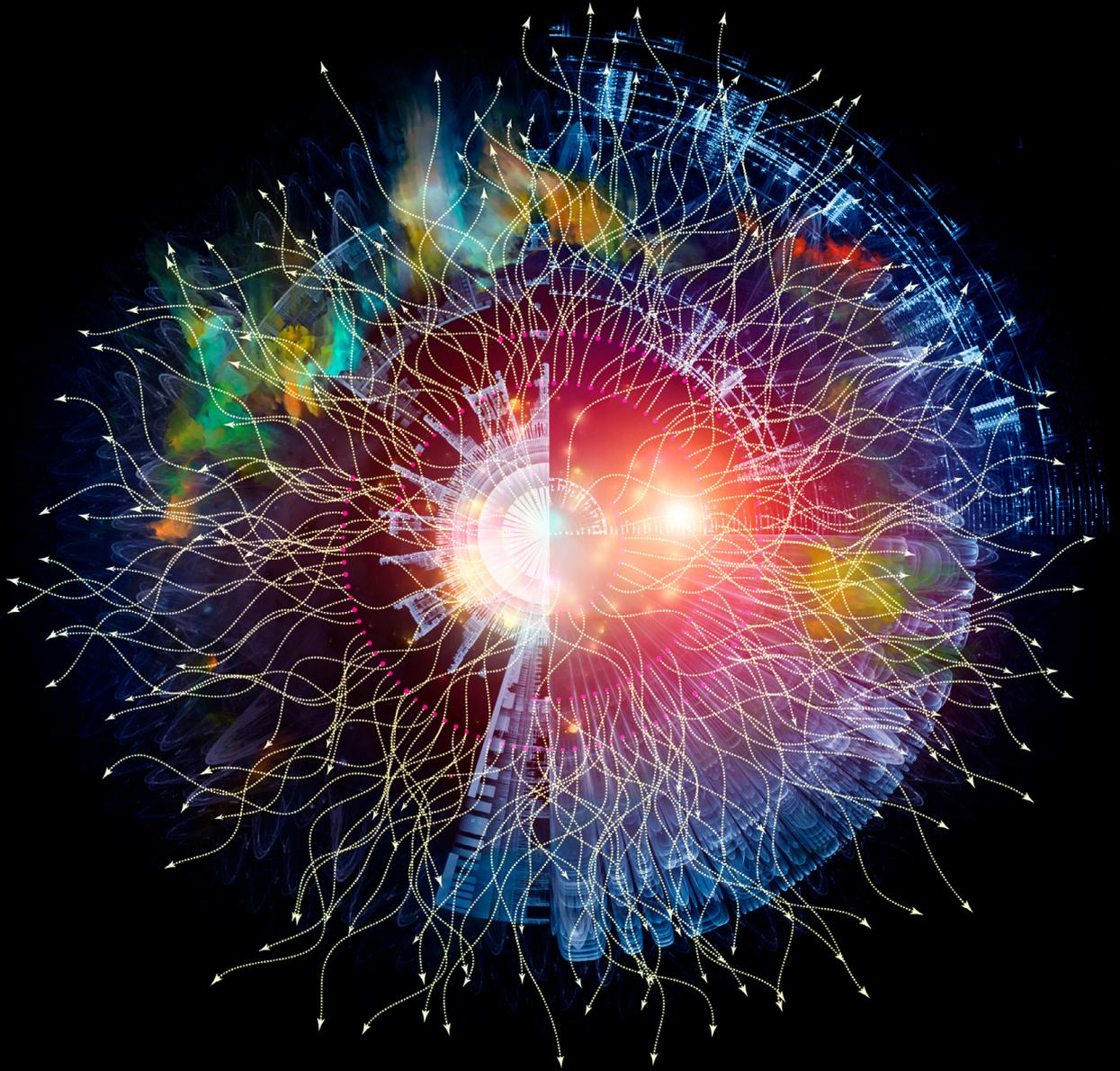


Deloitte.



Double your intelligence

Using intelligent automation to
double productivity in Finance

Financial Services

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Foreword

Intelligent automation presents a huge opportunity for Finance functions within financial services institutions to deliver information and value to the business more quickly, more accurately and at lower cost.

These intelligent automation technologies, which we call Robotic and Cognitive Automation (R&CA), can have a rapid transformative effect and are facilitating the standardisation of core Finance processes that are long-overdue for simplification. It is our view that a different approach is required to deploy robotics effectively by creating Finance automation utilities, which is different to how automation is typically deployed within front and middle-office functions.

