Avoiding the automation trap

A process first approach to intelligent automation in financial services
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The financial services industry is facing significant disruption. Regulatory pressure is giving way to growth priorities in a changing competitive landscape. In this environment, cost pressure remains constant while customer expectations are rising rapidly, driven by the digital experiences delivered by leading companies and nontraditional market entrants alike. Consumers today have interactions with their smart devices that are intuitive, immersive, engaging and reliable. They have come to expect the same from their financial services experience.

For financial services companies, success is no easy task when constrained by functional silos, complex legacy systems and stringent regulatory requirements. It requires a shift in organizational mindset and the creation of a digital and collaborative culture that recognizes that customer experience and process are inextricably linked. Intelligent automation presents a powerful new lever with which to digitally transform the enterprise, and a fundamentally new way of thinking about business process design.
Financial services companies must reboot business models and deliver new digital experiences. Disrupt, or destruct. Intelligent automation is a fundamental lever in this digital transformation.

Rewriting the rules of business

Experiences must be:

Simple – instant, secure and reliable, day-to-day

Engaging – intelligent, adaptive, proactive, with human interaction in moments that matter

Intuitive – rich, consistent, mobile, with contextual insights

Secure – compliant and trusted

Immersive – part of life
What is intelligent automation?

“Intelligent automation” refers to a wide range of techniques that enable the digitization, processing and evaluation of information to fundamentally change how work is performed. It is not one piece of technology, but rather, a combination of tools and methods that work in concert to improve the performance of a function, the effectiveness of the employees involved and, ultimately, the experience of the customer. We believe there is a crucial insight here: applied properly, intelligent automation solutions are designed around the user experience – both customers and employees. In other words, designing for “the human in the loop” enables intelligent automation to be focused on human interactions where you want them, because you want them optimizing the human roles by improving them with tools that improve their efficiency and effectiveness. Many implementations disappoint because they try to automate everything they can, rather than everything they should.

“Intelligent automation is the combination of techniques that digitize and structure data, process information and enable cognitive decision-making to drive business outcomes."
The rapidly evolving automation landscape that is fundamentally changing how work gets done

Vendors and tools are continuously evolving capabilities within and across these automation techniques, but each technique has a distinct purpose.

| **Digital forms** – omni-channel forms that allow users to input data in a digital and structured format |
| **Chatbot/virtual assistant** – computer programs and UI that can conduct real-time textual and auditory-based conversations with people |
| **Visualization tools** – used to gather data from various sources and manipulate data for further use; end user-based and ETL |
| **Data aggregation tools** – software used to create visual representations of data to highlight key insights and provide data analysis and reporting capability |
| **BPM** – workflow tools that integrate and orchestrate tasks in an end-to-end business process; rules-based |
| **RPA** – Software tools that interface with existing systems/UIs to automate manual tasks; deterministic rules |
| **RDA** – Software tools that run on a person’s desktop to automate manual tasks to complement their day-to-day work |
| **Machine learning** – a field of computer science that gives computers the ability to learn/make “judgment-based decisions” |
| **Deep learning** – a subfield of machine learning that creates “artificial neural networks” requiring less human involvement in learning algorithms |
| **Advanced analytics** – techniques utilized to discover deeper insights, make predictions or generate recommendations |
| **NLP** – machine learning-based capability that allows machines to understand and interpret written human language |
| **Voice to text** – capability that enables the translation of spoken language into text; often incorporates machine learning |
| **Next Gen OCR** – tools that convert paper-based typed, handwritten or printed text into digital text; often incorporates machine learning |
| **Image recognition** – machine learning-based capability that allows machines to understand the context of digital images |
So where should intelligent automation tools be applied? How can they be applied most effectively? Our experience has consistently shown that an approach focused on finding applications for specific tools achieves disappointing results. This tool-led approach is fundamentally flawed.

For starters, each tool has technical limitations that restrict the potential scope of automation. When companies focus on a specific tool, they create the scenario of a hammer looking for a nail. In these situations, if a process includes tasks that the tool can’t solve for, the process is often redesigned to fit the tool - rather than optimizing the process itself. Overextending the capabilities of a specific tool - using it to solve for something it isn't intended to remedy - is another common pitfall.

