

Beyond Hyperautomation: A Deeper Look into Developing a Cohesive Automation Approach



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INTRODUCTION

Hyperautomation is the newest buzzword circling around the automation community, but what does it really mean and could successfully applying this approach help organizations digitally transform? With our current economic climate, there is no doubt that businesses across all industries are taking a critical look at their revenue and costs to determine how technologies like intelligent automation can help alleviate financial challenges and accelerate digital transformation initiatives.

Subject to constant change, the infrastructure of virtually every company has become a complex ecosystem, requiring a significant amount of human effort and tools to maintain. In many cases, business processes supported by legacy systems that were created decades ago are still in place. The influx of next-generation tools in the market has provided the opportunity to address these challenges by meeting almost any automation need. From using robotic process automation (RPA) to automate mundane and time-consuming tasks to using cognitively advanced tools – such as business process solution management (BPSM), machine learning (ML) and artificial intelligence (AI) – to automate more difficult and complex processes, there is a digital solution for every challenge an organization may have.

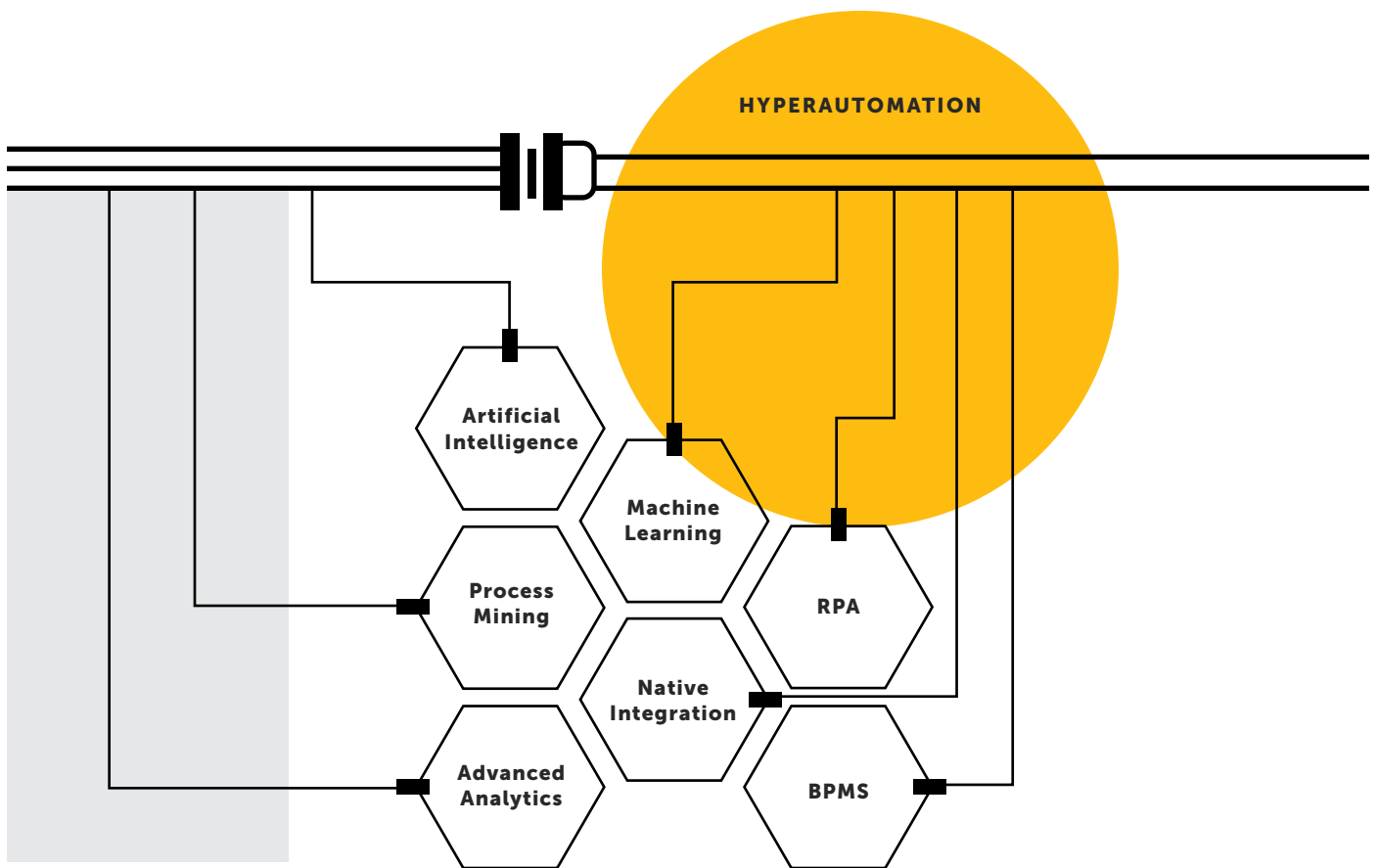
What hyperautomation demonstrates is that it is not just about each individual automated solution, but rather how we can orchestrate these tools to have the greatest impact. The question becomes whether hyperautomation is enough to successfully drive digital transformation for organizations, or whether there are other aspects that should be considered when implementing a cohesive automation solution.

