HyperChain

powered by TheValueChain

White paper 2021

Ready for the next step in process automation?

Intro

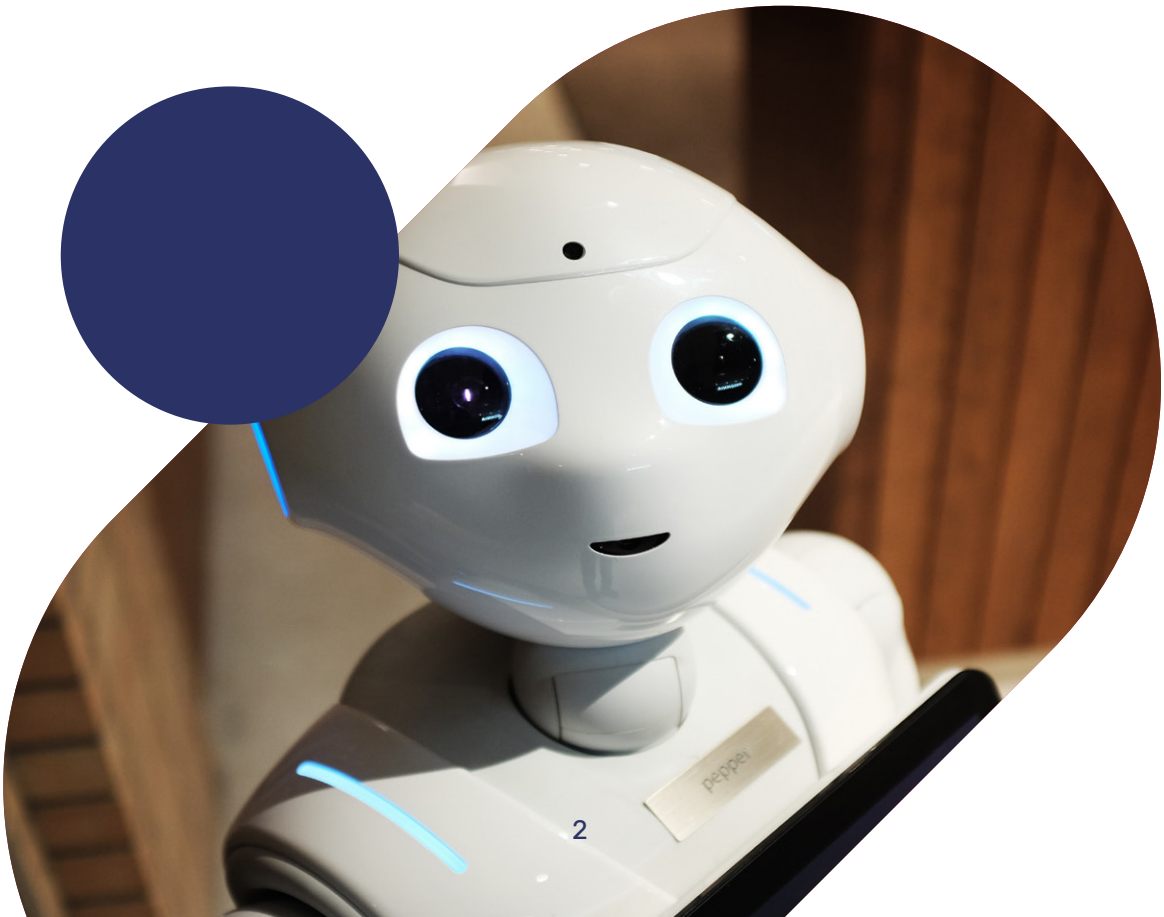
A view into the future

The thrilling pace of technological and scientific evolution has brought humanity to an unprecedented moment in history. As Gerd Leonhard puts it in his book 'Technology vs Humanity': "Humanity will change more in the next two years than in the previous 300 years". Yuval Noah Harari adds, in his smashing bestseller *'Sapiens, A Brief History of Humankind': "It's the first time in history when we'll have no idea on how human society will be like in a couple of decades."*

We're all in unchartered territory. Welcome to the future.

Even though the unknown might scare us, there's no need to fear the future. Because with unseen possibilities come extraordinary opportunities. Life and business changing technology positively impact our lives and daily operations – either gradually or at lightning speed.

Automation performs more complex daily tasks, granting us the opportunity to make operations more reliable, productive and profitable.



What will you do? Which choices will you make?

Will robots come for your job as well? They just might. (Fun fact: you can check the automation risk of your profession through willrobotstakemyjob.com).What is most certain is that they will disrupt your industry and business significantly.

