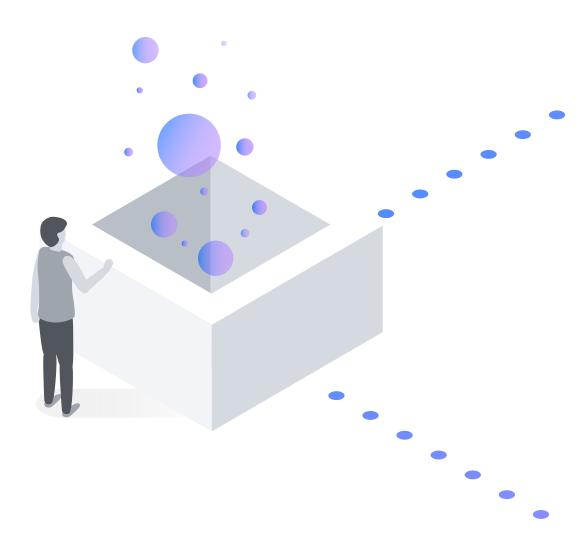
Outcome-based Approach for Successful Intelligent Automation





Setting strategic targets for impactful change

To prepare for the Future of Work, enterprises need to focus and define the expected outcomes from intelligent automation.

Realizing benefits from automation

Many organizations begin their automation journey by setting a broad mission to drive productivity across the business with the hope it will lead to cost savings. This strategy is effective for implementing lots of small improvements within departments and business units. As the business starts to see initial successes, the logical reaction is to ramp up the same model to get more benefits. Unfortunately, most of the wins in the first wave of automation are low hanging fruit, and it becomes difficult to identify more of these opportunities with the same siloed approach. Instead, the organization needs to scale up to implementing intelligent workflows that enable a Cognitive Enterprise¹. To do this, the organization must gain leadership buy-in across business units to change the way end-to-end processes are executed. It is also around this time the business may realize that, although they have made productivity improvements, these benefits are not mapping to a bottom-line impact. Most businesses hope they will be able to easily glue together all the efficiency gains from different individuals to realize meaningful cost savings, but due to the fraction of people's work targeted for automation, and the unique activities individuals may cover, it is challenging to rebalance and free people to take on new roles. Instead of achieving a shift in ways of working, people become more efficient at performing the same role they had before the investment was made in automation.

This results in a stakeholder management challenge for the team accountable for driving transformation through

Cognitive Enterprise

Companies transforming themselves by leveraging new technologies to reshape their competitive positions and build new business models.

"Automation should not be undertaken for the sake of automation, instead it is imperative to align the expected outcomes from automation with the strategic goals of the organization." automation. Process owners view the automation as a success, since their teams are more productive; they are unwilling to undergo further disruption to their team. Meanwhile, transformation program executives and CFOs are demanding hard dollar returns on the investment being made This leaves the automation team unable to showcase the full benefits of their program, since they do not have a required commitment to hold the business accountable for realizing the desired outcomes.

Committed leadership

The successful deployment of intelligent workflows requires cross-departmental leadership buy-in on the value of the outcomes that automation will provide. Automation should not be undertaken for the sake of automation, instead it is imperative to align the expected outcomes from automation with the strategic goals of the organization.

Aligning outcomes with strategic goals improves the likelihood of buy-in from executive stakeholders who will then embrace the Future of Work offered through automation. For example, if an organization differentiates from their competition by offering great customer experience, the team may want to define an increase in the Net Promoter Score (NPS) as the target outcome from automation. Increased NPS will drive impact across departments making it easier to secure support from leadership to get access to the required subject matter experts that make the automation implementation a success.

Meaningful metrics

Once the automation team has access to the required process experts, they will need to work with these stakeholders to assess the "as is" value chain through the lens of the final desired outcome. The outputs from this activity are not only the automated future state process, but also the measurable outcomes that each group of stakeholders is responsible for achieving within their section of the intelligent workflow. It is important to note that these component outcomes must be defined within the context of the overall value chain. It is very easy to myopically focus on one step at the expense of the end-to-end process.

After outcomes are defined for all the accountable stakeholders, they need to be aligned to metrics based on the required future state of the operations. Effective metrics provide transparency to the impacts of automation. They also motivate stakeholders by enabling team members to track and monitor how they are progressing against expectations.

Effective metrics need to be meaningful, measurable, and reasonable. For metrics to be meaningful they must align to the strategic outcomes identified for the respective stakeholder and the overall business.

