

COE 2.0: Dawn of the Intelligent Automation Center of Excellence

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As the promise of robotic process automation (RPA) captured business leaders' imagination over the past several years, many organizations sprinted to create Centers of Excellence (COE) to manage their automation programs.

Companies were generally aligned on the desired automation goals that COEs would drive: profit growth, cost optimization, accuracy improvement, and improved customer experience, among others. However, on-the-ground evidence and industry analysis is increasingly demonstrating that the traditional COE and automation program — namely, one focused on rules-based automation — often holds back the broader promise of artificial intelligence-led business transformation. An established COE may not always be the same as a successful COE, especially when its focus is principally, or even solely, on RPA opportunities and adoption within the organization. Artificial intelligence technologies are evolving quickly enough that a COE established several years ago

with the goal of introducing RPA as a mindset may need to be redefined as machine learning and other artificial intelligence solutions are increasingly proven to deliver value and impact.

Enter the COE 2.0: a driver of combined RPA, machine learning, and other artificial intelligence toolkits, digital integration, change management, training, and process re-engineering. Our research shows that these COEs — with proper resources, scope, and executive leadership — are crucial to an end-to-end Intelligent Automation transformation. In fact, an “intelligent” COE may be the key to a program that thrives, enables strategic shifts, and prepares an organization to flourish in a competitive landscape.

Early success with an RPA-centric COE, significant obstacles for future value

Adoption of RPA has occurred at breakneck speeds, with growth of 57% in associated technology spending over the past year and an anticipated 200% growth over the next three years.¹ However, implementation of automation at scale remains elusive for many organizations. As of last year, 69% of companies had fewer than 10 RPA bots in production; only 3–5% had 30 or more bots, according to industry research.² There are many causes behind the obstacles preventing wider automation scale. Companies have struggled to maintain hundreds of single-task bots;³ up to 50% of RPA use cases fail over time because of poor design and maintenance;⁴ and COE adoption rates are low, with as few as 37% of companies recently surveyed indicating that they make use of one.⁵ Focusing a COE and an automation program only on RPA opportunities can lead to three major detriments and challenges. COEs and automation programs should evolve — in unison — to address these challenges.

1 First, the scope and potential of automation processes is greatly diminished as use cases involving unstructured documents, cognitive decision-making, and routine rules changes cannot be easily implemented. Organizations typically identify and succeed with “quick win” use cases — typically those that make use of basic data entry or extraction from highly standardized documents — but fail to successfully implement more-complex use cases which would yield longer-term value. As one McKinsey publication on RPA-only approaches notes: “Installing thousands of bots has taken a lot longer and is more complex than most had hoped it would be. It might sound simple to pull a salary statement, but what if, for that worker, the data is in unstructured formats?”⁶

2 Second, COEs have not sufficiently focused on the change-management implications mainly due to a focus on task-level RPA automation. For bigger and more intelligent end-to-end process automation, companies struggle with getting buy-in from key stakeholders and encouraging adoption when people feel threatened by automation and resistant to change. Due to lack of early stakeholder engagement when shaping future-state vision and communications

