

DOING MORE WITH LESS:

ACCELERATING BUSINESS TRANSFORMATION
WITH INTELLIGENT, HYPERAUTOMATION

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INTRODUCTION

Today's enterprises have shifted the pace of digital transformation into overdrive – as the survival of many is under threat. Technology leaders have accelerated the adoption of multiple technologies including Robotic Process Automation (RPA) and Artificial Intelligence (AI), to address today's disruption and to provide the necessary agility for an unpredictable future.

RPA can be defined as the use of software bots to execute processes which involve high volumes of repeatable tasks, that were previously executed by humans. The disruption of workflows caused by the pandemic has highlighted the importance of RPA. When processes are automated, the physical location of employees and other stakeholders becomes less important. RPA makes these processes more agile and flexible and makes businesses more resilient. RPA can also increase operational efficiency, drive business growth, and enhance customer and employee experience.

As enterprises increasingly leverage RPA, they recognise the need for the rapid automation of an increasing number of processes. Integrating AI, data analytics and machine learning with RPA can allow more complex processes to be automated. Indeed, AI and machine learning can drive the discovery of processes which can be automated, and together with RPA, dynamically and continually automate processes at scale. This activity is described as hyperautomation and is viewed as a natural evolution of RPA.

This paper uses inputs from discussions with technology decision makers across ASEAN. It highlights some of the key challenges faced by enterprises in ASEAN as they seek to gain a competitive advantage in the 'new normal' with a blend of automation and Artificial Intelligence (AI). It will focus on:

- Challenges faced by technology leaders and some immediate candidate processes for automation
- The role of RPA in addressing business challenges
- Attitudes towards RPA in ASEAN
- Combining RPA and AI for hyperautomation, to address more complex challenges and processes
- The role of humans in hyperautomation
- The benefits of hyperautomation
- The journey to hyperautomation
- Accelerating business transformation with hyperautomation

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CHALLENGES

FACED BY TECHNOLOGY LEADERS AND IMMEDIATE CANDIDATE PROCESSES FOR AUTOMATION

The remote operating model is the 'new normal' for knowledge-based workers. The rush to remote working has compounded some key challenges faced by technology leaders and accelerated the pace of digital transformation in major areas.

Inefficient processes and disjointed workflows have been problematic for enterprises for many years. These workflows often require employees to perform repetitive tasks which are candidates for RPA. For example, back-office functions such as finance and accounting and HR often involve the use of multiple systems, interspersed with repetitive manual tasks. This challenge is exacerbated when employees are widely distributed and require differing levels of access to sensitive data, from their home environments.

In the ASEAN region, challenges involved in enabling business continuity, varied by country. In less mature economies such as Indonesia and the Philippines, acquiring equipment as well as problems with network connectivity, make remote working particularly difficult. Many employees do not have a quiet place to work at home, free from interruption, and many employees need day-to-day or/and hour-to-hour instructions to do their work. Contact centre and frontline processes continue to face disruption as restrictions remain in place. These challenges are major drivers for automation.

BUSINESS PROCESSES TYPICALLY INCLUDE CLUSTERS OF HIGHLY STRUCTURED MANUAL TASKS WHERE EMPLOYEES FREQUENTLY NEED TO:

- ENTER DATA INTO MULTIPLE SYSTEMS.
- RETRIEVE DATA FROM ONE SYSTEM AND ENTER IT INTO ONE OR MORE DIFFERENT SYSTEMS.
- RECONCILE DATA ACROSS MULTIPLE SYSTEMS.
- RUN SYSTEM REPORTS AND TRANSFER THE REPORT TO ANOTHER SYSTEM.

THESE TYPES OF BUSINESS PROCESSES ARE OFTEN INEFFICIENT AND ARE THE MOST IMMEDIATE CANDIDATES FOR AUTOMATION.



THE ROLE OF RPA

IN ADDRESSING BUSINESS CHALLENGES

The non-invasive nature of RPA makes it useful for streamlining operations which depend on activities underpinned by legacy IT systems and for generating returns rapidly without re-engineering those existing legacy systems.

The current crisis has made it difficult or impossible for contact centre agents to physically work in contact centres, and they often do not have the tools to work effectively from home. This challenge is particularly apparent for offshore contact centres in the Philippines and India.



From a customer experience perspective, RPA can eliminate customer and employee effort by collecting, analysing, and sharing information across channels easily. The creation of chatbots can reduce the need for customer service staff and enable data to be entered into systems immediately.

For back-office processes such as finance and accounting and HR, there are many challenges which can be addressed by RPA. Expense management, for example, often involves a mix of printing, scanning and data entry. All of these manual processes can be automated by using a bot. Similarly, other back-office processes such as invoice processing and onboarding new staff can be streamlined and automated using RPA.

