Want to Be Digital First?
THEN YOU NEED HYPERAUTOMATION

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Test Automation Software

KEYSIGHT
TECHNOLOGIES

The efficiency effect

Feeling the pressure to do more with less? You're not alone.

In every industry there is a relentless drive for improved efficiency. Companies are under ever-increasing pressure to:

- Reduce bugs
- Decrease other technology glitches
- Address performance issues
- All while releasing faster than ever

At the same time, trends like mobility and virtualization have changed how users expect to consume digital services and interact with brands online. We know we have to produce slicker, more compelling experiences or lose out to competitors.With a shortage of highly skilled tech workers and the pressures outlined above, this is easier said than done.

But it's not all bad news. Next-generation automation can help you bridge the gap, and keep pace with the demand for greater efficiency while also delivering a better, more engaging user experience.

Hyperautomation delivers tangible business benefits

Hyperautomation, defined by Gartner as dealing "...with the application of advanced technologies, including AI and ML, to increasingly automate processes and augment humans," has been on the firm's list of top technology trends for the past two years.[1] But it's not some nascent technology that has yet to deliver a material impact—it's actually very much in action today.

By next year, Gartner believes AI augmentation will:

- Generate $2.9 trillion in business value·
- Retrieve 6.2 hours of worker productivity.[2]

And by 2024, the firm estimates that organizations will lower operational costs by 30% by combining advanced automation technologies with redesigned operational processes.[3] Sounds promising, right?

Aiding in post-pandemic recovery

Hyperautomation can also help you address the new business priorities arising from COVID-19. The pandemic forced companies to shift operations and invest heavier in some technologies while deprioritizing others.

For example:

- 59% of executives in a recent KPMG survey say the pandemic has accelerated their digital transformation initiatives
- As a result, 43% plan to increase their automation spending

According to the report, "Automation is a key building block for future digital transformation… As the new reality unfolds, automation priorities are shifting towards more advanced, strategic, and transformational capabilities." [4]

Fueling a cultural shift

As more organizations embrace hyperautomation there will be a cultural shift, as businesses redefine roles and responsibilities. They must determine how to offload repetitive tasks to machines so that humans can be freed to focus on strategic work and, in turn, these employees may have to retrain in certain areas. As the technology matures, this will also result in a demand for more mindful, interesting and skillful work for humans in the pursuit of ongoing digital transformation.

Digital first starts with a modern testing approach

When you think about software testing, what are the first things that come to mind? If it's a compliance function that focuses primarily on whether the technology works as intended, then you need to think again. This is an outdated mentality that belongs squarely in the rearview.

Companies cannot be digital first with a legacy, compliance-focused testing methodology. Why? Because whether it's an internal user accessing an enterprise workflow or an eCommerce customer shopping via a smartphone, it's their perception of how this technology performs that matters.

As such, success is reliant upon testing the quality of the digital experience. This is where hyperautomation can revolutionize software and application testing. Drawing on advanced AI, a modern approach to testing enables you to:

- Evolve beyond the pass/fail mentality and instead experience technology from the users' perspective
- Use image analysis to see the screen as it appears to customers
- Automate workflows that provide strong coverage of the user experience while also testing system performance and functionality

This sounds good in theory, but today's population is comprised of various demographics, profiles and levels of technical savvy.How can companies account for this and test the digital experience of all users? By drawing on advances in AI to create synthetic users for each customer persona. From there, it's easy to drill into the data to see where key business outcomes are being missed as a result of technology factors. For example:

- Are older generations struggling to navigate a complicated checkout page?
- Are slow load times irritating digitally savvy millennials?

Obtaining this insight is one piece of the puzzle. Automating the testing for it on an ongoing basis is the other. Through the power of hyperautomation, companies can do both and ensure they're delivering the right digital experience for every customer, every time.

Automating across complex environments

As critical as the customer experience is, we can't ignore the operating challenges that exist on the backend. If you're like most organizations, you likely work across a range of systems, applications and programs. Not only is this trying to manage, it also can quickly lead to inefficiencies that divert time and attention from more important work.

