

Gauge Your Intelligent Automation Maturity

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Summary

Intelligent automation (IA) is fueling the next wave of digital transformation. Organizations seeking the next level in competitiveness and customer obsession are looking to scale the scope, impact, and strategic value of their IA initiatives. To help technology leaders evaluate their preparedness to drive intelligent automation throughout the enterprise, this report provides a framework that uses 20 criteria to determine an organization's maturity level — beginner, intermediate, or advanced.

Topics

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[The Intelligent Automation Maturity Assessment](#)

The Intelligent Automation Surge Demands Scale, Control, And Innovation

IA is built from artificial intelligence such as computer vision, text analytics, and machine learning. It gains strength from robotic process automation (RPA), digital process automation (DPA), and a host of other software platforms designed to orchestrate and manage business processes. Investment in IA surged during the pandemic as enterprises needed to conduct business remotely, support workers at home, and move toward a digital and more autonomous business. Maturity in the practice and discipline of automation will help:

- **Build scale to cover automation investments.** Scaling automation rapidly is the stated goal of most enterprises. To do this, enterprises need tools, training, support from subject-matter experts (SMEs), and provision of licenses to business developers.
- **Develop needed governance, skills, and operations expertise.** Automation involves multiple parties like business and technology management, build operations, strategy executives, and those training for new skills. Firms with mature automation manage the communications well between all of these stakeholders. They also build shared services, govern vendor selection, and jump-start, evangelize, and scale [intelligent automation](#).
- **Reduce redundant automation technology and prepare for human/machine collaboration.** As enterprises execute automation roadmaps, they usually deploy AI and RPA task automation in multiple independent efforts. This results in automation silos, redundant solutions, and the need to coordinate humans and machines. Leaders need [better coordination](#) to manage a workforce increasingly dependent on machines.

Intelligent Automation Requires Competencies In Four Dimensions

Implementing an IA program is usually more involved than a typical technology implementation. This is because automation programs introduce novel complexities such as the requirement to effectively manage hybrid (digital and human) workforces and often demand organizational cultural frameworks centered on automation. To realize the benefits of IA, tech leaders must address four key competencies (see Figure 1):

- **Process: Learn what to automate and how.** Finding processes to automate — and effectively automating them to deliver business value — is the first major hurdle on the road to scale for any IA initiative. Companies that fail to identify the right processes early in their automation journey rarely get continued funding beyond the first year. On the other hand, highly mature firms have often automated hundreds of complex processes spanning multiple departments to cover customer journeys from end to end. Such companies consistently leverage tools such as process mining or DPA to improve the quality and automatability of their processes.
- **People: Your toughest challenge is also your greatest opportunity.** Firms with high people maturity involve multiple organizational levels. Companies must invest in a strong base of technical talent that includes automation architects, business analysts, and developers. These developers understand the principles of process assessment, automation architecture, and design as well as development best practices. Successful organizations invest in building and strengthening a pervasive automation culture. This includes enabling and empowering business users and citizen developers and getting them excited about the possibilities of automation in their work. Mature firms create a self-reinforcing flywheel of energy, ideas, and adoption within the business functions.
- **Governance: Keep automation from running amok.** Automation can revolutionize an industry when done right — but can inflict catastrophic damage if done wrong. Governance is a vital element of well-run, scaled IA programs. This has both tactical and strategic implications. The basics include bot lifecycle auditing, an established design authority to align IA to the right use cases, and documented control frameworks including security checkpoints, business continuity, and coding standards. Effective governance also requires a broad view of automation and treats IA with a product mindset, establishing clear roadmaps and connections to business metrics and user value.
- **Automation technology: Optimize the engine powering your business.** Organizations in early IA maturity struggle with islands of automation — disparate, disconnected implementations with little or no shared infrastructure and standards. As they advance along their maturity journey, they begin to consolidate infrastructure, standards, and technology expertise with a focus on robustness, scalability, work orchestration, and component reusability. Mature firms approach their IA technology and infrastructure as a shared organizationwide resource. They also develop strong expertise in building and deploying process automation that often involve unstructured data or machine learning to support advanced decision-making.

