opteamix

White Paper

Building a roadmap for your HYPERAUTOMATION journey

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This white paper is meant for professionals tasked with leveraging hyperautomation. Read on for a deep-dive, potential use cases, and tried and tested approaches to reap the many benefits of hyperautomation.

The current scenario has made many organizations take a hard look at their business strategies to ensure that they will survive, remain competitive, and relevant tomorrow. There is no shortage of technologies vying for attention, and hyperautomation is on top of the list.

What is hyperautomation?

A fairly common definition of hyperautomation is the use of multiple tools, technologies and people in an ecosystem of technical solutions to achieve more than what simple automation (such as Robotic Process Automation) can achieve. Most tools and echnology vendors would offer a similar point of view since they must ensure their products remain relevant to the marketplace.

However, a more apt definition for the professional charged with business transformation is that hyperautomation is the perfect union of data, technology, and human intuition that will drive the successful organizations of tomorrow. Of course, the right tools and partners are a vital part of the journey, but automation for automation's sake will fall short of the transformative potential that a holistic approach can achieve.

Envision the outcome and define success before you begin!

Every organization should have the desired end state in mind, be it faster time to market, customer satisfaction, retention, etc. along with a series of achievable milestones that can be used to incrementally measure progress along the way. Depending on the organization, the envisioned state could be captured in the business plan or project charter, but should always serve as the compass for all activities. Simply put, if a new initiative is in alignment with achieving the end state, it should be given the go ahead. If it does not, continue to innovate and only support initiatives that will support the vision

While it is useful to think only about the end goal that is motivating the organization to undertake hyperautomation, it should not be the only goal. The journey to hyperautomation often leads to newer and better opportunities that simply cannot be fathomed from the start. Henry Ford once stated that if he had asked what his customers wanted, they would have replied, a "faster horse" because few people understood what automobile technology could do or the freedom it could impart. Instead, what Ford and other automotive pioneers did was to show the buying public that what they really wanted was faster, less expensive transportation!

Later, the marketing pioneers also learned that automobiles were not only more practical, but they offered a "status symbol" and "sense of style" that few could have predicted with the dawn of the technology. Therefore, by analogy, think about what the desired end state should be for the organization and avoid presuming the solution – the horse as illustrated in the above example.

Look for grass roots innovators

Chances are, there are multiple managers already in the organization that have already attempted some forms of automation and innovation. Perhaps there are some RPA projects in-house, or even an unofficial, under-the-radar RPA Center of Excellence already established? Maybe some department is using OCR or ICR as part of their document management system? The benefits of these initiatives, both successful or not, is that they will provide an excellent pool of leaders who will be able champion the hyperautomation initiatives within the organization and will provide the experience that will help identify those projects or processes most likely to benefit from automation. These projects and technologies are mostly likely going to be successful in your organization.

While it is easy to focus on pet projects or manual process candidates for automation, it should always be remembered that data is the fuel that will power any hyperautomation initiative. Therefore, when looking for grass roots innovators, do not overlook those who manage reports or practice data science or analytics. The implementation of hyperautomation will almost certainly require the use of Artificial Intelligence (AI) or Machine Learning (ML) that will require clean, consistent and accurate data to be effective.

Preparing for the hyperautomation future

As stated earlier, hyperautomation requires the marriage of many advanced technologies and data, but automation cannot survive without people! While all organizations have unique needs, it is recommended that the journey begin with three parallel tracks that are all working in collectively to support the future state of hyperautomation.

Technology track

This seems to be the one obvious track that is associated with automation (hyper or otherwise) but too often it is the only track that is given attention. While RPA tools are great, they can only deliver so much value on their own. Similarly, AI and ML can contribute significantly to automation, they too are of limited value when implemented on their own without being part of an overall well-engineered ecosystem. Therefore, the technology track should focus on creating an interoperable ecosystem of the tools and technologies necessary to achieve the desired end state, and in the opinion of the author should focus on automation platforms, transformative technologies as well as business analysis and discovery.

