

WHITEPAPER

Four Important Questions to Consider When Defining Your Covid-Driven Automation Strategy



The disruption of Covid-19 can not be understated. Entire industries have been forced to reengineer how they get work done. The chaos caused by the pandemic has shown how ill-prepared many businesses are to adapt to sudden changes. For example, processing paperwork is difficult when employees are remote and paper forms are physically at the office. Without automation, these processes grind to a halt. Systems and processes that are inflexible and can not scale break down when people change their behavior all at once. These are just some of the challenges presented by the global pandemic that are accelerating the adoption of automation and digital transformation.

While Covid has caused significant disruption, it has also led to learning opportunities and insights into how new technology can be used to solve tough problems. Many are quickly learning how to implement a digital transformation strategy while those that were further along in implementation are learning if their strategies are robust enough as Covid tests them. These lessons will inform how we improve productivity in the future.

As organizations continue on their adoption of automation or are forced to embark on this journey, decision-makers should answer a few key questions to ensure their strategy is on a sure footing to meet the demand of this new environment.

- 1 How will your strategy handle complex processes at scale?
- 2 How will humans and machines interact and how will they work together to make good decisions?
- 3 How often will processes change and how will you make changes?
- 4 How is data shared and is it clean and trustworthy?

HOW WILL YOUR STRATEGY HANDLE COMPLEX PROCESSES AT SCALE?

The rapid shift in how we do business has forced every professional to invent creative solutions that balance the safety of employees and customers with the need to keep the business functioning. In a crisis, no option is out of the question and innovation is now paramount to survival. Uncommon situations are now the norm. This change leads to disruption and increased complexity which can break fragile processes.

The shock of Covid has also exposed vulnerabilities in the automations that were implemented before the pandemic. With many businesses shutting down operations at the onset of the Covid-19 outbreak, an instant response to shore up finances to ride out the storm led to chaos. The rush to secure Paycheck Protection Program (PPP) loans before funds dried up stressed loan systems to such an extent many crashed under the pressure. One of the primary issues was that automations were not sophisticated enough to scale. Banks relying on RPA to automate PPP loan processing proved so chatty that they took down the Small Business Administration system. Digital transformation strategies need to be sophisticated enough to scale with increasing demand and not repeat broken processes in an infinite loop. Integrating more logic into systems can enable them to handle more demand and complexity.

The simple task of getting paperwork and workers in the same room has become so complex it warrants new processes. Workers can't just walk a paper form down the hall to get it approved. Nothing is simple anymore and as things change we are finding new ways to manage this. Digital forms are becoming a must-have, eliminating manual processes that are no longer physically practical but also don't scale. As organizations adopt digital forms, they should not just copy their existing forms into a digital format but consider more dynamic forms that provide a better and more efficient user experience. Don't present an exhaustive drop down list in your digital forms but lists that are tailored specifically to the person filling out the form. For example, if a customer is looking for a loan with low monthly payments, don't include products with short payback periods in a list of options. The future is only getting more complex and increasingly driven by data. More efficiently collecting data will provide more fuel for better decision making. Rules engines are key for enabling dynamic forms as rules can be written to present the most appropriate options, reducing the complexity for the user.

COVID-19 has had no greater impact than in the healthcare space. Every activity has an extra layer of complexity as providers consider the spread of the virus in every decision they make. The simultaneous demand for healthcare also exposed inflexible processes that must adapt.

Managing hospital operations and optimizing scarce resources while quarantining has become exponentially complex. Take bed management for example. Pre-Covid, to increase profitability, sophisticated hospitals were already using models to automate decisions to optimize resources such as hospital beds. While these processes may have worked in normal times, rigid rules are not going to work when quarantining becomes top priority and available beds now include field hospitals. As variables increase, systems must be able to scale to support greater complexity. A sophisticated rules engine integrated within a workflow can nest multiple rule sets into a single workflow. Rules and workflows that are relevant in a field hospital may be different than for bed management in the main facility yet the two workflows need to work together to optimize bed utilization across the system.

