The Definitive Guide for Intelligent Automation Success

A Primer for Healthcare Organizations

GENZEON

Table of Contents

Introduction

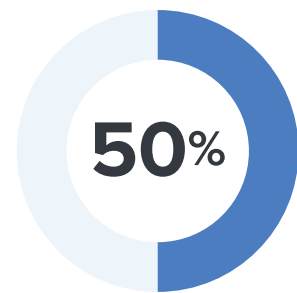## Automation isn't a sweeping, one-size-fits-all solution

The healthcare industry harbors a chart-full of ailments, forcing organizations to relentlessly adapt. Organizations must also do all things efficiently with full compliance but do it in a manner that benefits patients. Achieving these goals can begin with improving internal processes.

Enter intelligent automation (IA).

Organizations are harnessing IA to improve business process speed, accuracy, and efficiency. Automation can also lend a helping hand with employee morale and patient satisfaction.

However, automation isn't a sweeping, one-size-fits-all solution. The healthcare industry harbors various tasks that still call for human interaction. Some processes or steps may not yield worthwhile benefits or significant return-on-investment (ROI) from automation. Other processes suitable for automation may be littered with errors and redundancies, requiring a careful clean-up before implementation.

In this whitepaper, we'll discuss the dangers associated with automatic automation, the steps and tools organizations can use to implement automation wisely, and why preserving a human element is integral for positive enterprise-wide outcomes.
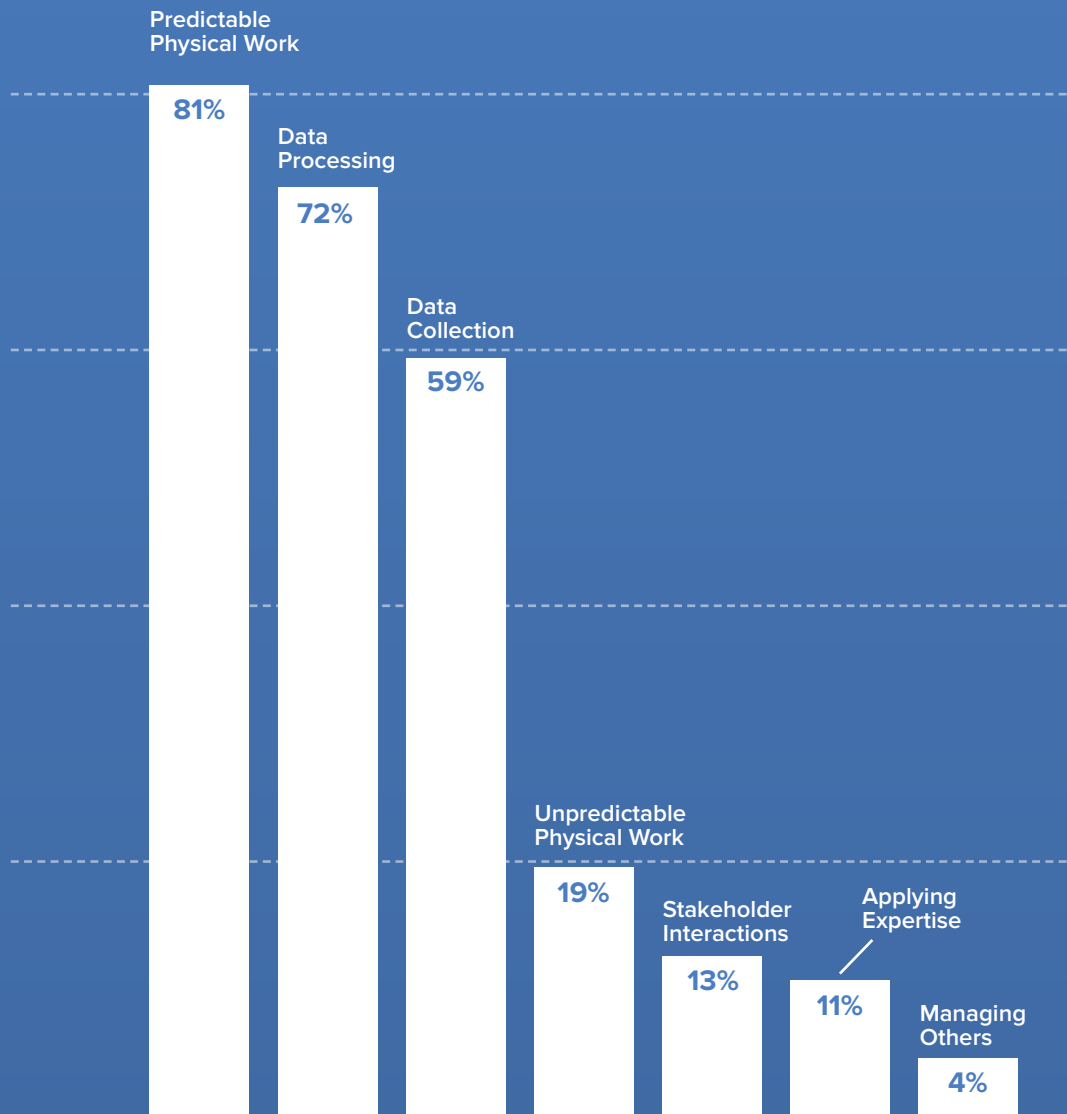
50%

