

#### Of special interest to:

Legal counsel
Corporate security officers
Information security executives
Compliance executives
Risk management executives
Internal audit

#### **Authors:**



Todd Marlin

EY Global Forensic & Integrity Services Technology & Innovation Leader



Jeremy Osinski

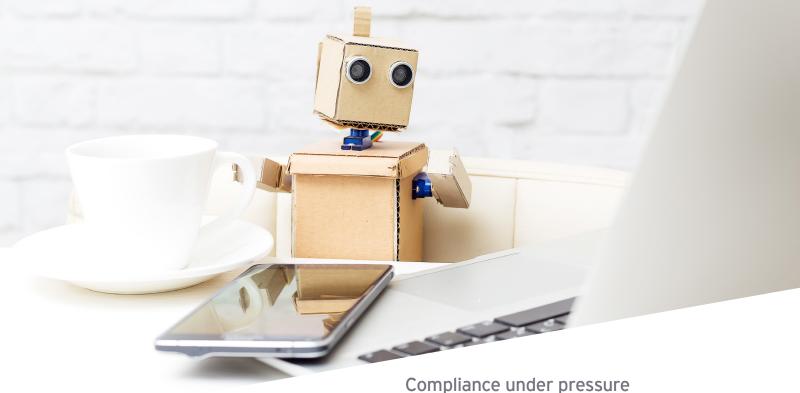
Senior Manager Forensic & Integrity Services Ernst & Young LLP

# Transform compliance with smarter RPA

Companies intent on driving efficiencies in compliance management have increasingly turned to robotic process automation (RPA). The use of RPA helps deliver operational and cost efficiency, while improving quality by reducing human errors. But using RPA alone has its limitations – while it mimics human behavior, it cannot learn from mistakes or evolve with changing business environment. Technology-savvy organizations are gradually looking to enhance their automation efforts with artificial intelligence (AI) tools, such as machine learning and natural language processing (NLP).

This paper examines key areas of the compliance function that pose great opportunities to implement automation – in many cases, intelligent automation – by incorporating Al technologies.





Compliance under pressure

Governments around the world are enacting new regulations to keep pace with emerging technologies and the growing commercialization of consumer data. Companies doing business in multiple jurisdictions must determine how best to comply with conflicting laws. The cost of noncompliance is usually hefty fines.

Increasing digitization of business activities is also putting pressure on compliance functions. Compliance programs have long relied on data and now need to incorporate more data than ever. The large volume and wide variety of data types are becoming increasingly challenging, sometimes impractical, for humans to handle on their own.

#### Companies are increasingly adopting RPA in compliance programs

One of the fastest-growing markets for business software is RPA, which trains software "bots" to perform standard, rule-based processes. The rules-based and repetitive nature of many compliance processes make them strong candidates for RPA adoption. Many RPA tools today no longer require specialized technical skills, thus making it easier for compliance professionals to use them in their day-to-day activities. RPA bots are being created to automate the data ingestion process in compliance programs such as retrieval, cleansing and formatting. Routine regulatory reporting has also seen more bots at work.

While bots can be good at taking on rote work, they aren't smart enough to handle many complex legal and regulatory requirements that often demand in-depth analysis by aggregating and crossreferencing data. Companies are starting to turn to AI technologies to complement RPA. Redesigning business processes with AI-enhanced RPA not only shifts lowvalue human tasks to bots, it provides the insights to shape strategic decisions.

By 2022, 80% of RPA-centric automation implementations will derive their value from complementary technologies, according to Gartner. The most common ones are machine learning and NLP. Gartner predicts organizations that combine AI and RPA technologies with redesigned processes will cut nearly a third of their operational costs by 2024.1

<sup>&</sup>lt;sup>1</sup> Kasey Panetta, "Gartner Top 10 Strategic Technology Trends for 2020," Gartner, 21 October 2019, https://www.gartner.com/smarterwithgartner/gartner-top-10-strategic-technology-trends-for-2020/.



# Complementary technologies enhance RPA implementation

The use of analytics-driven technologies alongside RPA can help the compliance function enhance and expand the scope of its automation efforts. The most common technologies being used thus far are machine learning and NLP.

