

The buyer's guide to intelligent business automation from IBM



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What we offer

The IBM Cloud Pak® for Business Automation solution includes modular, integrated [intelligent business automation software](#) built for essentially any hybrid cloud, that's designed to help quickly solve your toughest operational challenges. Our comprehensive solution includes a broad set of AI-powered automation capabilities—process mining and modeling, content services, document processing, decision management, workflow orchestration and tasks—with a flexible model that lets you start small and scale as your needs evolve.

What you can do with it

Whatever your business goals, this solution helps you:



Discover processes

Pinpoint inefficiencies or hotspots in your operations to help determine where to apply automation for the greatest impact using process mining and modeling.



Apply intelligence

Use the data from automating your operations for machine learning and AI to recommend action and reduce the amount of work people need to do.



Augment your workforce

Build and deploy robotic process automation (RPA) and digital labor to collaborate with humans wherever a higher level of productivity can be achieved, or when backup is needed.



Automate core operations

Apply core automation capabilities—document processing, workflow orchestration, decision management and content services—to key operational areas for greatest impact.

See [chapter 2](#) for specific use cases and client examples.



What makes it worth consideration

There are a lot of automation technologies out there. Here's what makes our solution valuable:

- **You get a full set of modular, integrated capabilities to help you start and scale your automation projects quickly.** Our solution uses a complete set of enabling technologies—such as process mining and modeling, workflow orchestration, decision management, content services, document processing, RPA and digital labor, and operational intelligence—to help you digitize and automate virtually all types of work at speed and scale.
- **The automation capabilities that make up the solution are considered industry-leading by analyst groups such as Forrester and Gartner.** See [chapter 4](#) for more details.
- **You're not locked into capabilities you don't need.** With our flexible purchasing model, you can start with one of the capabilities, such as task automation, and evolve from there.
- **Deploy automation apps and services anywhere: your cloud, an IBM-managed cloud or on premises.** [IBM Cloud Pak for Business Automation](#) is a containerized, cloud-native solution certified on the market-leading Red Hat® OpenShift® platform.
- **Monitor and measure whether processes are improving across your operations because there is built on a common analytics layer.**
- **Get support from the global IBM Business Partner and services ecosystem.** You can also engage with the IBM Garage™ teams to help define and quickly start your automation journey.
- **You can build a business case with proven return on investment (ROI).** IBM commissioned Forrester to examine the total economic impact enterprises may realize by implementing the IBM intelligent business automation software solution. The financial analysis found an ROI of 675% over a three-year benefit period and a payback on upfront costs of less than six months. You can use [the report](#) (PDF, 990 KB) as a framework to help you evaluate the potential financial impact of using the solution in your organization.

02: What you can do with it

Flexibly apply the [IBM intelligent business automation solution](#) across a variety of use cases and industries. Build, manage and deploy business applications to enable better operational efficiencies, increase customer satisfaction, and simplify compliance management with rules and regulations with one integrated solution.

What you can do	How clients are using our software today
Improve onboarding experiences for customers and employees	<ul style="list-style-type: none">– Automate employee onboarding between various HR systems and tools.– Reduce errors and improve response times by removing the need to manually input or re-enter customer data into various systems.– Improve customer satisfaction by automating the opening of new accounts or customer tasks, such as bill payments or insurance claims.– Automate processes that support the opening and onboarding of new physical locations or products. <p>Read our customers' stories:</p> <ul style="list-style-type: none">– UK National Health Service Blood and Transplant maximizes patient outcomes.– Bank of Montreal automates to make bill payments 6x faster for customers.– Byblos Bank gets customers on the road sooner with a 40 percent faster auto loan application process.
Facilitate faster, simpler requests or approvals	<ul style="list-style-type: none">– Comply more quickly with General Data Protection Regulation (GDPR) data requests.– Simplify the internal expense management process and increase efficiency by automating workflows and creating simple, automated decisions for approvals or denials.– Improve efficiency of capital expenditure requests.– Improve IT service desk response times with virtual assistants.– Accelerate claims processing times. <p>Read our customers' stories:</p> <ul style="list-style-type: none">– MUFG Bank automates processes to increase staff productivity.– ENN taps into hyperautomation to boost productivity.– Administrative Office of the Courts accelerates claims processing from 45+ days to 10 days or less.
Resolve issues or customer disputes more quickly	<ul style="list-style-type: none">– Automate employee actions around billing disputes for improved response and resolution time.– Respond to compliance issues quickly by automating various parts of the process.– Fulfill service requests more easily with automated responses and scheduling.– Improve data management and analysis for better customer or citizen outcomes. <p>Read our customer's story:</p> <ul style="list-style-type: none">– Edmonton Police Service transforms digital evidence management to improve safety and quality of life.

