

# BECOMING STRATEGIC WITH INTELLIGENT AUTOMATION

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PAPER 2

**INTELLIGENT AUTOMATION IN BANKING**

APRIL 2021

Dr. John Hindle & Dr. Leslie Willcocks  
Knowledge Capital Partners



“Possibilities do not  
merely add up; they  
multiply’.”

Paul Romer, co-recipient,  
2018 Nobel Memorial Prize in Economic Sciences



## ‘WHEN YOU COME TO A FORK IN THE ROAD, TAKE IT.’

Automation technologies could contribute an additional \$US1 trillion annually in value across the global banking sector - through increased sales, cost reduction and new or unrealized opportunities. But this value is still largely being left on the table. Why? There are well documented challenges with automation, including lack of clear and strategic intent and senior executive support for automation, plus heavily siloed deployment within organizations, resulting in disconnects within and across digital transformation efforts. To be frank, operating models *per se* neither enable nor ask for strategic use of automation technologies. But a hidden key reason has become increasingly obvious – the failure to grasp the nature and size of the opportunity.

This is understandable. As a species we are not good at understanding the major engines of the opportunity for value creation - compound growth and combinatorial innovation. As our 2020 “Just Add Imagination” report series highlighted, if automation technology deployment produces small improvements each year, the compound results will be massive. If automation technologies can be recombined in new ways, not only can existing opportunities be seized, but new ones can be created, ad infinitum. As Paul Romer said in 2016:



‘Every generation has underestimated the potential for finding new recipes and ideas. We consistently fail to grasp how many ideas remain to be discovered. The difficulty is the same one we have with compounding: possibilities do not merely add up; they multiply.’



Prescient banking executives we are researching understand two things: the strategic opportunities offered by intelligent automation; and how automation can drive the twin engines of compound growth and combinatorial innovation.

They have also, for some time, been anticipating how automation can be deployed to address inescapable competitive pressures driven by rising customer expectations on digital banking. Financial institutions are aggressively deploying automation technologies. This has accelerated during the COVID-10 crisis. Moreover, digital ecosystems are disintermediating and re-shaping how financial services are discovered, assessed, purchased and delivered. Think, for example, of mobile devices, and multi-channel apps made available by fin-tech businesses such as Wise (formerly Transferwise) that have transformed the customer experience, beginning with foreign exchange and expanding into international banking. High-tech multinationals are also entering financial services, leveraging seamless multi-channel customer relationships, advanced scaled technology infrastructures, and immense real-time data lakes.

In all this, intelligent automation has become vital for future competitiveness and differentiation in financial services. Let's look at three banks that have grasped both the problem and the opportunity.

## **NORTH AMERICA | HUMAN AND DIGITAL WORKERS BLEND AND MULTIPLY OUTCOMES**

In 2015, a major Canadian bank adopted a new value-oriented, purpose-driven management philosophy of increasing organizational agility and improving customer experiences. A key focus involved transforming disjointed operating processes on an end-to-end basis, but from the customer's perspective. This went far beyond simply tweaking existing systems and processes for incremental improvement and cost reduction.

Accordingly, the automation business case was based on increasing the value of the bank's services as measured by customer metrics – retention rates, service expansion, and improved net promoter scores – rather than simply “doing (bad) things faster”. Taking an agile approach, aided by design thinking, the bank realized that a unified customer data structure was a critical requirement for improving service experience. They integrated front-end artificial intelligence and machine learning tools with their Blue Prism platform to capture, structure, and curate existing customer data in a shared repository supporting multiple service lines.

In addition to **Efficiency** savings estimated at more than 200% from the ability to access and use previously trapped data, the bank also estimated a 400% gain in enterprise **Effectiveness** – measured by increased customer retention and revenues from broader services integration.



