

# FUTURE OF AUTOMATION



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### THE EVOLUTION OF AUTOMATION

Automation has been driving business efficiencies since the dawn of the commercial revolution. As technology matured over the years, so did operational effectiveness. The early life of automation began when enterprises relied heavily on MS Office Macros to ease out most of the voluminous and complex data-related tasks.

With the passage of time, much of the repetitive and mundane work was the most sought-after candidate for automation via the enterprise scale platforms and tools.

The **wave** can be termed as **'Hyperautomation'**. It is where artificial intelligence is the key contributor in the automation journey, and it is replacing many of the actions solely performed by/ dependent on human intelli-gence until now. **Hyperautomation** is the next evolutionary step in driving business process efficiencies – i.e., combining existing automation tools with new technologies such as artificial intelligence (AI) and machine learning (ML) to drive automation across a wider variety of tasks, processes, job functions, business areas, and industry sectors. Hyperautomation is also referred to as sophisticated automation i.e., to discover, analyze, design, automate, measure, monitor, and adjust.

#### Intelligent automation (RPA + AI)



# Technology platforms continue to add and expand functions and features:





### HYPERAUTOMATION IS THE DEMOCRATIZATON OF AUTOMATION

In 2019, – Gartner predicted that Hyperautomation will be the number one trend for Strategic Technology (Top 10 Strategic Technology Trends for 2020\*). Hyperautomation is a business-driven, disciplined approach that organizations use to rapidly identify, vet, and automate as many business and IT processes as possible. Hyperau-tomation involves the orchestrated use of multiple technologies, tools, or platforms, including:

- Artificial intelligence
- Machine learning
- Event-driven software architecture
- Robotic process automation (RPA)
- Business process management (BPM) and intelligent business process management suites (iBPMS)
- Integration platform as a service (iPaaS)
- Low-code/no-code tools
- Packaged software
- Other types of decision, process, and task automation tools

With cloud adoption, RPA along with a combination of AI and ML enabled highly integrated and scalable automa-tion ecosystems, thereby further accelerating the democratization of automation.

Organizations perceived automation to be rules-driven, repetitive and limited to process automation, logs, sys-tems, and app monitoring. Hyperautomation has reimagined the way we look at automation possibilities now.







RPA continues to impact businesses at breakneck speed. It is evolving into an intelligent form of technology that has had many success stories in automating complex tasks through Hyperautomation. Automation hub has gained much ground from being a concept of user collaboration to a platform that allows user groups to ideate, evaluate, assess, and finalize different automation opportunities, thereby building a pipeline of processes man-aged centrally. Automation hub features some components mentioned below:



### CENTER OF EXCELLENCE – THE KEY TO REALIZING VALUE FROM AUTO-MATION

One proven way to implement centralized automation management is through a center of excellence (CoE). The best practices of RPA state that in the development of reusable solutions the use of bots does not increase the negative risks for the organization. The responsibilities of a CoE will depend on the exact governance model used. The most common activities include the following:

 A well-designed organizational structure, well-defined roles, and a governance strategy to support them, are undeniably critical for transformational engagements, especially the ones that you would like to scale with time. Governance and risk management framework creation is often underrated in midsized organizations. And that is the most common pitfall at the source of unsuccessful organiza-tion-wide adoptions.

- A governance framework should be in place whether the organization believes in central delivery team (CoE) and/ or decentralized teams. Along with the organizational structure, defining proper reporting mechanisms, roles, responsibilities, and the delivery model are key.
- When the automation portfolio is defined and aligned to the organizational structure, a practice of proactively documenting and aligning unique use cases to the organization's mission-critical priorities will mature the model as it grows.

## A strong CoE makes all the difference

**Opportunity analysis:** Identify candidate business processes and build business cases and a strategic vision.

**Development standards:** Establish and enforce best practices for automation development.

**Change management:** Facilitate processes and training to integrate automation into the current workforce and to integrate bots with existing systems.

