To maximize your intelligent automation investment, start with a comprehensive Total Cost of Ownership (TCO) measurement

As businesses continuously reshape amid unpredictable and perpetual change, digitization and automation are key enablers to staying relevant. Findings in the Everest Group report, *Intelligent Automation (IA)—How Much Is Your Dollar Worth?*, show that getting the best return on investment (ROI) is more likely when business leaders rethink, in a holistic fashion, how IA is used.

Today’s businesses are embracing automation to improve productivity and revenue growth in profound and transformative ways. How these changes will enhance future readiness, however, is contingent on an inclusive plan that views the enterprise business outcomes holistically, with clarity on where and how people, technology and processes intersect. Based on research in this report, a surprising just 28% of businesses are accurately measuring the TCO and ROI of IA improvements while 44% believe they are measuring accurately but are not.

As this report shows, organizations that choose an integrated approach achieve more optimal long-term benefits. Also key, enterprises that create comprehensive IA plans can better support scale and sustainability, boost automation outcomes, do away with persistent silos and strengthen governance over change management.

The research presented in this report offers insights into the current state of IA and the challenges in measuring the true ROI of automation (results show 62% of companies surveyed had limited measurement). The report also reveals what the best-performing enterprises are doing.
The “true achievers” that are excelling in IA are reaping greater rewards by pursuing transformation from a holistic operational viewpoint, versus making spot improvements. These organizations are investing more in end-to-end thinking and launching intentional AI programs that generate better outcomes.

Because these true achievers have a more comprehensive view of their TCO, they can more accurately plan for, measure and achieve better outcomes than “false leaders.” As the survey reflects, with the TCO-based measurement, more than 40% of “true achievers” have an incremental cost savings of >$10m—some also exceeding $100m in savings.

The research also shows that successful transformations adopt a best-in-breed approach to sourcing IA technologies by integrating platforms for different technologies. It’s companies that bring together the technology with strong governance practices that are the true winners. The best performers have predominantly established a unified Center of Excellence (CoE) strategy as their core operating model.

When it comes to implementation, it is important to review where you are and where you want your program to go to ensure the plan to get there is accurate. And this is regardless of the stage a business is in on its IA journey—whether working in silos, setting up a unified CoE strategy or scaling up the program. Take a moment to consider the evidence of the true achievers in this report and make changes that will help your business thrive in a competitive environment.

From our perspective, in a digital-first world where constant change is the norm, enterprise leaders investing time, money and effort to build a comprehensive strategy for IA will become more operationally efficient, drive growth, reduce costs and improve employee and customer experiences. Also paramount is the need to accelerate the pace and investment focus to create a joined-up, long-term plan. We believe this report and its takeaways will help executives look at their organizations holistically, to enable a sustained scale of automation across the enterprise that keeps their business relevant and ready for anything.
Intelligent Automation (IA) –
How Much Is Your Dollar Worth?

Best Practices to Maximize Return from Your Intelligent Automation Investments

Anil Vijayan, Partner
Vaibhav Bansal, Vice President
Ashwin Gopakumar, Practice Director
Shiven Mittal, Senior Analyst
Pragya Sultania, Senior Analyst

Copyright © 2023, Everest Global, Inc. All rights reserved.
Contents

Introduction 03

Research methodology 04

Current state of Intelligent Automation 05

The challenge of measuring automation ROI 05

Separating the true achievers from the false leaders 10

What are the true achievers doing differently? 12

Conclusion 24
Introduction

Recent global phenomena such as the COVID-19 pandemic, the Great Resignation, the Ukraine-Russia conflict, and rising inflation have repeatedly tested organizations’ ability to adapt in an increasingly volatile world. These challenges have sent corporate executives back to the drawing board to re-examine their strategic priorities. Notably, digitization and automation have topped enterprise agenda to enable business continuity and agility. In fact, digital transformation has been gaining momentum over the last decade, but recent events have accelerated technology adoption to make businesses future-proof and more competitive.

Enterprises, irrespective of industry or size, are embracing automation and driving it as a strategic agenda across functions and lines of business. What started as simple task-based automation using Robotic Process Automation (RPA) is now evolving into a quest to achieve end-to-end automation using a combination of different complementary technologies, such as RPA, Artificial Intelligence (AI) / Machine Learning (ML), process mining, task mining, API automation, and process orchestration. This technology mix has led to the emergence of Intelligent Automation (IA), which encompasses the ecosystem of these different technologies and the business principles required to drive enterprise automation at scale.

While IA has proven benefits in terms of helping enterprises become more operationally efficient, reducing costs, and improving employee and customer experience, implementing and scaling up IA programs is not an easy task. It involves choosing the right technologies and partners, implementing an effective change management program, and monitoring the associated costs and benefits. Given that these technologies are relatively new, one of the most common challenges that enterprises face is measuring the Total Cost of Ownership (TCO) and IA benefits to arrive at the true ROI from their automation programs as they scale. While most digital transformation leaders believe that they are running a superlative automation program, a deeper look reveals that many have a myopic view of their TCO. Organizations need to have a holistic view of their costs, and it is this overarching view that distinguishes what we call the true leaders from the false achievers.

To understand the challenges and best practices of digital transformation leaders as they develop a comprehensive view of their automation costs and benefits, Everest Group surveyed 50 executives across enterprises and industries and at different stages of their automation journeys.

