



Whitepaper

Simplifying the path to digital transformation with the right intelligent business automation platform

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Overview

Incorporating digital transformation, modernization, and governance initiatives is now at the front and center of modern businesses. A recent Deloitte survey of CEOs indicated that **85%** “organizations had **significantly accelerated digital transformation** during the crisis, with three-quarters seeing the pandemic as fostering the formation of new partnerships and alliances.”

This interest is not surprising given the uncertain business climate, continuously changing customer behavior, internal workforce re-alignment, a need to reduce operational overheads, and improving time to market for new product / service offerings. Enterprises embarking on digital transformation are realizing that changes concerning customer demand, demand and supply chain alignment, internal corporate environment, and external business landscape are evolving faster than ideas are becoming products.

Digital transformation can have different meanings depending on the type of users or organization; however, one common thread is the significantly reduced time gap from ideation to adoption of new technology, which has shifted from years to months to now weeks. This means that there needs to be a clear and concise alignment between various stakeholders (business users, operations teams, IT support, customers, and vendors) to provide highly scalable and configurable next-generation solutions to achieve business goals.

Intelligent Business Automation (IBA) is a powerful lever in supporting digital transformation, leveraging multiple solutions and technologies (Figure 1). According to a recent Gartner forecast, “the needs of business-driven hyper-automation will be one of the top three drivers for low-code adoption through 2022.” IBA combines multiple tools of hyper-automation to solve an entire business process problem, not just parts of it.

Key Components Driving IBA

The main pillars of IBA / Hyper-automation include Business Process Management (BPM), Low-Code / No-Code platforms (LCNC), Robotic Process Automation (RPA), Conversational AI, and Process Modelling, typically supported by peripheral

technology areas such as Predictive Analytics, Artificial Intelligence (AI), Machine Learning (ML), Natural Language Processing (NLP), and Integration (traditional ESB and micro-services-based API).

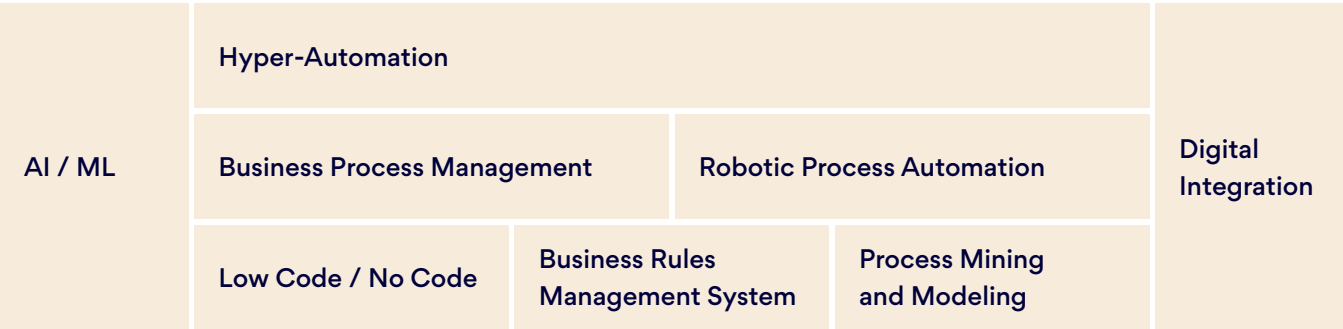


Figure 1: Components of Digital Automation

The Readiness Check

Before examining the features and capabilities of an automation platform, it is crucial to consider a few key strategic elements. These include:

- Support for Next-Generation Features: The platform should support advanced features such as offline capability, “headless” working, support for microservices, chatbot, ML, and predictive analytics.
- Product Roadmap: The product roadmap must be studied carefully, especially when it comes to advanced features or micro-services enablement.
- Availability of Resources: Many niche automation providers struggle to provide the skills needed to stay current with the rapid development in this field, which can hurt the implementation.
- Implementation Partner: Can the implementation partner collaborate across the entire transformation journey from ideation to deployment and maintenance?
- Availability of Framework and Solution Accelerators: Does the vendor have suitable accelerators and frameworks to develop scalable and reusable applications.
- Vendor Stability: Is the platform provider a viable, stable business that will be around long-term to support your business?
- Internal Readiness: Does your organization have the required internal infrastructure to undertake transformation projects.

