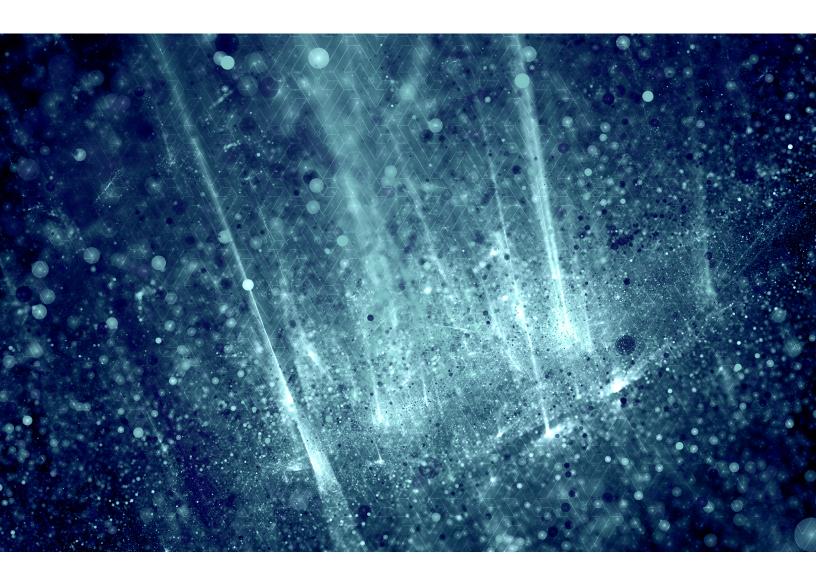


ZL UNIFIED ARCHIVE®

Compliance Pre-Review and Advanced Sampling



Helping Organizations Achieve Optimized Compliance Efforts

The enterprise today is required to operate within the framework of numerous industry-specific rules enforced by regulatory authorities. This is especially true of businesses in the heavily regulated sectors such as financial services, healthcare, public utilities, biomedical sciences, and government. Not only are these regulations constantly evolving, but they are also generally becoming more stringent with time. As this regulatory climate matures, there is less room for business error; rather than simply being a legal requirement, compliance control over data has emerged as a high-level strategic issue. Large organizations are looking not only to increase compliance workflow efficiency and accuracy, but also tightly integrate those efforts with enterprise-wide information governance strategy.

Regulated firms must be vigilant to remain compliant with today's dynamically-shifting requirements, as adjustments to existing law are not uncommon. For instance, FINRA (Financial Industry Regulatory Authority) made approximately 50 proposals in 2014 to add or amend the rules governing financial services companies; the trend has continued into 2015, with 25 more proposals being submitted by mid-year. Many of the proposed changes are for increasing the scope of existing requirements; for example, one of the proposals would mandate disclosure of conflict of interest in communication for all debt research analyst reports (earlier only applicable to equity research). Methods of communication also complicate issues: electronic content generated by organizations, such as emails, instant messages (IMs), social media posts and other non-traditional communication have made it increasingly challenging for organizations to meet compliance requirements.

The risk of failure is significant and potentially expensive, with criminal consequences possible in addition to civil penalties. A fine for a HIPAA privacy rule infraction in the healthcare industry can total \$250,000 with possible imprisonment up to 10 years; a financial services firm can be fined north of \$1 million for violating rules in SEC 17a-4. The rules to abide by aren't always clear, either. With notoriously vague guidance inherent in regulations such as the Foreign Corrupt Practices Act (what exactly defines corruption?), the expense of non-compliance can be staggering considering the lack of clarity. Fines for these violations have reached as high as \$490 million, crossing international borders and landing top officials in prison. The stakes are high, but firms are often left to their own devices to figure out exactly what constitutes a red flag or potentially non-compliant item. Thus, the value in comprehensive control of data is invaluable, as it makes it (1) easier to monitor for potential problems, and (2) easier to describe and defend policies that were in place, in the case they subsequently come into question.

Page 2 of 8 © ZL Technologies, Inc.