Figure 1

Use These 20 Components To Gauge Your IA Maturity

Process

1. We're investigating whether an intelligent automation strategy makes sense for our business and are searching for the right combination of processes to make a strong business case.
2. Our pipeline of candidate processes (identified and vetted for automation) covers at least the next 12 months' worth of effort.
3. We have successfully implemented RPA in multiple departments, handling a wide range of processes for a variety of use cases; we have at least 100 bots in production.
4. At least 15% to 20% of our automations go beyond simple, repetitive tasks to automate processes such as document extraction use cases that leverage NLP or machine learning for decision management.
5. We support automation by using modern methodologies and tools such as process mining, task mining, or DPA to understand and rationalize processes.

People

6. Our internal business analysts are proficient in RPA process assessment methods such as task mining, including recording human sessions and applying machine learning techniques to isolate patterns for automation.
7. We employ "automation architects" who are proficient in aligning the right automation technology to a use case, designing automations, making effective automation design decisions, standardizing best practices, infrastructure provisioning, and performance management.
8. More than half of the new ideas, initiatives, and energy for our automation program come from business domains (bottom-up) rather than from top-down initiatives.
9. We have well-funded staff skilled in areas such as resource allocation, operational performance management of IA bots, analytics, and reporting to monitor our automation operations.
10. We have given our business users the tools and training to be effective citizen developers for the automation initiative.

Governance

11. We have a documented control framework (e.g., process assessment, coding standards, security, and business continuity checkpoints) that we use before we put an automation in production. Our pipeline of candidate processes (identified and vetted for automation) covers at least the next 12 months' worth of effort.
12. Our automation COE has a defined operating model with clear responsibilities for line-of-business and IT teams (e.g., development, delivery, and ongoing maintenance of automation).
13. Our automation COE has been in full operation for more than two years.
14. We approach our automation portfolio with a product mindset toward automation roadmap, metrics, and user value.
15. We treat our bots as digital workers, complete with unique identity and access management credentials that are well-aligned with our company's security principles.

Automation technology

16. We have a shared infrastructure and standards for multiple IA technologies, such as RPA, DPA, or AI/ML components such as NLP, document extraction, or chatbots. These support different departments, with appropriate segregation of duties.
17. We have strong expertise in building and deploying process automations that use AI capabilities to read and understand documents.
18. We have strong expertise in building and deploying process automations that use chatbots or conversational AI.
19. We have strong expertise in building and deploying process automations that use machine learning for decision support.
20. We envision and are planning for a work environment where humans and machines work together and are preparing for human-in-the-loop and advanced work orchestration processes.

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Determine Your Own Intelligent Automation Maturity Level And Growth Plan

The impact of automation on your efforts to win, serve, and retain customers is unquestionable and was [highlighted by the COVID-19 pandemic](#). A self-aware, responsive, and action-oriented environment that uses advancing automation is the goal. However, it can be difficult to determine just how prepared you are to enter a more automated world, where are you now, how you compare with your peers, and where you need to reach. Take this survey to assess your competencies and where you should invest. The results will put you in one of three maturity categories:

- **Beginner: Learning about automation opportunities.** Beginner firms are investigating whether a more controlled and centralized view of automation makes sense for them. Today, the company may have scattered projects for RPA and other IA components. It has limited or no skills in developing automation or identifying new opportunities for automation. Beginners need to build consensus for a greater focus on automation to reduce redundant tool sets, provide more cost-effective integration of automation building blocks, and leverage skills across the business. Don't feel bad if your organization is a beginner — most enterprises are.
- **Intermediate: Plenty of automation that is not yet unified or democratized.** Intermediate firms have had success with automation and have multiple RPA and AI component projects in production. They have an automation center but haven't completely formalized metrics or pipeline management; they may lack SME support. They have a roadmap for shared service and enterprise standards but have yet to put these in place. They have not put automation tools in the hands of the business, as they're wrestling with how to do this.
- **Advanced: Strong governance, AI, mining, and federated empowerment.** Highly mature organizations have federated automation governance, with distributed access to automation tools across the business. These firms have well-functioning automation strike teams or centers, with strong control frameworks and good working relationships between IT and the business. They have invested in newer methods to assess and build automations like task mining and process mining and have deployed AI building blocks for conversational intelligence and decision management, with shared-service roadmaps in some areas. In short, they have the foundation in place to scale intelligent automation quickly and safely.

Supplemental Material

Online Resource

The report on this survey includes a maturity assessment. Click the link at the beginning of this report on [Forrester.com](#) to access the assessment.