While the above factors ensure the vendor’s and organization’s readiness and alignment with the initiative, organizations also need to ensure that the appropriate expectations are met, including:

The type of advanced features required (e.g., mobile interface, external integrations, etc.)	Whether the platform can implement multiple use cases within a short timeframe?
Whether the platform is highly configurable, portable, and scalable.	Whether it will have a low total cost of ownership in the long run.

This fit assessment ensures all stakeholders understand the complexity of the endeavor and match these with their expectations. It will also allow

the implementation team to execute the project in a phased manner commencing with the appropriate internal setup.

Interface	 External Sites / Embedded	 UI Complexity	 Mobile Support	 Role Management	
Workflow	 Workflow Complexity	 Case Management	 Notifications	 Task Management	 Rule Management
Integrations	 LDAP	 Database	 COTB Connections	 Enterprise Content Management	 Third Party APIs

Figure 2: Fit Assessment



Selecting the Appropriate Intelligent Business Automation Platform

Identification of Business Cases: As a first step, due diligence must be undertaken to identify the use case and business case roadmap for the next one to three

years. A market analysis for the selected use cases ensures that the software provides the correct value proposition to meet future requirements.

Key Benefits & Outcomes

- \\ The early definition of program objectives and charter
- \\ A clear articulation of KPIs and SLAs
- \\ Defining outcomes from the new platform
- \\ Understanding the type of software required (RPA, reporting, OCR, case management, rules management, etc.)

