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**Compliance Modernization**  
Focus on 5: Robotics Process  
Automation (RPA)

# 5 insights on how robotics can drive financial services compliance modernization

## Using innovation to lead, navigate risks and opportunities, and disrupt the status quo

Robotic process automation (RPA) is quickly transforming middle- and back-office operations in financial services institutions. Robots (bots) that are at the heart of RPA have been used in the past to mimic rules-based, process oriented human execution activities (e.g., document gathering, data retrieval, calculations), thereby automating workflow and decision-making for a variety of processes, including loan origination and collections. Recently, however, RPA has been implemented more widely across institutions to help drive efficiency and effectiveness. And the benefits are already apparent. By embracing complexity and leveraging this technology in new ways, financial services companies are accelerating their corporate performance (see Benefits of RPA).

As financial services institutions consider other operations or functions that could benefit from RPA, compliance stands out as a strong candidate, particularly the area of monitoring and testing. By understanding the opportunities for compliance automation, taking important preparatory steps, and addressing key implementation considerations, including performing appropriate cost/benefit analyses, financial services institutions can be better prepared to tap into RPA's potential. Here are five insights on how RPA can enable compliance modernization in financial services:

### 1) RPA can contribute to more effective and efficient compliance processes

Several aspects of compliance oversight operations can be enhanced through RPA implementation. As noted, monitoring and testing is an especially promising automation candidate. RPA's capability to pull and aggregate data from multiple sources could also enhance the efficiency of regulatory, non-financial, and risk reporting as it can help eliminate or reduce the time-consuming processes of collecting, compiling, and cleansing, and summarizing large amounts of information. Other potential automation candidates include

the risk assessment process, complaints management, and investigative/root-cause analysis processes.

### 2) Monitoring and testing highlights RPA's compliance potential

Monitoring and testing provides a powerful example of RPA's potential to transform compliance operations. For example, financial service institutions execute a portfolio of individual tests to determine if their various operations are compliant with specific laws, rules, regulations and, as appropriate, internal policy directives (collectively known as regulatory requirements). A large financial services institution can be responsible for executing thousands of tests annually with varying execution frequencies, completion times, and sample sizes. Each test requires planning (inclusive of sampling), document/evidence gathering, test execution, and reporting. Applying RPA to repetitive, manually intensive monitoring and testing activities allows institutions to refocus employee activities on higher value areas such as high complexity, judgement-based monitoring and testing activities, quality assurance reviews of results, and root-cause analysis of exceptions.

Two compliance monitoring and testing processes in particular are promising automation candidates. RPA can streamline *sampling* by both efficiently extracting information from disparate systems with varying data formats across the enterprise and selecting sample populations using

predefined sampling criteria. RPA in *test execution* may improve efficiency by significantly reducing time to execute the test (see *RPA in action*). Moreover, it can also improve effectiveness through reduced human error and enhanced reporting of results. In addition, RPA can help institutions expand their sample size or move to full-population monitoring and testing without significantly increasing total execution time. This capability would let institutions learn more about their monitoring and testing populations and potentially move to a "reliance model" by leveraging results in other monitoring and testing areas, thereby reducing total monitoring and testing required across the enterprise.

#### Benefits of RPA

Leveraging RPA to execute monitoring and testing activities, as well as other compliance-related processes, can produce a number of benefits including, but not limited to:

- Expanded resource capacity due to more efficient execution processes
- Greater personnel productivity and ability to focus on higher value activities
- Improved outcomes through greater quality and consistency in the execution process
- Expanded scope of coverage in, for example, breadth of transaction sample size, and product coverage
- Reduced costs through a 24-hour work model



RPA can also improve enterprise-wide monitoring and testing processes to help streamline the broader monitoring and testing operating model. For example, RPA can be used to compile, aggregate, and report on test results across the enterprise, freeing employees to perform trend analysis and provide qualitative commentary. Additionally, RPA can enhance workflow management through its ability to designate, track, and manage monitoring and testing assignments—for example, automatic archival of artifacts to document milestone completion, auto-generation of email notifications to move from sampling to execution, and execution to quality assurance review. Lastly, RPA can help track and report on the completion of activities per service level agreements (SLAs), and send auto-generated escalation messages as needed.

### 3) RPA readiness can enhance and accelerate implementation

An important element of RPA planning is assessing the readiness of existing processes, data, systems, and the overall governance structure for the introduction of automation. Processes should be evaluated to determine if they are stable or require remediation before automating. If process re-design, fixes, or upgrades are imminent, an assessment should be performed to determine whether process re-engineering should occur during the development of automation or whether automation of such processes may be premature.