Up to 50% of RPA projects fail

Source: "Get Ready for Robots," EY.

Healthcare's Automation Potential

Predictable
Physical Work
81%

Data
Processing
72%

Data
Collection
59%

Unpredictable
Physical Work
19%

Stakeholder
Interactions
13%

Applying
Expertise
11%

Managing
Others
4%

The percentage of time spent on activities with the technical potential for automation by adapting currently demonstrated technology.
Source: McKinsey Global Institute analysis "Where machines could replace humans — and where they can't (yet)"

Healthcare's Current Condition Calls for Automation

Hospitals are understaffed and working with limited beds. New players outside healthcare have entered industry competition. Data systems within organizations can't communicate. Manual processes still prevail. And ever-changing laws challenge compliance and security.

Let's look deeper at healthcare's current condition and how it warrants positive intervention.

Thin or Non-Existent Margins

Labor costs, supply chain issues, and inflation have pushed hospitals into negative margins, inducing a negative spiral of fewer hospital beds, reduced ER capacity, and inflated wait times, worsening illnesses, increased ER visits, and strain on attending staff and providers. Healthcare facilities need solutions to save costs without sacrificing services and streamline workflows for greater efficiency.

Competition

Patients today want convenience, accessibility, and immediacy—at an affordable cost; they aren't concerned with who delivers on these expectations. Joining the digital transformation to deliver patient desires is no longer an option for healthcare organizations, it's a necessity to remain competitive—especially when companies far removed from healthcare are offering enticing digital solutions to existing problems.

Outdated Processes and Technology

In healthcare, humans are still manually moving a lot of data, and legacy systems can't communicate.

Accuracy, security, profitability, and competitiveness can all take a hit with aging processes. A portion of the 21st Century Cures Act was put in place to motivate healthcare organizations to update old technology and pursue interoperability.

Security and Privacy Risks

Most healthcare organizations are a treasure trove of personal and clinical data, which cyber thieves highly prize. A trepidation persists that an abundance of digital accessibility—such as with the 2022 changes to the 21st Century Cures Act—exacerbates security risks. However, automation technology can award a bounty of benefits, and even work towards enhancing security and privacy.
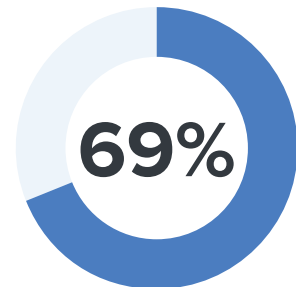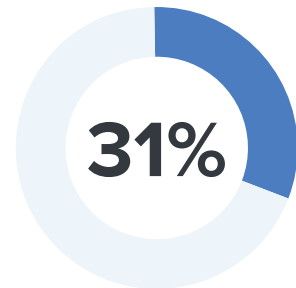
Digital Transformation