This research combines findings from the survey and select in-depth interviews, as well as Everest Group’s ongoing research and IP on IA, to provide insights on:

- Current state of IA
- Challenges in measuring the true automation ROI
- How true achievers in IA think of TCO versus others
- What true achievers are doing differently to achieve higher ROI
Research methodology

All enterprises included in this study have an overall annual revenue of more than US$1 billion and have been investing in IA for at least one year. The executives surveyed and interviewed as part of this study lead some aspects of their enterprise automation program and hold roles such as head of the automation CoE, head of digital transformation, head of GBS automation, and director of IT – IA.

Out of the 50 enterprise participants, Everest Group identified 28% of enterprises as true achievers – those with a comprehensive measurement of various cost components in their overall TCO and have achieved a higher ROI than other enterprises.

Exhibit 1 shows the distribution of participants across industries for both true achievers and other enterprises. Please note that the respondents’ collective profile does not necessarily represent the global landscape of IA buyers but the sample considered for this study.

EXHIBIT 1
Distribution of respondents by industry
Source: Everest Group (2023)

<table>
<thead>
<tr>
<th>Industry</th>
<th>True achievers</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer goods and retail</td>
<td>14%</td>
<td>11%</td>
</tr>
<tr>
<td>Electronics, hi-tech &amp; technology</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Hospitals and healthcare providers</td>
<td>7%</td>
<td>14%</td>
</tr>
<tr>
<td>Insurance</td>
<td>7%</td>
<td>8%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>7%</td>
<td>28%</td>
</tr>
<tr>
<td>Professional services</td>
<td>7%</td>
<td>0%</td>
</tr>
<tr>
<td>Communications, media, and entertainment</td>
<td>7%</td>
<td>14%</td>
</tr>
<tr>
<td>Life sciences</td>
<td>0%</td>
<td>3%</td>
</tr>
<tr>
<td>Travel and transportation</td>
<td>0%</td>
<td>3%</td>
</tr>
</tbody>
</table>
Current state of IA

First-time adopters of automation start by tackling simple, manual, and repetitive tasks using technologies such as RPA to reduce manual effort and allow employees to focus on higher-value activities. However, the rules-based nature of such technologies is limiting and cannot tackle more complex tasks that involve human-like judgment. To drive operational efficiencies and achieve end-to-end automation, enterprises start combining RPA with AI-based automation technologies, such as Intelligent Document Processing (IDP) and conversational AI, to automate parts of processes that are content-intensive, involve unstructured data sources, or live customer interactions. While this process-level automation opens the gateway to a greater number of use cases, and offers additional benefits such as higher cost savings, better quality processes, and greater operational efficiencies, the automation continues to happen in silos within an enterprise, and the benefits are restricted to these small pockets of innovation.

To achieve true transformation, IA at scale employs an enterprise-wide approach to embed automation into the very DNA of an organization. It enables enterprises to reimagine their operations and seamlessly integrate their people, processes, and technology to create a hybrid workforce of digital and human workers. This mix unlocks the next level of benefits and business outcomes that touch every part of the organization. This strategy brings together RPA, AI-based technologies, and other ancillary technologies, such as process mining, task mining, API automation, process orchestration, and analytics, to create a digital-first business.

Notably, scaling up automation programs enables enterprises to unlock strategic benefits (revenue growth, ROI, business continuity, higher customer satisfaction, superior employee experience), cost benefits (cost savings, FTE capacity, increased automated hours), and operational benefits (higher employee productivity, operational efficiency and quality, shorter turnaround time, better governance/compliance).

The challenge of measuring automation ROI

As enterprises rapidly grow their automation programs to achieve superior enterprise-wide benefits, they often fall behind in tracking the increasing number of cost components and incremental benefits that arise from this growth. This failure inevitably leads to an incorrect measurement of the TCO and the ROI from automation, which can hamper the program itself. A comprehensive and accurate measurement of the automation TCO and its associated benefits is instrumental to showcase the advantages of automation to different business units and receive greater buy-in from business leaders. Enterprises cite the inability to demonstrate ROI as a common reason for falling off the automation wagon. When costs are not measured timely and correctly, enterprises can develop an inflated sense of ROI early on, which later results in cost shocks that can hamper business confidence and jeopardize the program’s sustainability.

An accurate measurement of different cost components and benefits also helps digital transformation leaders design the right automation program that works for an enterprise. When IA is scaled, it impacts several aspects of the program that, in turn, impact ROI. Business leaders need to invest the right amount of time, energy, and resources on these aspects. While some of these considerations are related to the technology strategy (for example, the extent of AI leverage and platform sourcing...
strategy), some are related to the operating model (for example, the CoE structure and transformation office leadership), while others are related to the talent strategy (such as the talent sourcing strategy and leverage of citizen development). Each of these considerations has an impact on several TCO cost components and the various benefits that enterprises can obtain from IA. Hence, it is important to be aware of these considerations to help leaders design effective automation programs.

**Most enterprises have a myopic view of their TCO**

Measuring the TCO of an IA program can be a complex process involving various cost components and sub-components. Broadly, TCO can be broken down into the initial setup and deployment costs (or CAPEX), and the run costs (or OPEX). The initial costs are costs incurred at the beginning to set up the necessary teams, infrastructure, and governance mechanisms to start the automation program, as well as the costs involved in the initial development and deployment of different automaton projects. Run costs are recurring costs, such as ongoing software license, support and maintenance, and ongoing training costs, incurred on an ongoing basis to sustain the program.