Update data or demographics while reducing error potential

- Update change of address more quickly while managing governance around know your customer (KYC) and other data validation requirements.
- Automate data updates once versus entering them multiple times and increasing the chance of error.
- Automate updating beneficiary information for insurance policies, financial holdings and more.
- Consolidate data into a centralized repository for more visibility and control.

Read our customers' stories:

- [Turkcell reduces data extraction process from 2.5 years to 6 months](#)
- [BBVA Compass takes control of data to reduce risk and seize new opportunities](#)

Accelerate the process of managing, sending and receiving payments

- Simplify accounts payable and improve vendor relations with automated payments.
- Improve accounts receivable with optical character recognition (OCR) and automated decision management tools for faster processing.

Read our customer's story:

- [Turkcell reduces data extraction process from 2.5 years to 6 months](#)

Prevent fraud with real-time operations

- Intercept fraudulent transactions with automated, instant decisions.
 - Route potential fraud to digital or human workers for quick resolution.
 - Identify patterns of fraud and react with agile rule changes.
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03: How it works

- How you can apply operational intelligence
- How to enhance operations with process mining
- How to deploy the software solution

The IBM **intelligent business automation solution** is designed to help you digitize and automate different types of work at scale, as well as build and deploy digital employees to increase the efficiency of knowledge workers. This is done using one of the most comprehensive sets of automation capabilities in the market, supported by an analytics layer to collect, prepare and visualize operational data from across the solution. These capabilities work together to help you discover processes, apply AI insights and augment your workforce.

