

AGILE AUTONOMOUS DIGITAL ENTERPRISE

Nearly 67% of CEOs say that acting with agility is “the new currency of business; if we’re too slow, we will be bankrupt,” according to KPMG.

This global pandemic has changed the face of the world we all live in. Everyone adapted to the new normal geared towards flattening the curve. With all its downsides, looking at the brighter side, it has fast-forwarded the digital transformation and accelerated growth opportunities for many businesses.

By now most companies have digitised at least some part (if not all) of their business to protect employees and customers facing mobility restrictions during the Covid-19 pandemic. This ‘locked down’ world has opened new latitudes for companies to future proof themselves from any unforeseen catastrophe.

According to McKinsey, we have vaulted five years forward in consumer and business digital adoption in a matter of around eight weeks.

Banks have transitioned to remote sales and launched digital outreach to customers to make flexible payment arrangements for loans and mortgages. Grocery stores have shifted to online ordering and delivery as their primary business. Schools have pivoted to 100% online learning, and this list goes on.

Understanding Autonomous Digital Enterprise (ADE). Simply put, ADE is a business built or adaptive to successfully navigate in the digitised epoch through agility, a customer-focused approach, and actionable insights to evolve and stay relevant in an ever-changing disruptive environment.

Here is the bird’s-eye view of the basic technology tenets, which will be discussed at length in this article ahead:

1. A **transcendent customer experience** because a proactive, responsive and customised service is vital for all businesses today. To ensure a competitive edge, customers’ expectations and needs must be exceeded, not just met.
2. **Pervasive Automation** is inter-woven throughout and improves performance, innovation and efficiency. It is only possible to achieve accuracy, execute with speed, optimise costs by applying smart automation across data, applications, systems and workflows.
3. An **enterprise DevOps** approach is necessary to optimise the rapid and continuous delivery of applications and services surrounding business processes across an organisation to further enhance agility by instilling DevOps principles.
4. A **data-driven** business or culture is fact-based innovation

with predictive models that can help gain insights and set realistic business goals. It makes decisions while using a combination result of measurable goals, pattern analysis, and insight assessments to develop strategies for excelling in any business.

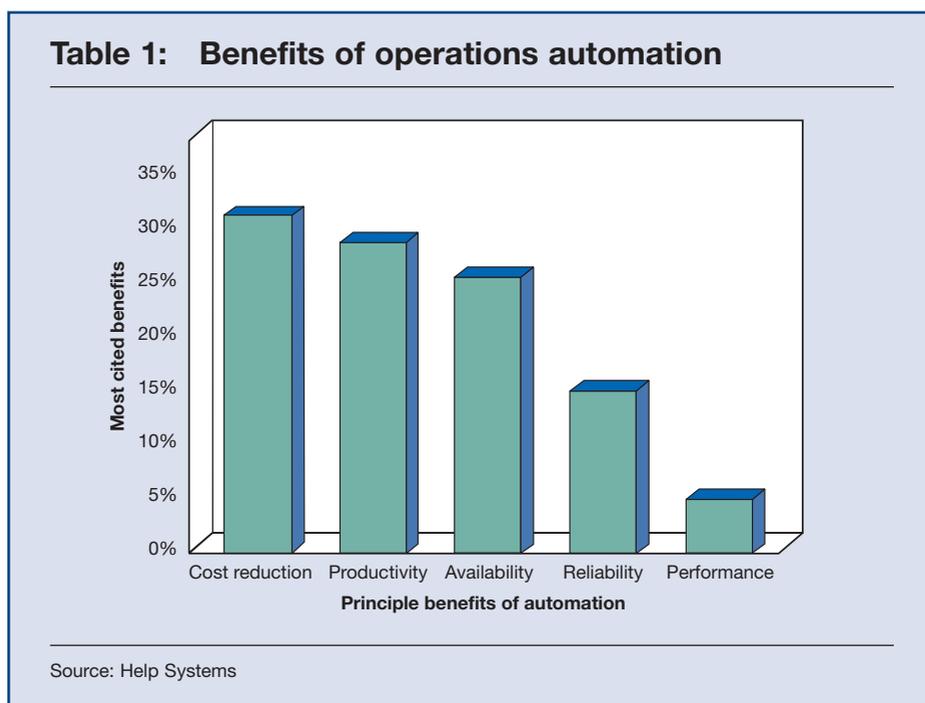
5. **Adaptive cybersecurity and cyber resilience:** As businesses are rapidly digitising and automating operations, cyber risks multiply simultaneously. An adept cybersecurity mechanism in place not only aids in meeting regulatory requirements but allows for early detection of security compromises and automatic, autonomous response when a malicious event occurs.