Framing policies relevant to an organization's operating environment and monitoring employee actions (surveillance) to ensure compliance is an ongoing, living process that incurs significant cost and effort. Multiple departments including operating business divisions, compliance, IT, and legal teams need to work coherently to understand the regulatory restrictions, corporate priorities, and organization's risk exposure and develop a compliance strategy. Surveillance is a key component of the strategy not only for satisfying audit requirements but also for identifying any violations at their onset so that internal corrective measures can be applied early on. Failure in identifying or addressing a violation in a timely manner can potentially result in expensive legal proceedings and/or hefty penalties. A carefully-designed information governance platform goes a long way in helping an enterprise execute its compliance strategy in an effective and cost efficient manner.

This paper describes two such platform components:

- (1) ZL Compliance Manager Pre-Review module
- (2) ZL Compliance manager Advanced Sampling module

Via discussion of workflow and functionality, this paper will highlight how these modules can help organizations optimize cost by channeling surveillance effort and actions with a much more granular level of control. Not only do these technological capabilities help optimize cost effectiveness, but they also optimize the time spent by key organizational personnel within the compliance and risk departments, thus minimizing wasted time and misdirected attention.

Overview of Typical Compliance Flow

In order to understand the core value of ZL Compliance Manager's Pre-Review and Advanced Sampling modules, it would be helpful to re-visit the typical steps in an organization's compliance flow. Specific details regarding an organization's own preferred compliance workflow are not covered in this overview as they are not relevant for this discussion, but the general overarching process is similar in most organizations.

One of the first steps in setting up a compliance flow is deciding which information source (i.e. email, instant messaging, social media platforms, etc.) needs to be brought under the purview of surveillance. For example, email is almost always considered a source to be reviewed, but financial services companies typically choose to also review their traders' chat transcripts from platforms such as Bloomberg terminals. Infrastructure must be established to ingest these data types (henceforth referred to as "messages") from their various native sources, and pool them in a repository from which they can be reviewed at a later point in time.

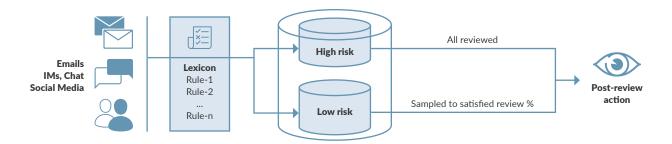
©ZL Technologies, Inc. Page 3 of 8

It would obviously be cost prohibitive to review every message that is brought into the repository simply because of the high volumes involved. To deal with this problem, organizations typically set up two conditions. The first condition is a review percentage that governs a minimum percentage of total messages that need to be reviewed for any period. This percentage is decided based on multiple factors that include but are not limited to regulatory guidelines, industry norms, and organization's past experience. The second condition is a set of rules grouped together in what are called lexicons. These rules reflect situations specific to an organization that are more or less likely to be seen in violations. The rules get compared with the content and/or metadata associated with every message that is brought in the compliance repository. Any message that matches the criteria of a rule is flagged as high or low risk depending on the rule.

In any given review period, two situations could occur. When the number of messages identified as high risk sufficiently satisfies the minimum review percentage established in first condition above, none of the messages marked as low risk get presented for review as we have satisfied the quota. However, in the event that more messages are marked high risk than necessary to satisfy the minimum review percentage quota, the number of messages to review could exceed the review percentage. In the second scenario, if the number of messages marked as high risk are not enough to satisfy the review percentage, the remainder required to satisfy the review percentage gets randomly sampled from the messages marked as low risk.

In the last step of the process, all the messages presented for review are analyzed by a reviewer and the necessary action is taken. The steps described above are depicted below:

Diagram: Standard Compliance Flow



Page 4 of 8 © ZL Technologies, Inc.