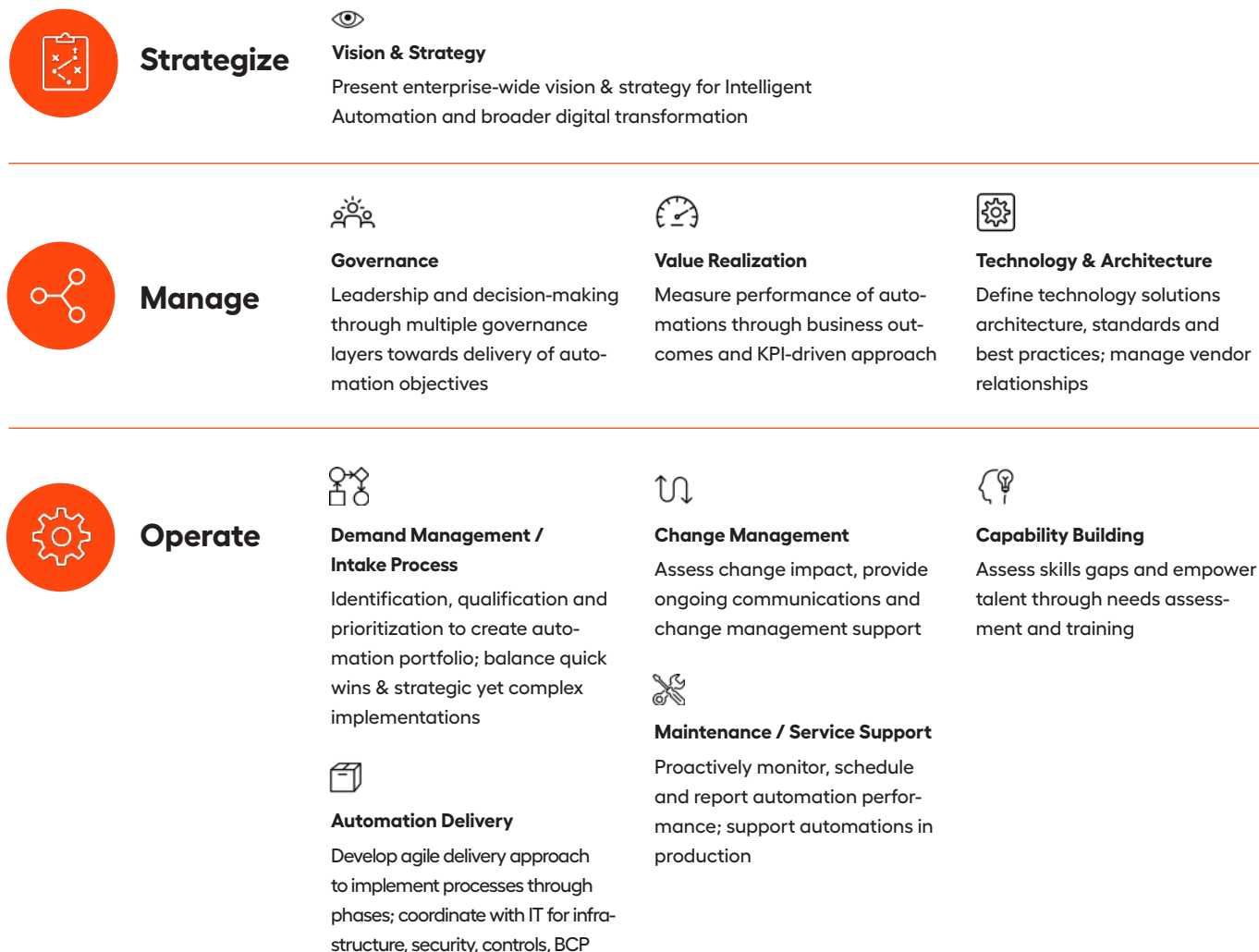
around the transformational value of automation, many efforts fail to address possible follow-on impacts. These can include confusion around new ways of working, disillusioned employees and operational disruption. Without an effective approach to measure the impacts of new automated processes on all stakeholders (both internal and external), it’s difficult to design effective interventions. Strong communication, training and transition plans can help ensure that automation becomes the new business as usual.

3 Third, RPA-focused automation typically views cost reduction as the single most important metric by which an automation program’s success or failure is measured. While cost reduction is an important measure of business value, it is not the only way to view transformative business outcomes. A robust value-realization approach can help COEs give emphasis to other benefits, such as: revenue growth, improved customer experience (internal and external), costs avoided by reducing risk and/or expensive alternate investments (whether in people or IT), overall capability building by embedding automation in the business culture, and more.

The COE 2.0's role in enabling scalable Intelligent Automation

A COE 2.0 serves its organization by taking three key actions with regards to the automation program: setting and promoting a strategy, serving as a governing body, and assisting with effective and sustainable implementation of RPA and machine learning use cases.





Lessons from building Automation Centers of Excellence

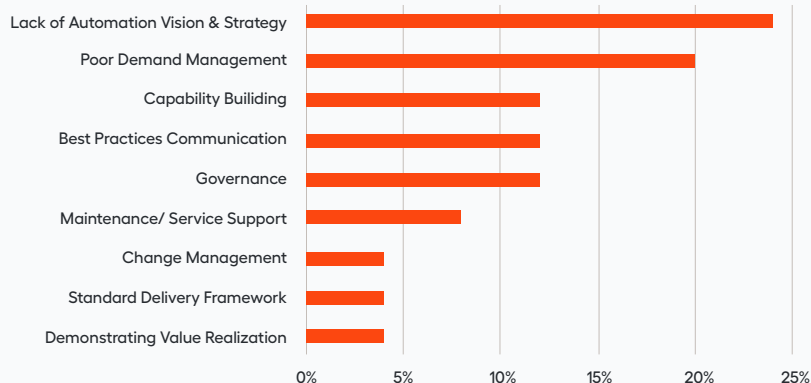
As the COE — and the wider strategy — matures from RPA-focused automation to one that increasingly integrates machine learning, some core components will require less focus while others grow in importance. A COE's role, team make-up, and goals are not static; they will need to change over time to meet the needs of an organization's automation journey. Five core components in particular — vision & strategy, value realization, technology & architecture, automation delivery, and change management — should garner the greatest attention in the transition to an Intelligent Process Automation COE.