This unique approach, which combines robotics, point cognitive tools and operational excellence, can typically achieve a 20-25% increase in efficiency within six to twelve months. Furthermore, experimenting effectively with artificial intelligence (AI) can enable Finance functions to achieve over 50% efficiencies within two to three years, speeding up and vastly enriching the insight Finance brings.

Financial services organisations can harness the potential of R&CA to halve the capacity required from their Finance functions, or double their output, all while increasing the intelligence and quality of information. In this report we will explore how to achieve this.

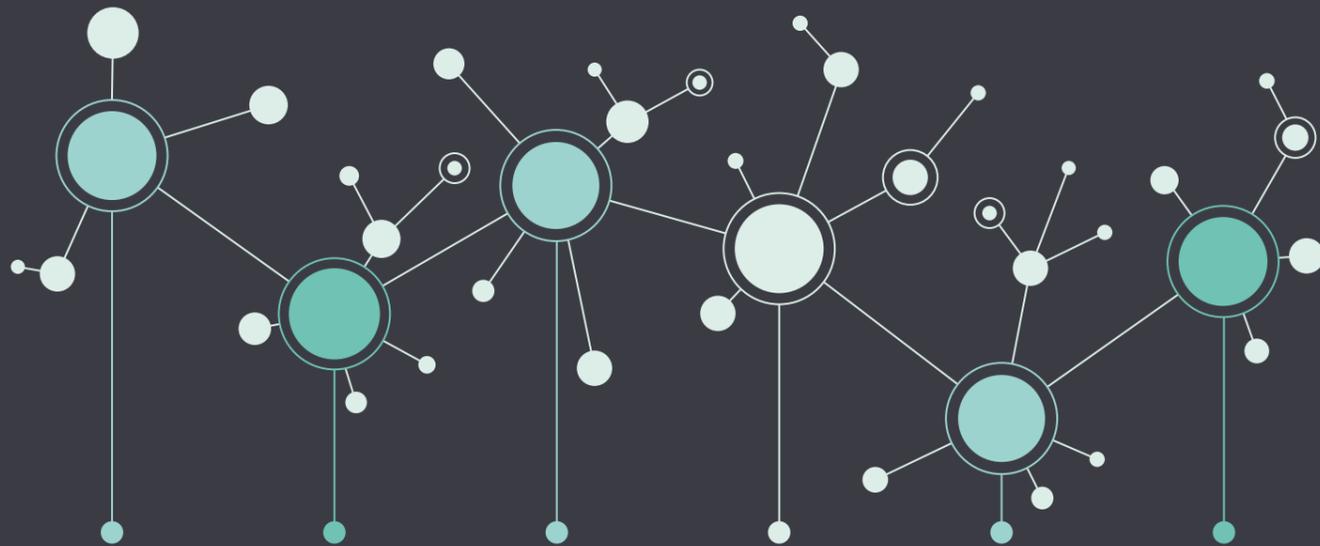
Opportunities for intelligent automation in Finance

Robotic automation is delivered through software that is used to mimic human action and perform rules-based tasks.

The opportunity presented by robotics is widely understood. Performed correctly, robotics can reduce costs, increase speed and improve the quality and accuracy of Finance processes and can be deployed alongside large-scale technology implementations. This is particularly valuable in helping to automate simple processes such as reconciliations and invoicing, for example. However, robotics is far beyond automating small parts of processes. It has the real potential to enable an automated back-office processing centre or 'robotic servco', where tasks are performed and overseen by robots with little human interaction.

The opportunity presented by cognitive technologies is less well understood. More advanced cognitive tools are able to interpret and produce analysis or make decisions, as well as interact with Finance people within the organisation, making accountants and quants more effective. There is a lot of hype around AI, but deep accounting and regulatory compliance expertise is required to ensure these technologies are adopted in a controlled and compliant manner.

We are working with our clients to experiment across a range of areas in Finance including:



Neural networks and learning technologies to investigate repetitive reconciliation breaks by seeking missing counterparty data from external sources.

Learning engines to provide more granular management reporting than would have been possible within previous timescales and constraints.

Advanced predictive modelling to improve financial forecasting using information gathered from various sources and processed in big data analytical solutions.

Cognitive assistance that learns from quants and actuaries, to provide them with data more quickly to support them in their daily, monthly and quarterly activities – making them more efficient and effective.

Natural language generation to automate whole or key parts of statutory and management reporting commentary where a consistent format is required regularly.

Chat-bot technology to support business partnering and business user self-service, such as the resolution of common queries from cost centre controllers.

Benefits of intelligent automation in Finance



Processing speed, capacity and timing are greatly improved as validation, adjustment and calculation steps of multiple processes are performed in parallel by robots. In addition, more effective workload balancing and overnight processing from robots removes significant waiting times, as well as time zone issues and downtime between different locations, and frees up capacity to allow a far leaner working day timetable.