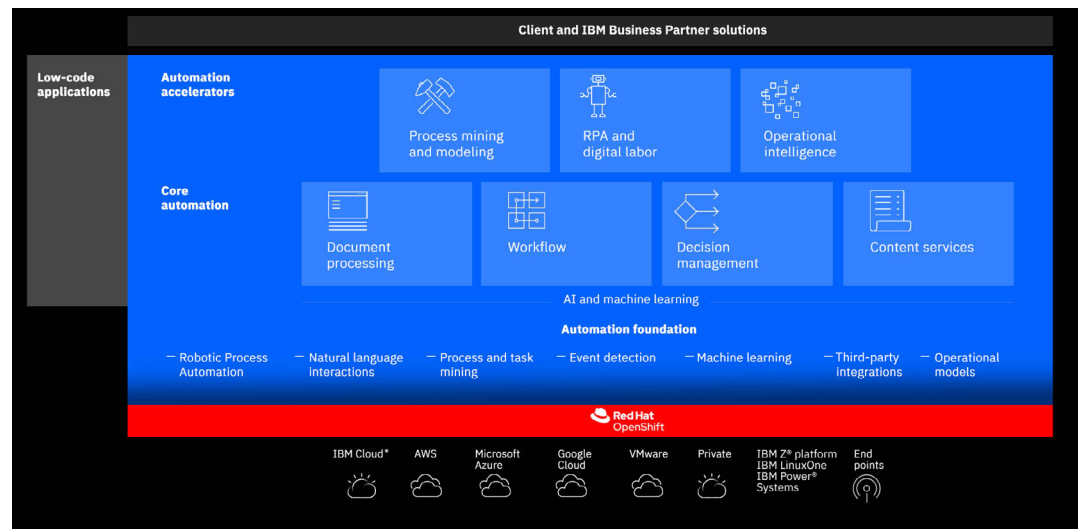
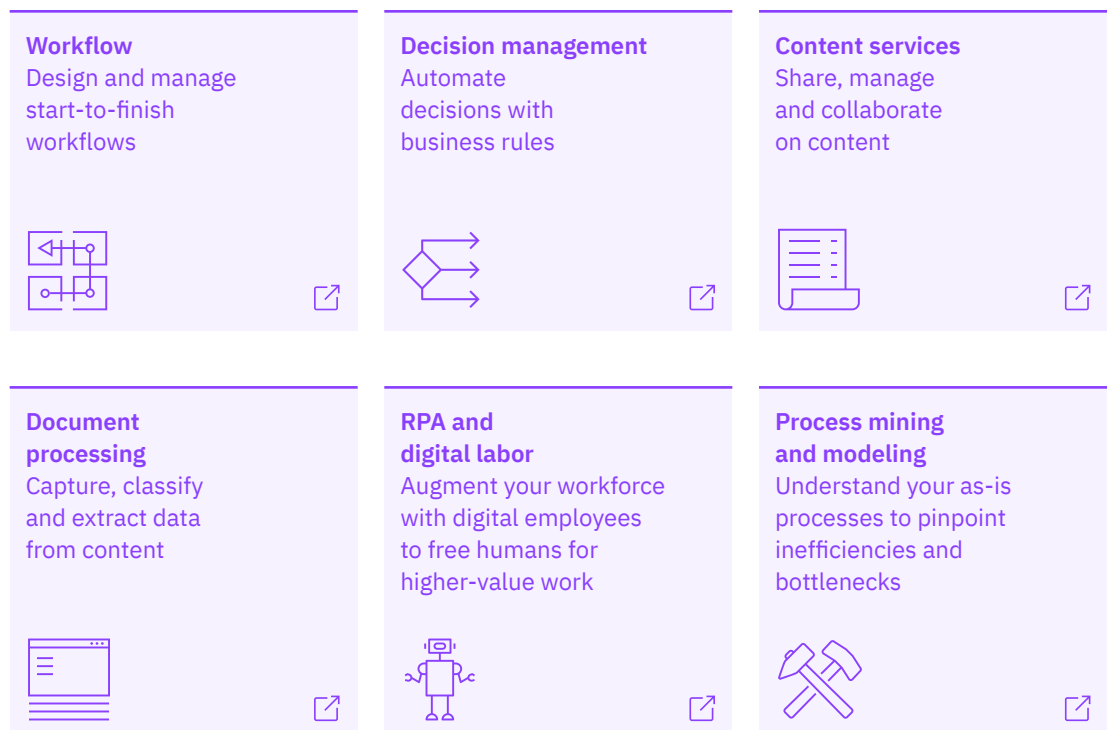


Figure 1: IBM Cloud Pak for Business Automation

You can use the following core automation capabilities as you need them. Start with one, then expand to others. Learn more about each core capability



In addition to automating using each of these capabilities individually, it's possible to combine capabilities within a single use case. For example:

- Invoice entry: An RPA bot opens an email from a vendor, along with an attached PDF invoice. Data capture interprets the invoice and passes relevant fields back to the bot. Then, the bot logs into the invoice system and inputs the invoice data.
- Client onboarding: A client rep collects and documents client information. Capture and content capabilities read, process and manage the client documentation. A workflow is initiated to orchestrate new client approval steps, involving both human and system tasks.
- Billing dispute: A customer service rep collects client dispute information. Decision automation auto-approves the billing dispute based on specific criteria. A workflow orchestrates the billing dispute resolution steps.

[See how](#) the IBM Cloud Pak for Business Automation core automation capabilities work together.

[Find out](#) how one financial services client used multiple automation capabilities to improve its customer experience and increase operational efficiency.

[Check out](#) the underlying architecture of our solution.

How you can apply operational intelligence

Derive AI insights from the embedded intelligence to improve operations across three areas:

1. Machine understanding

- Extract unstructured data with greater reliability and accuracy, and without requiring any coding or data science.
- Visualize and measure key performance indicators (KPIs) with business-friendly dashboards.
- Speed the document classification process using deep learning document vision skill.

2. Digital decisioning

- Generate better recommendations and outcomes for rule-based decision automation by applying machine learning to historical results.
- Prioritize tasks to enable greater workflow efficiency.