WHAT IS HYPERAUTOMATION?

According to Gartner's Top 10 Strategic Technology Trends for 2020, hyperautomation was listed as the top strategic technology trend that will drive significant digital disruption and massive opportunities for organizations over the next decade.¹ Although hyperautomation is considered new terminology, some companies have spent years viewing automation through a holistic lens. Let's take a step back and understand what hyperautomation entails:

Hyperautomation deals with the application of advanced technologies, including AI and ML, to increasingly automate processes and augment humans. Hyperautomation extends across a range of tools that can be automated, but also refers to the sophistication of the automation (i.e., discover, analyze, design, automate, measure, monitor, reassess). (Gartner, 2019)

Although there are multiple sources with slightly different definitions of the term, all of them include the idea of using multiple tools to create a cohesive automation suite. This viewpoint is crucial as it shifts the focus away from individual technology to holistic business transformation and continual improvement, which in practice are rarely, if ever, successful using just one tool or technology. The image below shows an example of how hyperautomation is the umbrella term under which a full suite of automation technologies and tools is present.



¹ Smarter With Gartner, Gartner Top 10 Strategic Technology Trends for 2020, October 21, 2019, <https://www.gartner.com/smarterwithgartner/gartner-top-10-strategic-technology-trends-for-2020/>

This image does not cover the only examples of hyperautomation, however. We expect that, as time goes on, the hyperautomation suite will continue to evolve and even add multiple other tools and categories. Nevertheless, we have listed some key technologies that are currently part of the hyperautomation toolbox and use cases that highlight their value.

<p>Artificial Intelligence</p> <p>AI is a set of technologies that can simulate intelligent behavior generally associated with humans, such as language comprehension, visual perception, speech recognition, decision-making, etc.</p>	<p>Use Cases</p> <ul style="list-style-type: none"> • Automate processes like customer interactions with chatbots for travel-related, entertainment, apparel or consumer product websites to deliver an excellent customer experience • Automate inventory replenishment on store shelves by using computer vision and motion robotics
<p>Machine Learning</p> <p>As a subset of AI, ML is a collection of algorithms that enable software to learn to make predictions based entirely on data and not on pre-programmed instructions.</p>	<p>Use Cases</p> <ul style="list-style-type: none"> • Detect financial fraud by identifying anomalies in credit card activity in real time • Inspect produce using computer vision to enable spoil date prediction • Forecast and plan for demand in the retail industry based on previous demand data, factoring in specific situational information
<p>Robotic Process Automation</p> <p>RPA refers to software that can be easily programmed to perform repetitive and simple tasks across computer applications. RPA is currently used across every business vertical to help automate mundane and time-consuming tasks.</p>	<p>Use Cases</p> <ul style="list-style-type: none"> • Take received forms, send a receipt message, check the form for completeness, file the form in a folder and update a spreadsheet with the name of the form • Prepare and distribute periodic reports based on pre-defined data sources and distribution lists
<p>Business Process Management System</p> <p>A BPMS enables continuous improvement within an organization by focusing on multiple processes within lines of business. By using automation tools, such as RPA and workflow management, a BPMS gives organizations a level of transparency to see potential opportunities to increase efficiencies within processes.</p>	<p>Use Cases</p> <ul style="list-style-type: none"> • Leverage workflow management and RPA to automate end-to-end processes • Use a BPMS across all verticals to provide complete internal transparency of multiple processes
<p>Advanced Analytics</p> <p>Advanced Analytics involves applying an algorithmic process to data or content with the goal of deriving deeper insights, such as identifying meaningful correlations between different environmental factors, making predictions or generating recommendations.</p>	<p>Use Cases</p> <ul style="list-style-type: none"> • Carry out claim fraud analysis for health insurance companies • Perform customer segmentation across verticals to identify key target markets based on a multitude of data points
<p>Process Mining</p> <p>Process Mining analyzes large sets of operational data from enterprise systems, providing detailed, data-driven analysis related to key processes and their performance.</p>	<p>Use Cases</p> <ul style="list-style-type: none"> • Audit trails of BPMSs and workflow management systems • Log transactions for enterprise resource planning and more

These technologies are key components that are commonly considered today as a long-term investment for their strategic value. However, when applied to the right use case, they can also uncover tactical opportunities by identifying weaknesses throughout the business. The suite of technologies listed above provides organizations with the ability to gain a deeper understanding of their day-to-day functionalities and how they can work towards continuous improvement by analyzing performance data.

“By 2024, organizations will lower operational costs by 30% by combining hyperautomation technologies with redesigned operational processes.”

Gartner, Predicts 2020: RPA Renaissance Driven by Morphing Offerings and Zeal for Operational Excellence, December 2019

HOW DO WE GO BEYOND HYPERAUTOMATION?