The rapid adoption of telemedicine is another trend driven by Covid that is adding new complications. Managing human resources is no longer limited to in-house staff but could extend around the globe. Medical billing, already complicated, also gets even more convoluted. For example, Medicaid in different states may reimburse differently for telemedicine. This may not be a problem if the doctor and patient are located in the same state but what if this is not the case. As telemedicine expands beyond international borders, additional regulations may apply, creating even more issues. This is just another example of how Covid has created new complex challenges. A sophisticated rules engine will be key to managing billing as new channels of service delivery gain traction.

As the world changes rapidly and becomes more complex, the need to scale increases, and organizations across all industries need an automation strategy that can manage the new dynamics of a post-Covid world. To automate processes with so many variables and rules, a robust platform with a multi-layer data model may be required.

Organizations that are developing business process automation strategies need to consider if their business logic is robust enough to handle the improbable.

Implementing a robust Business Process Automation (BPA) platform that is designed to support complex processes and scale is an important foundation for managing the growing complexity of digital transformation. The world is getting more complex and the pandemic has just accelerated this eventuality. A BPA with a robust rules engine can manage the plethora of business rules that organize processes that incorporate a large number of variables. Scoring rules can streamline loan approvals and truth tables can organize and automate complex regulations. Dynamic forms can also eliminate manual processes while simplifying data capture.

HOW WILL HUMANS AND MACHINES INTERACT AND HOW WILL THEY WORK TOGETHER TO MAKE GOOD DECISIONS?

Within a crisis, good decisions need to be made fast as outcomes have such a profound impact. One benefit of the current predicament is that we are learning how to use existing technology better.

With humans better able to process and make decisions based on unorganized data and machines better equipped to quickly process organized data, working together is yielding the best outcomes. For humans and machines to work together most effectively and efficiently, workflows need to be smart. Traditional workflows tend to be rigid and are not designed to consider real-time decision making within the path of the workflow. Workflows that incorporate rules can leverage higher intelligence.

Instead of workflows being designed and implemented with decision points based on fixed criteria, rules can be used to enable more dynamic decision making. For example, implementing an artificial intelligence (AI) model into a workflow that can predict which patients have Covid can drive workflow.

An AI test developed at Oxford University was able to predict which patients were Covid positive with an accuracy of 92.3% in less than an hour by analyzing routine healthcare data. This is much quicker than the 24-hour lab test and can make healthcare facilities safer and more efficient. If the model predicts that a patient does not have Covid, they can be separated from those who may have the disease. For those who are not ruled out as negative for the virus, separate workflows can be triggered that incorporate human decision making and additional testing. AI and human intelligence are both very powerful and building workflows that embed this intelligence is key to managing decisions in an increasingly complex world. Rules embedded in workflows make them more dynamic because they can isolate cases that require greater scrutiny and they can also provide a limited set of options for quicker decisions driven by human intellect.

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HOW OFTEN WILL PROCESSES CHANGE AND HOW WILL YOU MAKE CHANGES TO THEM?

Workflows, logic, and rules have traditionally been implemented using code embedded in software. In a rapidly evolving world, automations that are hard to adjust or require specialized skills to change will be less nimble in a shifting landscape.

The need to automate everything during a pandemic exposes how reliant we are on developers to create apps and automations. Software developers have always been in high demand but the need for businesses to transform all at once has led to a talent shortage. An estimated one million computer programming related jobs are unfilled in the US.

Organizations looking to automate processes to respond to rapid change must design not only for efficiency but for resiliency. Companies that are not able to continue operations in person and do not possess the skills to develop software to build automations are stuck. Hospitals could not wait for developers to add new rules around quarantining and make changes to their bed optimization models to include the challenges presented by field hospitals.