U.S. health systems

79%
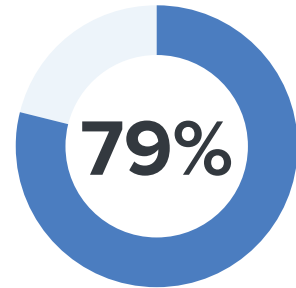
are in the planning stages

International health systems

69%

are still planning

31%

are implementing new technologies.

Source: "2022 State of Healthcare Report," HIMSS.

Automation That Goes Beyond the Budget

Cost reduction stands as an obvious motivation for automation. Workflow automation alone could save the US healthcare industry an additional $16.3 billion every year. But business process automation benefits can advance beyond the budget and elicit enterprise-wide gains.

Speaking to the substantial executive-level support for digital transformation within healthcare, the director and digital leader for The Chartis Group, Thomas Kiesau, stated, "It's no longer a question of importance. It's a question of the degree of importance now."

Healthcare leaders support digital transformation because, in addition to cost savings, automation can improve accuracy, compliance, productivity, and customer and employee sanctification."

$16.3 B

The amount workflow automation could save the US healthcare industry annually

Source: 2020 CAQH INDEX®

Why Healthcare Organizations Automate

Improved Accuracy

Increase Transparency

Increased Compliance

Increased Productivity

Improved Employee Engagement and Morale

Improved Patient Experience

Interested in Learning More?

Read more about the top reasons why healthcare organizations look beyond the budget argument when considering an intelligent automation project in our article, "Intelligent Automation: Going Beyond Cost Reduction"

Automation Initiative Barriers

With all the benefits that automation bestows, healthcare organizations still bump into barriers before launching. Intelligent automation projects are big, organizational changing efforts. This means a high risk, in addition to a high reward. Here are a some of the most common barriers, fears, and myths surrounding IA projects:

Fear of Change and Failure

There's comfort in the familiar, even if the familiar bears many faults—what if change exacerbates the situation? Healthcare organizations can't afford operational downtime if an automation program backfires. Therefore many chose to stay with slower, less efficient legacy processes. Then there is the challenge to gain consensus, and train and acclimate staff. Yet, at some point change should be made to preserve premium care and services, and upgrading systems may render financial rewards down the road, as we'll discuss below. Organizations can look to external automation experts who can optimize their transition and ensure the right processes are matched with the right tools for optimal performance.

> "If the 800-pound gorillas in healthcare are not willing to experiment, try out new things—and, yes, fail—then what hope is there for other companies with less ability to weather setbacks?"
>
> — Sachin H. Jain, MD, MBA

Upfront Costs

The initial monetary output for an automation initiative sometimes scares off decision-makers, particularly those within smaller organizations—though there is no denying that upfront expenditures can be quite significant for some initiatives. However, there are options that can help offset the costs, such as incremental adoption. An organization can triage the program into phases of importance and roll out it over time. And for the long-term, in if a process with a sufficient ROI is selected, the automation will prove more cost-effective than the legacy system.

Oversized Scope, Not Enough Resources

A project that is too large and insufficient resources are two other common hurdles on the way to automation. Organizations often don't employ enough staff who can spare the time needed to fully implement an initiative—or the staff doesn't possess the skills to do so. Here again, a third-party partner could step in with the proper expertise to handle all implementation without draining internal resources.

"

Organizations should take care not to be blinded by automation's potential, but rather look to carefully crafted outcomes.