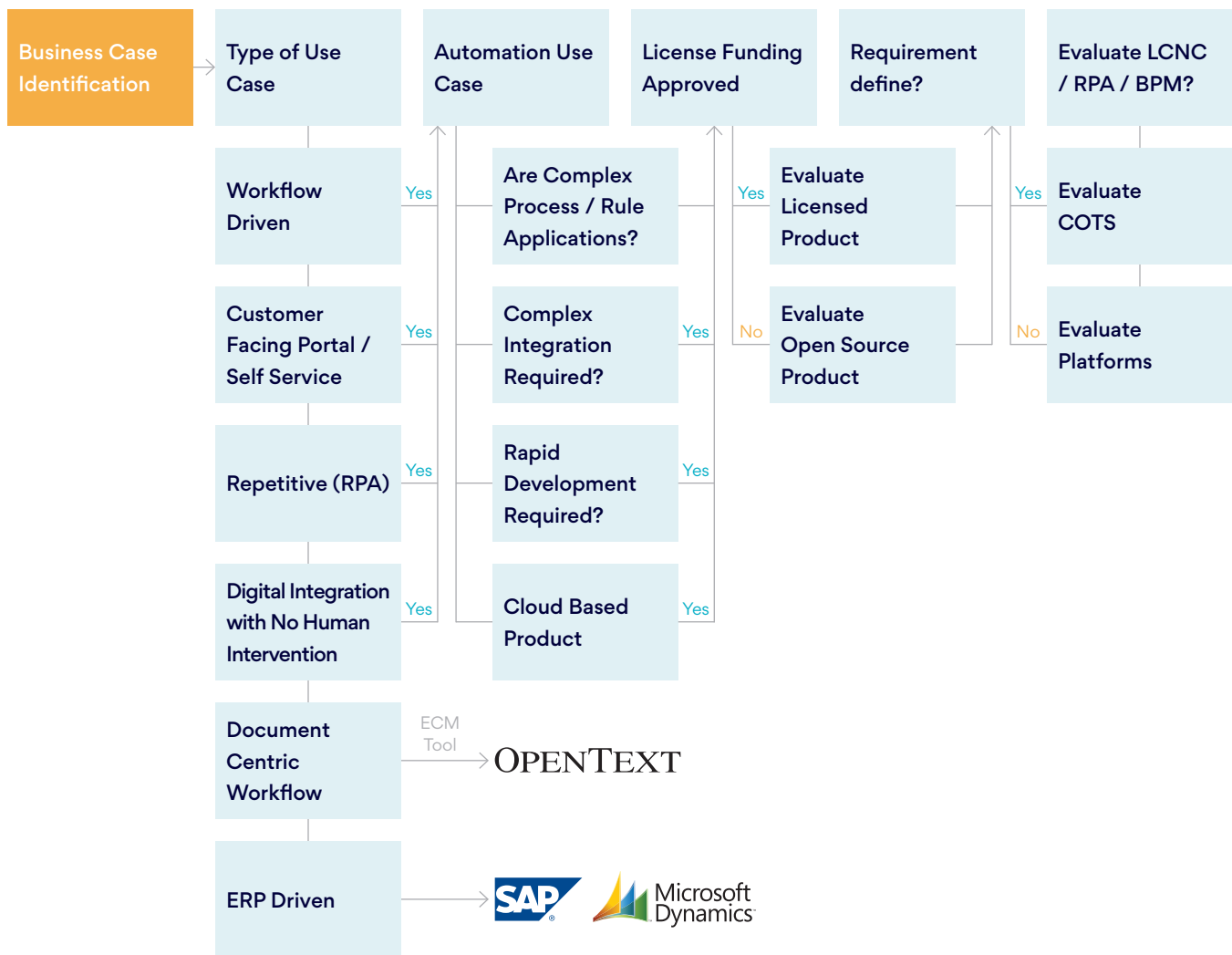


Figure 3: Identifying the right Intelligent Automation platform

Applications and Use Cases: It is critical to ensure the platform can implement multiple business use cases that consist of core and peripheral applications.

This helps businesses promote reuse and reduce technology and integration complexity.

Key Benefits & Outcomes

- \ Supporting a 'product-to-platform' route
- \ Reducing support and maintenance costs (operation / CAPEX / OPEX) with lesser complexity
- \ Enabling options for innovation and improvement
- \ Reusability across processes and business units
- \ Helping achieve standardization and adherence to best practices
- \ Reducing technical debt with legacy software

Highly Configurable and Visual Platform: Due to changing customer and compliance requirements the platform should be developed to provide flexible application configuration. A rigid implementation that fits only the current environment can put the

organization in massive technical debt in future. Having a configurable system helps to scale and meet future requirements quickly while avoiding hard coding.

Key Benefits & Outcomes

- Ensuring reduced time to market as changes can be done in weeks
- Quick POC / prototype for feasibility analysis
- Enabling configurable business rules / logic
- Ensuring an agile-based development approach where changes are quickly incorporated