The different initial costs and run costs, along with the extent to which enterprises track them, are depicted in Exhibit 2. The exhibit also shows the share of these different components as a percentage of the overall TCO.

**EXHIBIT 2**

**Extent of different costs that enterprises track and their share as a % of TCO**

*Source: Everest Group (2023)*

<table>
<thead>
<tr>
<th>Initial setup and deployment costs</th>
<th>Extent to which costs are tracked</th>
<th>Share of TCO¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial software license costs</td>
<td>![Tracking Level] 8-13%</td>
<td>8-13%</td>
</tr>
<tr>
<td>Infrastructure costs</td>
<td>![Tracking Level] 8-13%</td>
<td>8-13%</td>
</tr>
<tr>
<td>Discovery</td>
<td>![Tracking Level] 5-10%</td>
<td>5-10%</td>
</tr>
<tr>
<td>Implementation</td>
<td>![Tracking Level] 15-20%</td>
<td>15-20%</td>
</tr>
<tr>
<td>Operating model</td>
<td>![Tracking Level] 8-13%</td>
<td>8-13%</td>
</tr>
<tr>
<td>Quality assurance</td>
<td>![Tracking Level] 3-8%</td>
<td>3-8%</td>
</tr>
<tr>
<td>Awareness training</td>
<td>![Tracking Level] 3-8%</td>
<td>3-8%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Run costs</th>
<th>Extent to which costs are tracked</th>
<th>Share of TCO¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ongoing software costs</td>
<td>![Tracking Level] 5-10%</td>
<td>5-10%</td>
</tr>
<tr>
<td>Infrastructure maintenance</td>
<td>![Tracking Level] 5-10%</td>
<td>5-10%</td>
</tr>
<tr>
<td>Support &amp; maintenance</td>
<td>![Tracking Level] 8-13%</td>
<td>8-13%</td>
</tr>
<tr>
<td>Organizational change management</td>
<td>![Tracking Level] 3-8%</td>
<td>3-8%</td>
</tr>
<tr>
<td>Ongoing training programs</td>
<td>![Tracking Level] 3-8%</td>
<td>3-8%</td>
</tr>
</tbody>
</table>

¹ For enterprises that track cost elements comprehensively
As the survey results show, while most enterprises track some of the more obvious costs, such as software license cost and IT infrastructure setup and maintenance costs, the extent to which they track some of the other cost components decreases as we move to implementation, discovery of use cases, and support and maintenance. This falls even drastically when we look at costs related to the operating model, quality assurance, organizational change management, and awareness and training programs. Enterprises fare poorly in terms of tracking these cost components, which on average account for about 30% of the overall TCO, while they do not completely track cost components accounting for up to 65% of the TCO.

Many enterprises have taken a myopic view of their TCO and are not tracking various key components that are needed to build a true picture of their actual costs. Enterprises cite the lack of awareness, along with several other reasons for ignoring these components, as listed in Exhibit 3.

**EXHIBIT 3**
Enterprise reasons for excluding cost components
Source: Everest Group (2023)

- **Considered as fixed costs and not counted in TCO**
  - Head of COE and other management effort
  - Internal automation developer effort

- **Efforts/Services are leveraged from other parts of the organization and not counted in TCO**
  - Central organizational change management team effort
  - SME effort
  - Centralized infrastructure costs

- **Not allocating sufficient importance to these elements of the program**
  - Training: rely on vendor-provided free online training material, which is less effective than structured one-to-one training programs
  - Organizational Change Management (OCM): OCM is not deployed uniformly across initiatives but in a piecemeal fashion
  - A very small team performs training/OCM or limited effort is put in such initiatives

Notably, these are incorrect assumptions, often arising from thinking about automation as a short-term initiative than as a longer-term strategic investment. This results in an incomplete representation of TCO and an inflated estimate of the automation program’s ROI. These flawed assumptions also result in significant impact to the forecasting and planning, particularly when scaling up the program. Enterprises which do not create comprehensive plans for the required efforts end up cutting corners to stay within the planned budget, resulting in poor automation outcomes.
When elements such as change management and training are ignored, it indicates an immature approach to automation. Everest Group’s Scaling Up Intelligent Automation report indicated that more than 60% of enterprises have indicated change management and access to the right talent as key challenges to scaling up their automation programs. Hence, when enterprises ignore these elements, they are unable to realize expected outcomes from these programs.

Enterprises need to evolve beyond such a short-sighted view of automation as an initiative and think about how automation can transform the organization in the long term to achieve the maximum possible benefits. Enterprises tend to follow a multi-stage journey to reach a comprehensive understanding of their automation TCO and ROI, as illustrated in Exhibit 4.