OVERALL, THE MAIN WAYS WHICH RPA CAN ADDRESS BUSINESS CHALLENGES INCLUDE:

- **ERROR REDUCTION OR ELIMINATION.** BOTS ARE PROGRAMMED TO FOLLOW RULES, SO THEY NEVER DEVIATE FROM THOSE RULES. THEY OPERATE 24/7 AND DO NOT GET TIRED OR FORGETFUL.
- **INCREASED PRODUCTIVITY.** THE SPEED AT WHICH ACTIVITIES ARE UNDERTAKEN IS DRAMATICALLY INCREASED AND EMPLOYEES CAN FOCUS ON MORE VALUE ADDING ACTIVITIES. SIGNIFICANT COST SAVINGS, SOMETIMES AS MUCH AS 80%, CAN TYPICALLY BE GAINED WITHIN ONE YEAR OF IMPLEMENTATION.
- **SCALABILITY.** ADDITIONAL BOTS CAN BE DEPLOYED AS NEEDED IN LINE WITH PEAKS AND TROUGHS IN DEMAND.
- **COMPLIANCE.** RPA ACTIVITY IS PROGRAMMED TO COMPLY WITH POLICIES AND REGULATIONS. ITS ACTIVITIES ARE ALWAYS MONITORED, GIVING ENTERPRISES FULL VISIBILITY.

Getting started with RPA involves process mining and discovery to identify suitable automation candidates. Processes which require high volumes of repeatable tasks are ideal candidates. In addition to the discovery process, enterprises can consider processes that have been automated by others. There are many processes which have been automated by enterprises. The most popular include invoice processing, expense processing, onboarding new staff, and basic levels of customer interaction using chatbots.

ASEAN technology decision makers highlight the importance of Proof of Concept (PoCs) projects prior to RPA implementation. These PoCs enable enterprises to streamline processes, eliminate errors and ensure that broken processes are not automated.



ATTITUDES TOWARDS RPA IN ASEAN

ASEAN technology decision makers are aware of the productivity benefits of automation. The largest enterprises in ASEAN have typically embarked on an automation journey. Decision makers acknowledge the need to eliminate waste and standardise processes before they are automated. As one CIO stated, "You don't want an automated mess".

For a growing proportion of ASEAN enterprises, automation is becoming core to their digital transformation initiatives. A CIO from a Singapore government agency explained how RPA is becoming increasingly important to her organisation. She explained that contact centre staff are unable to handle requests at peak times. She states that "RPA is complementing frontline staff with additional capabilities, to absorb surges in demand". She added that "RPA is also being used for compliance checks on a large number of documents and to digitise those documents. The COVID-19 pandemic has accelerated our use of RPA and we plan to ramp up our digital capability with this technology. We are increasingly combining RPA with AI and expect this mix to become widespread."

The Head of Group Technology from a property development firm highlighted the importance of Involving the business in any RPA projects or pilots. He commented that "The business often doesn't know what RPA is. RPA helps business and can eliminate some of the less desirable work. Once employees understand this, they are keen to make it work and employees are needed to make it work".

The CIO of a large Malaysian service provider described how RPA is being used to increase productivity and improve employee capabilities while driving value creation for the business. He described how, in the past year, RPA has saved 13,000 employee hours and avoided MYR 2 million in costs. He added that "We are working at automating processes throughout the entire organisation, but we expect customer experience to be the biggest focus for increasingly intelligent automation". He highlighted the importance of proof of concept projects to make sure that the automated processes work properly before being rolled out. The company has been incubating a change in culture where employees embrace automation. He added that "Employees realise that automation can give them the opportunity to upskill".



COMBINING RPA AND AI FOR HYPERAUTOMATION

TO ADDRESS MORE COMPLEX CHALLENGES AND PROCESSES



The combination of RPA, AI and machine learning allows amore holistic and innovative approach to workflow management. It allows the combined application to process unstructured as well as structured data and to make improvements to existing processes, or crucially, identify and automate tasks that RPA alone cannot address.

Hyperautomation can rapidly scale automation across the enterprise. It leverages process discovery tools to identify processes which can be automated. It encompasses AI and analytics which can allow it to provide metrics around the business impact of automation. The integration of large amounts of data and its use with AI and machine learning is a natural evolution for creating AI-generated RPA.

The important benefit of hyperautomation is the scope of automation. Hyperautomation is a super set of RPA. While RPA is the basic building block to automate repetitive, rule-based processes, hyperautomation solutions can understand an organizations' processes and dynamically generate RPA scripts to automate those processes.