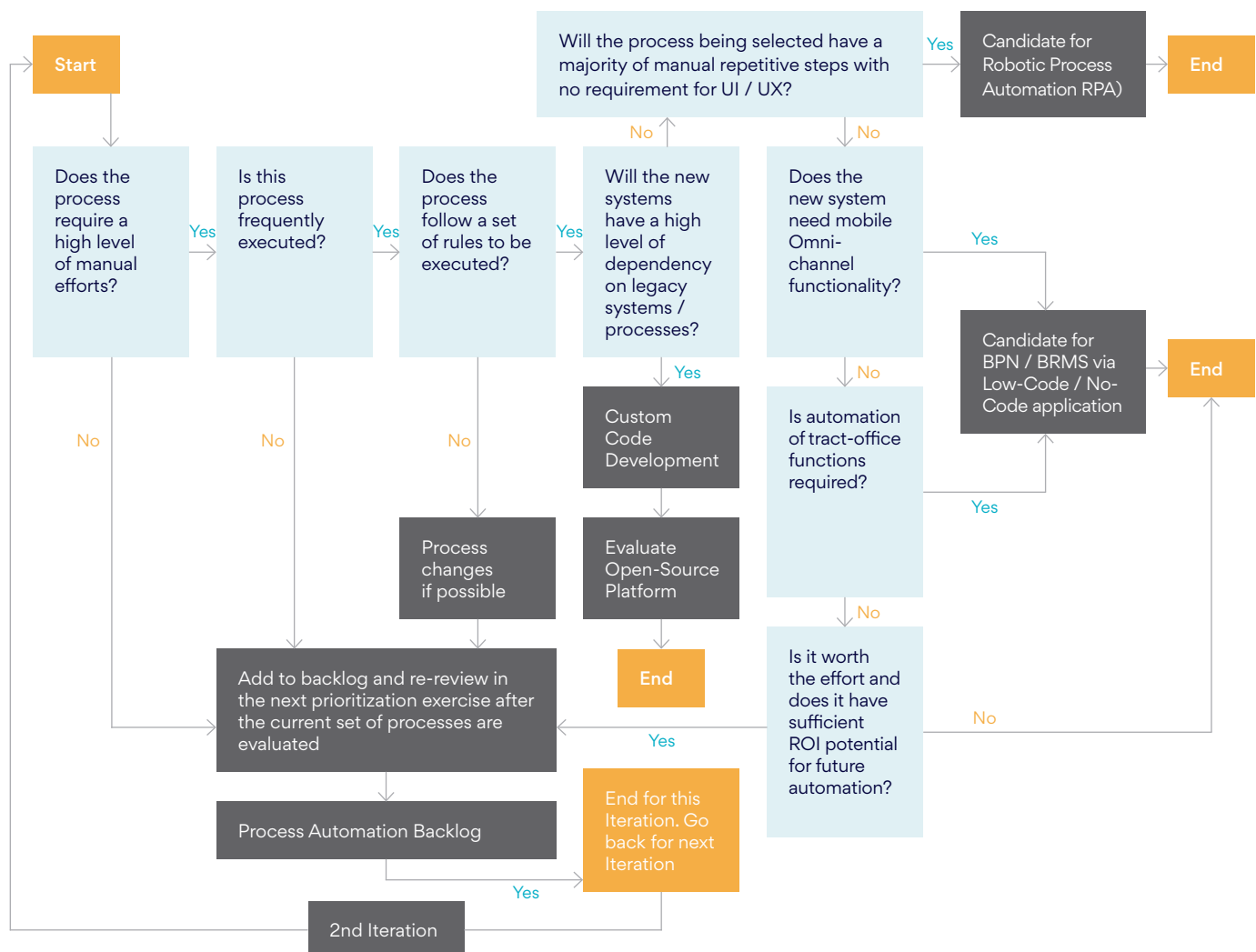


Figure 4: Analyzing fitment for LCNC / RPA / other technologies

Support for Modern Architecture: Advanced design and architectural concepts such as micro-services-based solutions, inbuilt DevOps, and CI / CD provides flexibility to start small and scale up. They also help scale without impacting performance or forcing compromises on governance and transparency. The micro-services approach to developing smaller,

independently managed applications / modules can help distribute application / business logic across groups without affecting other applications. This approach can help organizations go “headless”, develop incrementally, and decouple various layers (UI, business, data, etc.).

Key Benefits & Outcomes

- \ Business agility and faster time to market
- \ Higher scalability
- \ Improved data security and compliance
- \ Reduced development-to-deployment cycle
- \ Imbibing an ‘automation culture’ within the organization

Enhanced Omnichannel User Experience:

The platform should be able to deliver consistent, templated, and simple yet rich user experiences. It should be accessible and easy to use for many levels of people including, tech-savvy engineers, business professionals, and so-called ‘citizen developers’ in customer and partner organizations. They should

be able to design from scratch, customize a pre-built design template, or import an existing design, all without compromising performance or functionality. These low-code solutions can ensure more active participation and help gain more feedback within the development cycle and reduce costs through insourcing.

Key Benefits & Outcomes

- \ Faster prototyping for early user feedback, and avoiding wireframe development for multiple devices and OS
- \ Ensuring consistent messaging across channels
- \ Higher user adoption, customer loyalty, and retention
- \ Opportunities for in-sourcing and onboarding members with lesser technical expertise for engineering roles, thus reducing costs
- \ More control on the development process
- \ Opportunities for cross-skilling

Integration and Compliance with Industry

Standards, Protocols and Frameworks: The platform should support open standards and support multiple industry-standard protocols. It should have certified connectors for leading industry tools such as SAP,

Oracle, or internal applications that need to be integrated with. It should also have appropriate certifications from relevant regulators, government bodies, and agencies such as FHIR, GDPR, GDS, ISO, WACG, etc.

Key Benefits & Outcomes

- \ Support for hybrid integration (on-premises, cloud, DB, API, SOAP)
- \ Certified connectors to reduce development time and promote configuration
- \ Supporting non-technical users with simple drag-and-drop features
- \ Better data privacy, security, standardization, and compliance
- \ Wider acceptance and adoption across industry

Agility and Enhanced Governance: The platform should support application development in factory model for quicker adaptability to market changes without compromising security, compliance,

and quality. It should also support multi-team development initiatives that may require constant and open communication.

Key Benefits & Outcomes

- \ Develop applications incrementally
- \ Develop parallel teams in PODs (product-oriented delivery)
- \ Reduce development cycles

Business Model & Market Alignments: The platform must align with the organization's digital vision. This requires due diligence to identify whether an open-source tool, commercial off-the-shelf product (COTS), or platform-based approach is the best way forward. This helps design the solution

blueprints, define the integration specifications, and develop and document user stories to meet the software requirements. The software must be selected based on its ease of adoption and ease of integration with other solutions such as IBM, Oracle, Microsoft, open-source software, etc.