-- Harsh Singh, GM, Healthcare, Genzeon

The Risks of "Automatic" Automation

Intelligent automation can render copious advantages for a healthcare organization. What business leader wouldn't want to increase productivity, streamline workflows, and please customers and employees? However, the road to maximum efficiency and satisfaction isn't always via automation. Automation won't always improve certain processes or steps within a process; and the effort and resources expended to automate may override the outcome potential. Also, original redundancies and errors could be transferred to the automated process if an organization fails to analyze and optimize the process.

Automation should be wielded discerningly as a tool rather than a "fix it all" strategy. But even as a tool, it may not always be the best option—you wouldn't use a hammer to fix every household repair. Automation shouldn't be automatic. It should be implemented selectively with scrutiny and precision. Genzeon's general manager of healthcare, Harsh Singh, summed up this notion well when he stated, "Organizations should take care not to be blinded by automation's potential, but rather look to carefully crafted outcomes."

Let's delve into ways organizations can go wrong when they choose to automatically automate.

> "It makes sense to target the dysfunctional systems that are hard to work with. The first step is to find the root cause of a problem."
>
> — **Jeanne Schweder,** Automation World

Ways Organizations Can Go Wrong When They Automatically Automate

Choosing the Wrong Process or Step to Automate

Automation Complacency

Failing to Optimize a Process Before Automation

Patient Frustration

Inability to Switch to Manual Operations

Over-Promised Capabilities and Unreasonable Expectations

Limited Understanding of the Business or Processes

Choosing the Wrong Process or Step to Automate

The most critical step for a successful automation program is selecting the right process to automate. This is one of the top reasons many automation programs fail. Making a poor choice here could unleash even greater inefficiency, and frustration.

Often businesses neglect to ask important questions such as:
*   What are we trying to fix?
*   Does it need to be fixed?
*   How will automating improve it?

Businesses tend to automate low ROI processes—over time the cost of licenses, developers, and maintenance, surpasses the value automation delivers. And there are occasions when human involvement is necessary, particularly for complex or ambiguous decision-making steps.

Process complexity is an element decision-makers should evaluate before opting for automation. The more complex a process, the more complex the programming, which can increase the potential for inadvertent errors. Complex processes will also require more computing time, and potentially more updates or bug fixes—translating to more human interaction and more full-time hours expended.
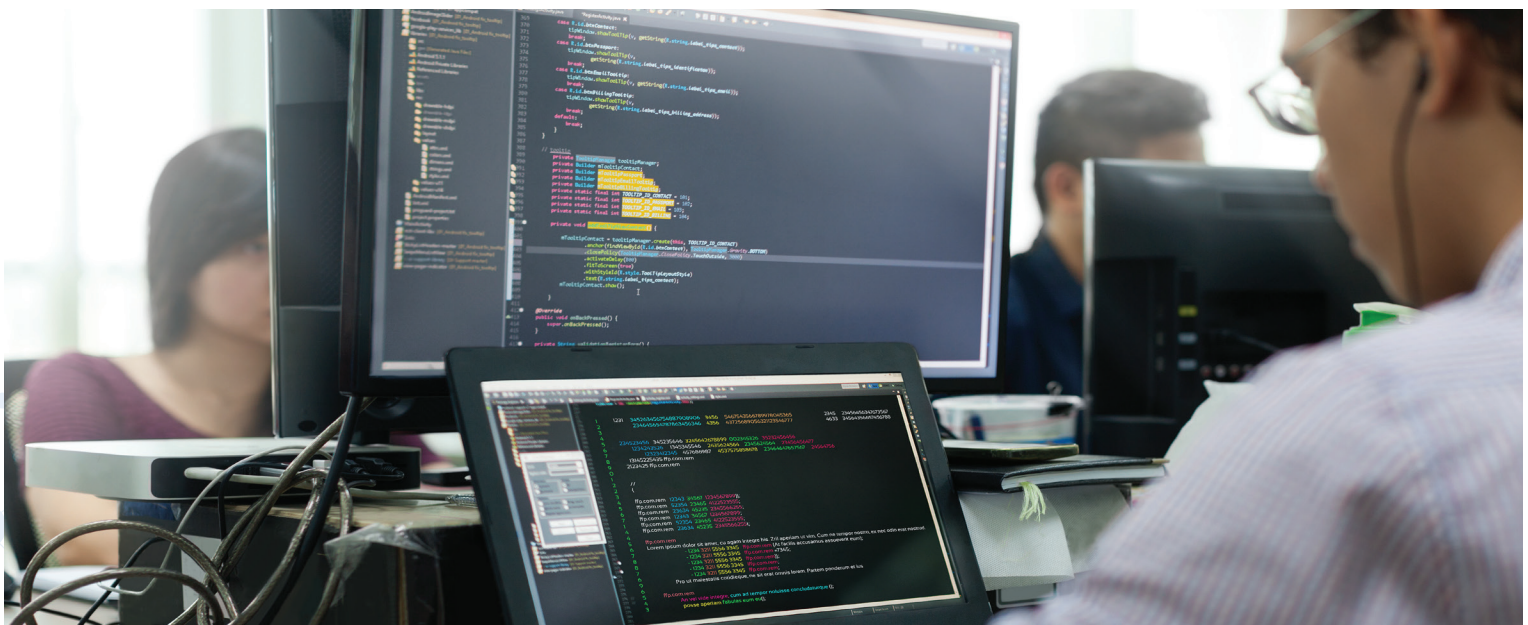
Failing to Optimize a Process Before Automation