**EXHIBIT 4**
Multi-stage approach to track true TCO
Source: Everest Group (2023)

- Software license costs
- Infrastructure costs
- Implementation cost

- COE costs
- Costs of operations manager, SME, project management/governance, etc.
- Support costs
- R&D costs

When automation starts as siloed initiatives within the organization, enterprises typically track the software license cost, infrastructure cost, and a few implementation costs related to code development and deployment. As they move to a more structured model with a centralized CoE driving these initiatives, they also start to account for the operating model-related costs, such as setting up of the CoE and governance and program management, as well SME effort, R&D, and support costs. Further, as they attempt to scale up their automation programs, they start to realize the disconnect between their predicted and realized ROI and start to include additional cost elements, such as process redesign costs, compliance and security audit costs, quality assurance costs, and costs related to change management and training of resources, to the TCO calculation.
### Extent of different initial setup and deployment costs that enterprises track

<table>
<thead>
<tr>
<th>Category</th>
<th>Initial software license costs</th>
<th>Discovery</th>
<th>Implementation</th>
<th>Operating model</th>
<th>Quality assurance</th>
<th>Awareness training</th>
<th>Support &amp; maintenance</th>
<th>Infrastructure maintenance</th>
<th>Ongoing software costs</th>
<th>Organizational change management</th>
<th>Ongoing training programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current tracking</td>
<td>🟢 (High)</td>
<td>🟢 (Medium)</td>
<td>🟢 (Medium)</td>
<td>🟢 (High)</td>
<td>🟠 (Low)</td>
<td>🟠 (Low)</td>
<td>🟠 (Low)</td>
<td>🟠 (Low)</td>
<td>🟠 (Low)</td>
<td>🟠 (Low)</td>
<td>🟠 (Low)</td>
</tr>
<tr>
<td>Aggregate expected tracking in the future</td>
<td>🟢 (High)</td>
<td>🟢 (Medium)</td>
<td>🟢 (Medium)</td>
<td>🟢 (High)</td>
<td>🟠 (Low)</td>
<td>🟠 (Low)</td>
<td>🟠 (Low)</td>
<td>🟠 (Low)</td>
<td>🟠 (Low)</td>
<td>🟠 (Low)</td>
<td>🟠 (Low)</td>
</tr>
</tbody>
</table>

- **Servers**
- **GPUs**
- **Databases**
- **Virtual desktops**
- **Process mapping effort**
- **SME effort**
- **Code development**
- **Integration**
- **Data collation/cleaning (ML models)**
- **ML model training**
- **Robot/software platform licenses**
- **Setting up of COE**
- **Governance & program management**
- **Standards & best practices creation**
- **Coaching**
- **Code reviews**
- **Architecture reviews**
- **For executive & senior management**
- **For business/operations employees**
- **Robot / ML models monitoring**
- **Robot fixes**
- **ML model updates**
- **Software upgrades**
- **Process changes**
- **Robot migration to the cloud**
- **Other support**
- **Ongoing maintenance**
- **Business continuity planning**
- **RPA / other ongoing software usage costs**
- **Communications**
- **FTE reskilling/redeployment to new roles (for impacted resources)**
- **For executive & senior management**
- **For business/operations employees**
Separating the true achievers from the false leaders

Looking at the extent of TCO measurement and the estimated ROI from automation programs, we can categorize enterprises into four distinct groups, as shown in Exhibit 5.

EXHIBIT 5
Extent of measurement of TCO vs estimated ROI
Source: Everest Group (2023)

The two important groups of note are the true achievers, or those that have both a comprehensive measurement of their TCO and a high ROI, and the false leaders, or those with a high estimated ROI but limited measurement of their TCO. Our survey results indicate that a staggering 44% of enterprises fall into the false leader category, while only 28% are true achievers. The false leaders report a high ROI from automation, but, in reality, they do not have an accurate measurement of their TCO, and, hence, the return that they calculate is not the true ROI. These enterprises have a false perception of success in their automation programs and fail to recognize that they are achieving sub-optimal outcomes as compared to the true achievers.

When other outcome metrics, such as total cost savings, operational improvement, and productivity improvement, are compared for the false leaders, as shown in Exhibit 6, it is clear that they are not really achieving the best outcomes. However, because of a false sense of success, they are unable to identify gaps in their programs and make course corrections.
EXHIBIT 6
Incremental outcomes that true achievers have accomplished
Source: Everest Group (2023)

Not only do the true achievers have a more comprehensive view of their TCO, but they also have an accurate measure of their outcomes and have been able to achieve better outcomes when compared to the false leaders. As Exhibit 6 highlights, while 100% of the true achievers and false leaders indicated a more than 25% estimated ROI, a comparison of actual cost savings (in US$) reveals that a higher number of true achievers have been able to generate greater cost savings from automation. This is reflected across other benefits, such as improvement in turnaround time, employee productivity, process governance and compliance, employee experience, customer experience, and top-line growth as illustrated above.
What are the true achievers doing differently?

Most automation initiatives start out as small projects in some organizational cohort and have limited scopes and objectives. A section of business or IT teams or a combination of the two could drive these initiatives. As these projects achieve initial success, start to scale up, and gain more traction from other parts of the enterprise, the initiative could pose new challenges.

It is at this point where true achievers adopt a more structured and programmatic approach toward automation. They are quick to secure funding from an executive sponsor and onboard crucial IT and business stakeholders. Bringing together different stakeholder groups is vital to embed automation into the enterprise DNA and lay the foundation for a successful and sustainable automation program. As this DNA is gradually ingrained into the way of working, true achievers employ various levers to achieve higher cost savings, better outcomes, and ROI. Each of these levers, as Exhibit 7 shows, have varied implications on the automation TCO’s cost components.

EXHIBIT 7
Levers that true achievers use to attain better outcomes
Source: Everest Group (2023)
We look at these levers in more detail below.