Efficiency  
savings



Gain in enterprise  
Effectiveness

→ [See the first paper in this series](#) for a more detailed summary of our Total Value of Ownership model

The technology platform, moreover, enabled a new organizational structure built on a blended human and digital workforce that could better match task times and volumes to appropriate resources. As the bank's automation lead notes, “it changes how you think about ‘work.’” Taken in aggregate, the bank's gains in **Efficiency** and **Effectiveness** feed and reinforce each other, exemplifying Romer's maxim that innovations “do not merely add up, they multiply.”



It changes how you  
think about ‘work’.



The bank's intelligent automation platform has also supported greater **Enablement** gains in terms of new products and services, enterprise resilience, and first-mover advantage. When the Covid-19 pandemic required major government response, for example, the bank was able to develop custom automations in just a few days to support massive government referral and aid programs. Without adding headcount, the bank was able to complete thousands of aid applications, attracting new customers and generating widespread public good will and reputational equity.



The bank estimates the resulting gains in enterprise **Enablement** to be greater even than the combined **Efficiency** and **Effectiveness** gains.



## MIDDLE EAST | A BANK TRANSFORMS CUSTOMER EXPERIENCE

A major Middle Eastern bank similarly undertook an enterprise-wide transformation to seize a leadership position in its key markets, using Blue Prism technology as a strategic platform, beginning with greater **Efficiency** and **Effectiveness** gains. When customers requested payment investigations, employees had to manually check payment status and customer details to respond to any query. The process involved accessing multiple systems and e-mailing multiple departments – a complicated, time-consuming, and error-prone exercise resulting in multiple e-mail threads that created delays and errors.

By combining intelligent automation with Natural Language Processing (NLP), Machine Learning (ML), and data mining tools, the bank developed a totally automated end-to-end solution to track payment status, pull relevant payment and customer details, and apply rule-based validations, referrals and query responses, with no manual intervention.

The solution delivered 100% improvement in quality, response times, and customer experience. Employees also gained valuable new skills and experience implementing the automation program. The new process also generated **Enablement** gains from the resulting wealth of data and management information – raw material for applying data science using Hadoop to improve management decision-making.

The bank also gained significant **Enablement** value from automation in responding to the COVID-19 pandemic. At the onset, the bank had to reorganize the working model and infrastructure immediately to accommodate remote working, and simultaneously deal with an unexpected spike in service volumes requiring additional staff. By exploiting the flexibility of its intelligent automation platform, augmented with NLP, ML, and Big Data capabilities, the bank was able to shift to a work-from-home model and support the expansion of demand smoothly, with no business impact.

Finally, it's worthwhile to note that bank's automations underpinned **Enablement** gains through drastic improvement in transaction enquiry handling turnaround time. Given different countries and time zones the bank deals with, often a SWIFT enquiry response that had originally taken 8-12 hours to close, could now be accomplished in less than 2 minutes, resulting in a transformed customer experience.



The solution delivered 100% improvement in quality, response times, and customer experience.

The wealth of data and management information became raw material for applying data science using Hadoop to improve management decision-making.



## EUROPE | REDUCED CUSTOMER WAIT TIME FROM 12 DAYS TO 4 HOURS

One of Europe's oldest and largest banks, serving over 10 million customers in multiple countries, realized major gains in service quality, speed to market, and customer experience from its intelligent automation deployments. Over 300 acquisitions led to a complicated operating environment with no core banking system. Intelligent automation, however, enabled the bank to manage operations across legacy estates, using APIs to bridge systems and alleviate problems.

The senior automation lead describes its RPA platform as the “arms and legs” that pull data from systems, and cognitive tools such as ML and OCR as the “brains” that analyze and interpret it. The bank estimates it has achieved a significant 150% improvement in overall **Efficiency** from its automations and expects additional gains from process improvements in 2021.

The bank also estimates it has captured an additional 30-50% value to date in overall enterprise **Effectiveness** – resulting in higher transaction volumes, better regulatory compliance and improved service quality, availability and timeliness.