Key Benefits & Outcomes

- \ Reducing the chance of failure due to proven implementation and past successes
- \ Alignment with the organization's vision
- \ Tackling technical debt and financial prudence

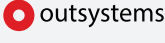
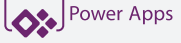














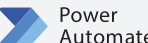














	Platform	COTS	Open Source
LCAP / BPM	 outsystems  Power Apps  mendix  unqork  PEGA  Appian		 CAMUNDA  jBPM
BRMS / Decisioning	 PEGA  einstein	 Progress® Corticon®  IBM ODM  SAPIENS <small>Partnering for Success</small>	 Drools
RPA	 UiPath™  blueprism®  Power Automate  AUTOMATION® ANYWHERE <small>Go be great.</small>		
Digital Integration	 MuleSoft  Boomi  workato  apigee		 ANSIBLE
Process Mining	 celonis  UiPath™		
Support Tools	 Google AI  Azure  Amazon Machine Learning  aws	 IBM Watson  Power BI	

Figure 5: Software Classification

Licensing Models: The availability of a suitable licensing model is a critical consideration in platform selection. The platform should provide multiple subscription, enterprise, and perpetual license-based pricing models to choose from. These may include

an outcome-based model, SaaS, PaaS, user / transaction / developer / application-based pricing. Importantly, the platform should provide a flexible model to adopt and grow.

Key Benefits & Outcomes

- \ Pay-per-use model allowing for lower capital expenditure
- \ Avoidance of potential vendor lock-in
- \ Optimization of overheads and infrastructure costs
- \ Alignment of the platform with company's growth and evolution

Non-Functional considerations: Non-functional requirements are critical for the success of any program. Some of the parameters to consider include portability; flexibility in hosting based on the nature of the business; in-built features for multi-security requirements;

scalability of transactional and master data horizontally and vertically; support for enterprise-grade metrics; maintainability; framework-based development and reusability across processes, rules, UI, etc.; and support for ad-hoc reporting and personalization.

Conclusion

Intelligent business automation is a critical component of the digital transformation journey. The selection process requires detailed analysis and due diligence as many platforms offer similar features but differ in subtle ways that make a difference.

The onus needs to be on how the business views its requirements in the short- and long-term and the platform's ability to scale going forward.

To learn more about the Persistent IBA practice, visit our [website](#)

About Persistent

Persistent Systems' IBA practice is a one-stop shop for all IBA (LCNC, RPA, Digital Integration, DPA, and BPM) requirements. Persistent is considered a trusted partner for over **12+ years**, and we have helped multiple customers select digital platforms. Persistent has already created **Centers of Excellence** and **digital factories** around IBA technologies to demonstrate best practices and use cases around these areas. We have successfully implemented IBA solutions for more than **70+ customers**. Persistent IBA practice has **strategic partnerships** with leading platforms such as Appian, UiPath,

Automation Anywhere, OutSystems, Unqork, Celonis, IBM, Salesforce, and Microsoft's suite of products. Persistent has been considered a **leader / strong performance** in Intelligent Business Automation (IBA) consistently for several years. We are directly involved in product engineering and development for leading IBA platforms such as Appian, OutSystems, etc. We start from discovery and process modeling UX for most of our clients using Greenhouse (our proprietary tool) and the Celonis process modeling tool to help prioritize, implement, and provide customized managed service models.

Why Partner with Us

Persistent Systems' IBA practice brings together multiple hyper-automation solutions under one roof to ensure we solve the entire problem and not just parts of it

Our Center of Excellence governance model for customers has evolved methodologies and best practices based on our years of experience and technology expertise

We are an integral member of Center of Excellence for many of our clients and help in the strategic direction of their digital projects

References

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About Persistent

With over 16,500 employees located in 18 countries, Persistent is a global services and solutions company delivering Digital Engineering and Enterprise Modernization. We combine deep technical expertise and industry experience to help our clients anticipate what's next and develop solutions that create unique competitive advantage. Persistent was named to the Forbes Asia Best Under a Billion 2021 list, representing consistent top-and bottom-line performance as well as growth.

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