**Machine learning** helps analyze and understand unstructured data (e.g., comments in T&E data and customer service logs). Machine learning algorithms can be used to help detect hidden patterns of risky activities and relationships. Its self-learning feature improves analytic accuracy and reduces false positives over time.

**NLP** allows computers to understand human language, both text and speech. NLP models decipher meaning, measure sentiment and categorize the data. For example, NLP can be used to analyze notes in sales transactions to detect potential fraud by emotive tone analysis.

#### Automation hotspots in compliance

Based on client engagement experience, EY teams have identified several key areas in a compliance function that are prime candidates for automation, with varying degrees of "intelligence." Vendor due diligence/monitoring Regulatory and management reporting 8 Email and social media monitoring **Automation** hotspots in Anti-bribery and anti-corruption Regulatory changes compliance Complaint management Time and expense compliance 6 Data protection and privacy



# Vendor due diligence

Vendor due diligence often involves many laborious tasks that are ideal for RPA implementation. Bots can be set up to automate clearly defined checkpoints (e.g., check against a pre-established list of banned vendors or vendors that could cause conflict of interest). Machine learning technologies can be used to integrate a much wider range of data sources (e.g., sanction data, court records) and perform in-depth analysis to uncover risks that otherwise may not be obvious by the traditional method.

# Email and social media monitoring

RPA software can be set up to regularly scan corporate emails and public social media posts with pre-defined key word searches intended to identify risk activities and relationships. However, deploying NLP can greatly enhance risk detection. NLP can be used with sentiment analysis tools that evaluate the emotion, tone and intent of messages. Critics charge this violates employee privacy, but messages can be kept anonymous during processing and access to identified risk activities can be controlled. These tools can produce real-time heat maps of employee engagement – even analyzing emojis, in addition to text.

### Anti-bribery and anti-corruption (ABAC)

Standard, rules-based ABAC tests can be programmed in bots to analyze data and identify red flags in transactions (e.g., round dollar payments, miscellaneous payment description). But the range of data sources that can be accessed or analyzed can be limited if using RPA alone. Using machine learning technologies, the bots' risk assessment abilities can be greatly enhanced by integrating a much broader set of data sources and generating scores to indicate the level of potential risks.

### Complaint management

Taking lessons from how RPA and Al tools are already transforming customer service in the consumer space, companies can greatly enhance the handling of calls to ethics hotlines. For example, IBM Watson's Tone Analyzer uses machine learning to analyze chatbot conversations as they occur to help predict customers' emotions and issue automatic apologies. Voice analysis detects negative emotions from both the customer and service representative, providing real-time feedback to employees that helps them resolve the call, or flags the conversation for escalation to a supervisor. Successful complaint resolution mitigates legal risks while trends can be detected by categorizing and analyzing complaints.

### Reducing risk with digital twins

A team of professionals from **EY Forensic & Integrity Services** collaborated with General Electric (GE) to improve its compliance training with an automated solution using advanced analytics. Risk profiles were created for each employee from GE systems data becoming part of that employee's "digital twin" and allowing GE to automate and personalize compliance communications and training, rather than relying on mass emails and courses that may be ignored.

For example, if an employee is about to travel to a high corruption-risk country to meet with a new customer, the employee automatically receives a message in a preferred communication channel that summarizes risks and links to relevant GE policies and processes. The system also creates integrity scores, so managers can reward employees with high scores or coach those with lower ones.



### Data protection and privacy

The surge in data protection laws around the world is accelerating the move to AI-enhanced automation solutions. Technologies that automate the discovery, inventory and classification of sensitive data help reduce noncompliance risk but often need machine learning algorithms to handle complex aspects of the tasks, especially when it comes to discovery and classification. Gartner predicts more than 40% of privacy compliance technology will rely on AI over the next three years, up from 5% in 2020. Gartner also finds most companies are now handling privacy requests from customers manually at an average cost of \$1,400 each, while taking at least two weeks to respond.2

# Time and expense compliance

Requiring managers to manually approve employee time and expense reports can be a laborious task that takes time away from important business decision-making. Expense management tools are using RPA to automate simple checklist type of tasks such as matching credit card receipts to approved types of charges. Adding machine learning allows companies to detect irregular expenses and patterns, flagging them for human review. For example, machine learning algorithms can be developed to categorize expense policy violators based on their risk levels and send email warnings tailored to the severity of the problem.

