and (6) generate a Suspicious Activity Report (SAR) based on the investigation of the case resulting in suspicious activity that warrants government reporting;

a storage medium comprising event data connected to the instruction execution platform;

a storage medium comprising case data connected to the instruction execution platform; and

a storage medium comprising a datamart connected to the instruction execution platform, wherein the datamart stores the risk factors, the pre-defined threshold, and information regarding the experience to enable to instruction execution platform to use the event data and the case data.

~~17. The system of claim 16 wherein the scoring of event groups further comprises:~~

~~obtaining a plurality of predictors including the pre-defined risk factors;~~

~~collecting training data regarding existing cases;~~

~~running a logistic regression using the training data to obtain the weights for the plurality of predictors; and~~

~~determining, using the weights and the predictors, a likelihood that establishing the event group as a case for investigation will result in a suspicious activity report.~~

~~18~~13. The system of claim ~~16~~ 12 further comprising a plurality of detection channels to obtain data regarding the events, wherein the data is formatted as an event interface record.

~~19~~14. The system of claim ~~18~~ 13 wherein the instruction execution platform is operable to interface with a management of cases application to provide a decision regarding a suspicious activity report for a case.

~~20. The system of claim 19 wherein the scoring of event groups further comprises:~~

~~obtaining a plurality of predictors including the pre-defined risk factors;~~

~~collecting training data regarding existing cases;~~

~~running a logistic regression using the training data to obtain the weights for the plurality of predictors; and~~

~~determining, using the weights and the predictors, a likelihood that establishing the event group as a case for investigation will result in a suspicious activity report.~~

~~21~~15. The system of claim ~~19~~ 14 wherein the scoring of event groups further comprises using a decision tree methodology.