Even if a process is deemed a suitable candidate for automation, it shouldn't be blindly automated as it currently exists. Automation doesn't fix bad processes. A process should first be analyzed and optimized to discover and eliminate redundancies, errors, nonessential approvals, data inputs, and reports.

If errors aren't identified and removed, they will transfer to the automated process, and failure to eliminate redundancies and unnecessary elements will bog down efficiency with increased cycle times and costs. Maximum effectiveness can only be reach with clean, thoroughly evaluated input.

In the next section we'll review steps for a thorough optimization.

"Business leaders and technical professionals can't let their skills atrophy in the face of algorithms that usually get it right but fail in the most spectacular of ways."

— **Timothy Wu,** Professor, Columbia Law School and former White House Advisor

Inability to Switch to Manual Operations

Establishing backup plans for potential business interruptions is a core concept of business continuity. Organizations can lose substantial time and money during downtime. What will happen if your automation program fails? Will you have the resources to switch to manual mode?

Over-reliance on automation can have consequences when you no longer employ staff with the expertise to manage manual processes during an incident. Organizations must be careful not to breed intelligence out of the business and make certain that they balance their technology with talent—enough talent to manage a manual process when an incident occurs.

Limited Understanding of the Business or Processes

Overusing automation can limit staff's knowledge of business functions and stifle their innovation. The more you remove employees from essential business operations, the more removed they can feel from their potential for contribution. You want your employees to feel needed, like they add value to the company.

With excessive automation, employees' responsibilities can feel more abstract rather than directly effective, and they also are denied the ability to understand the purpose of a process and how it functions. The goal here is to allow employees to function at the top of their license or skillset.


> "The consequences of automation complacency are rarely fatal, but as organizations from Wall Street to retailing have discovered, they can be financially and reputationally ruinous."
>
> — diginomica

Automation Complacency

Workers can grow too dependent upon automation, much like pilots who've become too reliant on autopilot functions. Office staff can begin to assume a blind trust in technology to such a degree that they become careless and miss critical warnings or ignore their own intuition and judgment.