Vision & Strategy

Many organizations note that they seek to achieve scale with their automation program, but a lack of vision and/or strategy often means there is only a vague idea of what success looks like or whether it can ever be achieved. Automation needs to be a key transformation pillar across the organization; a vision & strategy are a starting point for success. Many considerations should inform the development of an automation vision, including but not limited to market conditions, growth objectives, resource availability, and the competitor/industry landscape. For a COE moving to advanced artificial intelligence applications, the vision & strategy should include a role

for machine learning as well. When crafted, an automation vision should be widely communicated. For example, Santander included a part of their automation vision in its latest annual report: “We are re-engineering, digitalizing, and robotizing so that eventually all processes will be automated for speed and efficiency.”⁷ Not coincidentally, Santander’s annual report also stressed the importance of machine learning on several occasions. Our research shows that a lack of a vision & strategy is a leading factor undermining scale in automation programs (Exhibit B, right).⁸

EXHIBIT B: TOP CHALLENGES PREVENTING SCALE OF AUTOMATION PROGRAMS



Value Realization

Accurate and continuous tracking of metrics related to value can equip organizations with data to assess progress against their automation strategies. The collection of a robust set of metrics can serve as business intelligence for enterprise-wide leadership, other internal audiences, and external stakeholders. A review conducted by WorkFusion found that organizations are making their automation efforts public. For example, in its most recent annual report, JP Morgan Chase noted that “initial results from machine learning fraud applications are expected to drive approximately \$150 million of annual benefits and countless efficiencies.”⁹ Only 56% of COEs aggregate and deliver collected automation metrics to their Boards and Executive Committees on a routine cadence; another 20% report metrics to internal working groups but not to the Board (Exhibit C, p. 7, details the top metrics collected).¹⁰

Technology & Architecture

A COE needs to maintain a best-fit solution perspective through evaluation of automation requirements and how these complement other digital technologies. A COE should be tasked with providing in-house advice on the best practices around standards, reference architectures and accelerators (such as reusable components, development frameworks, methods and guidelines), and reusability towards the goals of ensuring successful deployments in the most efficient and effective way. Organizations have done this by developing community practices, coupled with organization-wide communication and governance. Based on the mandate and operating model of a COE, this goes beyond “policing” activities to a more ongoing, collaborative development of automation best practices. Reusability becomes particularly critical to ensure fast time-to-value for machine learning use cases. For example, a healthcare provider machine learning use case could

include identification of the medical procedure, patient name, date of procedure, and other key details from fully unstructured documents. Implementation of this use case provides several reusable components, including medical procedure exceptions and third-party documentation handling.

Automation Delivery

An effective and efficient automation delivery strategy and model is the backbone of any COE. Delivery teams need to be staffed with all necessary core skills: business analysis, development, testing, data architecture, delivery management, and agile coaching; as well as specialized skills such as domain and machine learning expertise. Delivery models will move back and forth — from centralized teams which ensure maximum adherence to standards, to nimbler decentralized teams for smaller-scale use cases. Long-term strategy must manage a blend of external resources with in-house talent to meet capability development needs.

Change Management

To maximize value, organizations also need to proactively plan how to manage changes (whether to employees, customers, operations or technology) stemming from the introduction of automation. This must be more than an afterthought. Data aggregated by WorkFusion indicates 40% of COEs do not have dedicated focus on promoting or designing change management, which aligns with why organizations consider change management a leading reason for failed implementations.¹¹ The Automation COE leader at a major healthcare company recently described how a highly standard business practice — managers with the most employees get the most executive attention and promotions — deterred his organization’s ability to scale automation because managers were concerned about their own status in the company.¹²

The solution required a change management approach from human resources regarding how promotions are considered and awarded.

Governance

A COE should provide accountability and effective management of the overall automation effort, by defining the owner of the strategy, aligning executive-level sponsorship and appropriate financial investment, and empowering the COE with decision-making authority. A fine line exists between having a COE serve as a bureaucratic layer while it facilitates timely use case deployment. About 56% of organizations with an existing Automation COE maintained a formal “deal review” process for approving potential use cases before implementation, according to data collected and analyzed by WorkFusion.¹³ Approximately 80% were responsible for assessing the value of an automation use case, but final approval remained with a governance committee outside of the COE — which often helped enable faster decisioning and development.