This allows stakeholders to showcase the realization of the targeted outcomes. Often metrics are impacted by too many variables to have a reliable connection to the target outcome and they lose meaning. This is why it is also important for metrics to be measurable. This requires clear definitions of how the metric will be calculated and the implementation of systems to capture and validate the data to perform the measurements. Once a system of measurement is identified, the stakeholder will need to capture how the metric is currently performing to create a baseline to compare with the future state results. This comparison shows the impact of changing from the current way of working to the Future of Work. Lack of time spent at the outset establishing performance baselines results in confusion and challenges at the end of the project; it becomes impossible to clearly calculate improvements. Finally, the target metric needs to be reasonable. A reasonable target is challenging, but achievable. If a stakeholder doesn't believe they can achieve their target they will either be resistant, blockade the project, or burn out attempting to achieve the impossible. On the other hand, if a metric is too easy, they may not give it the proper level of focus, leading to issues in quality.

Future of Work

The business environment that comes to life when business processes are run by technology and supported by people.

Often metrics are impacted by too many variables to have a reliable connection to the target outcome and they lose meaning.

An example of a weak metric is, 'Improve call handling in the call center.' This metric is not meaningful, since it is ambiguous in defining what aspect of call handling needs to be improved. It is not measurable, because there is no quantifiable measure of improvement based on the current baseline and level of performance. Finally, it is not reasonable since the stakeholder has no idea what they need to do to achieve success. A better metric is, 'Reduce the average call resolution time of Level 1 customer inquiries by 10%.' This is meaningful for organizations looking to increase customer satisfaction, and measurable through call handling data. The reasonableness of this request has more to do with the organizational ecosystem and may require deeper assessment based on the time and investment available to drive such change.

Once metrics are agreed upon, the relevant stakeholders need to sign off on them and include them in their own performance measurements. This will ensure that everyone has the right level of commitment to achieving the target results to motivate the required support throughout the automation project. The signed target outcomes hold stakeholders accountable for taking the required actions to realize benefits from the change in ways of working. This may include training and work load redistribution. To ensure that stakeholders are willing to be accountable for the targets, the automation team must identify outcomes that are meaningful for each business unit and align with the overall strategic outcomes that were agreed upon with executive leadership.

Intelligent workflows never get tired, do not make typos, or go off script.

Types of outcomes

Intelligent automation drives many types of benefits, and identifying what outcomes are meaningful for the organization increases stakeholder buy-in. Starting out, most organizations focus on improved human productivity and cost take out, but these are just two modalities of benefits that can be realized from automation. Additional types of benefits include flexibility, compliance, human augmentation, actionable insights, and learning systems.

Flexibility – Shifting to a digital workforce, with automated skills for the execution of intelligent workflows, allows an organization to scale operations up and down. This allows organizations to meet peaks and troughs in demand due to both cyclical, and unforeseen factors. This flexibility allows for improved total cost of operations, since organizations do not need to maintain resources to meet demand peaks. It also enables high customer satisfaction through reduced waiting and processing times.

Also, since intelligent workflows are inherently digitized, they can be dynamic watchers for triggers, and then making near real-time changes to preemptively mitigate or avoid the situation. An example of this is when pending jobs for a process step exceed a certain threshold, so the intelligent workflow identifies it as a bottleneck and in near real-time allocates more resources to resolve the bottleneck, mitigating a negative impact to throughput.

Compliance – Intelligent workflows never get tired, do not make typos, or go off script. This drives high-quality deliverables that can adhere to complex rules and regulations. Automation can also generate documentation of the processes it executes to maintain audit trails, so the organization can validate that the digital worker 'crossed the T's and dotted the I's.' Accurate execution allows organizations to avoid penalties incurred due to breaches, and eventually reduces the amount of risk coverage required as the compliance capabilities of the intelligent workflow are validated. Human augmentation – In processes that require human interaction, intelligent automation solutions can converse with operators and end clients to clarify and answer questions. For example, intelligent automation can automatically field common questions, freeing call center representatives to focus on more challenging questions and provide a higher quality interaction. This will result in higher levels of customer satisfaction which can be tracked through customer loyalty metrics such as recurring purchases, retention, and cross-brand sales.

Similarly, these systems can provide insights to expert workers, from engineers and astronauts to actuaries and insurance claims adjusters. Digital advisors quickly look up answers to questions from the mountains of manuals for all the machines on an oil rig or space station. The benefits from this can be validated through reduced resolution times for issues and maintenance which will also increase time for higher productivity activities such as proactive operations and research.