This automation complacency can be particularly troublesome when machine-operated processes require human intervention. An otherwise minor problem could quickly turn into a crisis for simple lack of diligence and attention. Then a kind of cognitive detachment ensues where people would rather let a device do the thinking when a human should be in charge.
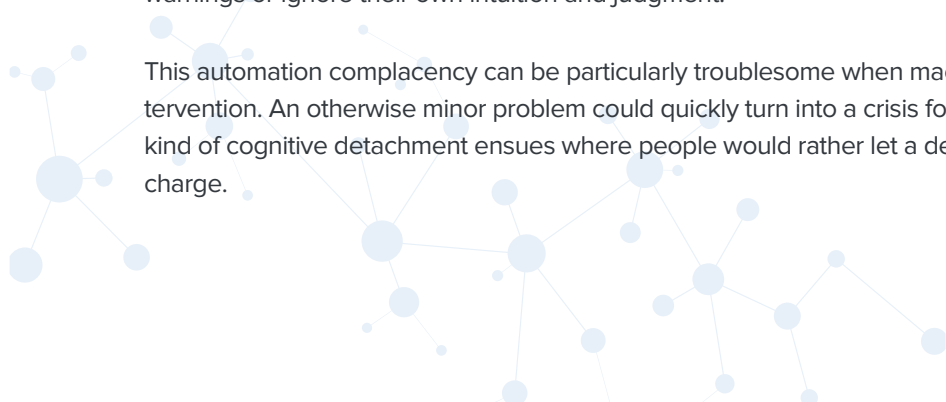
Patient Frustration

Automation has made great advances for patients, granting them accelerated response times, broadened accessibility, and boosted convenience. But patients aren't machines. Organizations should keep this important fact at the forefront when developing automation that will directly impact or interact with patients.

Carefully consider when automation is right, when it's not, or when a combination of automation and human interaction is best. Some patients may feel abandoned or frustrated when faced with too much machine reliance without the option for human intervention.

70%
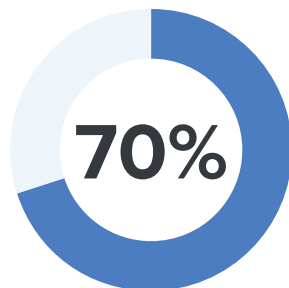
By the end of 2022, machine learning will automate 70% of customer service functions and chatbots will handle 75-90% of customer queries.

Over-Promised Capabilities and Unreasonable Expectations

Occasionally, automation partners over-promise their capabilities. They lure organizations into enticing initiatives with proposed results that can't be fulfilled—such was the case of the healthcare tech start-up Olive. An investigation suggested Olive delivered "only a fraction of the savings" it promised, leaving many clients upset.

Other times, organizations may also allow their expectations to run overboard, assigning greater potential for their automation initiatives than what actually exists.

Inflated promises and expectations run the risk of pushing automation into the Trough of Disillusionment: "Because the innovation does not live up to its overinflated expectations, it rapidly becomes unfashionable. Media interest wanes, except for a few cautionary tales."

Steps to Effectively Optimize a Business Process for Automation

Optimizing a business process is a critical undertaking that should be conducted with precision and patience if you want to avoid the pitfalls listed above. Your automated process can only be good as its input data. If you fail to define the process's goals, outline its steps, and evaluate its current execution, you may end up automating inefficiencies and errors.

6 Steps for Business Process Optimization

Identify and
document your
existing process

Identify the systems
or tools used to
complete the process

Identify all persons
involved or responsible
for each step of the
process

Analyze the
process

Document your
revised process

Certify the
process

"Business process automation starts with human analysis and documentation of the processes. All successful implementations require diligent prework before integrating automation initiatives."

— Prashant Krishnakumar,
Genzeon's VP of intelligent automation.
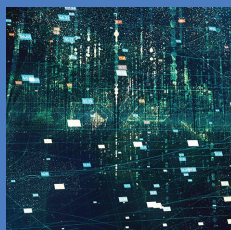
Interested in Learning More?

Read more about the steps for optimizing your business processes when considering an intelligent automation project in our article, "5 Steps to Optimize Your Business Processes—and Get Ready for Automation"

Automation Tools

Choosing the right automation tool is just as important as selecting the right process to transform. An organization should choose an automation tool after it understands and optimizes a process. Your unique process requirements should determine the automation tool—not the other way around. You shouldn't select a tool and force a process to adapt.