Demand Management and Intake Process

An automation strategy is only as effective as the ability of an organization to generate and act on ideas. Managing automation demand is a key gateway for business lines and functions to engage with the COE. In our experience, demand generation for new COEs has typically been highly centralized (that is, the COE plays a key role in identifying use cases), but over time, is federated to the business lines as knowledge develops and more internal stakeholders are able to recognize processes which may benefit from automation. As organizations become more adept at generating demand for automation, a COE will also need to play a more-involved role

in prioritizing use case development. Prioritization may initially be based on “low-hanging” opportunities but that may change over time. As a COE transitions to include more than RPA use cases, demand generation may centralize again: identification of Intelligent Automation use cases typically requires additional training and examples.

Capability Building

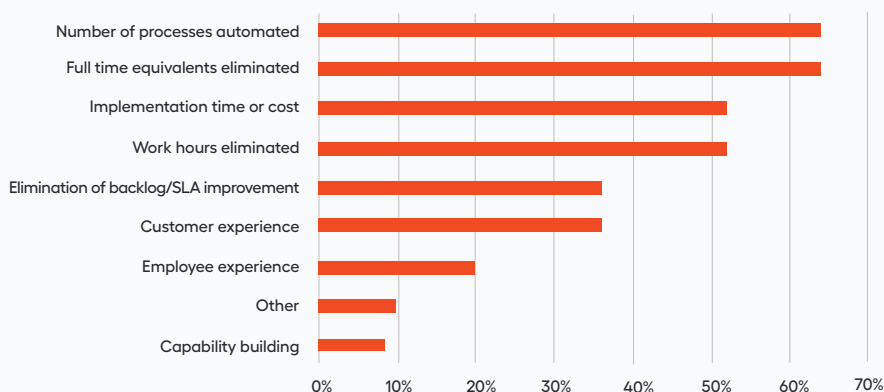
Automation requires new workforce capabilities at a previously unnecessary level of depth and breadth. Although vendors, consultants, and staffing agencies will assist through different phases of program maturity, the organization must ensure it can manage and advance with internal know-how. Capability building often begins with a COE understanding where internal skill gaps exist and developing a roadmap to “upskill” the organization. Conversely, capability building does not end by hiring a handful of highly capable developers, business analysts, or data scientists. The introduction of automation at scale in an organization requires a new mindset: leadership should think “automation first” to reinvent their business operating models. However, internal capability building appears not to be front-of-mind for many COEs; data collected by WorkFusion shows only 55% of COEs were involved in developing and delivering training.¹⁴

Maintenance / Service Support

To ensure seamless transition from delivery to business-as-usual operations, support must form a key component of the automation value chain. It is especially important to ensure automated operations are working smoothly for early implementations, to showcase value to the business. In absence of the right support structure, the business teams can quickly

become skeptical, making sponsorship of further automations less forthcoming and bringing doubts regarding COE capability to deliver promised value. If business teams do not trust automation, the value realization could be further slowed (e.g., moving employees to other tasks instead of “firefighting” automation issues). Along with delivery, the service support needs a scalable approach, tools, staffing and best practices from the outset to manage both new delivery and existing operations.

EXHIBIT C: TOP INTELLIGENT AUTOMATION METRICS TRACKED BY COES



Selecting a COE model: Assessing needs, advantages and trade-offs

The choice of an operating model is strategic, with a goal toward ensuring the core components of a COE all deliver value. Most COE structures can reflect one of three models: centralized, with capability concentrated at one point in the organization; decentralized, with each business division in a complex organization building a COE; or a hybrid model, with a central COE offering shared responsibilities to other, hub COEs.