3. Intelligent data gathering and analysis

- Monitor automated operations in real time.
- Gather and normalize event data from automation applications or services for building machine learning models.
- Access insights, create KPIs and set up alerts using natural language query and conversational interfaces.

Revisit the use cases featured in [chapter 2](#) to learn how the built-in operational intelligence can help reduce the amount of work people need to do.

Use case	How intelligence reduces the amount of work people need to do
Onboarding	<ul style="list-style-type: none"> – Extract data from identification documentation. – Classify customer personally identifiable information (PII) as record. – Automate onboarding approvals based on historical data – Route benefits processing to the most appropriate worker based on task type. – Gather onboarding data to alleviate administrative (For example, learn which steps require more or less automation).
Requests and approvals	<ul style="list-style-type: none"> – Extract data from request documents. – Classify incoming document types (For example, a purchase request or evidence of expense). – Automate request and approval based on historical data (For example, when to auto-approve versus route to a specialist). – Route approval to most appropriate worker based on task type. – Gather data on approvals (For example, learn which approvals require additional investigation versus auto-approval).
Disputes and issue resolution	<ul style="list-style-type: none"> – Classify incoming document types (For example, complaint, bill, claim). – Automate resolution based on historical data (For example, when to auto-approve versus route to a specialist). – Gather data on issue resolution (For example, learn which approvals require additional investigation versus auto-approval).
Data updates	<ul style="list-style-type: none"> – Extract data from new documentation. – Classify incoming documents (For example, customer profile, employee profile, beneficiary documentation). – Automate processing based on historical data (For example, detect data conflicts or inconsistencies). – Gather data on data updates (For example, learn which data updates tend to be inconsistent or inappropriate).
Payments	<ul style="list-style-type: none"> – Extract data from invoices. – Classify incoming document types (For example, invoice, packing list). – Automate payment based on historical data (For example, approval, fraud detection). – Route investigations to workers based on domain and vendor knowledge. – Gather data on payments (For example, learn which type of invoices tend to be incorrect or fraudulent).
Real-time operations	<ul style="list-style-type: none"> – Automate real-time operations based on historical data (For example, fraud detection, cross-sell). – Gather data on real-time operations (For example, learn more about cases where fraud or risk was incorrectly detected—false positives or negatives).

How to apply process mining

To unlock the true value of intelligent automation, you have to understand how your critical processes work—how they really flow, where time is spent and where your bottlenecks lie. Once you have a clear understanding, you can determine the ROI of automating key areas of your operations.

With the IBM Cloud Pak for Business Automation, you use historical data to apply process mining and dive deep into your business.

- Discover end-to-end processes using existing and historical data from event logs in information systems to capture a clear picture of your as-is state.
- Identify opportunities for automation that will lead to the biggest overall process time and business efficiency improvement by applying data algorithms to event logs.
- Calculate projected ROI of to-be processes with simulated initiatives and decide what to automate using our core automation capabilities.
- Monitor and measure the true impact of changes, activities and performance against business goals and reanalyze for continuous improvement.

You can generate and apply insights from process mining to address key areas of improvement such as KPIs, inefficiencies and errors.

KPIs

- What are the key business KPIs that drive business success?
- How can we evaluate and monitor those KPIs on an ongoing basis?
- How can we improve the KPIs?

Inefficiencies

- Where in the process are there bottlenecks?
- Where do people spend the most time?
- Where should we investigate more deeply?

Errors

- Where are people making mistakes?
- Where are the processes out of compliance?
- Where do we have loops in the process due to do-overs, errors or missing information?

To learn more about the process mining capability in the IBM Cloud Pak for Business Automation:

[Read the article](#)

[Jump-start your hyperautomation journey](#)



How to deploy the software solution

You have the flexibility to deploy automation apps, services and digital employees virtually anywhere with our automation software solution. You can deploy on premises, in essentially any cloud through containers or as a hosted managed service by IBM SaaS.

For technical information about the containerized version of our solution—IBM Cloud Pak for Business Automation—including product features, requirements, installation and more, visit the [IBM Knowledge Center](#).