Actionable insights – Existing data from an organization's ecosystem, and even the data generated through the execution of intelligent workflows, can be mined to identify new correlations and opportunities that can be leveraged to further differentiate and gain competitive advantages. An example of this is to assess buying patterns so that organizations can identify correlations between products. With this insight, companies can present correlated products during key moments in the sales cycle to increase the rate of upselling and cross-selling. This can be validated through increasing revenue per customer as customers purchase more items.

Adaptive learning systems – Continuous process improvements are realized in intelligent workflows through machine learning and low-cost experiments that identify opportunities to adapt operations. With machine learning, feedback can be gathered in real-time from end users who validate the responses provided. This information is automatically fed back to the system as training data, adapting the automation to provide more accurate responses. Similarly, by building automation using platform-based micro services, businesses can be more agile-shifting, upgrading, and changing different aspects of the workflow based on learnings from low-cost experiments that can be conducted on digitized workflows. These experiments can be conducted to identify and resolve process bottlenecks or quality issues, thus improving operational effectiveness.

Digital Advisors

Pre-trained and configurable, with the ability to learn, or be taught, new skills The benefits from adaptive learning systems can be validated through time and cost metrics for transformations, compared to existing process improvement programs. Another measurement is the improvement in response accuracy and process throughput.

Automation for targeted outcomes

- A leading energy company, based in North America, established a Transformational Management Office (TMO) to deliver against key organizational priorities. Their goals included cost savings, digital transformation to unleash the full potential of their people, and to harness and create value from data. Automation plays a key role in this transformation after the client had early success with an RPA pilot.
- Their pilot bot executed a manual invoice indexing process that was cumbersome and error-prone. The new RPA bot reduced manual effort by over 5,200 hours per year and produced a much higher quality output. This exceeded all expectations and generated demand for automation across the business.
- To manage that demand and align the automation program with broader business goals, the automation team established a standard process for opportunity prioritization including an assessment tool to drive prioritization based on measurable business outcomes.
- The standardized opportunity intake process allowed rapid assessment of use cases and robust benefits tracking from opportunity identification to deployment. Within 18 months, the client identified a backlog of use cases with an estimated value of \$55m, of which \$35m has been prioritized for execution.
- As automation solutions are delivered and processes are transformed, results are being tracked and communicated to enable benefit realization and generate ideas for new use cases. These include a bot which has reduced invoice swipe reviews from 2-3 weeks to 20 minutes, and another which has executed over 5,000 SAP time entries since its inception. Some of the bots are driving direct cost savings, but not all the benefits are monetary focused. The TMO is also prioritizing other business priorities including reducing manual effort in support of the business goal of 'unleashing the full potential of our people' which drives increased job satisfaction and engagement. Similarly, they are digitizing and automating processes rich in data to better understand and harness insights to improve operations. Since the projects chosen to be executed are based on the priorities the TMO agreed upon with the overall organization, they are gaining traction expanding their pipeline of opportunities and delivering meaningful value to the business.

5,200 manual hours reduced per year by RPA bot

20 minutes for processes that took 2-3 weeks

Aligning for impact

Intelligent automation at scale requires complex stakeholder management across multiple departments to get buy-in to change the current ways of working. Without stakeholder buy-in, there will be a lack of adoption and even out right resistance. Even with that commitment, personal agendas and conflicting targets can sabotage results.

To successfully implement intelligent automation at scale, organizations need to align the target outcomes from automation to the organizational strategy. This will motivate all relevant stakeholders from both business and IT to engage and support the implementation of automation. Stakeholders will be more willing to take a fresh look at how work gets done and collaborate across business units when they understand how the results they are accountable for integrate with the other stakeholders to achieve strategic goals that drive impactful change.



Michael Lloyd Senior Managing Consultant, Offerings, IBM Automation

About the author

As a member of IBM Automation's Build and Manage Offerings, Michael Lloyd drives the development of methods, assets, and best practice while working with clients on their automation-led transformations to a Cognitive Enterprise. With nine years of experience in application design and management, process change management, and intelligent automation, Mr. Lloyd leverages industry-leading platforms and delivery models for the design, build, management, and optimization of Automation Transformation Programs at scale.

For more information on this technology, contact Michael Lloyd at lloydm@us.ibm.com

Resources

¹ https://www.ibm.com/services/cognitive-enterprise