Greater leverage of cognitive automation
Cognitive automation uses AI-based technologies to automate human-like judgement in back-end and front-office business processes. Technology solutions that leverage AI can range from productized solutions such as IDP and conversational AI to bespoke AI solutions that leverage ML, NLP, computer vision, and deep learning to enable human-like decision-making capabilities in specific scenarios. These technologies, when used in conjunction with rules-based platforms such as RPA and process orchestration, can allow enterprises to automate a wider set of use cases and facilitate end-to-end process automation, which cannot be achieved via RPA.

A look at the survey data in Exhibit 8 shows that true achievers have a higher leverage of both standalone AI-based solutions and a combination of RPA and AI than other organizations.

EXHIBIT 8
Average share of automations across RPA- and AI-based automations
Source: Everest Group (2023)

<table>
<thead>
<tr>
<th></th>
<th>True achievers</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>RPA only</td>
<td>53%</td>
<td>66%</td>
</tr>
<tr>
<td>RPA + AI</td>
<td>32%</td>
<td>21%</td>
</tr>
<tr>
<td>AI only</td>
<td>15%</td>
<td>13%</td>
</tr>
</tbody>
</table>

An important consideration to be kept in mind when investing in cognitive automation is that it has implications in terms of additional investments from the enterprise. Transformation leaders need to consider and plan for additional investments in implementation and infrastructure to drive cognitive automation effectively. Exhibit 9 highlights that, for true achievers that have extensively leveraged cognitive automation, implementation and infrastructure costs account for a higher share of their TCO.

While cognitive automation requires additional investments, true achievers have been able to leverage it to automate a wider set of use cases and generate much better outcomes from the automation program in the long run.
Cognitive automation requires additional investment during implementation, as additional time and effort is spent on activities such as acquiring, cleaning, and enriching data, as well as training and iteratively fine-tuning ML models to reach a reasonable level of accuracy. Specialized talent such as data scientists and ML engineers also need to be involved. Moreover, cognitive automation requires additional infrastructure in terms of more CPUs and GPUs, as it requires higher computational power to train and run the ML models. Further, it requires additional support and maintenance related to ML model monitoring and retraining. Overall, cognitive automation tends be 30-40% more expensive than RPA-based automation. Due to the nature of AI, the payback period for cognitive automation may also vary. While RPA solutions may generate ROI within one year, the timeframe is typically longer for cognitive automation. However, as the success of true achievers indicates, these additional investments generate much better outcomes from the automation program.

A best-of-breed approach to sourcing automation technologies

An important aspect of an enterprise’s automation program is its approach to sourcing different technologies. With the emergence of different technologies and their increasing maturity, enterprises must choose the technologies that best suit their specific needs and use cases.

The technology provider landscape is also continuously evolving with different types of providers co-existing in the market. Some providers are moving to a holistic automation solution that combines technologies such as RPA, IDP, conversational AI, API automation, task mining, process mining, and process orchestration into a single integrated platform. They have either built these capabilities in-house or acquired them inorganically. Other technology providers offer a single capability but have carved a niche for themselves by becoming highly specialized in that capability. There are also instances of coopetition between providers in which they have partnered together and created integrations between their platforms in a joint Go To Market (GTM) strategy to offer the best capabilities to their customers.

Exhibit 10 depicts IA technology sourcing approaches for true achievers and other organizations.
While an enterprise may choose a unified platform with built-in RPA and AI / cognitive capabilities that acts as a one-stop shop for their needs, they may miss some opportunities such as best-in-class accuracy rates and ability to effectively address certain use cases if they opt for this approach. As Exhibit 10 above highlights, true achievers have adopted a best-of-breed approach to sourcing IA technologies by integrating best-in-class platforms for different technologies based on their applicability in specific use cases. This approach requires additional investments in implementation and support and maintenance, but it offers better outcomes. Exhibit 11 highlights that a best-of-breed approach requires higher integration during the implementation stage and often needs specialized skill sets or talent for implementation and support. It can also require additional administration and management effort to source and onboard these platforms.

EXHIBIT 10
IA technology sourcing approaches
Source: Everest Group (2023)

EXHIBIT 11
Additional investments to consider when deciding the technology portfolio strategy
Source: Everest Group (2023)
Notably, however, a best-of-breed approach yields better outcomes and a higher ROI for enterprises. Some of the key benefits and considerations with a best-of-breed approach are highlighted below.

<table>
<thead>
<tr>
<th>Benefits of a best-of-breed approach</th>
<th>Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can potentially improve outcomes/value</td>
<td>Enterprises need to consider tools that align well with their current or planned systems landscape</td>
</tr>
<tr>
<td>Certain use cases might be better suited for different products than the base IA platform</td>
<td>Enterprises need to also have a clear framework to realize the desired outcomes from the tools, as opposed to buying first and figuring out the approach later</td>
</tr>
<tr>
<td>Easy to replace – limited vendor lock-in and technical debt</td>
<td>Most enterprises still choose a single base IA platform for orchestrating processes</td>
</tr>
<tr>
<td>In a single platform strategy, an enterprise might end up paying for features that are not used if the pricing is not modular</td>
<td>Enterprises would need to evaluate if their existing platforms can address a use case or if a best-of-breed solution is needed for each use case</td>
</tr>
<tr>
<td></td>
<td>A plug-and-play capability through connectors can help ease the integration process</td>
</tr>
</tbody>
</table>

At the same time, even enterprises that follow a best-of-breed approach typically have a limited set of IA platforms to orchestrate between the different automation and human elements. Many enterprises are in the process of rationalizing the base IA platform to a single platform, as it offers efficiencies for the automation program. Below we list key benefits and considerations for enterprises looking to rationalize their base IA platforms.