04: Comparing it to other solutions

- Top benefits
- Features comparison
- Third-party evaluations
- Five FAQs

Top benefits of the IBM intelligent business automation software solution

- **You have power.** With the solution's full set of core, market-leading automation capabilities, you can manage more sophisticated processes, decisions, content and RPA bots. For instance, integrated content and predictive analytics capabilities mean you can support complex processes, such as fraud detection and patient care, and insights gathering that spans your enterprise and information sources.
- **You have flexibility.** The IBM licensing model means you can start with a modest investment and grow—aligning your spending with your return. You pay for what you need and have the flexibility to reallocate licenses to other capabilities in the future.
- **You can apply AI to work.** The solution embeds machine understanding, digital decisioning, and intelligent data gathering and analysis to reduce the amount of work that people need to do. For example, the deep learning document vision skill enables you to significantly speed document classification compared with manual efforts.
- **You're not locked in.** Our industry-leading software is designed to be a modular, integrated solution using standards like Business Process Model and Notation (BPMN)—not just in process models but also in scripting and application composition. With our solution, you're not required to go 'all in.' You're not locked into a proprietary solution that has a closed, restricted talent market and tools ecosystem, making it easier to use your existing hired talent.
- **You have freedom.** You can deploy and run the solution in the environment of your choice—on essentially any Kubernetes management system, or one or more private or public clouds.
- **You have independence.** You maintain control over your strategy. Our tools enable business and technology specialists, together with external IBM Business Partners, to implement agile approaches and collaborate on developing and managing solutions. You're able to take initiative, make decisions and drive change instead of, say, a systems integrator.



Features comparison

Use this table to help identify the features and benefits of our [intelligent business automation software solution](#) that match your requirements. Compare the features and benefits of the IBM solution against other solutions you may be considering.

Value category	Compare these solution features and benefits	IBM intelligent business automation solution	Other solution under consideration
Completeness	Full set of integrated software capabilities—process mining and modeling, workflow, decision management, content services, document processing and RPA—to digitize and automate different types of work, from the simple to the complex.	✓	
	Tools for business users, IT developers and business analysts to rapidly develop apps.	✓	
Intelligence	Machine understanding for more reliable and accurate unstructured data extraction and faster document auto-classification.	✓	
	Digital decisioning for better rule-based decision automation and task prioritization.	✓	
	Intelligent data gathering and analysis that captures all events generated by the solution and aggregates them under KPIs for a real-time view of business operations.	✓	
Simplicity and speed	Low-code design tools to help teams build and change applications quicker. Business owners and subject matter experts can have a direct role in digitizing their business.	✓	
	Unified “operate experience” to govern, administer, monitor, scale and help ensure reliability and compliance of componentry.	✓	



Visibility	Built-in operational analytics with business-friendly dashboards for a 360-degree view of operational performance and governance.	✓
Quality	Core business automation capabilities considered leading or strong by top analyst groups such as Forrester and Gartner.	✓
Flexibility	Designed to provide simple, consistent licensing. Pay for what you need with flexibility to reallocate licenses to other capabilities. Buy new, exchange or trade-up from eligible stand-alone entitlements.	✓
	No cloud vendor lock-in. Deploy and run anywhere—your cloud, IBM Cloud, on premises—to reduce IT ecosystem complexity and resources for implementation and maintenance.	✓
	Ability to migrate existing runtimes without application changes or data migration.	✓
Scalability	Deployment options that align with an IT cloud strategy, for example, SaaS, public cloud, private cloud or on premises, and designed for quick scaling from proof of concept to an enterprise rollout.	✓
	Rich, agile management and governance features to help manage change at scale over time.	✓

Compliance	Apply built-in tools, customized reporting and audit trails to your automations.	✓
Security	Full software stack support and ongoing security, compliance and version compatibility.	✓
Services and support	Global services and IBM Business Partner communities to help build and manage automations on your chosen environment.	✓
	Expert resources to help bring the best of automation innovation to your projects without disruptive change in products.	✓
	Around-the-clock worldwide support.	✓
Openness	Built on containers. Can be managed by leading Kubernetes management solutions, such as the Red Hat OpenShift platform, for easier software deployment on any public or private cloud.	✓
	Works well with other solutions, products and systems. Extensible to support third-party toolkits. The capabilities provide REST APIs for interoperability.	✓



Third-party evaluations of our software solution and capabilities

Solution

- IBM was recognized as a [Leader in The Forrester Wave: Software For Digital Process Automation For Deep Deployments, Q2 2019](#).
- An IBM automation software customer experiences ROI of 675% and a payback on upfront costs of less than six months from going live. Read this [IBM-commissioned Forrester study](#) to understand the total economic impact of the IBM automation software solution.

