CLAIMS

1. A system for generating real-time regulatory compliance alerts using taxonomy based classifications of regulatory obligations, the system comprising:

a database storing taxonomy based classifications of rules within a regulatory data set;

one or more processors; and

memory storing one or more programs configured for execution by the one or more processors, the one or more programs comprising instructions for:

identifying an employee and determining one or more rules within the regulatory data set that are applicable to a business associated with the employee;

monitoring activity, of the employee, associated with a computer system of the employee, using a background process running on the computer system of the employee, wherein the monitored activity includes one or more of the employee's (i) email, (ii) chat messages, (iii) keystrokes, (iv) mouse clicks, and (v) transcribed voice-conversations;

comparing the activity of the employee with the regulatory data set;

determining that the activity of the employee comprises conduct in violation of a rule of the one or more rules within the regulatory data set; and

in response to determining that the activity of the employee comprises conduct in violation of the rule:

issuing a compliance alert identifying the conduct in violation of the rule; and

storing a summary of the compliance alert in the database.

2. The system of claim 1, wherein comparing the activity of the employee with the regulatory data set comprises identifying at least one of the plurality of categories, modules, subjects, and/or rules within the regulatory data set as related to the data associated with the activity of the employee using a qualitative-based predictive analytics to determine when employee is engaging in conduct that is likely to or about to violate a rule within the regulatory data set.

3. The system of claim 2, wherein the qualitative-based predictive analytics

comprise machine learning, deep learning, or transfer learning.

4. The system of claim 2, wherein the qualitative-based predictive analytics use two or more models as part of an ensemble model.

5. The system of claim 1, wherein the compliance alert comprises an email alert, a pop-up warning, an alert on a graphical user interface, or an alert issued via an application programming interface.

6. The system of claim 1, wherein the one or more programs are further configured to issue an alert when the rule changes.

7. The system of claim 1, wherein the one or more programs are further configured to issue an alert when a new relevant rule is created within the regulatory data set.

8. A computer-implemented method for generating real-time regulatory compliance alerts using taxonomy based classifications of regulatory obligations, performed at a computer system having one or more processors and memory, the method comprising:

storing taxonomy based classifications of rules in a database, wherein the rules are from a regulatory data set;

identifying an employee and determining one or more rules within the regulatory data set that are applicable to a business associated with the employee;

monitoring activity, of the employee, associated with a computer system of the employee, using a background process running on the computer system of the employee, wherein the monitored activity includes one or more of the employee's (i) email, (ii) chat messages, (iii) keystrokes, (iv) mouse clicks, and (v) transcribed voice-conversations;

comparing the activity of the employee with the regulatory data set;

determining that the activity of the employee comprises conduct in violation of a rule of the one or more rules within the regulatory data set; and

in response to determining that the activity of the employee comprises conduct in violation of the rule:

issuing a compliance alert identifying the conduct in violation of the rule; and

storing a summary of the compliance alert in the database.

9. The method of claim 8, wherein comparing the activity of the employee with the regulatory data set comprises identifying at least one of the plurality of categories, modules, subjects, and/or rules within the regulatory data set as related to data associated with activity of the employee using qualitative-based predictive analytics to determine when the employee is engaging in conduct that is likely to or about to violate a rule within the regulatory data set.

10. The method of claim 9, wherein the qualitative-based predictive analytics comprise machine learning, deep learning, or transfer learning.

11. The method of claim 8, wherein the compliance alert is issued when the rule changes.

12. The method of claim 8, further comprising generating a log of alerts issued based on the activity of the employee.

13. A system for generating real-time regulatory compliance alerts using taxonomy based classifications of regulatory obligations, the system comprising:

a means for storing taxonomy based classifications of regulatory dataset;

a means for identifying an employee and determining one or more rules within the regulatory data set that are applicable to a business associated with the employee;

a means for monitoring activity, of the employee, associated with a computer system of the employee, using a background process running on the computer system of the employee, wherein the monitored activity includes one or more of the employee's (i) email, (ii) chat

messages, (iii) keystrokes, (iv) mouse clicks, and (v) transcribed voice-conversations;

a means for comparing the activity of the employee with the regulatory data set;

a means for determining that the activity of the employee comprises conduct in violation of a rule of the one or more rules within the regulatory data set;

a means for issuing a compliance alert identifying the conduct in violation of the rule in response to determining that the activity of the employee comprises conduct in violation of the rule; and

a means for storing a summary of the compliance alert in the database.

14. The system of claim 1, wherein monitoring the activity of the employee comprises monitoring three or more of the employee's (i) email, (ii) chat messages, (iii) keystrokes, (iv) mouse clicks, and (v) transcribed voice-conversations.

15. The computer-implemented method of claim 13, wherein monitoring the activity of the employee comprises monitoring three or more of the employee's (i) email, (ii) chat messages, (iii) keystrokes, (iv) mouse clicks, and (v) transcribed voice-conversations.

16. The system of claim 1, wherein determining that the one or more rules within the regulatory data set are applicable to a business associated with the employee comprises:

receiving a current compliance manual applicable to the business associated with the employee;

extracting business operational data from the current compliance manual; and

identifying regulatory obligations related to the business operational data.