Adopting a no-code strategy enables businesses to not only be more resilient but also more efficient. Without the need to wait for developers to implement changes to applications and application logic, organizations can respond quicker.

No-code can also support better implementation of business logic. Analysts and front-line workers have the best insight on how to improve processes and implement changes. By enabling them to control business rules and workflows, processes are more likely to operate the way they were designed.

HOW IS DATA SHARED AND IS IT CLEAN AND TRUSTWORTHY?

Making good decisions and automating processes requires data. Covid is showing us that insights and markers can be found anywhere. Insights are even coming from the waste treatment plants as scientists work to detect the Coronavirus in human excrement. To make the best decisions promptly, decision-makers need the right data standardized, organized, and accessible to provide situational awareness.

For example, managing hospital operations with limited resources provides very little margin for error. Being able to track multiple metrics and variables on one screen to understand how they are related and how they are changing is instrumental to managing in a crisis. Juggling bed resources to human resources to personal protective equipment (PPE) and even anticipating demand for post-mortem service can be better orchestrated from a single app or dashboard.

More often than not data is trapped in silos such as SaaS platforms, SQL databases, or legacy systems which do not always effectively share data. Getting data out of these systems is only half the battle, data may be in different formats or contain duplicates leading to bad information. Just like any business process, integrating data requires rules to ensure that data is uniform and error-free.

Consolidated error-free data is great but it is not going to add much value unless it is in the hands of decision-makers. Workflows and rules are also ideal for automating the creation of dashboards, reports, and alerts so the most appropriate action can be taken quicker.

LEVERAGING A RULES-BASED AUTOMATION PLATFORM FOR INTEGRATION AND DATA CLEANSING

A rules-based automation platform is an ideal orchestration solution for integrating various applications and databases into a single view so managers can make the most informed decisions. Rules can be leveraged to clean data, transform it and address any anomalies and load it into other systems. Workflows can also be used to execute API calls and query databases.

An orchestration layer can also pass data from one system to another triggering new workflows. In many cases, an off the shelf system may address the majority of typical situations but may not be flexible enough to automate unique or edge use cases. A robust rules-driven automation platform with extensive integration capabilities can function as extensions to existing systems.

NO GOING BACK

Many may wonder when things will get back to normal. The innovations spawned by necessity will change how we get work done well into the future. There is no going back. Things that we thought once impossible are now commonplace. Customers' expectations are also changed forever and services such as curbside pickup will not go away.

As we begin to emerge from the fog of the Covid chaos, organizations need to not only think about today's process automation but how they will compete in an environment where business process automation is a must, not a "nice to have".

Keys to success in the future will be a solid automation strategy that addresses:

- How your business processes will scale with added traffic and complexity
- How automation works with people and AI
- How quickly rules and workflows can adapt
- How to access quality data



HOW DECISIONS CAN HELP

Decisions is a rule-based no-code business process automation platform. The solution is uniquely positioned to help organizations that are struggling to implement business process automations today while providing a foundation for future innovations.

- The robust design of the platform and data model enables its customers to automate some of their most complex business processes.
- The unique design also includes a rules engine within a workflow designer. This approach enables humans and AI to interact with automated rules to dictate the path of any workflow process.
- The platform is also no-code, making it much more accessible to non-developers and allows non-technical people to make their own updates.
- Finally, the integration capabilities of Decisions software enables API calls and database queries within a workflow. A vast library of prebuilt integrations also provides extensive options to incorporate data into the decision making processes. The combination of robust rules, workflow, and integration capabilities support data cleansing and routing. These capabilities make it an ideal orchestration layer to manage data and processes across systems.



Decisions is a leading provider of no-code, business process automation software, headquartered in Virginia Beach, VA. Decisions technology is deployed as the basis of multiple commercial applications in healthcare, life sciences, finance, logistics, and operations software. It is used directly by companies on almost every continent, ranging from mid-size companies to many Fortune 500 corporations.

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