So, what will you do? Continue to perfect processes that will prove to be a dead-end? Or re-invent yourself by adapting to tomorrow, by integrating future-proof tech and creating a human framework that delivers an added value?

"We're entering a constant state of VUCA: Volatility, Uncertainty, Complexity and Ambiguity.

But you can meet Volatility with Velocity. You can fight Uncertainty with Unorthodoxy.

You can answer Complexity with Creativity. And you can defeat Ambiguity with Awesomeness."

Georg Leonhard in 'How The Future Works'.

Here's what you'll learn in this white paper

This introduction into the world of hyperautomation will shed light on the opportunities and possibilities it avails. We'll explain what the term means and what the process can mean for your organisation. It's your blueprint to understanding the concept and using it to re-invent your business and operations to gear up for what's to come.

What is hyperautomation?

Gartner explains.

Hyperautomation is the idea that anything that can be automated in an organisation, should be automated. Non-streamlined business processes are a massive financial burden that create extensive issues and problems.

Hyperautomation has shifted from being an option to a necessity for survival. The technologies behind the concept – from Robotic Process Automation (RPA) to low-code and AI – are rapidly becoming must-haves for architecting and addressing critical business demands.

Business-driven hyperautomation can be used to rapidly identify, vet and automate as many business and IT processes as possible. However, with the high demand for automation from business executives, inefficient work processes are becoming a serious challenge for companies. Extensive and expensive business processes characterised by a patchwork of systems that are not lean, connected, consistent or optimised, are the root cause of the problem.

An intelligent approach to Hyperautomation is crucial to automate processes for speed, efficacy and minimal level processing.

If you want to dive deeper into the subject, we've lined up some interesting reads for you. **Check out these reports from Gartner** *and familiarise yourself with the background of hyperautomation.*

The case for hyperautomation

What the market trends say

- 90% of workers are often subjected to performing **monotonous, repetitive tasks.** Disconnected data negatively impacts your business productivity – and data gaps, slow integration, and repetitive manual tasks are to blame.

- IT end-users adopt **shadow IT practices** to fulfil their job requirements in ways that are easier for them.

- The rapid digital acceleration by businesses puts pressure on IT leaders to increase application delivery speed and Time to Value. As a result, the **demand for custom software solutions** has skyrocketed. This upsurge has sparked the emergence of citizen developers outside mainstream IT, boosting the rise of low-code*.

- Many businesses lack the agility to respond to suddenly shifting customer demands. So, while they embrace cloud and automation platforms (for mainstream requirements) and agile software development processes, **low-code has emerged as a crucial acceleration tool** to modernise and digitise their operations.

* Low-code is a visual approach to application development. Any developer can leverage reusable components and model-driven logic to rapidly build applications, regardless of their experience level. This bypasses the need to write code for complex programmes and replaces it with visual drag-and-drop tools and process modelling, reusable components and real-time collaboration.

HyperChain

TheValueChain's take on hyperautomation

We believe that hyperautomation requires not only a different skill set, but also a different mindset. Classical design thinking with complex high-code solutions isn't sufficient anymore. Instead, a dedicated team focused solely on Hyperautomation without being distracted by parallel ERP implementations, is the way forward.

In fact, we firmly believe hyperautomation is much more than just RPA. And that's precisely why we chose to launch a separate, fully commited team to support our clients in their hyperautomation journey. They work on a business case basis. If there isn't a business case in it, we don't move forward with the project.

As skilled and experienced SAP specialists, we bring a tangible competitive advantage to the table when it comes to hyperautomation in combo with SAP. On top of that, ERP implementations are in our DNA. We have mastered them in countless business environments.

Rest assured, we will comprehensively review your business processes and evaluate them thoroughly, up to the smallest detail to deliver the best solution. If your challenge would be better resolved by applying a solution other than hyperautomation, we'll transparently and honestly advise you to do so. We're here to optimise your operations and deliver second-to-none results – not sell you one solution, regardless.

TheValueChain's HyperChain team is a devoted selection of experienced process optimisation consultants, ***100% focused on hyperautomation.*** *They have one mission, and one mission only:* ***to lower your total cost of SAP ownership*** *(TCO) by identifying the correct use cases and intelligently automating your processes. This team also wields an abundance of expertise in* ***integration with third-party solutions.***

Experience stories

User cases to back up the claims

1. Galapagos

Our HyperChain team is on course in automating the PO confirmation workflow at leading biotech company Galapagos. This project has a three-part mission: to standardise the process, improve the supply chain planning, and free up more FTE's to focus on more valuable tasks for the company.