The automation platform has increased enterprise productivity and brought significant growth in both customer and employee satisfaction. On regulatory compliance, the complicated ‘Know Your Customer’ (KYC) remediation process is now supported by digital workers and presented in “dashboard” formats for management decision-making. The result: on time with 100% quality. And by integrating chatbots with its Blue Prism automation, the bank's customers can request credit and debit card cancellation and replacement in a single fully-automated transaction.

While the bank had not set out to achieve transformational gains, it is doing just that by progressing an infrastructure platform for innovation. Digital workers take on many roles, for example: chat bots that automate customers' bank statement requests; accountants that read income statements from customers, saving time for their colleagues on the front line; work schedulers that park payments during peak volume time to make maintenance cheaper. The bank has already realized an estimated 30% additional **Enablement** value to date from its more than 500 digital workers.

They enabled the bank to rapidly develop and deploy processes giving customers access to government pandemic aid and relief funds. Core banking services such as loan commitments – previously taking 12 days – are now provided to customers within four hours – a huge expansion in customer added value. Service is now available at weekends, increasing volumes by five percent. And detailed compliance reports for multiple national and European authorities and jurisdictions are now compiled and formatted by digital workers for human review and approval.



Loan commitments that previously took 12 days – are now provided to customers within four hours – a huge expansion in customer added value.



## CONCLUSIONS

What are we learning from these leaders?

- 1** Adopting a strategic executive mind-set in deploying intelligent automation is critical in capturing maximum value. Without a transformative view and an enterprise vision suffusing from the top, the strategic uses of automation for greater **Effectiveness** and **Enablement** are foregone by tactical local initiatives, focused narrowly on what can easily be measured: cost savings and cost avoidance.
- 2** Leaders in automation deployment start with an external focus on customers and competition, using that perspective to design an end-to-end business process architecture that accelerates digital innovation. By 'seeing the business through the customer's eyes', they use automation to improve every aspect of the customer experience rather than "doing bad things faster". Creating value is the primary objective; cost is important, but secondary.
- 3** Building a robust in-house automation capability creates flexibility and a knowledge base which, with strong governance and disciplined behaviors, forms part of the Enablement platform and accelerates strategic uses of automation technologies.
- 4** Longer term strategic **Effectiveness** and **Enablement** value from intelligent automation far outstrips near-term **Efficiency** gains in the leading deployments we have studied – by multiples ranging from 3x to as much as 7x – demonstrating the value of compound thinking.
- 5** In a rapidly evolving multi-vendor technology environment, choosing an open automation architecture is a critical decision factor, and a key Blue Prism strength emerging from our client research. Forrester also notes: *"As a global RPA provider, Blue Prism manages a strong ecosystem of go-to-market alliances and implementation partners in most countries...an overarching suite of tools...and more than 1800 prebuilt automations downloadable from Blue Prism's Digital Exchange for reuse". (The Forrester Wave: Robotic Process Automation, Q1, 2021.)*

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**John Hindle is Managing Partner, and Leslie Willcocks is Research Director at KCP.**

## RESEARCH BASE

Our research draws upon a KCP/LSE proprietary data base of 500 plus RPA and cognitive automation cases studies taken from multiple sectors and economies. These were studied over time (from 2015-2021) and included 'leader,' 'follower,' and 'laggard' users of the technologies. We gained additional insight from four annual surveys during this period. Earlier findings appear in four books (see note 1 below) and in the Blue Prism series "Keys to RPA Success" and "Just Add Imagination," as well as published articles in Sloan Management Review, Harvard Business Review, LSE Business Review, Forbes and MISQ Executive. Building on these foundations, in 2021, we researched an additional 15 advanced user organizations taken from the banking and finance, insurance, health, telecommunications, and utilities sectors in the USA, Europe and Asia Pacific. We used interviews, documents, and survey questionnaires. We also reviewed more than 350 award submissions covering innovatory and effective automation practices. The objective was to gain further insight into the technologies used and the business value being planned for and achieved, to guide existing and potential adopters. This research series will include focused analyses and reports on 5 key industries: banking, insurance, telecoms, healthcare, and utilities.