EXHIBIT D: COE MODEL OPTIONS

	 Centralized Single shared services group responsible for end-to-end automation program	 Hybrid Central group ensures common vision, governance; shared responsibilities with functional areas	 Decentralized Multiple, independent but non-competing COEs aligned functional areas
 Strategize	<ul style="list-style-type: none"> • Common, shared vision across the enterprise • Centralized decision making on key automation program elements • Top-down definition of priorities 	<ul style="list-style-type: none"> • Common, shared vision across the enterprise • Shared decision-making • Automation agenda owned by functional area 	<ul style="list-style-type: none"> • Complete autonomy in defining the functional area-specific automation vision and strategy • Self-defined automation agenda, priorities, and timelines
 Manage	<ul style="list-style-type: none"> • High control over standards, development, governance, reusability, vendor management • Single point of ownership for collaborating with other functions like IT • Key role in enablement through trainings on development and demand generation 	<ul style="list-style-type: none"> • Strong “toll-gate” approach to ensure standards are met by hybrid groups • Single point of coordination for collaborating with organizational support groups, vendors • Centralized technology standards 	<ul style="list-style-type: none"> • Few mandated control or governance mechanisms to ensure standards or best practices • Federated groups compete for organizational support groups like IT • Most likely to be dependent on single key executive sponsor
 Operate	<ul style="list-style-type: none"> • Requires prioritization of automation across multiple functional areas • Constrained by budget and resources and demand generation from functional areas • High economies of scale, but time to value can suffer 	<ul style="list-style-type: none"> • Can be limited by functional area’s resources and capabilities • Centralized team focuses on technology enablement and capacity building across the organization • Typically faster time to value than centralized model 	<ul style="list-style-type: none"> • Limited by functional area’s resources and capabilities • Lacks coordination, especially of reusable components, across enterprise • Fastest and most robust demand generation • Lowest economies of scale, often fastest time to value

Maturing capabilities demand continuous evolution

Automation is now a boardroom agenda for many organizations and a COE can translate strategy and vision into business transformation. At the same time, it is imperative to get the basics right, both for COEs transitioning from an RPA-only focus to more robust automation programs and new COEs. The core components detailed in this article highlight the design components that any COE model needs to consider and focus on as part of its mandate to drive an effective automa-

tion program. While the high-level core components may not change, the role of a COE at the beginning of the automation journey is different from later expansion to multiple functions and eventually to scaling throughout an organization. By balancing and maintaining a dedicated focus on its vision, ownership of outcomes, and ability to solve challenges quickly, an organization's COE can propel the whole automation journey.

¹ Press release: "Gartner Says Worldwide Spending on Robotic Process Automation Software to Reach \$680 Million in 2018" retrieved from <https://www.gartner.com/en/newsroom/press-releases/2018-11-13-gartner-says-worldwide-spending-on-robotic-process-automation-software-to-reach-680-million-in-2018>

² Everest Group (2018) and Deloitte (2017), <https://www2.deloitte.com/content/dam/Deloitte/tr/Documents/technology/deloitte-robots-are-ready.pdf>

³ <https://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/digital-blog/burned-by-the-bots-why-robotic-automation-is-stumbling>

⁴ [https://www.ey.com/Publication/vwLUAssets/Get_ready_for_robots/\\$FILE/ey-get-ready-for-robots.pdf](https://www.ey.com/Publication/vwLUAssets/Get_ready_for_robots/$FILE/ey-get-ready-for-robots.pdf)

⁵ <https://www2.deloitte.com/insights/us/en/focus/cognitive-technologies/state-of-ai-and-intelligent-automation-in-business-survey.html>

⁶ <https://www.mckinsey.com/business-functions/mckinsey-digital/our-insights/digital-blog/burned-by-the-bots-why-robotic-automation-is-stumbling>

⁷ https://www.santanderannualreport.com/2018/sites/default/files/economic_and_financial_review.pdf

⁸ Internal WorkFusion data, aggregated from 25 responses to a survey administered in August 2019 on Automation Centers of Excellence. Survey responses included an even distribution between financial services, technology, consumer goods, healthcare, and responses from North America, Europe, and Asia.

⁹ <https://www.jpmorganchase.com/corporate/investor-relations/document/annualreport-2018.pdf>

¹⁰ Internal WorkFusion data; COE survey

¹¹ The IA Global market Report 2019 (H1): How to Manage Change so that Automation Sticks (SSON, 2019)

¹² <https://www.workfusion.com/ascend/on-demand/video/scaling-intelligent-automation-a-learning-journey/>

¹³ Internal WorkFusion data; COE survey

¹⁴ Internal WorkFusion data; COE survey

WorkFusion is the leader in Intelligent Automation solutions and works with organizations globally to facilitate the success of their automation programs, including through establishment and empowerment of Centers of Excellence. For more information on how our solutions and services can deliver value to your business, please contact:

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About WorkFusion

WorkFusion's AI-driven automation and RPA software offers Intelligent Automation at scale for companies across the globe. Forward-thinking businesses and leading enterprises across the business spectrum choose WorkFusion to reduce their total costs, up-skill their workforces and gain a competitive edge. WorkFusion is headquartered in New York City with operations throughout Europe and Asia.

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