Limitations of a Standard Compliance Flow

The typical flow as described in the previous section has some significant limitations:

- (1) Potentially non-compliant outbound messages cannot be "blocked" from exiting the business; review is conducted only after messages have been sent. The risk posed by a non-compliant outbound or inbound message (i.e. one sent or received from an external recipient) can be significantly higher than that posed by a purely internal message. By the time such a violation is noticed, it could be too late to take any mitigating action. It would be ideal to prevent such a message from getting delivered to external recipients before it gets reviewed. Most standard compliance offerings don't have such capability.
- (2) Random sampling of low risk messages (whenever required) is done based on a single review percentage only. This doesn't allow the incorporation of differential risk posed by an outbound, inbound, and internal message into the sampling process. It is desirable for the compliance platform to support different sampling rates for the three types of message directions. This is also not possible in many standard offerings.
- (3) Ability to specify only one random sampling percentage poses another limitation. There is little control on the total number of messages and the number of low risk messages that get presented for review. Thus, in heavy periods when messages get flagged as high risk, all messages are presented which significantly increases the workload on the reviewer. At the same time, no low risk message gets sampled in such periods. This makes the company more vulnerable to rules that may have been forgotten that should be flagged as high risk messages. Achieving a balance in reviewing high risk and low risk messages provides better sampling and due diligence. Again, most standard compliance offerings don't usually provide this flexibility.

The first limitation mentioned above may be removed by enabling ZL Compliance Manager's Pre-Review module. It requires a ZL server's Mail Transfer Agent (MTA) to be configured in the organization's messaging gateway. When enabled, this module blocks outbound and/or inbound messages triggered for pre-review and presents them to a compliance reviewer. Only the messages that have been approved by the reviewer to pass through are delivered to respective recipients.

The second and third limitations mentioned above may be removed by enabling ZL Compliance Manager's Advanced Sampling module. ZL's journaling and classification engine allows for efficient categorization and processing of messages in multiple buckets from internal, inbound, and outbound messages. The Advanced Sampling module lets organizations specify relative proportion of internal, inbound, and outbound messages for random sampling. Thus, it becomes

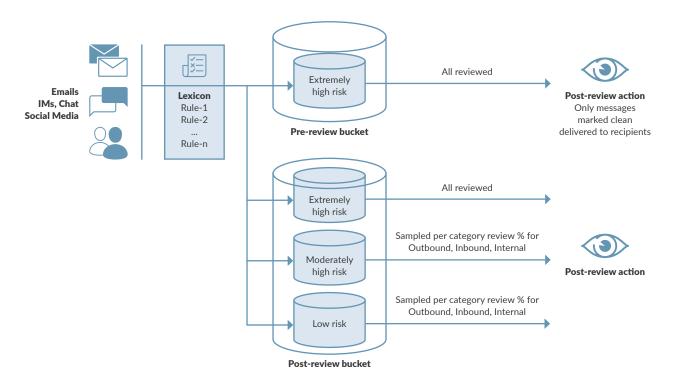
©ZL Technologies, Inc. Page 5 of 8

possible to increase/decrease the sampling of any particular category of messages relative to the other two. In effect this means separate control on each category's review percentage thus removing the second limitation.

The Advanced Sampling module also provides the ability to subdivide the high risk category into extremely high risk and moderately high risk groups. All the messages flagged as extremely high risk get presented for review irrespective of the set review percentage, as they are seen to represent the most pressing category of circumstances. However, the messages flagged only as moderately high risk are now subjected to random sampling if the sampling quota is met. Furthermore, companies can individually specify the desired review percentage for moderately high risk and low risk messages. Treating messages separately in these two buckets for random sampling dramatically reduces the variability in the number of messages presented for review at any given time. As a result, the organizations are able to better plan resources needed for review and analysis. The dependency of the compliance surveillance process on the existing lexicons (quality and relevance) also gets reduced. Thus the third limitation is also removed.

The following figure is a representation of the modified steps in the review process as outlined above.

Diagram: Compliance Flow with Pre-Review and Advanced Sampling



Page 6 of 8 © ZL Technologies, Inc.

Conclusion

Businesses face multiple challenges in the form of stringent regulatory environment, exploding electronic information, and increasing competition. As a result, organizations are constantly fighting the battle to reduce operating cost while improving compliance. More granular control on the review of electronic information can help companies stay confident about catching any policy violations without significantly increasing cost. ZL Compliance Manager's Pre-Review and Advanced Sampling modules provide many valuable features that enhance granularity in review process.

©ZL Technologies, Inc. Page 7 of 8



Page 8 of 8 © ZL Technologies, Inc.