TATA CONSULTANCY SERVICES

Transforming Daily P&L in Financial Institutions: The Way Forward

Abstract

Product control is an integral function within the investment banking division of capital markets. An important aspect of product control in finance is daily profit and loss (P&L) validation, which is currently predominantly manual involving repetitive and mundane tasks. This results in increased processing time and inadequate analysis leading to incomplete or incorrect P&L reporting and ultimately impacts the strategic and tactical decision-making processes of banks. This also potentially exposes banks to penalties and fines imposed by the regulatory bodies. Automating the daily P&L process through robotic process automation (RPA) can help increase accuracy, enhance efficiency, minimize operational risks, improve the decision-making processes, and facilitate greater collaboration and synergies. This paper proposes an automation-feasibility conviction-matrix to identify the most suitable sub functions for RPA in finance and suggests an adoption roadmap.

The Current Product Control Landscape

Global investment banks operate with diverse business models and financial instruments. Consequently, the product control function differs across different banks as regards size, complexity and nature within the capital markets division. The product control unit acts as a mezzanine layer between the front office, middle office, and back office departments. Daily P&L validation is a critical part of product control and the figures provided by the front office or the trading desks need to be independently verified and validated by product control teams as mandated by the regulatory bodies. The objective is to avoid rogue trading incidents that can potentially result in penalties or fines imposed by the regulatory bodies. This, in turn, will also directly impact the bank's balance sheet as well as investor and shareholder investments.

Daily P&L validation comprises some mission critical tasks including:

- Validating of attributes and sub-attributes
- Comparing T0 with T1 (actual with expected)
- Posting adjustments
- Populating commentary on the reported amounts and movements
- Assessing market risk sensitivities
- Ensuring daily balance sheet substantiation
- Establishing the process flow for new products in a smooth and regulatory compliant manner
- Enabling internal and external reporting for bank-wide operational risk items and management metrics
- Reconciling upstream and downstream systems
- Mapping and maintenance of the books as per regulatory reporting and disclosure requirements

Challenges to Daily P&L Validation

Financial institutions encounter several challenges in daily P&L validation.

Complex IT infrastructure: The organic growth of the banking sector has resulted in various non-aligned and siloed source-feed systems across various products and geographies. Multiple legacy systems and sub systems across different regions have resulted in a complex system architecture that has made data retrieval cumbersome. This also complicates the daily P&L reporting adversely affecting the decision-making processes within financial institutions.

Data quality: Multiple risk management, accounting and P&L systems, data sources, and manual processes for data sourcing and processing have resulted in poor data quality. This exposes banks to operational risks and leads to additional costs related with maintaining data.

Evolving products: Products evolve continually due to change in market dynamics, regulations, and trading strategy. However, the underlying processes, controls and the system infrastructure have not kept pace across the value chain thereby adversely impacting the outcomes in daily P&L reporting.

Manual, error-prone processes: Excessive dependence on spreadsheets that entail manual intervention along with a large amount of repetitive work compromises accuracy, increases processing time, and results in less time spent on effective analysis of P&L reports.

Clearly, financial institutions need a comprehensive solution that eliminates manual, time-consuming, and error-prone processes and analysis, cuts costs, and ensures data quality to facilitate accurate P&L reporting and validation and effective product control processes.

RPA to the rescue

Banks operate with multiple siloed systems as a result of organic growth within banks. Incorporating RPA in finance and accounting processes will help integrate and consolidating multiple siloed systems like risk management, P&L, accounting, ledger, and sub-ledgers. This will help facilitate traceability of data flow from upstream to downstream systems and ensure seamless communication among the functional teams within tight deadlines. This will enhance the daily P&L reporting activities and improve the strategic and tactical decision-making processes within the banks. It will also create more fungible and agile teams by reducing dependence on operations and onshore stakeholders for P&L specific queries thereby making the team more efficient and effective.

Data quality: RPA tools can be used to improve data quality by solving problems like duplicate data, inconsistent formats, junk characters, null values and so on. Once these relatively simple issues are sorted out, financial institutions can move to more complicated use cases like enabling a unified customer view and ensuring real-time feeds and end-to-end traceability. Banks must adopt a robust data management framework to reduce operational risk and costs associated with maintaining data.

Deploying RPA tools ensures the agility of the data underlying the business products, which in turn improves the daily P&L reporting and validation processes. RPA can also help ensure seamless data flow from upstream to downstream systems to help reduce the time and effort on front to back reconciliation.