Automation platforms

Arguably any automation initiative is going to require innovative products to enable it. Traditionally, RPA tools and licenses were very expensive, and it was possible to count on one hand the number of vendors offering these tools. The great news is the tools have advanced significantly, are less expensive and now there are hundreds of alternatives available so that “vendor lock in” should be less of a concern.

While a COE may wish to support one or two high-end platforms, the argument can be made today, that business units should not only have more than one or two choices of high-end solutions, but a number of lower-end products that offer superior value-to-cost ratio than some of the traditional platforms currently provide. Chances are that your organization might have some automation tools in-house, and possibly even a few implementations that are delivering value.

Even if your organization has not taken this step yet, the quest for hyperautomation needs to begin with the RPA solutions needed and then develop standards for interoperability for the future.

Transformative technologies

While certainly not limited to AI and ML, transformative technologies must form the common core of any hyperautomation ecosystem. With implementation of AI and ML, the cloud has enabled access to incredible services for common tasks such as OCR, ICR, Voice Recognition, Natural Language Processing that be accessed with simple service calls for a modest budget. Therefore, the build/buy decision for any of these common services for most organizations should be “buy” and the recommendation is to identify those services that work the best for the envisioned end-state with an understanding of interoperability between the chosen automation platforms and in-house technologies.

Chances are, there will be many solutions evaluations and perhaps no clear winners, but this author would argue to let units pick whatever services they need in this regard from any vendor as long as interoperability is preserved. Eventually, in order to fully implement hyperautomation, it will be necessary to have custom-built services that cannot be bought off the shelf, therefore, the interoperability should not be limited to the common commercially available services but how custom services can be built that will transform the business.

Business Process Modeling (BPM) & discovery

The other often overlooked technology track that is recommended is the business process modeling and discovery within the organization. The idea behind BPM, and for the purposes of this article, I am going to include process mining tools as a necessary and vital component of BPM. If our goal is to achieve hyperautomation, then we want our automation to not inherit all the bad "workarounds" or other inefficiencies that are common in the workplace.

If we automate the same existing broken manual processes, then our successes are going to be very limited. It is strongly recommended that in-house capabilities be developed for BPM and there are many fine platforms that are available on the market. Process mining is relatively a new player in the BPM space, but the technology is fascinating; it has the ability to mine commonly available logs to see what "desire lines" are in place, where business users are bypassing processes, or controls that might be in place to get their work done.

Data track

As stated earlier, the fuel for hyperautomation is data! The need for data will be driven by two factors –

The need for data to drive the AI and ML for automated decision making as well as keeping metrics on just how well the hyperautomation solution is meeting objectives.

Decision support data – the amount of time to operationalize data for use for AI/ML systems is often very significant and requires a disciplined data science approach. Therefore, it is never too early to begin the process of creating data that can be leveraged for the AI and ML of the future. The success of a hyperautomated solution will be directly attributable to the quality of the data used to develop the AI that will ultimately be employed.

Operational performance data – most organizations are familiar with developing metrics or KPIs to indicate financial performance or return on investment. Hyperautomation solutions certainly need to be measured for financial performance. However, the hyperautomation solution is a continual evolution and engineering performance metrics need to be collected to continuously improve the operation of the solution.

Personnel development track

The end goal of hyperautomation should not be to replace people but to give them “superpowers” to be creative, decisive and productive without the burden of the mundane. Therefore, reskilling the existing personnel will be vital, as the very nature of ‘business as usual’ will be forever disrupted by hyperautomation. The areas that should be looked at critically are:

Business leader development: One lesson learned from the RPA revolution is that those who are most successful are those that incorporate business team members and technology teams into a cohesive unit, such as a center of excellence or some similar organizational construct.

New technologies: Such as RPA, AI and ML will require new skills to develop solutions and support.

Data analysis : Will be lynchpin of the future of business; therefore, data scientists and data-adept business analysts will be needed for every step of the hyperautomation transformation.

Final thoughts:
Hyperautomation is evolutionary

Successful hyperautomation requires a careful, thoughtful approach to thinking about systems, data, and personnel to successfully transform the enterprise and realize the potential benefits. It can be argued that these solutions are never "done" but evolve continuously as the organization matures to realize its ever-increasing benefits.