Let’s look at an example of tool-led automation. A company attempting to automate the Accounts Payable process using only robotic process automation (RPA) may encounter the issues discussed. Since RPA is not designed to read information from invoices, the process might be re-engineered to add a manual step where a human inputs key invoice details in a format the RPA tool can utilize. Alternatively, the RPA capability may be overextended to extract information from the invoices - a task that may be more effectively performed with techniques such as optical character recognition (OCR) and/or natural language processing (NLP).

Additionally, there is limited contemplation of how automation may streamline a process to work in a completely different way. Automation assessments often only consider a process “as-is,” with usually no consideration of how the outcome might be achieved differently. A common mistake is to think too narrowly when considering potential automation opportunities. Business teams may lean toward specific pain points to ease tasks that people complain about, even though these are just a small fraction of an overall process.

All of these scenarios lead to lower value business cases and preclude the ultimate goals of digital transformation: harnessing the collective power of people, processes and technology, and seamlessly integrating techniques into the organization’s end-to-end processes and customer and employee journeys. The remedy lies in applying automation holistically, considering the full automation toolkit and selecting the most appropriate technique in each situation.
Envisioning the future with process first

The automation trap can be avoided when automation techniques are applied holistically. But the real difference-maker is not just the combination of automation techniques, but rather, how the various techniques are applied - in the context of process design and the experiences they are intended to drive for customers and other stakeholders. We believe this “process first” mentality enables business owners and process engineers to consider new ways to achieve an outcome or experience, leveraging all the tools and techniques at their disposal … such as intelligent automation, process reengineering, core platform changes, data solutions, blockchains and other technology alternatives.

Done properly, all of a function’s activities, and the customer journey they create, are viewed through a digital lens. Design thinking is a cornerstone of this approach, where customer and employee interactions are reimagined in a digitally enabled process. Designers, process owners and solution architects work together to envision the art of the possible, and consider how and which automation techniques can be used to make it happen.

Why focus on the process?

Process first design creates a scalable model to identify, assess and prioritize automation opportunities. It merges the principles of design thinking with the full automation toolkit to transform and digitize the enterprise in line with the overall business strategy. Unlike tool-led design, process first design enables an organization to:

- Put the customer and process first
- Select automation techniques based on suitability
- Design with the human in the loop where they deliver the most value
- Reimagine processes and transform the customer journey, considering the art of the possible
- Drive exponential value by transforming the business
Sure, an automation opportunity might originate from one pain point raised by the business, and these tactical solutions can still be viable business cases in some instances. But many such fixes are difficult to justify because they are too narrowly focused for the implementation and maintenance costs involved, or they are symptoms of a larger problem where a redesign could achieve much larger value. With process first thinking, the assessment of an opportunity encompasses upstream and downstream tasks while examining the process end to end to engineer the most suitable and highest value solution.

Once the process first approach takes root, innovation can flourish, be ongoing and relatively easy to achieve. Automation-fueled design can drive value organization-wide, transforming customer and employee experiences, reducing costs, and generating revenue and growth.

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Assessing what’s possible

Along with traditional cost optimization metrics such as net savings, ROI and payback period, an automation business case should assess the impact the opportunity will have on multiple value drivers, including:

**Customer**
- Customer satisfaction
- Self-service enablement

**Employee**
- Employee productivity
- Employee satisfaction

**Management**
- Reduced risk
- Increased compliance
- Business agility
- Business insights

**Corporation**
- Cost optimization
- Revenue and growth optimization
- Brand reputation

Automation opportunities can be prioritized based on the relative importance of these value drivers to strategic objectives.
Connecting moments that matter

Digital transformation is essential to success, yet our experience has shown that the relentless pursuit of automation is not the objective. We believe four core principles should guide the automation journey to remain grounded in the bigger picture. Embedding automation should be:

<table>
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<tr>
<th>Holistic</th>
<th>Design-led</th>
<th>Human-centered</th>
<th>Pragmatic</th>
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<td>Holistic, by considering end-to-end processes and the full spectrum of automation techniques, from day one</td>
<td>Design-led, with a focus on solving problems – starting with context and outcomes, not platforms and data sets</td>
<td>Human-centered, engineered around the needs of people, including customers, employees, vendors, regulators and others</td>
<td>Pragmatic, realistic in setting expectations, weighing readiness, risks and value</td>
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Process first in practice

