

INTELLIGENT AUTOMATION AT SCALE: WHAT'S THE HOLD UP?

Across all sectors, businesses are investing in and pursuing automation and smart technologies. But while companies are kicking the tires on automation – and achieving value, in pockets – many are yet to achieve its truly transformative power. The key challenge? Progressing from pilots and proofs of concepts to implement automation at scale, and unleashing the true value of human + machine collaboration.

Many companies are enjoying success from implementing intelligent technologies in specific business areas and processes. Robotic Process Automation (RPA), for example, is helping to reduce operating cost and improve the efficiency of many repetitive and manual back-office processes. Automation is driving data and analytics to reveal new insights into customers. And new automated channels are enabling companies to deliver differentiated customer interactions.

But few businesses are seeing the enterprise-wide transformational gains that are the true promise of Intelligent Automation at scale. Most have been taking a fragmented approach, identifying individual opportunities as they arise and implementing specific tools to solve a specific problem. But this fragmentation creates complexity and hinders a company's ability to scale.

A FUNDAMENTAL SHIFT – WITH REWARDS TO MATCH

In the era of human-machine collaboration, automation should be approached as a cultural change that brings people, process and technology together to build a sustainable enterprise model. What's more, successfully automating key processes and functions can free-up investment capacity. That's essential to move into new markets and opportunities as companies rotate to the New.

Rather than replacing people with machines for more efficient execution of an existing process, the greatest gains will come from reconfiguring the relationship between humans and smart technologies. The evidence? Organizations that have applied machine learning to their processes have seen a 200 percent increase in relevant KPIs. But those that have gone further by reimagining processes from scratch and unlocking the potential of human and machine interaction are seeing performance improve 10-fold¹.

Rethinking processes is only the start. As businesses increase the sophistication of the Intelligent Automation they deploy, they can do much more. They can extend the current business to drive growth. And by introducing disruptive capabilities they can create entire new businesses. Scaling automation and artificial intelligence

effectively depends on finding the right balance across these three dimensions of greater efficiency, growth and disruptive innovation.

NAVIGATING THE PATH TO SCALE

Companies need to see Intelligent Automation as the gamechanger it is: a profound shift for the overall enterprise. So what are the barriers that large enterprises must overcome to achieve that potential? They range from people and leadership, technology and operating model through to data and the overall approach to automation that each business pursues.

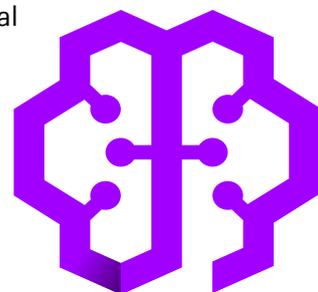
GOVERNANCE AND SPONSORSHIP: TO CHANGE EVERYWHERE, START AT THE TOP

Perhaps the single most important driver of success in scaling automation is the vision and commitment from the organization's senior leaders. Many businesses aren't achieving scale because they have pursued a bottom-up, piecemeal approach. Senior leadership needs to emphasize automation as a strategic priority and issue a mandate for change.

That mandate should define the scope of automation through understanding where they want to start and what the priority areas should be. Change management is vital, and that requires effective change agents, new capabilities and a culture that embraces automation – across the organization and not limited to a central team of designated experts.

While each organization that has successfully scaled automation is unique, they have all embraced core principles – at Accenture we refer to these as **MELDS**:

- 1. They adopt the right *mindset* for reimagining what's possible**
- 2. They champion *experimentation***
- 3. *Leadership* takes an active role in setting goals and directing artificial intelligence strategy**
- 4. They incorporate the right *data* as an integral part of their artificial intelligence strategy**
- 5. They empower employees to cultivate new *skills*.**



¹<https://www.accenture.com/us-en/insight-process-reimagined>

APPROACH TO AUTOMATION: IT'S ALL ABOUT OUTCOMES

Many companies start with a solution and then go in search of a question, selecting a tool as 'the answer', such as RPA from a specific vendor. Instead, implementing automation is (or should be) all about the outcomes it achieves; whether that's driving operational efficiency, greater productivity, higher quality, increased customer satisfaction or the creation of an entirely new business. Successful automation programs therefore focus relentlessly on measuring and reporting the business value and outcomes they generate. Not only is this essential to demonstrate success, it can serve as a stimulus to other projects as the value automation delivers becomes clear.