Autonomous digital enterprise frameworks – taking businesses light-years ahead. The fourth industrial revolution is denoted as a new chapter in technology disruption enabled by extraordinary technology advances proportionate with those of the first, second and third industrial revolutions; not only how businesses are perceived but also how businesses are steered.

In this connected 24/7/365 age, every aspect of a business, from operations to management, is reliant on using digital tools. With technologies such as AI and Automation augmenting our personal and professional lives, we are able to make smart choices and informed decisions in a blink of an eye.

Global AI in Financial Services Survey, supported by EY and Invesco, shows the impact AI will have on financial institutions, from business models to changes in the workforce; it says that by 2030, FinTechs anticipate AI will have expanded their workforce by 19% and that AI is changing how financial institutions generate and utilise insights from data, which in turn propels new forms of business model innovation, reshapes competitive environments and workforces, engenders new risk dynamics and poses novel challenges to firms and policymakers alike.

Looking into the technology crystal ball, businesses that want





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to thrive in the digital futurescape must evolve to Autonomous Digital Enterprises, a state where intelligent, integrated, value-creating functions can operate with minimal human interference, across every facet of an organisation.

With such a rapidly progressing market ecosystem, its true essence is not in advances in technology but in disrupting dynamics impacting on industry's business value chains. Given the right tools, automating computer operations can be surprisingly easy and can reap major benefits.

A recent study by a leading trade journal asked the question, "What do you see as the most important benefits of an automated computer centre?" The primary benefits of operations automation cited most often were cost reduction, productivity, reliability, availability and performance (see Table 1).

True autonomy – the essential ingredients. Every company today, big or small, is being disrupted by technology modifying its business processes and models.

It is now, that every company has converted itself into a technology company, meaning that the software used by these companies has become more than just a system of record-keeping to be a system of action, insights, and engagement.

This will further enable the use of DevOps in organisations using the power of AI to improve existing capabilities and further work on them. This does not mean companies have to start from the ground up on AI efforts, rather they need to look for software solutions that can offer prebuilt AI/ML solutions that drive change and transform their processes to ensure business sustainability.

While the Autonomous Enterprise might sound like a thing from the future, the technologies are extensively available today, and new generations are suited for enterprise use.

What makes up an Autonomous Enterprise? The first ingredient is AI-based analytics with actionable insights. AI should be applied to the business so it can start to understand the undercurrents.

Machine Learning and Behavioural Analytics define normal activity on a dynamic basis and recognise events, patterns, anom-

alies, relationships as well as root causes. These precedents help AI advance from being an analytical tool into virtual assistants that can proactively advise and prevent problem recurrence.

The milestone of true autonomy is reached only when the second ingredient is added i.e. Automation. The Autonomous Enterprise must have means for taking corrective action in response to the intelligence gleaned.

It is really not a question of why to become an Autonomous Digital Enterprise, but rather when and how organisations should transform into an Autonomous Digital Enterprise. To be ahead of time, organisations must upgrade operating models enabled by key technologies that can include the following key framework components:

Deliver a transcendent customer experience. With the technology revolution disrupting the business horizon everywhere, it has also transformed the customer behaviour in terms of expectations and decision making. The only way to ensure a competitive edge these days is to really go that extra mile and deliver a customised, apt and swift solution to the customers when and where they want it.

The transcendent customer experience is one of the key technology-enabled tenets that galvanise and sustain the Autonomous Digital Enterprise. Customers now expect more and their needs are forever changing.

Looking back some 10–20 years, companies like Fitbit, Spotify, Airbnb, and WeChat did not exist. Their constant improved services and easy access have raised the bar for the customer experience massively.

The blurred divide between the B2B and B2C has also changed these days and businesses need to shift from a transactional model, focused solely on selling products, to a relationship model, built around selling services, and creating deeper connections with customers.

Today's modern customer is very intelligent and would not fall for adverts with false promises. Their decision is influenced by multiple factors including features of the product/service, convenience, value for money, innovation, and a highly customised customer service, etc.

Imagine being able to purchase a car from the comfort of your home. Fill out the application process, configure the vehicle, compare payment plans, choose from a wide range, customise the payment plan to your choice, and have the authority to upgrade or modify the contract terms. All of this innovation can be credited to Autonomous Automation.

It is fascinating to explore more about futuristic technologies like driver assist, driverless cars, driver recognition, and monitoring. With the world of tech, and the world in general, moving at a startling pace, before we know it, our cars could be as smart as our phones currently are.