This project is being executed in multiple phases. First, our team is focusing on the top 20 suppliers with the highest number of PO's, resulting in shorter payment processing periods. Next, we'll take on the more complex cases. By using document extraction, we leverage AI to recognise data elements inside PDFs. Where necessary, we engage users to perform additional checks, speeding up the AI learning process.

Each PO confirmation gets its own workflow instance in a fully transparent process. KPI's are available at any given time.

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2. Allinox

Cooking equipment specialist Allinox determines the price of their products through a pricing cockpit with integrated complex cost elements. To fully integrate their Excel with SAP S/4HANA Cloud, they preferred a low-barrier Hyperautomation.

A workflow continuously synchronises the spreadsheet with the ERP system: bots perform whitelisted API calls to read data from and push data back towards S/4HANA. In case of exceptions, there's adequate error handling involving a user in the process. The choice for Hyperautomation wasn't only driven by cost-efficiency. The company was looking for ways to become more developer-independent for the maintenance of its systems. What really ties it all together is that SAP release upgrades have no effect on the operational quality.

3 Master your processes

Many businesses understand the challenge of creating lots of master data. It's hard to deliver data objects in a fast, but governed, way while achieving a good quality standard.

For example: to meet clients' requirements or local regulations, a high frequency of product creations becomes applicable. What follows, is a process with many objects to be created or adapted. Think of the product itself, the BOM, the master recipe, the product version, the inspection plan; a time-consuming and error-sensitive process. The responsibilities for these adjustments are also fragmented, which leads to delays and bottlenecks in transaction processing caused by the absence of enforcement and monitoring.

A low-code app speeds up the process while simplifying it at the same time. In a smart workflow, most tasks are performed by a bot, with a smaller margin for errors. In addition, people are notified when they need to validate or process exceptions, leading to faster transaction processing, improved supply chain planning and a better customer experience.

Getting in a state of hyperautomation

The HyperChain team's five-step approach

Hyperautomation requires a specific mindset and skills. The HyperChain team at TheValueChain has developed a five-step approach that covers all bases.

1 Understand hyperautomation

Why hyperautomation? What does it involve? Practical examples? What are the benefits? Where is the potential added value for your business? How do you go about it in a pragmatic way? We answer all these questions during a hyperautomation presentation.

2 Define use cases

In break-out sessions, we look for a wide range of concrete use cases for process improvement within each department of your organisation.

3 Business case

We examine the feasibility, impact and return on investment (ROI) of the proposed use cases. Based on that, we propose a smart selection of business cases and draft a partnership agreement, including a cost estimate.

4 Realize

We deliver the cases, with a focus on quality. Together, we decide on the best methodology for future cases. The goal is to let your organisation experience the business value of hyperautomation.

5 Expand

Together, we evaluate the results of the first cases, the lessons learned and the potential of automation for your business. After the first successes, we continue the organic growth towards a state of hyperautomation.

Why choose hyperautomation?

It's all about ROI

Hyperautomation helps you reduce costs, increase operational efficiency, and lower the margin of error in your processes. By implementing the right technological processes, your organisation is set for operational excellence.

1

Cost-saving through efficiency gains

Perform the same tasks with higher accuracy while cutting costs at the same time. As a result, handle more tasks, reduce your time investment and profit from a streamlined technological flow instead of an expensive patchwork of different solutions.

2

Cost-saving through technology

Classical high-code solutions are expensive and require costly expertise at every turn. Hyperautomation helps you avoid these high costs through low-code, integrated and user-focused solutions.

3

Cost-saving through operational improvement

Experience the impact of less error-prone solutions, which lead to shorter response times for your business processes, resulting in higher customer satisfaction and more accurate outcomes. Hyperautomation makes you more compliant and improves your data quality significantly.

Crucial insights

Seven critical takeaways on hyperautomation

1 Act now

Automation is happening, whether you like it or not. Every level of your organisation will feel the impact, blue- and white-collar jobs alike. Technology has become mature, is intuitive and affordable. Act now to achieve a competitive advantage.

2 Think big (start small)

The possibilities are endless, but it's crucial to identify the most suitable opportunities for your business. Achieve first successes with linear use cases, with an immediate ROI. Then, transition into more complex cases and choose organic growth. Evolve from tackling weakspots to establishing complete digital operations, and from stand-alone user assistance to operational excellence with integrated business units.

3 Go beyond RPA

RPA has countless advantages: it's easy to learn, understandable and has instant business value. However, RPA as a stand-alone solution has some downsides: it's not entirely transparent, human interaction remains a weak spot, and endless coding with "if-else" statements can make it too rigid for automation purposes. We love RPA, and it's a key component in achieving a state of hyperautomation. But to achieve optimal user experience, it needs to be complemented with smart workflows, low-code/no-code apps, chatbots and AI. This way, you can wholesomely capitalise on its possibilities.