Automation follows a continuum of sophistication, starting with RPA and progressing to ever-more sophisticated artificial intelligence. But that should not dictate how companies adopt automation. Prioritizing outcomes over technologies will likely mean that a combination of the 'three A's' – automation, advanced analytics and artificial intelligence – rather than one technology in isolation will deliver success.

TECHNOLOGY: GETTING AGILE

Most organizations continue to depend on the traditional waterfall model for design, development, testing and deployment of IT applications. Well defined stage gates, acceptance criteria, security and architecture review and approval cycles are tuned for major application deployments scheduled once or twice a year. But such a model goes against everything that Intelligent Automation deployments stand for: rapid prototyping and agile development/ deployment including tolerance for failing-fast. While security and architecture considerations must persist, most ambitions for rapid automation proliferation die on the vine from a lack of IT agility and business readiness.

This limitation is best resolved by investing in training and upgrading skills for IT teams; putting in the effort up front to modify IT processes, team



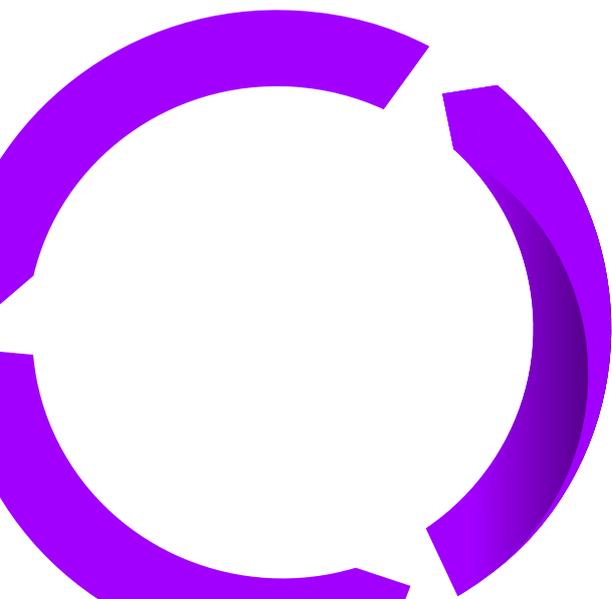
structures, infrastructure and tools to support rapid automation deployment in an agile manner. In practice this means:

- *IT processes for design approvals today might take weeks and sometimes months – in contrast, review and approval of each automation design should be completed in one to three business days by a single designated architect, as part of each sprint cycle*
- *Team structures need to become more of a factory model for scaled automation delivery, consisting of a 'team of teams', with each team responsible for design, build, test and deployment of five-10 automations into production every quarter*
- *Tools must support the automation vision with templates that standardize business case creation and value measurement, accelerators that automate design documentation and code reviews, dashboards to manage and control the bots in production, etc.*

Another challenge is the operation and uninterrupted running of bots in production. Deployment of a bot into production is not the end but only the start of the automation journey. Organizations tend to realize intended business benefits only if the bots run without major downtime for at least 12-24 months. The challenges of bot management are compounded when there are dozens or even hundreds of bots running across regions, across lines of businesses and across on-premise and cloud infrastructure.

To address this, the first step in the right direction is to establish an Automation Center of Excellence for scheduling, monitoring, fine tuning, fixing, upgrading and running the bots in production. It is important to optimize ticket and service management processes and tools to handle incidents related to bots in an agile manner. A run team with specific capabilities to fix bot-related incidents and problems is also key. This team should also be responsible for generating reports on bot productivity, efficiency and other KPIs that can help measure the value realized from automation.

The above approaches must be underpinned by a wide range of organizational changes in the IT setup. This includes specialized upskilling, training and certifications for IT



staff on automation tools, running innovation programs that support the automation vision, and reinforcing positive behavioral changes with top down communications and updated formal KPIs that drive a mindset shift. There has to be an organization-wide realization that automation is not just another IT task.