<table>
<thead>
<tr>
<th>Benefits of rationalizing the IA platform</th>
<th>Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost efficiencies</td>
<td>Factors to consider when selecting platforms for rationalization</td>
</tr>
<tr>
<td>Easy of development and support</td>
<td>– Platform capabilities and roadmap</td>
</tr>
<tr>
<td>Ease of administration and management</td>
<td>– Cost</td>
</tr>
<tr>
<td>Ease of training</td>
<td>– Ease of interoperability</td>
</tr>
<tr>
<td>More standardized teams/toolkits/outcomes</td>
<td>– Relationship with provider</td>
</tr>
<tr>
<td></td>
<td>Migrating bots to a different platform can be quite expensive and time consuming; hence, enterprises should:</td>
</tr>
<tr>
<td></td>
<td>– Conduct due diligence to determine if each bot is the right choice to move or whether it should be decommissioned</td>
</tr>
<tr>
<td></td>
<td>– Some bots may have to be totally rewritten from scratch</td>
</tr>
</tbody>
</table>
A unified CoE strategy
Creating and empowering the automation CoE early in the enterprise journey is a key success factor for mature and scaled-up enterprises. A dedicated CoE is responsible for evangelizing IA across the enterprise, as well as end-to-end program management. Exhibit 12 depicts enterprise approach to automation program governance and management for true achievers and other enterprises.

EXHIBIT 12
Enterprise approach to automation program governance and management
Source: Everest Group (2023)

True Achievers have predominantly adopted a unified CoE strategy as their core operating model. A unified CoE involves a centralized team that is responsible for all automation initiatives across the enterprise. It lays down the foundational structure and governance framework for successful automation execution, management, and scale up. As programs start to mature, a hub-and-spoke model becomes necessary to scale up and meet the demands of different business units and functions. In this case the central CoE holds primary ownership for overall program governance and manages only enterprise-wide automation projects. The development and execution of automation is federated to the spoke CoEs, which are linked to each business unit, helping focus on the needs of individual businesses and better understand the processes, challenges, and opportunities specific to them.

In contrast, in a decentralized model or where there is no CoE, businesses are left to manage their own automation initiatives and there is no structured approach or consistency to the programs, which makes scaling up difficult and economies of scale continue to be elusive.

In a unified CoE strategy, enterprises need to make higher investments upfront to set up the CoE and put in additional effort in governance, program management, and quality assurance activities such as standards and best practices creation, coaching, architecture reviews, and code reviews. However, these investments yield better cost efficiencies and higher ROI in the long run. As Exhibit 13 highlights, true achievers have been able to keep their operating model and quality assurance costs well below other enterprises and have also demonstrated a higher automation program efficiency across metrics such as deployment time, reusability, and utilization rate. This indicates that a unified CoE helps enterprises to reduce overall costs and rework across teams and improve program efficiency.
EXHIBIT 13
Impact of a unified CoE strategy on costs and program efficiency
Source: Everest Group (2023)

- **Operating model**
  - 60% of true achievers that have leveraged a unified CoE strategy have been able to keep their operating model costs below 10% of their TCO, compared to 0% for others.

- **Quality assurance costs**
  - 31% of true achievers that have leveraged a unified CoE strategy have been able to keep their quality assurance costs below 5% of TCO, compared to 0% for others.

Impact of a unified CoE strategy on automation program efficiency

- **Average time from planning to robot deployment**
  - 85% of true achievers that have leveraged a unified CoE strategy have been able to keep the average time from planning to robot deployment to less than 4 months, compared to 69% for others.

- **Robot reusability**
  - 46% of true achievers that have leveraged a unified CoE strategy have been able to enable reusability for >30% of the robots created, as compared to 19% for others.

- **Robot utilization**
  - 31% of true achievers that have leveraged a unified CoE strategy have been able to ensure bot utilization rates of >70%, as compared to 6% for others.

Some of the best practices that automation leaders from true achiever enterprises adopt are listed in Exhibit 14.
EXHIBIT 14
Best practices for implementing the automation program operating model
Source: Everest Group (2023)

Choose the right automation use cases
- Ensure that the right automation use cases are prioritized
- Do NOT pick use cases for which the automations are run infrequently
- Build automation only if exceeds a minimum threshold of hours saved or dollar savings
- Do NOT pick unstable processes, as they could result in high support & maintenance costs

Ensure a robust design
- Use industry best practices in automation design, including standards for architecture and reusability
- Conduct multiple independent reviews of design before development
- Conduct a thorough review of design to save time and effort further on in the process

Optimize processes
- Evaluate the potential for process optimization before undertaking an automation
- Reduce redundancies within a process before automating it
- If process optimization takes a long time, consider carrying out temporary automation first

Citizen development
In a citizen-led model, business resources or Subject Matter Experts (SMEs) play a key role in the identification and delivery of automations. A better understanding of processes and business context leads to higher-value opportunity identification, improved process visibility, lower dependency on IT, and faster scaling up. Exhibit 15 shows that true achievers leverage this model more than false leaders, with a higher share of automations developed by business resources.