THE ROLE OF HUMANS IN HYPERAUTOMATION

The most attractive opportunities for hyperautomation involve blending RPA with AI, analytics and complex workflows. Process fragmentation, often a barrier to automation, can be overcome by automation that allows human involvement in the process, to make a decision, or to give an approval.

Hyperautomation can only be successful when used together with knowledge workers. Dynamically generated scripts will never be perfect. Business process maps will need to be validated by employees. These employees will also be required to handle exceptions which scripts cannot automate. With knowledge workers in the loop, hyperautomation is expected to radically improve the resilience and adaptability of automation scripts.

This human and automation blend extends functionality, ensures that the technology drives process optimisation and facilitates the creation of a digital-enabled workforce. It also brings businesses closer to the ultimate goal of business and IT process alignment. Leading ASEAN enterprises are working hard to integrate employees into their automation journeys. It is important that employees do not view automation as a threat, but rather as a way of complementing their roles and allowing them to focus on value creation and upskilling. For example, a leading Malaysian service provider highlights the importance of employee involvement in the automation journey, as they play a critical role in defining processes, automating them and working with bots.

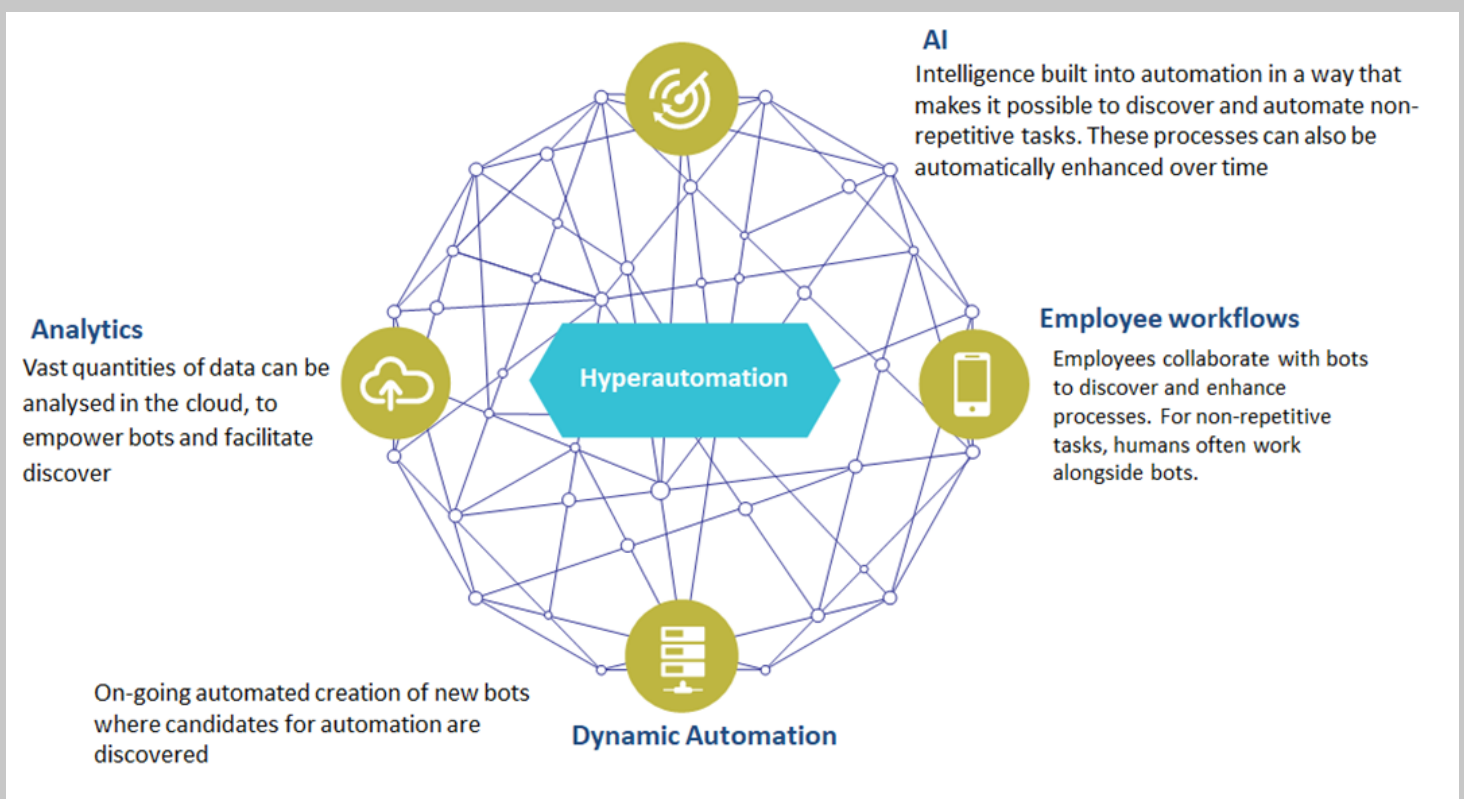


THE BENEFITS OF HYPERAUTOMATION

As mentioned, the most attractive opportunities for hyperautomation involve blending RPA with AI, analytics and complex workflows. Process fragmentation, often a barrier to automation, can be overcome by automation that allows humans to step into the process, to make a decision, or to give an approval. This human and automation blend extends functionality and ensures that the technology drives process optimisation and reinvention.

Figure 1 shows the key components of hyperautomation.

Figure 1 – Key components of hyperautomation



There are many benefits of hyperautomation. It helps to automate decision making throughout the enterprise, well beyond the capabilities of traditional RPA.

THE BENEFITS OF HYPERAUTOMATION

KEY BENEFITS INCLUDE:

- SCALING AUTOMATION IN A WAY THAT ALLOWS THE ENTERPRISE TO CONTINUALLY SEEK NEW CANDIDATES FOR AUTOMATION AND TO DYNAMICALLY CREATE NEW BOTS. WITH ALL FORMS OF AUTOMATION WORKING TOGETHER, IT IS POSSIBLE TO MOVE FROM BENEFITS OF A SINGLE TOOL TO A STATE OF DIGITAL AGILITY AND FLEXIBILITY AT SCALE.