Enhanced quality control is achieved through standardising and consistently applying thresholds, levels of materiality and business rules that help identify and address common control inconsistencies.

Better quality for consumers is achieved as ultimately the speed and accuracy of information that is provided to business partners, cost centre controllers and the regulator is all greatly enhanced.

Reduced physical space requirements, allowing the consolidation of existing operating locations. Automation also challenges the need and motivation for extensive offshoring or outsourcing.

Standardisation opportunities are made visible through the implementation of robotics, presenting a significant incremental opportunity.

Automation needs to be adapted to Finance processes

Finance processes tend to be high in variability and low in volume compared to other back-office processes targeted for automation.

Whilst organisations should not ignore notable opportunities to automate large portions of specific repetitive activities such as accounts payable, accounts receivable and expense processing end-to-end, this should not be the foundation of their approach. In our experience, the pipeline of worthwhile automation will run out without realising the material benefits of R&CA.

The approach to automation should be tailored for Finance processes where the most significant savings are typically driven by identifying common pervasive process components, such as data extraction, data validation, and performing standard calculations and adjustments that cut across processes.

“Significant savings are typically driven by identifying common pervasive process components.”

Our financial services clients are using robotics to help automate, speed up and reduce the effort needed to deliver activities for numerous Finance processes including:

-  **1** Journal postings including month end adjustments
-  **2** Reconciliation and related controls
-  **3** Data acquisition, validation, adjustment and calculation for statutory, regulatory and management reporting
-  **4** Production and distribution of regulatory and statutory reports
-  **5** Calculation, population, production and distribution of management reports
-  **6** Production of daily P&Ls and commentary
-  **7** Intercompany calculation, reconciliation and settlement
-  **8** Accounts payable and accounts receivable activities
-  **9** Extraction and manipulation of data from policy admin systems
-  **10** Set-up, triggering and extraction of data from actuarial models

Rethinking the Finance operating model

Our clients are working with us to build intelligent automation delivery capability by creating robotics centres of excellence, set up either specifically for Finance within the shared service centre or provided by their Operations or IT organisations.

In either case, we advise it is critical to understand and plan how that support model will operate in practice. This is an evolving and important consideration that financial institutions are evaluating and prioritising alongside their automation journeys.

Those making the most of intelligent automation are using it as a lever to challenge and rethink their core Finance operating model made up of business processes, software applications, technology infrastructure and governance models. These operating model components are undergoing change that is driven by the potential of new intelligent automation technologies.

The full potential to increase the efficiency of the Finance function is achieved when AI and cognitive technologies are integrated with cloud-based Enterprise Resource Planning (ERP) solutions. As technology infrastructure in Finance functions shifts to cloud-based solutions for storing, managing and processing data, AI and other cognitive technologies can begin to harness the massive volumes of data these cloud-based ERP technologies can generate. This will allow Finance functions to provide more automated, granular insights while eliminating error-prone, repetitive tasks and increase the efficiency of the Finance function.

This unique approach to implementing standardised and automated processes in robotics centres of excellence, alongside more advanced cognitive technologies that harness the power of cloud-based ERP solutions, will enable Finance to achieve over 50% efficiencies within the next two to three years.

Financial institutions will need to re-organise and re-plan their teams to adapt to the delivery and maintenance of automated processes. They will also need to address capability changes required within their Finance teams such as advanced analytical skills and data interpretation and data insight skills, in addition to expert oversight needed to manage automated processes and cognitive technologies. These changes will all need to be addressed while retaining Finance technical knowledge.

How Deloitte is helping financial services organisations deploy intelligent automation in Finance

Deloitte’s approach to automation in Finance leverages our ability to draw on our pre-eminent Finance, re-engineering and intelligent automation knowledge to standardise processes and maximise the benefits of automation.

Deloitte has been delivering Finance-wide intelligent automation programmes with a number of financial services clients to increase efficiency in their Finance functions. We have gained a wealth of experience in deploying robotics and cognitive automation tools within core operational accounting, internal and external reporting, and treasury and liquidity management processes in addition to typical shared service processes such as accounts payable and receivable.



Case study: Creation of a data and report production utility

Deloitte helped a European banking partner automate 50 accounting and reporting processes, increasing capacity by 25% from relevant teams in year one. To get towards 50% efficiencies we are helping the bank with further automations in the same area as well as exploring the use of cognitive technologies and changing the operating model to fully capitalise on the efficiencies created by the automated processes. In parallel, the programme has set up a Finance centre of excellence to run, maintain and change automations and has set up the infrastructure for up to 75 automated processes.