4 Build your centre of excellence

Provide leadership, best practices, and support for any business initiative through a centre of excellence (CoE). This central governance structure allows swift consensus building on initiatives and stimulates collaboration by creating room for discussion to streamline bottlenecks and surmount challenges. Integrate leadership, functional analysis and technical skills in your CoE.

5 API-first

Web-based applications can become a risk for your business. With most systems turning API native these days, you avoid the change sensitivity of bots mimicking user clicks. There are many whitelisted API's available for SAP (check them through https://api.sap.com). If there isn't one, make one. It might imply a slightly more extended development period, but you'll undoubtedly get a return in the long run.

"Don't perfect your dying routines. And don't let your kids get started with learning them. Downloading information to our hard drive is a dead end.

Instead, train them in understanding intuition, imagination, foresight, storytelling and empathy. Strong skills in science, technology, engineering and mathematics will be essential...

The more we digitise our world, the more human we can, and we must become. The future works differently, but that might be the best thing that ever happened to us."

Georg Leonhard in 'How The Future Works'.

6 Select your tech provider wisely

When searching for a tech provider that supports your ambitions, ask yourself some crucial questions. For example, what is your system landscape strategy? With which systems will you need to communicate, and what is the user experience like? If you require a high-level overview, consult Gardner Quadrant to identify their current product maturity, the direction and roadmap, market perception and user community.

7 Look beyond assumed processes

Businesses know where their pain points are and are highly capable of selecting high ROI business scenarios. However, this subjective take on what can be improved remains arbitrary. Through process mining technology, you can gather empirical insights by extracting knowledge from readily available events in your current information systems. This insight then allows you to create a solid base of input to build on for further improvements.

The hyperautomation toolbox

Why SAP is the technology of choice

To enable your hyperautomation journey, SAP provides the Business Technology Platform (BTP), a cloud platform where you can activate the services you require to realise your automation cases. It's like shopping in the App Store. Sounds familiar? It just might. Many companies are already on BTP, though some may not even realise it: Integration Suite (CPI, for integrating systems) and SAP Analytics Cloud (BI, for data analysis and reporting) are commonly used services.

Apart from that, SAP's BTP is an industry leader in terms of Multi-experience Development Platforms due to its "ability to execute" and "completeness of vision" demonstrated through the evaluation of 13 vendors.

Gartner states as follows: "Multi-experience development platforms provide software engineering leaders and teams with a unified way to create rich, interconnected user experiences across web, mobile, conversational, digital twin, IoT and AR applications. This research evaluates 13 MXDPs based on ten critical capabilities and five use cases."

Figure 1: Magic Quadrant for Multiexperience Development Platforms

As an SAP integrator, TheValueChain features this technology in its DNA. It's an obvious choice for high-demanding businesses and next-level projects in Hyperautomation. If you're already using SAP products, BTP offers a competitive advantage over other platforms such as BluePrism, Appian and the likes.

- It **seamlessly integrates into your SAP landscape strategy.** Apps are placed between other tiles in Fiori Launchpad, and whitelisted APIs are available within SAP BTP services.
- You get **access to pre-packaged content,** such as over 200 out-of-the-box RPA cases aimed at S/4HANA, ECC, SuccessFactors and Customer Experience.
- You **profit from a competitive licensing model.** Indirect digital access to SAP ERP – to, for example, create large amounts of sales order from a bot – is included in your license, free of additional charge, unlike with other "non-SAP intermediary software".

The hyperautomation toolbox

What's in the hyperautomation toolbox?

Ok, now let's take a closer look at the tools our HyperChain team uses to catapult your company into the hyperautomation future. So, what exactly is under the hood of our hyperautomation toolbox? Well, a wide range of technological solutions merging into an approach that fully streamlines your operations.

Process mining

We discover, monitor, and improve actual processes through process mining by extracting knowledge from events readily available in your current information systems. Process mining includes:

- Automated process discovery: i.e. extracting process models from an event log;
- Conformance checking: i.e. monitoring deviations by comparing model and log;
- Social network and organisational mining;
- Automated construction of simulation models;
- Model extension;
- Model repair;
- Case prediction; and
- History-based recommendations.

For our process mining works, we rely on Signavio, a highly efficient technology recently acquired by SAP.

Workflow management

Intelligent process orchestration is vital, creating a graphical workflow that determines which tasks are to be executed by a user or a robot (RPA). These "smart workflows" are a great way to create robust, sustainable automation cases. They enable communication between different BTP (or any other) services.