PEOPLE: OPERATING IN A HUMAN+ WORLD

Whichever technology options they choose, all organizations will have to equip their people with new skills. Creating the right skillsets for automation has two clear dimensions. One, as described above, is the specialized upskilling, training and certifications. The other key dimension is how people will work with and alongside automation technologies.

An organization's workers need to behave, think and act in a new way. Without the right skills and talent, no organization will be able to realize automation's promise. But there is a disconnect between companies' ambitions and the commitment to reskilling staff to operate effectively in an automated world.

According to Accenture research, six out of 10 business leaders expect roles requiring collaboration with artificial intelligence to increase in the next three years, and over half say that machine-human collaboration is important to the achievement of their strategic goals. Workers are keen to work with smart technologies, with 67 percent saying that they are eager to learn new artificial intelligence-related skills and 45 percent believing that artificial intelligence will help them work more efficiently. However, only three percent of executives say that they intend to significantly increase their investment in training and reskilling over the next three years². It's a gap that organization must close.

To do that, organizations need to think across three dimensions:

1. *Prioritize skills for development, depending on the type of artificial intelligence being used and the size, sector and existing skills levels of the organization*
2. *Tailor programs to suit a range of employee "starting points", addressing differences in employee motivation levels and existing skills*
3. *Create innovative learning experiences using digital methods.*

DATA: THE CRITICAL ASSET

While the simplest forms of automation, i.e. rules-based RPA, require clear instructions, data quantities and quality are less important.

But as organizations seek to introduce more sophisticated, cognitive technologies, the quantity and quality of data they use becomes a vital priority. Bad data leads to bad outcomes. Algorithms produce (at best) inaccurate results and at worst biased and harmful outcomes.

But with the right data, organizations can be much smarter about decision-making in the processes that are in the realm of intelligent automation. Intelligent automation reinforces the human, for example, how a virtual assistant enables enhanced interactions.

To be able to harvest the value from their data, organizations need to treat it as an asset. Like any other asset, this needs to be owned, managed as a resource and linked to the economic value that it brings.

Data-centricity involves setting processes, policies, procedures, and standards to ensure data is reliable, accurate, consistent, complete, secure, available and trusted across the organization. Data governance principles need to be instituted throughout the enterprise. Getting this right enables:

- *Process automation and faster data exchange within the business*
- *Lower cost of manual data reconciliation and alignment efforts, error fixing, etc*
- *Better quality decision-making by securing reliable, high-quality data "just in time"*
- *Greater availability of key data – speed of access, data timeliness*
- *Addressing data pain points at the source and creating a culture of data excellence*
- *A 360° view of the enterprise and corporate performance management improvement*
- *Faster time-to-market and greater efficiency by providing more accurate data in a timely manner.*

CONCLUSION

Automation at scale offers the promise of not simply doing things differently but doing entirely different things. As well as increasing efficiency by orders of magnitude, smart technologies open the chance to engage with customers in new ways, deliver new experiences and even create whole new business opportunities based on previously unavailable insights and capabilities. But to secure those gains, companies must take an enterprise-wide approach, sponsored from the top of the organization. Automation is a game-changer – and that means playing by new rules.

²<https://www.accenture.com/us-en/company-reworking-the-revolution-future-workforce>

CASE STUDY: ERICSSON

Automation and artificial intelligence implemented internally by Group IT have proven to be a catalyst and enabler for Ericsson's own IT/Digital transformation, with the organization demonstrating many of the best practices highlighted in this paper.

SPONSORSHIP FROM THE TOP AND AN OUTCOME-FOCUSSED APPROACH

The commitment shown by senior management, and targets set, have allowed Ericsson to aggressively scale their automation capability amidst an environment of multiple ongoing competing initiatives.

The organization has taken a value-led approach to the identification and prioritization of opportunities; measuring value from the initial opportunity assessment all the way through to rollout, to ensure that the most valuable opportunities are realized. Through this approach, Ericsson has realized significant savings. 400,000 hours of work are automated on an annual basis, and with over 100 RPA bots live and having processed over one million transactions, Ericsson have witnessed cost, quality, customer satisfaction and lead time improvements across functions and business areas.