Automation tools vary quite a bit in complexity and function depending on the need. For example, assembly lines often use basic rule-based robotics for repetitive work—one machine performs one simple task over and over. Each action requires a separate machine. Cognitive-based automation conduct more complex tasks, and often more than one task. And within those two broad categories lies other variations. Organizations can use a variety of automation types depending on their needs.

> "We can relate different types of automation to different parts of the human body with similar functions: RPA is like hands; OCR like eyes; NLP like ears and mouth; and ML as a brain."
>
> — Prashant Krishnakumar, Genzeon VP of Intelligent Automation

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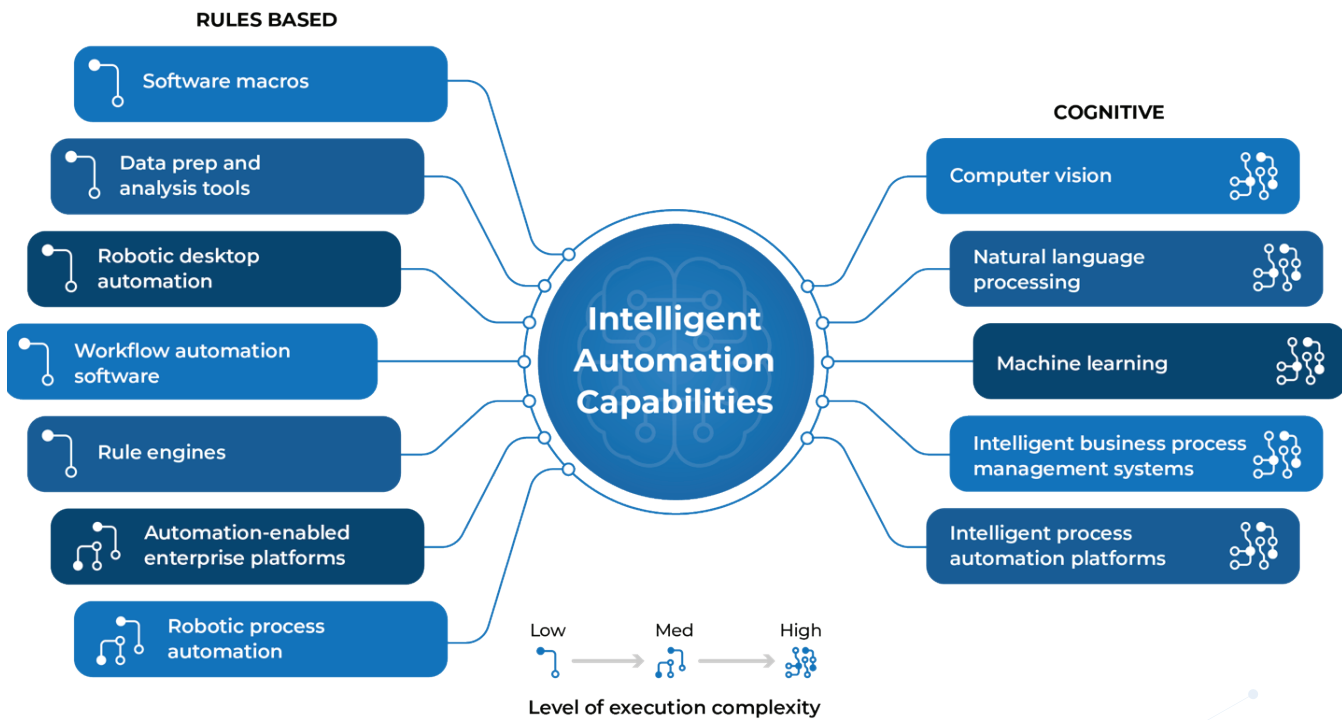
"It's no longer a question of importance. It's a question of the degree of importance now."