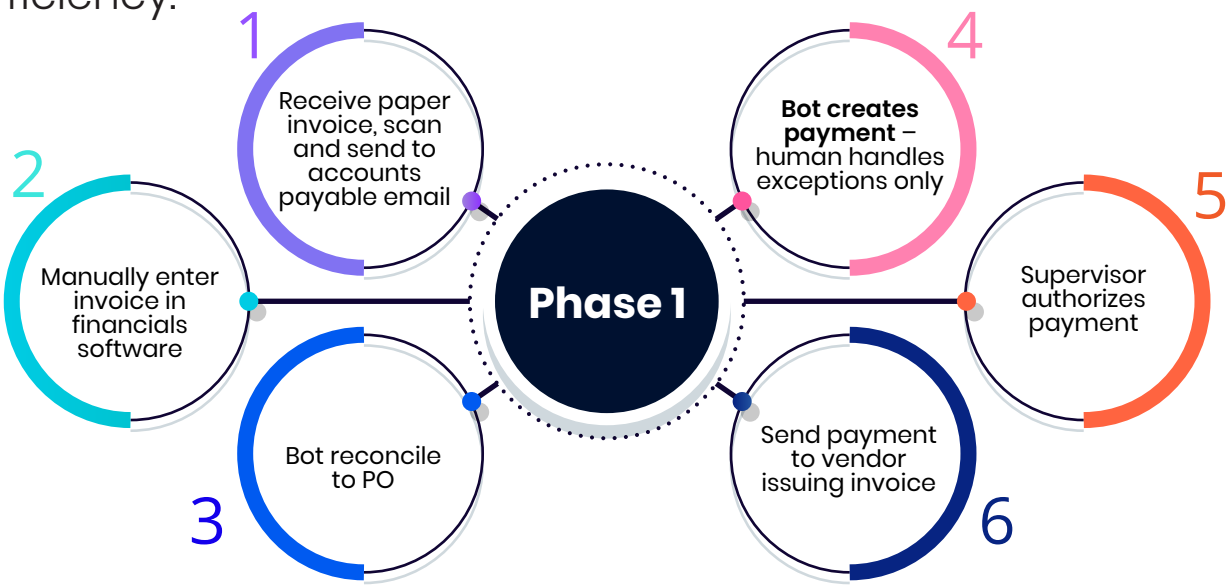
The journey to hyperautomation can be best illustrated with a typical example that most firms can relate to – **invoice processing.**

In a pre-automated scenario, invoice process might be analogous to:

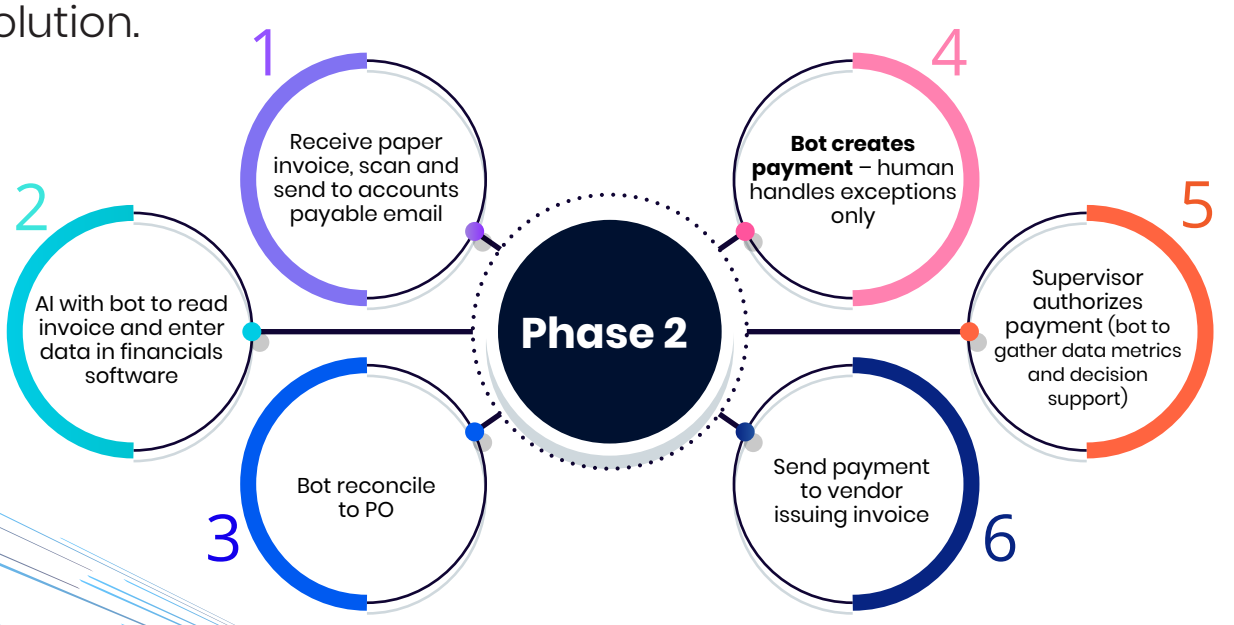
- Receive paper invoice, scan, and send to accounts payable email.
- Manually enter invoice in financials software.
- Manually reconcile with a PO.
- Create payment.
- Supervisor authorizes payment.
- Send payment to vendor issuing invoice.