# Regulatory changes

The unending flow of new regulatory or legal requirements can be managed more effectively with automated solutions. For example, a global effort to phase out interbank offer rates (IBORs) means any existing contracts or transactions linked to IBORs maturing after 2021 will require contract amendments or fallback language. Professionals used to have to manually analyze pages of documents to understand exactly what was needed to comply. There are many document intelligence tools that can be used to automate a large portion of the work and convert legacy contracts into digital formats that can be processed by contract management software.

<sup>&</sup>lt;sup>2</sup> "Gartner Says Over 40% of Privacy Compliance Technology Will Rely on Artificial Intelligence in the Next Three Years," Gartner press release, 25 February 2020, https://www.gartner. com/en/newsroom/press-releases/2020-02-25-gartner-says-over-40-percent-of-privacy-compliance-technology-will-rely-on-artificial-intelligence-in-the-next-three-years.

# Regulatory and management reporting

Corporate regulatory reporting is a complex and time-consuming process that begs for technology solutions. RPA bots can be used in straightforward data collection and cleansing tasks. It's been a common practice to use AI and advanced analytics technologies to provide deep insights and uncover hidden risks in regulatory and management reporting. The sheer volume of reporting required by a compliance function makes this the most promising area for joining AI and advanced analytics with RPA.

# Moving forward

To stay competitive and reduce risks, companies must become more agile, strategic and efficient in managing compliance. Investing in intelligent automation is a critical consideration for compliance leaders looking to achieve these goals.

Here are some tips for successfully implementing intelligent automation:

#### 1. Start small

RPA on its own can quickly add a great deal of value. Assess your current processes to identify low-hanging fruit. Look for high-volume, routine, rules-based tasks that can be more efficiently performed by bots. Adopt a phased approach with your automation efforts to minimize disruption to the business and to demonstrate measurable results along the way.

#### 2. Understand your data

Before any large-scale Al implementation, determine what data the technologies will run on. Identify the data sources, know how to access them and establish a central data platform. Al algorithms require clean, quality data to function properly.

#### 3. Ensure human involvement

Don't ever assume that automation can run on its own. There should always be a monitoring process in place where humans can assess performance of the automation systems and intervene when needed. Many AI technologies, such as machine learning, have self-learning capabilities that require human input. In addition, business and regulatory environments evolve quickly in today's age that human engagement is critical to ensure compliance programs are up-to-date.

To learn more, visit ey.com/ForensicDataAnalytics

#### EY | Assurance | Tax | Transactions | Advisory

#### About EY

EY is a global leader in assurance, tax, transaction and advisory services. The insights and quality services we deliver help build trust and confidence in the capital markets and in economies the world over. We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people, for our clients and for our communities.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. Information about how EY collects and uses personal data and a description of the rights individuals have under data protection legislation are available via ey.com/privacy. For more information about our organization, please visit ey.com.

#### About EY Forensic & Integrity Services

Embedding integrity into an organization's strategic vision and day-to-day operations is critical when managing complex issues of fraud, regulatory compliance, investigations and business disputes. Our international team of more than 4,000 forensic and technology professionals helps leaders balance business objectives and risks, build data-centric ethics and compliance programs, and ultimately develop a culture of integrity. We consider your distinct circumstances and needs to assemble the right multidisciplinary and culturally aligned team for you and your legal advisors. We strive to bring you the benefits of our leading technology, deep subject-matter knowledge and broad global sector experience.

© 2020 EYGM Limited. All Rights Reserved.

EYG no. 002496-20Gbl WR #2003-3462434 FD None

This material has been prepared for general informational purposes only and is not intended to be relied upon as accounting, tax or other professional advice. Please refer to your advisors for specific advice.

ey.com