EXHIBIT 15
Adoption of citizen development across enterprises
Source: Everest Group (2023)

<table>
<thead>
<tr>
<th>Share of citizen developer-executed processes</th>
<th>True achievers</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>26-50%</td>
<td>29%</td>
<td>6%</td>
</tr>
<tr>
<td>10-25%</td>
<td>29%</td>
<td>22%</td>
</tr>
<tr>
<td>Less than 10%</td>
<td>14%</td>
<td>28%</td>
</tr>
<tr>
<td>Citizen developers do not execute any process</td>
<td>29%</td>
<td>44%</td>
</tr>
</tbody>
</table>
To create a successful citizen developer model and facilitate its adoption, enterprises need to consider and plan for additional investments in organizational change management, training, quality assurance, and infrastructure, as Exhibit 16 highlights.

**EXHIBIT 16**

Additional investments for citizen development by True Achievers

*Source: Everest Group (2023)*

<table>
<thead>
<tr>
<th>Area</th>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infrastructure</td>
<td>80%</td>
<td>Of true achievers that have leveraged citizen development incur infrastructure costs accounting for &gt;10% of their TCO, compared to 56% for others</td>
</tr>
<tr>
<td>Quality assurance</td>
<td>80%</td>
<td>Of true achievers that have extensively leveraged citizen development incur quality assurance costs accounting for &gt;5% of their TCO, compared to 67% for others</td>
</tr>
<tr>
<td>Organizational change management</td>
<td>60%</td>
<td>Of true achievers that have extensively leveraged citizen development incur OCM costs accounting for &gt;5% of their TCO, compared to 38% for others</td>
</tr>
<tr>
<td>Training programs</td>
<td>40%</td>
<td>Of enterprises that have extensively leveraged citizen development incur awareness training costs accounting for &gt;10% of their TCO, compared to 14% for others</td>
</tr>
</tbody>
</table>

Enabling citizen developers typically requires additional investments in IT infrastructure such as virtual machines, high-end laptops/desktops, and high-speed internet. It also requires higher investments in training business users and SMEs in identifying use cases and creating automations. To ensure the program’s success, enterprises also need to invest in organizational change management initiatives, such as educating senior management, creating incentivization programs, identifying the right talent as program torch bearers, and creating a culture of innovation. It is also important to govern and track citizen developer automations to ensure adherence to internal quality standards.

True achiever enterprises highlight a couple of best practices to create a successful citizen development model, as described below.

**Strong focus on training and incentivization programs**

- Recurring training programs for citizen developers
- Programs led by external vendors and professional instructors and open to all
- Handholding through initial automations; dedicated resources within the team helping citizen developers if they face any issues
- Incentivization programs with rewards and recognition, driven by senior leadership
Tracking of automations and realized benefits

- Tracking of all automations globally at regular intervals (e.g., monthly, quarterly)
- Every developer who creates an automation to register their automation and list estimated benefits
- A dashboard presents the benefits information to everyone in the organization, thereby creating a circle of responsibility:
  - Management tracks the benefits dashboard
  - It validates claims against reality
  - It holds developers accountable for the benefits highlighted

A flexible talent sourcing strategy

Investing in developing a talent pipeline for driving automation is one of the most important aspects of an IA program. Enterprises use many strategies to secure the right talent for automation initiatives. As Exhibit 17 highlights, true achievers use a flexible talent sourcing strategy that leverages multiple channels, including upskilling/reskilling of internal resources, third-party resources, and hiring of new resources with IA skills, as well as recent graduates, and training them in IA skills.

EXHIBIT 17
Adoption of talent sourcing strategies across enterprises
Source: Everest Group (2023)

<table>
<thead>
<tr>
<th>Adoption of talent sourcing strategies for IA skills</th>
<th>True achievers</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leverage external/third-party resources</td>
<td>79%</td>
<td>72%</td>
</tr>
<tr>
<td>Hire new resources with IA skills</td>
<td>86%</td>
<td>56%</td>
</tr>
<tr>
<td>Hire from colleges and/or recent graduates to train in IA skills</td>
<td>57%</td>
<td>17%</td>
</tr>
<tr>
<td>Leverage existing resources who are re-skilled/up-skilled with robust training</td>
<td>50%</td>
<td>39%</td>
</tr>
</tbody>
</table>

Third-party service providers help enterprises access a wider pool of resources skilled in automation technologies and help them to scale up faster initially. However, as programs begin to mature, hiring internal resources and training them on technologies helps bring down costs and creates a pool of resources who are more aware of the business context. Some of the key benefits and considerations with different talent sourcing strategies are explained below.
## An integrated CIO-COO office driving transformation

To truly unlock the benefits of automation, these programs require a coordinated effort between the IT and operations teams. When the program is run by either team in silos, there is higher probability of misalignment of KPIs, which can pose roadblocks, create internal resistance, or result in rework. Exhibit 18 depicts that true achievers create an integrated CIO-COO office to lead digital transformations within the organization. While the operations team is responsible for identifying use cases, driving process excellence and optimization, and executing automations, the IT organization supports the program’s technology needs, including the required infrastructure, integration with internal applications, and security and compliance. Having an integrated approach embeds automation into the very DNA of the organization and becomes an integral part of the way of working.