First step would be target areas for automation or improvement with an RPA tool to make improvements.

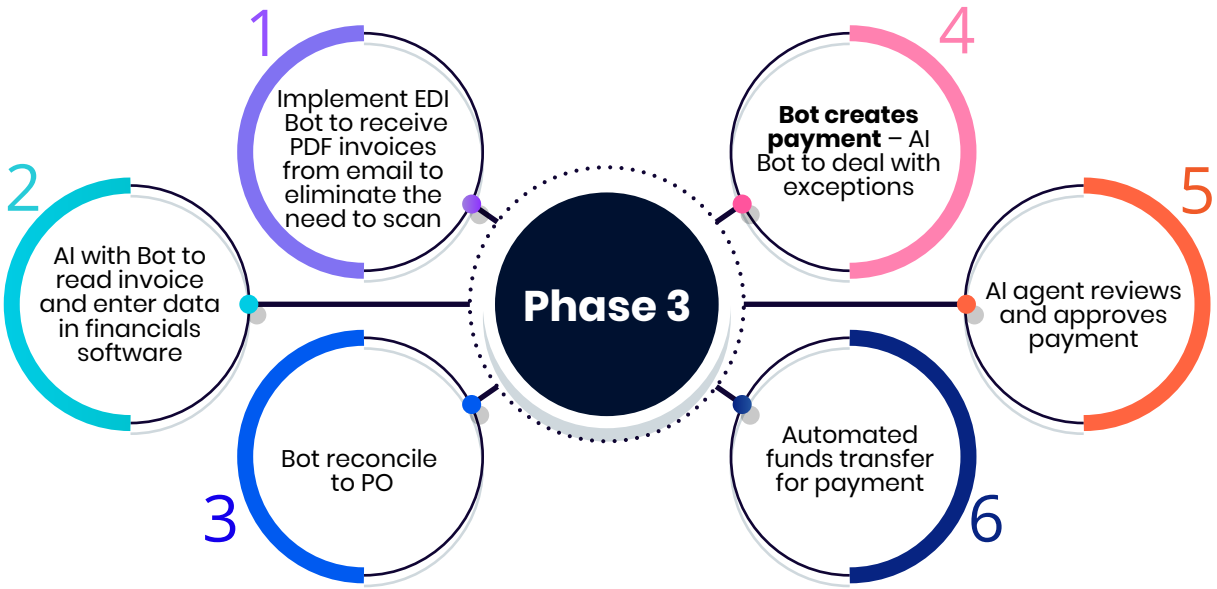
Phase 1 – Simple automation to automate simple steps in the process to reduce mundane human work and improve efficiency.



Phase 2 – Incorporate AI to machine-read invoice and leverage AI to handle exceptions to further reduce human interaction. At this time, data is being gathered to ensure the next layer of AI based automation can be introduced into the solution.



Phase 3 – Reach to point of a "zero touch" solution by adding EDI and another bot to intercept emailed invoices in PDF format as well as upgrade financial system to support electronic funds transfers.



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