Automation-ability Conviction Matrix: Identifying Processes for RPA

Continuous automation of daily P&L processes leveraging RPA, artificial intelligence (AI), cognitive techniques, and machine learning (ML) will help establish a standardized and integrated framework across the value chain, which is a key prerequisite for digital transformation. The success of automation through RPA, however, will depend on carefully identifying the right processes. Manual, repetitive processes within the daily P&L reporting function are ideal candidates for automation through RPA. Figure 1 depicts the automation-ability conviction matrix, a matrix devised to help pinpoint sub functions and processes that are highly complex and repetitive.
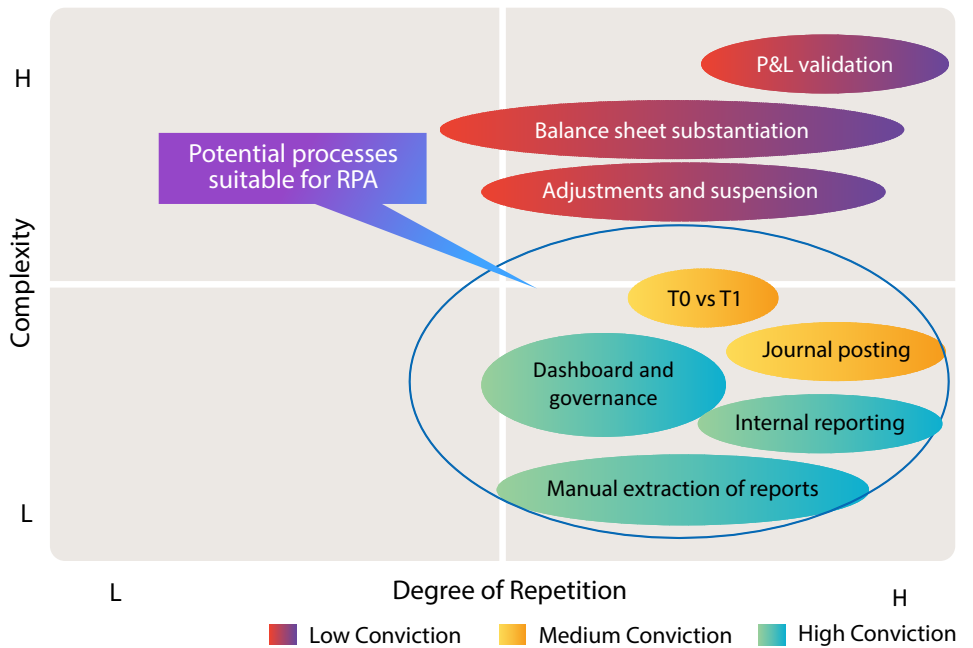
Suggested Implementation Roadmap

Once the sub functions and processes for automation through RPA are identified, banks will need to move toward actual implementation. However, financial institutions planning to embark on P&L automation must consider a few aspects. Since business stakeholders will reap benefits in the form of

improved strategic and tactical decision-making, effective analysis, and reduced operational risk, ensuring buy-in from business stakeholders is critical. Another key aspect to be considered is the return on investment – banks must perform a comprehensive cost-benefit analysis to weigh the potential benefits against the costs involved. This is especially important when implementation is undertaken in stages and the benefits realized from the previous stages are used as justification to continue with successive stages of the RPA program. Robust change management programs to ensure hassle-free implementation are other aspects that must receive due attention.

In our view, adopting a four-phase implementation roadmap (see Table 1) will ensure seamless execution and banks would do well to define a detailed roadmap with set milestones and timelines.

Phase	Activities
Initiation phase	Stakeholder buy-in, program management including operating model definition, responsible, accountable, consulted and informed (RACI), governance procedures, and change management strategy
Planning phase	As-is-to-be study, business rules definition, proofs of concepts (PoC) planning
Execution phase	Conducting PoCs and evaluating outcomes
Closure phase	Project plans, implementation as per schedule, transition to business-as-usual

In a Nutshell

Individual banks have unique challenges and opportunities and the RPA adoption approach will need to be tailored to suit each bank's requirements in the capital market landscape. This will help transform and standardize the fragmented processes within the P&L ecosystem in turn facilitating more incisive data analysis enabling faster decision-making. Given these benefits, banks must take steps to automate the daily P&L function and improve strategic decision-making, which is a prerequisite to achieving transformational growth and exponential value goals.

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