Enter Robotic Process Automation (RPA), which is accelerating hyperautomation across industries because it:

- Operates across multiple systems
- Interprets data from one program and applies it to another
- Adapts quickly to changing factors and learns accordingly

Complex omnichannel eCommerce systems? Check. Distributed warehousing and supply chain systems? Check. Electronic Medical Records (EMR) systems? Check, check, check. No matter the industry, RPA can:

- Automate processes
- Help humans focus on more strategic tasks
- Improve ROI and operational efficiencies
- Drive user experience improvements

Also, let's face it: no one likes admin work.

Laying the framework for continued innovation

Embracing a user-centric approach to testing and availing of RPA are reason enough to invest in hyperautomation. But if you need more evidence of the technology's benefits, consider the following:

Faster delivery without sacrificing quality

- Technology margins and investments are under ever-increasing scrutiny
- Companies cannot afford for project timelines to snowball or miss their delivery deadlines
- Organizations are facing growing pressure to release high-quality digital experiences at a faster rate than ever before
- From a testing perspective, AI-driven automation can help you address these three equally important priorities. As a result, you can maximize test coverage, increase testing efficiency and drive operational improvements, all with an eye on quality and delivering an engaging customer experience.

Scaling to accommodate emerging technology

The last few years have seen staggering advancements in the form of autonomous technology, IoT and 5G adoption, and this will only accelerate in the months ahead.

- Case in point, more than 80% of the companies surveyed inKPMG's post-COVID report are investing or plan to invest in emerging technologies as part of their recovery strategy

Introducing these new technologies into the enterprise can be a time and resource-intensive task. Hyperautomation makes it significantly easier by introducing disruptive technology in a way that minimizes friction and drives the business forward.

Addressing technology glitches before they become business problems

Everyone wants to avoid downtime. With hyperautomation, companies can spot bugs prior to release and address them efficiently before they have a chance to impact the customer experience or negatively affect business outcomes. By continuously monitoring performance after the technology has gone live, an intelligent test automation strategy also alerts companies to take action to avoid downtime. On top of the obvious customer experience benefits, this also eliminates the cost and resource burden of scrambling to restore technology after an outage.

Believe the hype

When it comes to hyperautomation the opportunities for greater efficiencies and, in turn, better digital experiences are too great to quantify. As Daryl Plummer, distinguished research vice president and Gartner Fellow, put it, "Automation is a new source for competitive advantage and disruption... CIOs should see hyperautomation as a principle, not a project, as they move forward in updating their processes for the future."[5]

Case study:
Hyperautomation allows Sheetz to Innovate in the new normal

Sheetz, a family-owned convenience store chain with over 600 locations across Pennsylvania, Ohio, Virginia, West Virginia,Maryland, and North Carolina, is one example of an organization that is prioritizing hyperautomation. The company needed a test automation platform that would support the agile delivery of new software and services to accelerate the pace of its digital transformation strategy.

One platform to test everything and anything

Sheetz had numerous requirements for its test automation solution, among them the ability to:

- Test multiple device sets and platforms
- Test technology spanning in-store and mobile
- Test different mediums, including voice ordering and scanners

In addition, the company wanted to:

- Accelerate delivery of digital products and applications
- Reduce the manual testing burden
- Reduce the regression testing window
- Automate the testing of mobile apps and ordering systems

After vetting numerous test automation solutions, Sheetz ultimately partnered with Eggplant, a pioneer in AI-driven testing that can test any system or technology. Through the power of hyperautomation, the latter can automate end-to-end testing across any platform and enable Sheetz to achieve the objectives outlined above.

Hyperautomation in the new normal

With its modern approach to test automation, Sheetz was able to quickly release new products and services to better serve customers when the Coronavirus pandemic hit. These include:

- Mobile checkout
- Curbside pick-up
- Integrations with third-party delivery services

This swift pivot to the new retail reality would not have been possible without the Eggplant platform, and its ability to harness the power of hyperautomation to drive better business outcomes. As Michele Devecchis, Quality Assurance Manager atSheetz, puts it:

We are amazed by the engagement and no other vendor comes close to providing the support that Eggplant delivers.

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