RPA's heavy reliance on data to automate compliance processes makes *data quality* paramount. It's also critical to determine whether technology infrastructure has the capacity to accommodate RPA, existing systems are compatible with the new automation tools, and system security can be maintained in the automated environment.

Readiness preparation also extends to the enterprise systems from which data and information used for automation will be drawn. If migrations, sun-setting, or conversions of such systems are imminent, any automation undertaken could be premature, and ultimately might need to be repeated.

For many financial services institutions, enhancements to their existing governance infrastructure is likely to be required prior to the automation of compliance monitoring and testing. Key infrastructure components needed to effectively operationalize RPA include:

- **Enhanced governance**, including management routines, clearly delineated roles and responsibilities, and revised policies and procedures
- **Issue management, risk management, and reporting**, with standardized issue reports populated by bots and validated by humans, including a clearly defined feedback loop and escalation process for reporting issues experienced during automation
- **Change management**, with defined management routines for identifying, maintaining, and approving test and related automation changes
- **Skillset development and training**, including ongoing capability assessments and roles-based training

### 4) Three challenges to consider before implementation

Many questions remain to be answered regarding the technical implementation of RPA. While the use of workflow and decisioning technologies has grown over the years, new challenges are arising.

One emerging concern is what happens when there are dependencies among automated activities, such as activities performed by bot 1 that trigger those performed by bot 2? In some instances, implementations are requiring more resources and time than expected, especially in large institutions.

Second, who will own RPA implementation is another important consideration. Depending on the financial services institution, an automation initiative may live in the information technology (IT) department or the group that owns the process being automated. Regardless of who technically owns the effort, the success of RPA implementation will hinge on seamless integration between IT and the business function, and the consistent involvement of those two groups.

Finally, once RPA is implemented, ongoing bot management will require clear definition of how issues will be handled to achieve timely, effective resolution. Also, a defined set of performance metrics, such as key performance indicators (KPIs), is critical for measuring the ongoing effectiveness and efficiency of RPA.

### Incorporating Automation into your Risk Framework

To address potential operational, financial, regulatory, organizational, and technology risks introduced by employing automation, it is important for an institution to define an automation risk framework and a supporting governance model.

The automation risk framework should be an extension of the existing IT risk framework, leveraging existing approaches to enterprise risk management. Examples of framework components include: foundational elements such as policies and standards, and strategic planning, capabilities including bot supervision, compliance and management, and process activities such as automation development and implementation.

For governance, some institutions may find value in establishing some form of automation and analytics center of excellence. Such a function could drive consistency and standardization of RPA efforts across the enterprise, as well as provide a designated, skilled personnel pool who can support compliance teams in designing, building, and executing tests using robotics.



### 5) RPA is just the beginning

While RPA is demonstrating its capacity to improve process effectiveness and efficiency, expand capacity, boost quality and consistency of outcomes, enable greater scope of coverage, and potentially reduce costs, it's also a harbinger of more to come. Breakthroughs are occurring in cognitive automation, artificial intelligence, and other tools which promise to automate ever-more judgment-based, complicated tasks.

For example, cognitive automation's ability to enable analysis and interpretation of unstructured data can further expand the coverage for more complex compliance monitoring and testing efforts. Opportunities are also emerging to use RPA in conjunction with cognitive tools and other emerging technologies.

#### Our take: RPA done right can be a valuable tool

Two considerations are worth keeping in mind in exploring RPA's potential use in compliance. First, it is not a panacea; however, it can be a highly effective tool for enhancing process efficiency, and it is gaining wide acceptance in financial services institutions. Second, it's impractical and unwise to try and automate everything; institutions will want to perform a cost-benefit analysis to determine whether undertaking an RPA effort makes business sense. Other levers, such as people and process initiatives, can also deliver big returns.

Finally, it can be helpful to remember new tools and techniques are emerging constantly that may provide previously unimagined opportunities. While something may be impossible today, who's to say it will still be tomorrow?



#### RPA in action

Three examples of manually intensive tests that can be automated with RPA include:

- **Regulation E (Electronic Funds Transfer Act)** – RPA can be used to pull customer bank statements and review transaction history to verify that fees charged to consumers accurately reflect the fee schedule for the specific customer.
- **Flood Disaster Protection Act** – RPA can be used in conjunction with optical character recognition and natural language processing to pull customer mortgage documents, such as appraisal and HUD-1, and extract relevant data to confirm the adequacy of the customer's flood coverage for properties in special flood hazard areas.
- **Trade surveillance** – RPA can be used to check for front running by analyzing the trading patterns of clients and principal orders to evaluate the time difference between orders, source of the orders (direct or on-behalf), historical order activity, and whether the proportion of the principal trades were after the client order started to execute.

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