<table>
<thead>
<tr>
<th>Sourcing strategy</th>
<th>Benefits</th>
<th>Considerations</th>
</tr>
</thead>
</table>
| **Leveraging internal talent and upskilling/reskilling them** | • Opens new career paths for employees  
• Higher job satisfaction  
• Retention of knowledge within the organization  
• Helps avoid critical dependency on providers  
• The enterprise does not have to pay a hiring premium | • Primarily for RPA, not cognitive automation  
• Need to build a culture of learning across the organization  
• Investments required in effective training programs |
| **Leveraging third-party resources** | • Essential at the beginning of the program to set up the CoE  
• Helps learn from industry best practices and advisory  
• Enables flexibility and scalability based on requirements  
• Provides unique skill sets for specific needs  
• Can be utilized to train internal resources | • Costs maybe higher for external resources but are relatively short-term costs  
• Costs can be managed through effective leverage of offshore resources |
| **Hybrid hiring model with experienced resources, as well as campus hires** | • Interns can be hired and trained as employees  
• Lower cost of hiring for campus hires  
• Over time, helps build knowledge within the organization | • For inexperienced hires, need to evaluate aptitude during the interview process  
• Once the interns are onboarded, start with simple maintenance projects; train through mentors, self-learning, and trainer-led courses with specific goals  
• Can also leverage talent training agencies that train recent graduates, who can then be hired  
• Experienced resources can be hired for more critical roles / specialized skill sets |
EXHIBIT 18
Leadership of digital transformation initiatives
Source: Everest Group (2023)

Some of the key benefits and considerations with an integrated CIO-COO office are described below.

<table>
<thead>
<tr>
<th>Benefits of an integrated CIO-COO office</th>
<th>Considerations</th>
</tr>
</thead>
</table>
| Better alignment with broader IT transformation initiatives | • Avoid automations where process/system changes might be coming up (in terms of UI, API, etc.)  
• If a broader transformation is upcoming, perform a cost-benefit analysis to determine if it makes sense to have a short-term automation solution  
• Track other planned changes/transitions and have resources in the COE to work with technology teams to monitor system downtimes, migrations, etc., and plan automations in alignment with these |
| Better alignment with business needs | • Follow business needs and priorities in terms of agenda  
• Cannot start program from just the IT side without business teams being onboard |
Conclusion

The global intelligent automation market has been rapidly growing over the past few years on the back of increasing enterprise demand and technology providers’ capability enhancements. Given the complexity of enterprise processes and the novelty of these technologies, enterprises are still trying to figure out ways to maximize the value from their investments.

Since intelligent automation encompasses numerous stages and technologies, cost components can vary, and it could become difficult for businesses to have a comprehensive view of their TCO. Additionally, intangible benefits such as customer satisfaction and employee experience could be difficult for enterprises to measure, resulting in incorrect ROI estimation and an underestimation of the benefits that might yield higher returns in the long run. Our survey findings indicate that most enterprises have a myopic view of their TCO, which leads to an inflated sense of ROI, making it difficult for them to identify the gaps in their programs.

True achievers lead the way by having a comprehensive view of their TCO, which allows them to measure the true ROI of their programs. These enterprises unlock many benefits from their automation programs and will continue to gather incremental benefits in the future. They have a holistic view of their TCO and ROI and have achieved superior strategic outcomes, such as improved customer and employee satisfaction, in addition to the regular benefits, such as cost savings and faster turnaround time. These enterprises adopt strategies such as increased leverage of cognitive automation, a best-of-breed approach to source automation technologies, a unified CoE strategy, citizen development, a flexible talent sourcing strategy, and an integrated CIO-COO office driving transformation to embed automation within their organizational DNA to gain superior outcomes.

Rather than going for quick wins by implementing intelligent automation in silos or in an unstructured manner, it is important for enterprises to take time and have a forward-looking approach to these automation investments. Intelligent Automation is here to stay, and enterprises that realize this sooner and take a cue from the true achievers will be able to thrive in a competitive environment. Enterprises need to incorporate a holistic view of their costs and benefits and adopt industry best practices, to reap powerful returns on their investments and thrive in a digital-first future.
Everest Group is a leading research firm helping business leaders make confident decisions. We guide clients through today’s market challenges and strengthen their strategies by applying contextualized problem-solving to their unique situations. This drives maximized operational and financial performance and transformative experiences. Our deep expertise and tenacious research focused on technology, business processes, and engineering through the lenses of talent, sustainability, and sourcing delivers precise and action-oriented guidance. Find further details and in-depth content at www.everestgrp.com.

This study was funded, in part, by Cognizant

For more information about Everest Group, please contact:
+1-214-451-3000
info@everestgrp.com

For more information about this topic please contact the author(s):
Anil Vijayan, Partner
anil.vijayan@everestgrp.com

Vaibhav Bansal, Vice President
vaibhav.bansal@everestgrp.com

Ashwin Gopakumar, Practice Director
ashwin.gopakumar@everestgrp.com

Shiven Mittal, Senior Analyst
shiven.mittal@everestgrp.com

Pragya Sultania, Senior Analyst
pragya.sultania@everestgrp.com

This document is for informational purposes only, and it is being provided “as is” and “as available” without any warranty of any kind, including any warranties of completeness, adequacy, or fitness for a particular purpose. Everest Group is not a legal or investment adviser; the contents of this document should not be construed as legal, tax, or investment advice. This document should not be used as a substitute for consultation with professional advisors, and Everest Group disclaims liability for any actions or decisions not to act that are taken as a result of any material in this publication.