Automation opportunity assessments, driven by process first thinking, provide the framework for building a company’s automation pipeline and road map. The exercise is designed to unearth potential value and opportunities, provide insight into which automation capabilities to invest in and prioritize implementation projects. Our experience has helped us compile a few key considerations when undertaking this approach:

- Start with a pain point, something everyone can understand and rally around. Use it to establish broader momentum and focus on the end-to-end business process or customer journeys. (*Holistic*)
- Consider input from all critical stakeholders – business, technology, risk management and others – in an innovation session. Solution architects, well-versed in the full range of automation techniques, should be included as well. (*Pragmatic*)
- Agree on the overall purpose of the business process and key guiding principles for the design of the process. Focus on the art of the possible. (*Design-led*)
- Identify how and where in the process human input is best utilized to add value. (*Human-centered*)
- Examine how various automation techniques can enable the process and journeys you envision, both in the interim state and in the ultimate future state. (*Holistic, Pragmatic*)
- Create an actionable road map that drives stakeholder engagement, prioritizes value (and engagement) and provides clear direction to achieve the vision you have set for your overall digital transformation. (*Pragmatic*)
A process first case study – transforming transaction disputes

Credit and debit card transaction disputes remain a pain point for many financial institutions. Customers experience a confusing and inconsistent set of entry points in which to file the dispute, and the subsequent process is lengthy, manually intensive and opaque. At one large processor, the backlog of addressing new disputes had slipped to more than a month as the volume of disputes rose, and the underlying cost to address them rose in tandem.

The process seemed ripe for automation, but we sought to consider the problem holistically and address the root causes of inefficient performance and poor customer experience. A number of issues surfaced – for example.

- Disputes were being submitted by customers through multiple means, including more than 40 different versions of intake forms that had been developed over the years.
- The month-long wait for a customer or client to have a dispute acknowledged led to many incoming calls seeking status. Finding and providing this information required significant and wasted effort – searching through stacks of paper forms, checking multiple disconnected systems and consulting with different teams.
- Four out of five disputes required at least one phone call back to the customer to gather additional information, because it wasn’t collected correctly the first time.

Utilizing a process first approach, we sought to reconstruct the process around an achievable – and greatly improved – experience for customers, clients and merchants. Comparing this future vision to the current process, initial results indicated significant improvement opportunities.

Eliminate 60% of outbound calls to gather additional information by standardizing the intake form, replacing 45 variations with one single digital form. Paper-based research activities – to check the status of a dispute – were fully eliminated.

Deflect 50% of inbound calls by providing clients and end customers with a direct view of the status of their disputes.

Automate manual steps – such as straight-through processing of low-value disputes accounting for 30% of the total volume – and utilize different automation techniques to deliver a seamless experience for customers, clients and employees. We used a combination of six automation techniques to standardize data inputs, improve and automate reporting and automate the processing of tasks.
The benefits of these improvements are significant for both the company and its customers and stakeholders:

- **Improved customer satisfaction and self-service enablement** – the backlog of new disputes is expected to be reduced from 35 days to 5 days. Straight-through processing of low-value disputes now allows for same-day settlements for a large number of customers, where previously the process would take 40+ days. Additionally, data is standardized and presented in one view, allowing clients, customers and employees the ability to understand the status through their digital portal.

- **Improved efficiency and cost optimization** – overall with full deployment, the efficiency lift is expected to be 35% in the cost of the function, including the elimination of overtime and the ability to redirect employees to higher-value interactions. The improved efficiency also led to a reduction in write-offs previously incurred due to delayed merchant chargeback attempts.

- **Increased compliance and business insights** – in addition to the increased transparency of dispute operations, the prioritization of disputes based on regulatory service level agreements (SLAs) was automated and adherence improved.

Making the change permanent

Digital transformation and disruptive technologies will fundamentally change how work gets done. Applying the techniques at our disposal – both traditional and new – must be done in a thoughtful and holistic manner. This will require an empowered workforce that is trained and incented to try new things, and changing the culture of the organization so that automation, enabled through a process-first approach, is a part of everything we do.
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