- MAKING BUSINESS PROCESSES MORE EFFICIENT, OPTIMISE BUSINESS OPPORTUNITIES AND PROVIDE REAL-TIME CONTINUOUS INTELLIGENCE.
- EMPOWERING EMPLOYEES TO FOSTER DIGITAL TRANSFORMATION. EMPLOYEES CAN FOCUS ON MORE IMPACTFUL WORK.
- ENCOURAGING EMPLOYEES TO COLLABORATE IN THE AUTOMATION OF END TO END PROCESSES.
- DEMONSTRATING A QUICK ROI FROM AUTOMATION AND GAIN KEY INSIGHTS INTO THE BUSINESS

Hyperautomation can only be successful when used together with knowledge workers. It will facilitate the creation of a digital-enabled workforce and automate all repetitive processes, supporting employees in processes that cannot be automated, or can only partially be automated.

Dynamically generated scripts will never be perfect. Business process maps will need to be validated by employees. These employees will also be required to handle exceptions which scripts cannot automate. Hyperautomation is expected to radically improve the resilience and adaptability of automation scripts, to the extent that dynamically created RPA scripts become the norm.

Hyperautomation frees up employees to focus on more impactful work and to help find ways to use automation and work with automation tools.



THE JOURNEY TO HYPERAUTOMATION

Few enterprises in ASEAN have implemented hyperautomation solutions. However, it is estimated that approximately 30% of ASEAN enterprises have implemented RPA. Compliance, error reduction, increased productivity, enabling employees to focus on higher value tasks, and cost reduction are major drivers for RPA adoption in ASEAN.

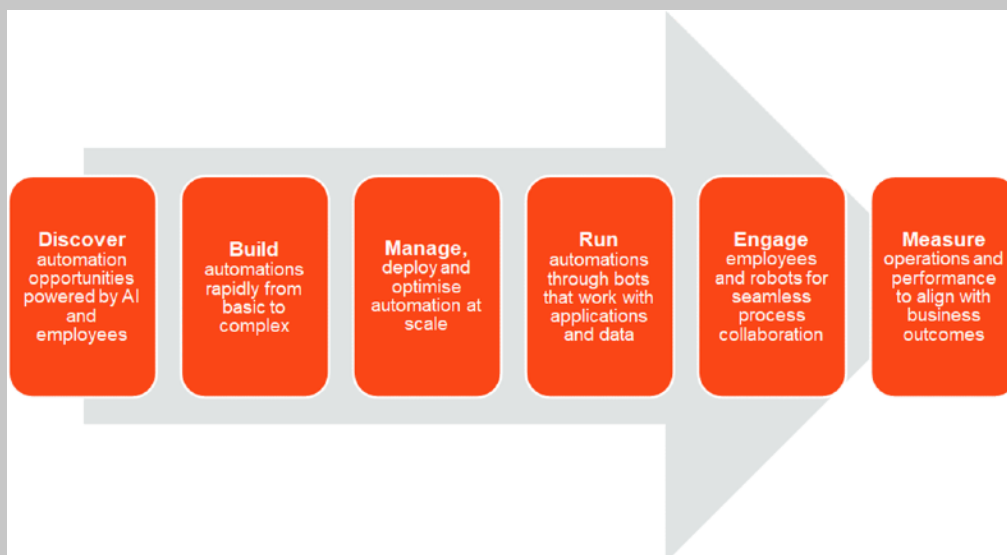
As RPA continues to mature, organisations are seeking ways to scale their implementations and to automate processes that are more complex. Intelligent automation addresses these needs by automating more processes at scale, more efficiently than RPA. It processes unstructured data, handles exceptions, and continuously learns, enabling intelligent automation to further increase productivity. Intelligent automation incorporates AI, particularly voice and vision capabilities and uses machine learning to optimise processes. Hyperautomation turbo charges intelligent automation by automating multiple processes (including complex processes) at scale. It offers continual discovery and automation of new processes, drives collaboration with employees. Importantly, hyperautomation becomes core to digital transformation initiatives.