In order to realize the full potential automation has to offer, different tools and methods must be implemented concurrently and work together in lockstep to achieve real results at scale. This includes end-to-end process reengineering while using a human-centric approach to reach a state that would qualify as hyperautomation.

End-to-End Process Reengineering

End-to-end process reengineering is the methodology of examining an organization's core business processes to save time and improve productivity and quality. While business processes are commonly shaped by human limitations and technology capabilities, process design choices that do not account for the process context often result in broken processes that do not perform at expected levels in the real world. Automating a broken process without first reengineering it only results in shifting bottlenecks, high errors and exceptions, thus leading to low automation benefit realization. Additionally, unstandardized processes have variabilities that complicate automation – instead of having just one core path for the process, there are additional paths created when inputs vary. Some of these variations are intentional, such as building alternate paths for white-glove customers. However, an experienced automation professional understands that organizations cannot add automation to a process that has yet to be standardized.

From a process reengineering perspective, processes should be streamlined and standardized as much as possible before any automation comes into the mix. The end-to-end portion of the approach becomes increasingly important when considering the upstream and downstream effects of the process. To put it in the simplest way, if upstream processes are automated first, steps that were initially required downstream and created additional work for users could become non-existent. Prioritizing end-to-end process reengineering from discovery through implementation allows organizations to gain full transparency into their processes and provides them with additional clarity on how to invest wisely in automation.

A Human-Centric Approach

A commonly overlooked, yet highly essential, aspect to automation design is using a human-centric approach throughout the end-to-end process. A human-centric approach aims to make processes and technologies more useful by focusing on the users' requirements and needs. This means that from the very start of discovery through design, the goal should always be making the job better from the user's perspective. As more businesses across every industry look to invest in automation, it is vital that user experience is prioritized to make automation solutions effective. Hyperautomation will yield a much higher adoption rate if it has been implemented with a human-centric approach from the start of discovery, all the way through implementation. We have found that this approach ensures a positive user experience and lends itself to successful digital transformation journeys for our clients. Ultimately, the path to automation should be the path of least resistance. It is not enough to simply automate a process – successfully automated processes must blend human and machine capabilities to achieve the best results.



BEYOND HYPERAUTOMATION USE CASES

To really articulate the benefits, here are some examples of where EPAM Continuum has applied hyperautomation by using process reengineering and a human-centric approach to develop a cohesive end-to-end automation solution for customers:

- 1.** Business processes and their accompanying tools are built for humans to work more effectively. While humans are very good at adapting to changes and pivoting quickly when necessary, the result is often that variances are introduced to processes, adding time and reducing overall efficiency. One global consumer product goods company was faced with this problem in the Latin America region. There were process differences in how customer orders were handled and even major differences in how processes were executed by different staff, with no discernable need for alternate paths. In order to address these differences and help the client find broad value across the region, EPAM Continuum used RPA, ML, end-to-end process reengineering and advanced analytics to reimagine the process and build an efficient solution. By implementing hyperautomation, the company was able to significantly improve human capacity KPIs and achieve high user adoption rates of the technology. The results were astounding – a 29% reduction in FTE hours and a 40% reduction in order aging (the time between order receipt and order delivery) for one country. This example highlights the importance of building self-reporting directly into the automated processes, as this allows a company to both understand the value of automation and the next logical targets for more cohesive hyperautomation. In addition, automating processes upstream can significantly reduce the complexity and error rates, thus simplifying downstream automations. This effect not only improves the performance of automated processes, but also reduces maintenance requirements of automation, as there are fewer exception paths.
- 2.** Following a large merger, a global insurance company was looking to reduce the cost of operations and determined that business automation would be a significant component in this effort. EPAM Continuum worked with the company to assess their existing end-to-end processes in claims and underwriting, and then used RPA, ML and BPMS to achieve \$18M+ in cost savings per year. The success rate of this automation program can be attributed to reviewing entire level 1, 2 and level 3 processes to understand how to use various automation tools, coupled with process and organizational changes, to create significant, lasting value. By looking at end-to-end processes, utilizing human-centric change management and other aspects of hyperautomation, the client was able to automate many business processes and achieve operational efficiencies and greater customer satisfaction through the claims process.

CONCLUSION

The methodologies and use cases listed above are just some examples of how your organization could drive digital excellence – not only through hyperautomation, but by going beyond the current thinking and stretching the boundaries of traditional automation tools. Hyperautomation includes a broad set of technologies and requires a specialized team who understands and has experience in this field – especially a partner that leverages end-to-end process reengineering and a human-centric approach. Digital transformation through a cohesive hyperautomation approach is the future of business, and EPAM Continuum has the business, technology and experience consulting expertise to help organizations like yours navigate the complexity of automation and avoid common pitfalls.

EPAM Continuum integrates business, experience, and technology consulting focused on accelerating breakthrough ideas into meaningful impact.

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