**Bot management:** Provide monitoring of production automations and capacity management.

**Value analysis:** Create a central point for evaluating metrics for success of automation. program

**Emerging technologies:** Provide evolution of the automation program to include new technologies.



### MANAGE AUTOMATION PERFORMANCE AND INSIGHTS THROUGH MEASUREMENT AND METRICS

Automation performance management solution enables organizations to track, measure, and manage the per-formance of their entire automation program.

While the bots are delivering the muchneeded process improvements at scale, it is important for organizations to keep a continuous track of performance parameters. This is on similar lines as employees who go through continuous feedback and reporting mechanisms in workplaces to ensure they are engaged and productive.

The principle of performance management remains same where we need to train, monitor, evaluate, re-train, and repeat. Most of the organizations depend on enterprise-grade performance management systems to track key performance indicators (KPIs) of the bots.

#### On an enterprise scale we can segregate the KPIs into three primary groups:



#### Bot prioritization:

Once the stability criteria have been met, IT teams could turn their attention to bot criticality if they want to effectively manage bot rescheduling and license usage. Below are some of the examples of priority bots:

- **Time-complex bots** that are connected to business processes with cut-offs (e.g., market cut-offs) which, if delayed, can lead to financial penalties
- Multi-business bots that cater to multiple business lines
- **High-value bots** that have successfully lowered the physical FTE of human application users and there-fore carry the most risk in the event of failure.

### WHY CITIZEN DEVELOPMENT IS THE FUTURE OF AUTOMATION

#### Who are they?

A citizen developer is one who builds applications for self and other people. Although they do not report di-rectly to IT, citizen developers use tools such as low-code or no-code platforms that are sanctioned by IT.

IT departments sanction tools and security and provide direction regarding application design and development, while non-IT employees focus on the actual applicationbuilding process.

Encouraging employees to become citizen developers is very important to scale, and for further improving productivity and efficiency along with collaboration and innovation.

#### Why are they important?

The IT team along with the RPA CoE can do limited bot development as per time and resource availability. If business users participate equally, then the some of the benefits are:

- Improve employee productivity and morale
- Bigger pipeline and automation potential
- Exceptional customer experience
- Front-office and back-office collaboration
- Revenue growth
- Skill empowerment
- Prior business knowledge.

#### Key to success:

Enterprise-wide automation requires more than just an RPA team; citizen developers need to be empowered with RPA to build their own automations to scale your program. An organization can plan for a successful citizen development program by following the simple guidelines mentioned below:



#### Low code citizen development and RPA CoE



**Low-code development** efforts have become the preferred way to put wellstructured and secure applica-tions into production quickly without negatively impacting IT enterprise projects. IT needs to establish effective governance to ensure enterprise data security and proper use of resources.

Some key identification markers on how governance can be implemented in citizen developer projects have been listed below:

- Identify existing or potential citizen developers.
- Establish a credentialing process for citizen developers – training and certification.
- Determine what projects are being or have been created.
- Establish where the citizen developer apps are being created (e.g., in office tools or in the other platform).
- Establish agreed-upon points of technology that call for IT involvement.
- Set up standard protocols for low-code development – sandboxing, testing, validation, audit, inte-gration, and deployment.
- Determine an evaluation process to decide whether a project is a candidate for IT development or low-code development.

Accordingly, the **governance type** can be selected from the three types mentioned below and the appropriate governance processes can be applied:

- Minimal governance
- Shared governance
- Complete governance

**In conclusion,** automation has always been and will continue to be a focus area for enterprises. Intelligent tech-nologies and the future of work will have far-reaching implications; some we can imagine and some we cannot.

Business operations that used to be laborintensive in the last 10 years must be able to leverage digitization and be adaptive to heightened customer needs and market competition.

Enterprises must strive to be adaptive – able to disrupt and respond to disruption. Future of work scenarios will remain informed by parallel and large trends such as robotics, intelligent automation and, lately, citizen devel-opment. What remains to be seen is how well enterprises are prepared to reap the benefits offered by prevail-ing technologies and usher in a new era with the right amount of technological growth and interactive business insights.



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