Individual capabilities of the business automation solution

Content	– A Leader in Ovum Decision Matrix: Selecting a Content Services Solution, 2019-2020
	– A Leader in IDC MarketScape: Worldwide SaaS and Cloud-Enabled Content Applications 2019 Vendor Assessment
Data capture	– A Leader/Star in Harvey Spencer Associates: World Wide Capture Software Vendor Market Matrix Report
Decisions	– A Leader in The Forrester Wave: Digital Decisioning Platforms, Q4 2020
Tasks	– A Leader in Robotic Process Automation (RPA)–Technology Vendor Landscape with Products PEAK Matrix Assessment 2019





Five FAQs

1. Why choose a comprehensive intelligent business automation solution over a point solution?

Generally speaking, with a point solution, you can select from a wide variety of vendors, But you act as integrator when you buy different automation applications from different companies. The products don't always work well with each other, and there's often no underlying foundation for things like analytics.

With a comprehensive solution, you get an integrated set of core capabilities with which you can build virtually any automation solution, depending on the completeness of the capabilities. However, you depend on a single vendor for support across the solution.

So, it depends on what works for you.

With the [IBM intelligent business automation solution](#) you get a full set of core automation capabilities with the ability to optimize any unused capacity. When you have a variety of point solutions, you can only optimize the capacity within each point solution. Also, as capabilities are added to our solution, it's easier to expand—compared to a point solution.

Finally, if you're a new customer of our solution, you get flexibility without much difference in cost. You don't need to buy something new to try something new. And if you already have entitlements, you can easily extend them with complementary capabilities within the solution. For example, if you have workflow, you can add sophisticated digital decisioning capabilities.

[Read more](#) about how a comprehensive solution helps avoid the hidden costs of point solutions.

2. Is the IBM solution too heavyweight?

It might seem that way, since this solution includes a full set of core automation capabilities—process mining and modeling, workflow, decision management, content services, document processing and tasks—under a single license. But you only deploy what you need, when you need it.

Designed to be built on standards like BPMN with service guarantees, the IBM solution is well suited for high-scale enterprise production use and for clients looking for a scalable IT automation solution.

Additionally, if you need automation that requires lower upfront investment and IT management, you can deploy the modular capabilities.

Whatever deployment method you choose, the IBM flexible licensing model means you can start with a modest investment and grow. You can use license credit on one capability, then expand or shift license usage as your needs change.

Caution: Watch out for companies selling “simple” apps as they can be more complex, proprietary and costly if you need to create custom apps.

3. How easily can I integrate my current applications with the IBM intelligent business automation solution?

Our commitment to open standards helps ensure well-defined interfaces so your existing systems can call into our core capabilities and our core capabilities can call out to other external systems through existing application programming interfaces (APIs).

4. How long does it take to deploy?

Since deployment typically involves the installation of software and the building and deployment of applications, we address both here:

- **Installing.** If using the SaaS version of the solution, software can be provisioned and accessed in a matter of hours or days depending on the capabilities needed.
- **Building and deploying applications.** Every deployment is unique but, generally speaking, it takes about 10 – 12 weeks in an iterative development cycle to have a functional application deployed. With reusable templates for use cases, low-code and no-code tools, there’s the potential to reduce this time and shift ownership to business users.

5. Does the IBM solution provide any applications?

Applications are not provided with the IBM offering. The IBM Cloud Pak for Business Automation provides a full set of software in one single solution, from the Red Hat Enterprise Linux® (RHEL) operating system and the Red Hat OpenShift™ operation and governance layer to the automation capability layer that includes workflow, decisions, content, capture, RPA, modeling, analytics, low code, digital labor and process mining. It’s designed to help you design, build and run automation applications and services in any cloud.