Pervasive automation done right is a game-changer. The prophecy of super-machines acting and thinking like humans has turned into a living reality. We have long attempted to create human Xerox with inherited human-like intelligence in machines to ease our work. There are bots, robots, humanoids, and digital humans that either outplay humans or coordinate with us in many ways.

Machine Learning and Deep Learning algorithms are built to make machines self-learn and make decisions just like humans. Omnipresent Automation is the key to improve performance, efficiency, and innovation.

The modern market is a world full of twists and turns at every corner that requires flexibility and adaptability to the ever-changing state of things. ‘Agility’ is the word that best describes what it takes to be competitive in the modern world and ever-evolving business impacts.

Enterprise DevOps to stay ahead of the curve. DevOps, as we all know, is a cross-functional approach to a process. It further optimises for rapid continuous delivery of applications and services and embraces cultural and behavioural change to create a frictionless environment. It is more of a culture shift as it aligns everything towards the same business goal.

Enterprise DevOps comes into play for developing and delivering software faster for customer retention, without any quality glitches. Now, this comes with its own set of challenges especially with more dispersed organisations – legacy systems and software, manual workflows, people and process hurdles can make the effort to drive efficiencies and enable innovation paradoxically slow.

Collaboration is the key here, the operation and development teams must share information, coordinate actions, and resolve incidents with technology optimised by AI, ML and automation to ensure the success of such collaboration.

According to Gordon Cullum: “If you aren’t already thinking about it or aren’t already doing it, you’re probably way behind the curve,” as DevOps, like digital, is an assumed norm now.

Data-driven approach powers everything we do today. Data is considered the ‘new oil’. Such is the value of these symbols, mostly numbers-zeros and ones. This applies even to the most complex algorithms, and most of what we mean when we talk about AI is classification software that assigns zeros or ones to match different variables or predict patterns at scale.

Having said that, in most relevant areas of life, to be sure, we still need human expertise to translate data into insights, and to convert those insights into actionable items. Acting on those insights is what ultimately makes someone data-driven.

Data without insights is futile, and insights without action are inane. It won’t be wrong to say that in an Autonomous Digital Enterprise, a data-driven business uses AI and analytics to extract and monetise valuable data from traditional sources like records and new sources like IoT devices, social media, and customer engagement systems.

This may sound abstract, but in many domains of life we actually function according to these principles on a regular basis, even if we are not data scientists, for example, when you watch a series that Netflix has suggested, or listen to a song that Spotify matched to your preferences, you are adapting to data-driven changes in your life.

The downside of modern technology and adaptive cybersecurity. The new epoch is all about evolution and migration, this applies to both, data and people. The rapid transition from fixed workstations to virtual office spaces and highly integrated, voice-based services means more freedom than ever.

In order to remain feasible in the age of augmented mobility, companies of all sizes are transforming outdated legacy systems into newer, more agile frameworks that are located in cyberspace. This allows businesses to become leaner and more efficient, improves customer service, and enables a more collaborative work environment that transcends time and geographic locations.

Every business today yearns for round the clock cybersecurity without the need for upgrades or human oversight. The security that not only responds to known threats but anticipates new ones and continually evolves to rectify and improve.

Adaptive Security is a real-time security model that continuously probes behaviours and events to protect against any threat and adapt accordingly before they occur. The primary goal of adaptive security is to create a feedback loop of threat visibility, detection, and prevention that consistently becomes more effective.

Gartner predicted that in 2020, 40% of large organisations will have established a ‘security data warehouse’ to support advanced security analytics.

The concept of ‘Cyber-Resilience’ is the new hype in discussions about cybersecurity. Its popularity is undoubtedly linked to the numerous headlines about cyberattacks and data breaches that become ‘breaking news’.

Far from being unique to the cyber-domain in general or financial institutions in particular, the dilemma of how to effectively respond and manage disruptions caused by unpredictable adverse events that have the potential to destabilise and ultimately obliterate, has been a central problem for all complex ecological, social, organisational, and technical systems.

The answer to all of this could be Resilience, which will be defined for the moment as the capacity to withstand, recover from, and adapt to external shocks.

To conclude, it is essential to understand that businesses may not be able to predict the future accurately, but they can prepare for it well in time to minimise the risks of damage involved in any unforeseen situations by becoming an Agile Autonomous Digital Enterprise.

Global business leaders need holistic agility at the enterprise level because moving in the right direction is not a matter of choice anymore, but a prerequisite for the autonomous future.



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