You can monitor process visibility at any point, giving insights into how many workflow instances are up and running at a specific moment, if and how long it's pending with users and receiving KPI's in attractive layouts.

Intelligent RPA

Robotic Process Automation – or RPA – is critical for your Hyperautomation solution. Bots execute tasks in the foreground (attended or triggered by users) or in the background (unattended, scheduled or triggered by API call). These bots rely on screen scraping technology and API communication.

If your company already relies on RPA (such as BluePrism or UIPath), it's wise to consider the possibilities BTP brings to the table. It's perfectly possible to hold on to your current RPA and to complete your automation setup with smart workflows, no-code app development, chatbots,... . It's recommended to investigate which synergies can be created.

Hyperautomation is not the same as RPA. Robotic Process Automation is an integral part of hyperautomation, but it's only one of the tools in our toolbox. RPA is a wonderful way to automate rule-based tasks, but it can be challenging to take this technology next-level. Some pain points in that regard:

- *It's complex to involve humans at the right time in the process in a user-friendly way.*
- *RPA often runs in the background, making it hard to maintain an overview, presenting governance challenges.*
- *It has limited intelligence: you can programme "If-Else" statements to infinity, resulting in very rigid bots.*

By adding "smart workflows", low-code/no-code app development, process reporting and AI into the mix, that's when you achieve a robust and sustainable environment supporting your automation efforts in the long term.

Low-code/No-code

Low-code (and even no-code) app development is enabled within your Hyperautomation framework. Developers use pre-packaged content and elements to accelerate standardised app developments. These apps need to communicate with other BTP services and systems through APIs. Our HyperChain team uses multiple services:

> Business Application Studio

The easy way to develop Fiori apps that integrate with the other apps on a Fiori Launchpad. Developers are assisted by wizards, optimised code and graphical editors to local test run, debug, and swiftly deploy. All these make this tool low-code.

> AppGyver

AppGyver is a no-code development pioneer that's recently been acquired by SAP. Their tagline: "You will never go back to coding. Seriously." There's no single lie in there!

Starting October 2021, AppGyver will be fully available on BTP. Did you know AppGyver created a European-wide trailer fleet management app for DHL without writing a single line of code? This tool combines a drag-and-drop user interface with the option of inserting your data, creating any logic visually, and using over 400 formula functions. It's surprisingly easy to publish apps to mobile, web, tablet, tv or desktop as well!

Connecting systems

The power of hyperautomation lies in the ability to integrate different systems fully. So, visualise it as a layer that's envelopes your system landscape, however complex, while engaging human intelligence when need be.

There are multiple ways of connecting these systems. For example, bots performing API calls through the back end can leverage Digital Access and security measurements through identity and profile management. Bots could also mimic "user clicks" – often referred to as "screen scraping" technology.

Alternatively, workflow management could launch service tasks with API calls. That way, you can list and manage process variant instances and corresponding workflow definitions. Finally, we can leverage integration platforms already in place, such as SAP Integration Suite (often: CPI). This integration Platform-as-a-Service (iPaaS) lets you integrate on-premise and cloud-based apps and processes with tools and pre-established content managed by SAP.
So, which systems are we looking to connect? Well, think of:

- ERP & CRP: SAP, Oracle, Microsoft, Salesforce… You name it;
- Desktop applications: the entire Microsoft Office Suite;
- Web browsers: from Chrome to Edge, Mozilla and many others, allowing you to exploit data for websites (an example: VIES for VAT number validation); and
- Any other system, such as MES, expense management, etc.

Adding AI to the mix

AI is the go-to solution for tying your Hyperautomation architecture together. As experienced SAP integrators, SAP AI Business Services is the logical choice for the HyperChain team.

AI is a broad term that carries a lot of weight. In terms of optimising your operations and processes, machine learning can be used to automate document information extraction processes. This allows you to process large amounts of business documents and use the extracted information to automatically process payables, invoices, or payment notes – while guaranteeing that invoices and payables always match. And that's just one example.

Conversational AI bots are another tool to consider. SAP Conversational AI lets you deploy powerful conversational interfaces with an end-to-end bot-building platform. Finally, the SAP Leonardo Machine Learning Foundation helps you enhance business processes and software applications with intelligence. You can use pre-trained machine learning services, deploy a custom model, or tune existing ones with your training data – all tailored to your use case and objectives.

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Let's talk hyperautomation

Intrigued by the possibilities of hyperautomation and ready to explore its potential impact on your business? Let's talk. Our HyperChain team is set to burrow deep into the world of hyperautomation with you, and identify the use case that'll revolutionise the way you do business.

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