As part of this programme, Deloitte created a data and report production utility within the bank’s shared services centre that is supported by robotic automation. The automations source and validate data, reconcile and calculate management, statutory and regulatory reporting information, and produce regular standard reports. This helped the client to speed up the production of reporting data and submissions, as well as reduce costs.



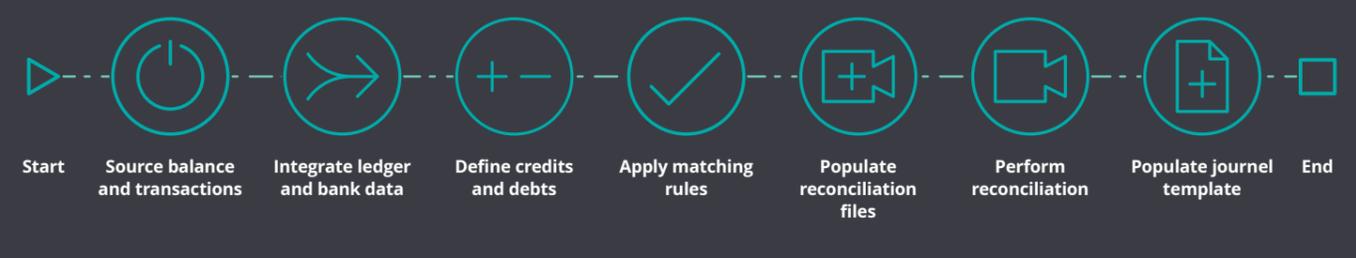
Case study: Automation of bank reconciliations

Deloitte helped a financial services partner re-engineer their reconciliation processes where common templates are applied to multiple reconciliations across multiple teams. Automation is used to format input data, categorise transactions into credits and debits, apply a set of pre-defined rules to match transactions and paste data into a common reconciliation template. Reconciliation status and breaks are then reviewed through new control dashboards.

High-level automated process to produce cost reports



High-level automated process to perform bank reconciliations



Learnings: approach to implementing intelligent automation

Through our experience of supporting clients in automation, there are a number of relevant considerations that can help organisations in shaping their intelligent automation initiatives and approach to implementation.



Develop incrementally.

Prioritise where to automate, within the constraints of your existing change and business calendar. Learn from early implementations and don't go for everything at once as automated components can be re-used multiple times across processes and divisions.



Take a process-driven approach.

Look across the Finance function and address processes across divisions to avoid duplication and prioritise the re-engineering of common process steps and components that increase capacity significantly.



Re-use automations.

Each automation needs to be implemented before it is added to the 'catalogue' of automated process components and re-used across processes and divisions.



Design the future operating model in parallel.

Design a vision for Finance and introduce robots gradually into the operational environment, monitoring quality and building user confidence.



Invest and experiment in AI.

Create budget for experimenting with emerging AI tools with a clear vision and priority focus for analysis and service provision.



Achieve early stakeholder buy-in.

Support is needed from strategic to operational stakeholders to quickly deliver such change.



Address limited resource constraints.

Prioritise robotics where possible to secure SME and change resource. Increase capacity through early automations and use implementation partners to provide capacity for large-scale change.



Build robotics capabilities within Finance.

Partnering, particularly in early implementation will help to scale capability faster. Financial services organisations should also provide training in robotics and consider specialist recruitment and outsourcing.



Resolve IT infrastructure issues.

The speed of implementation is dependent on quick resolution of current IT issues and implementing a stable and high performing environment.



Set-up for scale.

Your robotic and AI enabled 'workforce' will require the infrastructure and support model to operate effectively and resiliently.



Training and continuous improvement.

Existing technical Finance managers and SMEs should be re-trained to use, support and maintain robotic tools and technologies. This technical Finance knowledge coupled with robotic skills is also critical to the continuous improvement of the Finance function.

Conclusion

The potential for intelligent automation to enable a quicker, more accurate and cost-efficient Finance function is significant, if you get the approach right. Finance functions present scalable opportunities for automation that financial institutions can realise to achieve their efficiency objectives. Automation should be used as a lever to rethink and reimagine the Finance operating model which is being challenged by digital disruption. Move now, accelerate, deploy at scale, and invest in AI experimentation and integration with cloud-based ERP technologies.

The potential of intelligent automation and other digital disruption topics are explored in our Digital Finance Lab, which provides an immersive experience for Finance leadership teams to examine the impact of digital disruption on their business and the implications for the future Finance operating model.

For more information on how Deloitte can support you on your intelligent automation journey or to find out more about the Deloitte Digital Finance Lab, contact the team below.

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