Trying the software solution

Depending on where you are in your research, the following resources can help you experience the [IBM business automation software solution](#) in action:

Watch demo to see how the solution works



Read case study



Request a half-day workshop from our experts



Buying the software solution

Once you purchase, you get access to all the automation services within the solution but only pay for the ones you need. You can start small, solve a business problem, and then scale up, working with an IBM seller or IBM Business Partner to customize your solution.

Here's a quick overview of the process you can expect when you're ready to purchase:

1. First, engage with our experts to discuss your business problem. They'll ask several questions to understand your use case and determine whether our solution can help. See [chapter 6](#) on confirming fitness if you'd like to start there. If it appears our platform would be a good fit, you'll be connected with an IBM seller who will offer one or more of the following engagement options based on your preferences:
 - Deeper conversation into your business problem to identify the automation technologies most suited to solving it.
 - No-cost, half-day virtual [workshop](#) to identify specific use cases.
 - Live, customized demo showing what an automation software solution would look like in your business, using your own data or real-world use case.
 - If IT or other stakeholders want to validate how the software works in your environment, they can download fully functional software for evaluation or try it on the cloud with our SaaS deployment. Your IBM seller can walk you through each deployment option to ensure the best fit.



2. After you and your stakeholders have validated the solution, your IBM seller can discuss specific pricing and create a customized quote. If you decide to purchase, a contract is provided.
3. Once the software is delivered, implementation can be performed by your own employees with optional training from IBM, the IBM Expert Labs team, or your IBM Business Partner.

Here's how two clients got started:

- [TTI](#), a global provider of electronic components and products, implemented RPA to reduce pricing inefficiencies. It scheduled an IBM Discovery Workshop and built a bot to handle the new pricing model process with help from IBM Business Partner, BB3 Global.
 - A European life insurance company used our Expert Labs team to implement a fully integrated and more efficient document management system using the content services capability within the solution.
4. Around-the-clock worldwide support is included. If you need more engagement, such as on-demand consulting, that can be included, as well. Whether you purchase our solution to be managed by you on containers or managed by IBM as SaaS, you're entitled to no-cost product updates as they roll out.
 5. Finally, established financing is available to provide cash flexibility.

Extending the software solution

If you've already purchased our intelligent business automation software—whether on premises, or in the hybrid or public cloud—you have the flexibility to change your mix of capabilities whenever you want. For example, if you're currently using the workflow capability but find a use case needing decision automation, you can onboard this capability with relative ease and speed.

Deploying the software solution

As you evaluate your options, consider which deployment method works best for you. Our solution can be purchased in two form factors based on your IT software strategy and resource availability:

1. **Containerized, for virtually any cloud. Software managed by you.**

Available as [IBM Cloud Pak for Business Automation](#). Part of the [IBM Automation platform](#). Runs on the Red Hat OpenShift platform and can be deployed to any cloud, such as Amazon Web Services (AWS), IBM® Cloud, Microsoft® Azure or Google Cloud. Can also be deployed as a private cloud on premises.

2. **SaaS, on the IBM Cloud. Managed by IBM.**

Available as IBM Digital Business Automation on Cloud. Software support and maintenance provided by IBM.

More than software

While this buyer's guide focuses exclusively on the IBM intelligent business automation software solution, IBM Services® offers an extended option of the solution that supports fast prototyping, rapid scaling, and management of digital operations for business processes and IT—whether you're running IBM software or not. IBM Services can help you shape and execute your automation vision, including tailoring the automation software to meet specific enterprise needs.

For information, [click here](#).

Are you ready to implement a comprehensive intelligent automation solution?

A comprehensive intelligent business automation solution can fit any business, but you'll use it differently if you're big versus small, customer-facing versus internal-facing, heavily regulated versus lightly regulated, and departmental versus cross-enterprise.

A comprehensive business automation solution is a good fit when:

- You need some amount of customization, such as basic integration, but don't want to have to write code from scratch for everything.
- You've tried packaged apps, but they're not doing what you need them to do.
- You need to go to market fast and make changes quickly or want to experiment with new technologies like AI.
- You want integrated capabilities rather than disparate products from different vendors to reduce the burden on IT and avoid complexities with procurement.

See if a comprehensive intelligent business automation solution is right for you. [Take the short fitness test – if you haven't already.](#)

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