Furthermore, by taking a holistic view and assessing the opportunity to transform their overall processes, the company has realized opportunities with several times the value potential versus focusing on automation of as is processes in isolation. These efforts include standardization of repetitive tasks and automation of non-rule-based processes leveraging artificial intelligence in the form of machine learning and natural language processing.

TECHNOLOGY – AN AGILE DELIVERY APPROACH

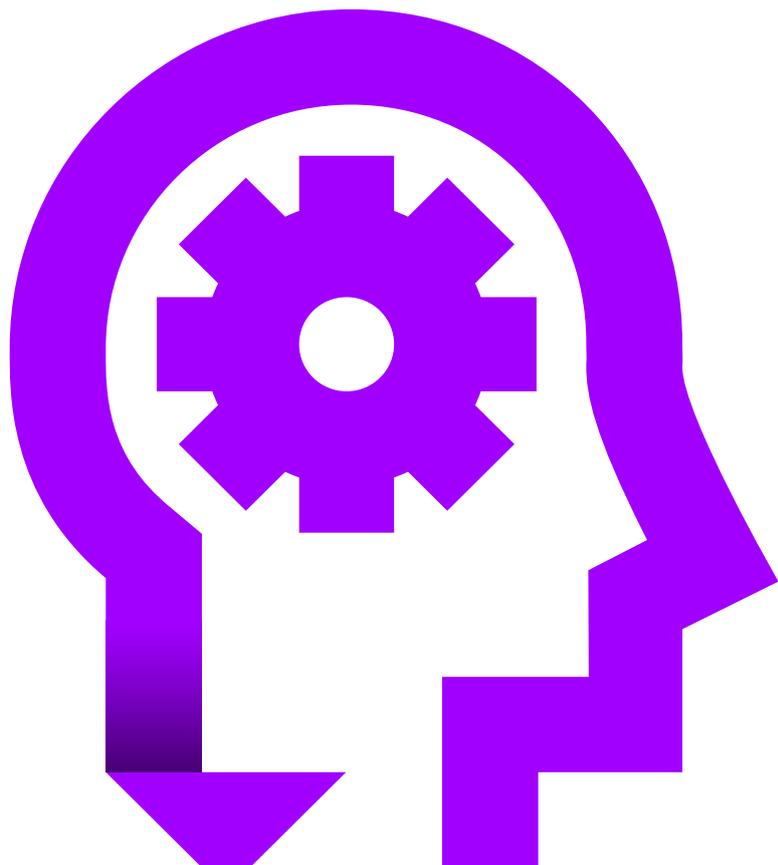
Ericsson's cloud-based automation infrastructure enables an accelerated development process for new automations which reduces time to market for automation projects. To further support agile ways of working, Ericsson continues to introduce new tools and improvement activities to their workforce in areas including documentation, value tracking, automation monitoring and service management.

PEOPLE - SKILLS, HEARTS AND MINDS

Ericsson have recognized that scaling automation requires new forms of collaboration and skill development. They have built capabilities to identify automation opportunities, and develop and deploy robots, and have established a common methodology for all phases of the automation cycle. Ericsson have also established an 'Automation, AI and Analytics Tribe' that connects 1,200 automation leaders and drivers across the business to ensure alignment on strategy and execution topics.

A DATA-CENTRIC OPERATING MODEL

In viewing 'data at scale' as a pre-requisite to enable future differentiation and profitable growth, Ericsson are finding new ways to break down organizational silos and leverage data across the enterprise; including setting up a data-centric operating model with company-wide data governance, enhancing data management capabilities and ramping up the data architecture to enable data at scale.



AUTHORS

Roar Carlson

Managing Director, Nordics
Communications, Media & Technology
roar.carlson@accenture.com

Dinesh Mohan

Managing Director, Europe
Intelligent Automation
dinesh.x.mohan@accenture.com

Per Österman

Managing Director, Nordics
Applied Intelligence
per.osterman@accenture.com

Daniel Hjelte

Managing Director, Nordics
Intelligent Enterprise, Robotics
& Artificial Intelligence
daniel.hjelte@accenture.com

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