Robots and humans, better together

For transactions, there's more to automation than RPA
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Introduction

Transactions. Today’s businesses deal with masses of them. In fact, for some firms — especially those with large customer bases — the volume of transaction records reaches into the millions and even billions. And they can produce a crushing workload.

Consider the case of a fictional reinsurance company — say, one that gets records from hundreds of different primary insurance companies each month in multiple file formats and file structures. Imagine the manual effort involved in transforming and translating all those records. Yet that’s what must happen before staff can upload the records into the firm’s own systems to process.

In the face of such massive volume, it’s hard to prioritize. As a result, truly important tasks — delighting customers by quickly responding to their requests, for example — can fall by the wayside. Other jobs, such as rapidly processing files and moving information between different systems, can stack up quickly, too. And companies won’t allocate work efficiently or make critical decisions as promptly as they should.

But as self-driving cars or Mars-exploring robots prove, technology is rapidly evolving — and that’s the case in business settings, too. Tools such as robotic process automation (RPA), dynamic workflow, and intelligent business process management suites (iBPMS) are helping companies manage transactions efficiently. Once they get transactions under control, these enterprises can deliver exceptional service, which inspires customer loyalty and has a positive impact on the bottom line. No wonder companies are turning to RPA to automate many of their transactions and processes.

But does this kind of automation produce the massive return on investment and business transformation that RPA vendors promise? Can RPA really streamline and address everything? After all, not all transactions are the same, and the cost and complexity of dealing with each may vary significantly.

To answer these questions, let’s look at the kinds of transactions that occur in every business across every industry.

The ideal transaction pyramid

We’ve developed the following pyramid to detail the ideal structure of transaction distribution for modern business. We’ve also indicated the technologies we think would most effectively manage them. The % signs on the right indicate how much each technology category should handle of all transactions. The $ signs on the left indicate how much each transaction costs, relative to the overall business.

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![Common transactions’ pyramid in most organizations](image-url)
You’ll quickly see that companies can automate a lot of transactions by design — and these cost the least to process. But other transactions will always require a human touch — these are much more expensive to process and call for additional technologies. Still, you should treat them with the same focus as the automated ones.

**Automation by design**

RPA is software technology that mimics how humans use existing applications for processing transactions, working with data, and communicating with other enterprise systems. RPA bots take over common high-volume, manual tasks: That’s automation by design, in a nutshell. Commonly, companies use RPA to move data between different systems and formats — customer records from Excel spreadsheets into a company’s database, for example.

Highly trained experts need to set up RPA — which means it’s expensive initially and when you need to make changes. But once configured, RPA can enter data 24/7 with zero chance of human error. And when customer records lack necessary information, higher-end bots are smart enough to recognize the problem and fix it. If a customer’s address is missing a zip code, for example, the bot can identify and enter it based on the city listed on file.

RPA really shines when it comes to moving data between systems. But automation by design excels in other areas, too. Here’s one way. You can configure dynamic workflows with smart business rules using iPMS, which is easy to get up and running or to change. For example, a primary insurance company can set it up so that any request for a straightforward insurance claim under $50 will trigger a workflow that checks to make sure it’s not from a serial claimer. Then, if everything is clear, it’ll issue the check automatically.

Rapid, smart, and accurate, automation by design can take over most of a company’s total transactions. And the cost of processing each record is the lowest among the different types of transactions.

**Ad hoc automation**

While companies can automate many of their transactions by design, some transactions require rules that depend on variables and conditions that managers must configure and change frequently. That calls for ad hoc automation.

Ad hoc automation applies rules like the ones people set up for email in Microsoft Outlook. In other words, it requires no technical knowledge. It’s easy to use and can help people manage business-critical cases. It can also allocate work.

Suppose you manage an operations center dealing with customer requests for insurance claims. With ad hoc automation, you can clear bottlenecks and meet customer service level agreements. All you need to do is to configure simple rules to automatically pay straightforward claims and those below a certain dollar value. You can do this yourself, because you don’t need any high-level, technical knowledge.

But what happens when a more complex claim comes through? How do you streamline costs when dealing with expensive-to-process transactions that require a human touch? And how can you balance the cost of processing with customer waiting time and other factors? These situations demand human decisions.