Several steps listed below are necessary on the route to achieve hyperautomation:

- **Process discovery.** Hyperautomation uses AI and employee input to drive process mining and discovery.
- **Build.** Once processes have been discovered, automations are built. Some of these automations are basic, typically involving repetitive tasks – others are more complex, often involving non-repetitive tasks and requiring AI.
- **Manage.** After being built, automations can be deployed and managed at enterprise scale. They can also be continually optimized.
- **Run.** Automations can then be run through robots that work with applications and data. These robots can be attended, unattended or used for tests.
- **Engage.** Engender collaboration between employees and robots to ensure seamless process delivery.
- **Measure.** Ensure that automations are aligned with desired business outcomes. Use metrics and insights to provide continuous feedback and to optimize performance.

Figure 2 below illustrates the journey to hyperautomation. It illustrates the journey in terms of stages that lead to hyperautomation.

Figure 2 – The Journey to Hyperautomation



ACCELERATING BUSINESS TRANSFORMATION

WITH HYPERAUTOMATION



Every business now needs to be a digital business –survival and success are dependent on digitalisation. Hyperautomation must be at the core of digitalisation initiatives.

Enterprises must align investments in automation, AI, and other digital technologies with driving customer experience, improving the top line, and matching business operations with customer-driven outcomes. Hyperautomation provides the capabilities to integrate applications, activities, systems, documents, screen-scrapes, and other touchpoints. This requires the break-down of siloes between business functions, the design of end-to-end processes and the dynamic development of full-scale automation solutions.

Hyperautomation can drive and accelerate the transformation of the back-office, front-office and industry-specific processes, at scale.

Ultimately hyperautomation allows enterprises to transform activities by identifying, automating, and integrating as many business processes as possible, while leaving the exceptions handling and decision making to the knowledge worker. Its use of AI, big data analytics and machine learning broadens the scope of candidate processes for automation and facilitates automation at a much greater scale than before.



CONCLUSION

Technology decision makers within ASEAN enterprises understand the benefits of automation and the role it plays in overall digital transformation initiatives. The main challenge that they face is getting buy-in from the rest of the business. The COVID-19 crisis has generally accelerated automation especially in areas of the business that have been disrupted such as contact centres. But, convincing senior business managers to take a more strategic view of the role of automation and hyperautomation as key enablers for digital transformation will take more time.

Some employees express concerns around the impact of automation on job security. While it is true that automation will eliminate the need for certain manual tasks, it is unlikely that it will eliminate jobs – to date, automation tends to eliminate tasks that account for perhaps 10% or 20% of an employee's role. As the technology matures, employees will increasingly see the benefits of automation for them – they will work closely with bots – the bots focusing on repetitive tasks and employees focusing to a greater extent on value creation activities that require at least some human judgement.

ASEAN enterprises that have implemented RPA solutions understand how blending RPA with AI, particularly voice and vision can transform their businesses. Visual capabilities are being used more widely for backoffice activities such as procure-to-pay and voice capabilities are increasingly being used to support frontline employees such as contact centre staff.

The continual searching for and discovery of new processes for automation is occurring with some large enterprises in ASEAN, where RPA implementations are mature and successful. Over time, hyperautomation will become commonplace as enterprises use automation as the core of their digital transformation activities and implement tools to discover and automate new intelligent processes at scale.



The background of the page is a complex, abstract composition. It features a large, stylized face on the right side, composed of various geometric shapes and lines. The face has a prominent nose and a wide, open mouth. The background is filled with a network of thin, light green lines that intersect and branch out, resembling a circuit board or a neural network. The overall color palette is muted, with shades of blue, green, and grey.

This white paper is prepared by CIO Academy Asia

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