— Thomas Kiesau, The Chartis Group (in partnership with HIMSS Trust)

The Continued Human Element

Automation has bestowed abundant rewards to humans over the past several decades. It has accelerated manufacturing, assisted in the operating room, and shown us images from space. However, there will always be—or should be—a need for humans to operate and program the machines and take over when the machines fail. Here are a few ways that we can preserve the human element in automation.

Human-Assisted RPA

Human-assisted RPA works in conjunction with employees directly on their computer, like a virtual assistant. It automates applications running on a user's desktop to help the user complete a time-consuming chore quickly. The "assistant" optimizes repetitive tasks, increases productivity, and improves quality of work through real-time guidance and automated activities.

An example of attended RPA would be when a customer service specialist activates a bot to execute an address change request in a matter of seconds instead of making the updates manually—and not as quickly.

Centers of Excellence

An automation center of excellence (CoE) is an internal team that streamlines automation output, provides structure, and helps scale automation throughout the enterprise. Organizations can use CoE to drive change management and establish a sustainable governance model to identify and measure RPA opportunities. A comprehensive CoE will continually plan, test, and evaluate an automation program to confirm the technology is meeting intended goals, ensuring that you get the most out of an automation program.

Citizen Developers

Businesses realize that as technology evolves at such blazing speeds, it's sometimes a challenge to hire staff with the most-current technical skill set. Shadow IT risks have also challenged companies' security, continuity, and IT workload. To promote worker efficiency and flexibility, gain more control over unauthorized apps, and ease the strain IT departments, organizations have turned to citizen development.

Organizations that adopt citizen development empower non-IT staff to build their own apps, often with no-code or low-code platforms sanctioned by their IT department. This practice grants employees total control of an app's functions, takes the development burden off IT, and promises better security because the internal IT department will support the app. Companies that promote citizen development understand that there is value in helping their employees feel more productive as they add value to the organization

Checking Bias / Ethics

Bias in AI occurs when two data sets are not considered equal, possibly due to biased assumptions in the AI algorithm development process or built-in prejudices in the training data. One of the simplest ways to learn from and rectify bias in machine learning algorithms is to have external validation testing conducted on algorithms used in high impact contexts.

Conclusion

Intelligent automation isn't just about adding technology, it's about adding technology wisely—where it makes the most sense and yields the greatest value. It's about improving the right process. And when the right process is selected, automation shouldn't be automatic. Organizations must carefully analyze and optimize processes first or they may risk errors, frustrations, and forfeit time and resources to remedy it all.

"Look to partners who are most interested in outcomes, not adding tech for tech's sake."

— **Harsh Singh, GM, Healthcare, Genzeon**

Genzeon's Harsh Singh, affirms these notions and adds that "to ease the transitional passage to automation, organizations should seek third-party assistance—but they must be diligent in selecting a partner that won't spend their money just because it's available. Look to partners who are most interested in outcomes, not adding tech for tech's sake."

If organizations are smart about their automation—meticulous evaluation, optimization, and planning—organizations can reach maximum efficiency, boost customer satisfaction, and improve employee morale.

GENZEON

Genzeon is a client-centric leading provider of intelligent automation, cloud, security, managed services, and other digital transformations. Since 2009, Genzeon has mobilized its healthcare and retail clients toward progress and success through effective, secure, and innovative solutions. Genzeon's clients range from fledging start-ups to established Fortune 500s. Some of their notable customers include Geisinger, Sharecare, Zelis, Atrium Health, MIB, CHOP, URBN, and West Marine.

To better serve its diverse clients, Genzeon has a global delivery team with a home office in the United States and additional locations in India and the Philippines. All facilities are fueled by passionate, creative doers and thinkers who champion Genzeon's core values: empowerment, accountability, and the human connection. Their commitment to embracing these values and applying them to every endeavor and interaction is what distinguishes Genzeon's technology and client relationships from its competition.

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