**Optimized human decisions**

After you’ve automated everything possible — by design or ad hoc — you may find exceptions to your established rules. That’s when it’s time to bring in people who can make decisions about how to move forward. Fortunately, they don’t have to blindly manage these transactions and hope for the best. Using data and algorithms, predictive analytics can show them different options and impacts.

For example, predictive analytics can help operations managers with high-volume caseloads by intelligently allocating work to team members. It does so based on everyone’s skill level, current work schedule, cost of work, and performance history. This results in smarter, faster decisions that lead to ideal business outcomes.
While transactions that require a human touch are more expensive to process than transactions handled by design or ad hoc, they are far less costly than non-optimized decisions. Here’s why. Transactions that humans handle exclusively are open to data errors and inaccuracies. Consider the reinsurance company we talked about at the start. Its agents must manually translate the thousands of records it receives each month into a format their internal system can process. That’s often where companies spend the most money per transaction.

The inverted pyramid

The pyramid we showed you earlier describes what the distribution of modern business transactions should look like. But in many organizations, the pyramid is upside down:

People process most of the transactions and make decisions without intelligent guidance and well-informed data. And they’re not using enough automation — either by design or ad hoc — to process transactions down the funnel.

That model hurts businesses on several fronts. It affects costs. And it undermines the efficiencies they need to process transactions, serve their customers, and run their overall operations. More important, it hampers their ability to innovate, to differentiate, and to quickly change as needed.

Technology can transform this situation, provided the mix is right — and that means more than just RPA. While RPA is in widespread use in business today, it’s not a panacea: bots simply do what they’re programmed to do. They can’t cover the whole spectrum of transactions.

Today’s reality in many organizations

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<thead>
<tr>
<th>Cost per transaction</th>
<th>Volume of transactions</th>
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</table>

Figure 2: Actual transactions’ pyramid in many organizations
The right technology for the right transactions

On the other hand, applying additional technologies that have workflow automation and predictive analytics, such as iBPMS, can help businesses flip the pyramid right-side up.

With iBPMS, businesses can address every transaction type – not just the low-hanging fruit or the low-cost, fully automated ones. In that way, they can reap the rewards of greater automation and smarter decision making.

While Business Process Management Suites have been around for more than a decade, Gartner introduced a second concept in 2012: intelligent Business Process Management Suites (iBPMS). Gartner defines iBPMS as a suite with next-generation features that enable intelligent business operations. The new features include intelligent analytics – that is, processes that learn to perform better over time using real-time data – as well as advanced mobile, social, and cloud capabilities.

![Diagram showing ideal technologies for optimizing business transactions](image-url)
Genpact Cora SeQuence and add-on technologies

Next-generation iBPMS solutions incorporate emerging digital technologies that break the boundaries of basic process efficiency and automation. Instead of simply collecting and processing data, they perform advanced analytics to cognitively optimize business processes.

As more organizations look to upgrade their business processes, they need a solution that can transfer data from legacy systems to modern ones. Technologies and capabilities like RPA, natural language processing (NLP), natural language generation (NLG), and cognitive computing are quickly becoming a cost-saving approach to data transfer. And they’re a natural fit for Genpact’s Cora SeQuence.

Cora SeQuence leverages Genpact’s vertical and horizontal expertise as a leading integrator of next-generation technologies including RPA. This lets us give customers the perfect combination of RPA and dynamic workflow.

Figure 4: Orchestration of technologies with Cora SeQuence
About Genpact

Genpact (NYSE: G) is a global professional services firm that makes business transformation real. We drive digital-led innovation and digitally-enabled intelligent operations for our clients, guided by our experience running thousands of processes for hundreds of Global Fortune 500 companies. We think with design, dream in digital, and solve problems with data and analytics. We obsess over operations and focus on the details - all 78,000+ of us. From New York to New Delhi and more than 20 countries in between, Genpact has the end-to-end expertise to connect every dot, reimagine every process, and reinvent companies’ ways of working. We know that rethinking each step from start to finish will create better business outcomes. Whatever it is, we’ll be there with you - putting data and digital to work to create bold, lasting results - because transformation happens here, at Genpact.com.

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