Datagraphic

The benefits of business automation

A guide to the next generation of technology

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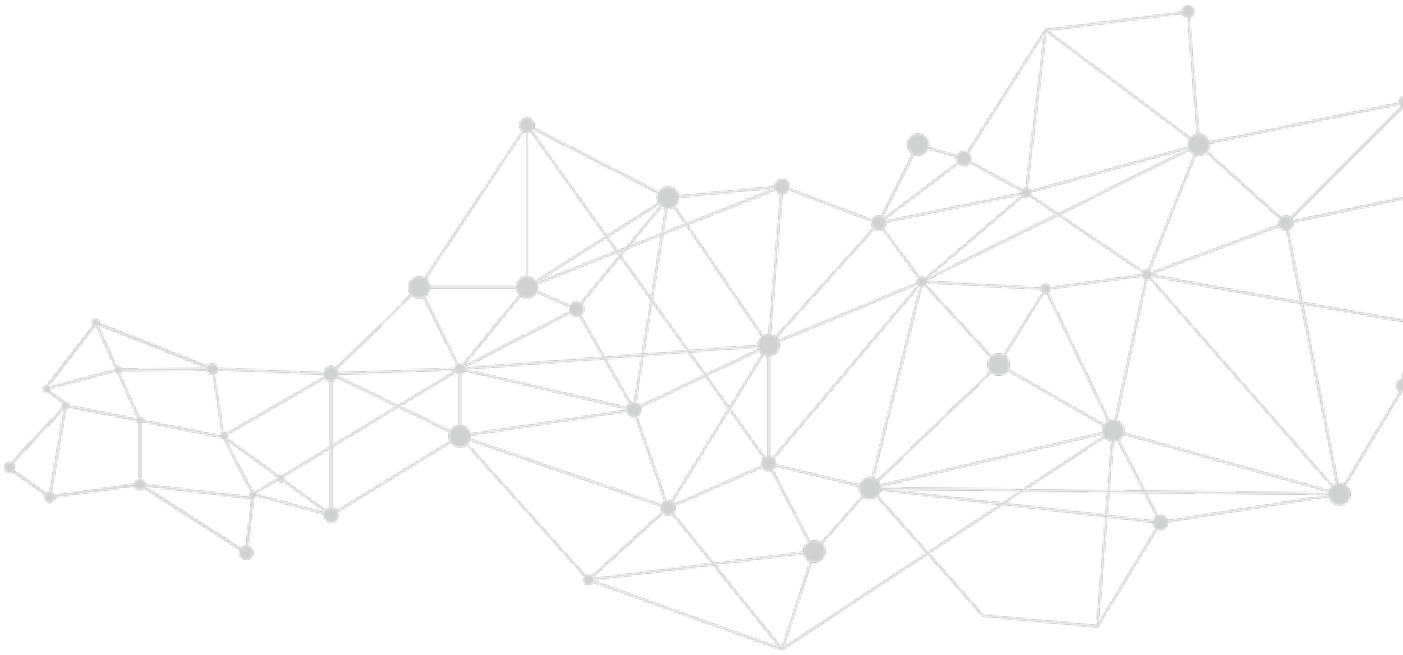


Introduction

Automation for business

Undoubtedly, the modern world has transformed through the advent of automation in the past ten years.

Not only does society have higher expectations of service delivery, but today's customers also ask for speed. It is no longer acceptable to project lengthy lead times or make allowances for delays.

This greater demand for products and services, fuelled by technological developments, has led to an increasingly rapid digital revolution. One which has changed the way we live, work and trade.

Consequently, to keep up with these adjustments, automation is rising in organisations across all industries.

Automation is here to stay

Since the industrial revolution, organisations have been waking up to the reality that automation – whether machinery or technology – can perform tasks faster and more efficiently than people.

Today's digital revolution has seen the introduction of 'robots' and vast computing power to create enormous cost savings through repurposed human input.

Moreover, virtually every touchpoint in business now captures data. Forward-thinking organisations can therefore combine software applications with this information to replace processes and take insight.

It means that almost every industry has been impacted by automation.

Today, tasks with major complexities can be enhanced through automation and machine learning techniques, overhauling entire industries.

Whilst largely beneficial, this too poses challenges and can spread resentment and fear. Automation has created new jobs but equally forced a change in practices and the way we work. It is, therefore, a notable consideration for any organisation undergoing this shift.

About the author

Karensa Maton is Head of Products at Datagraphic.

Karensa has worked with some of the UK's most prominent public and private organisations to help them with their digital transformation projects. She fully understands the barriers which prevent document automation and digital transformation success.

In this paper, our Head of Products, Karensa Maton, discusses types of automation to help you understand its use in real-life organisation applications.

She'll focus on how you can use automation tools for competitive advantage and assess the available methods. Karensa will then share her predicted trends for the future of automation.

This paper will be useful for those at the start of their automation journey to understand the impact of adopting automation in their department or wider organisation.

Key takeaways:

- **Understand the differences between commonplace automation techniques.**
- **Learn how automation can add value and offer a strategic advantage.**
- **Help you to review chosen methodologies and trends to leap into automation.**

What is automation?

All business functions include repetitive tasks, some of which involve some form of processing.

For this paper, we're not focusing on automation for manufacturing or production technology.

Instead, we're looking at how the automation of outbound communications can assist business operations in digital transformation.

> ***"The first rule of any technology used in a business is that automation applied to an efficient operation will magnify the efficiency."***
>
> ***– Bill Gates***

How does automation appear in everyday business?

Technology has been improving the way we work for decades, helping people to do jobs faster and better.

A very common example is in more efficient administration.

Customer, employee and supplier-facing documents such as welcome letters, payslips, invoices and statements are all essential, and often time-critical, communications.

Organisations must produce and deliver these documents securely and compliantly. But, manually producing them can be repetitive, labour intensive and costly. The process prevents people from focusing on more rewarding tasks that would benefit the department or wider business strategy. Therefore, productivity and profitability can be stifled.

By letting technology automate these tasks, teams can focus on higher-value work.

In a broad sense, automation is using smart technology to complete manual activities with minimal human input.

Types of automation

Robotic Process Automation (RPA)
RPA is software – or a set of tools – that can be programmed to use structured data and logical rules to complete routine tasks.

Artificial intelligence (AI)
AI is an automation technology that can learn, interpret and analyse data, recognise patterns, make predictions, suggestions and recommendations.

Machine learning (ML)
ML refers to technology that simulates human intelligence. Machines are programmed to *think* the way a human would when solving a problem and then mimic their actions.

It makes sense to consider all forms of automation as part of a wider digital transformation strategy.

The benefits of automation for organisations

Automation technology can provide vast benefits to organisations.

Advancements in technology in every department allow organisations to evolve in ways that might have never seemed possible.

That said, according to research by The Economist, only 48% of UK organisations use technology to automate business processes extensively. This means that over half of UK organisations are still yet to feel the benefits that automation can provide.

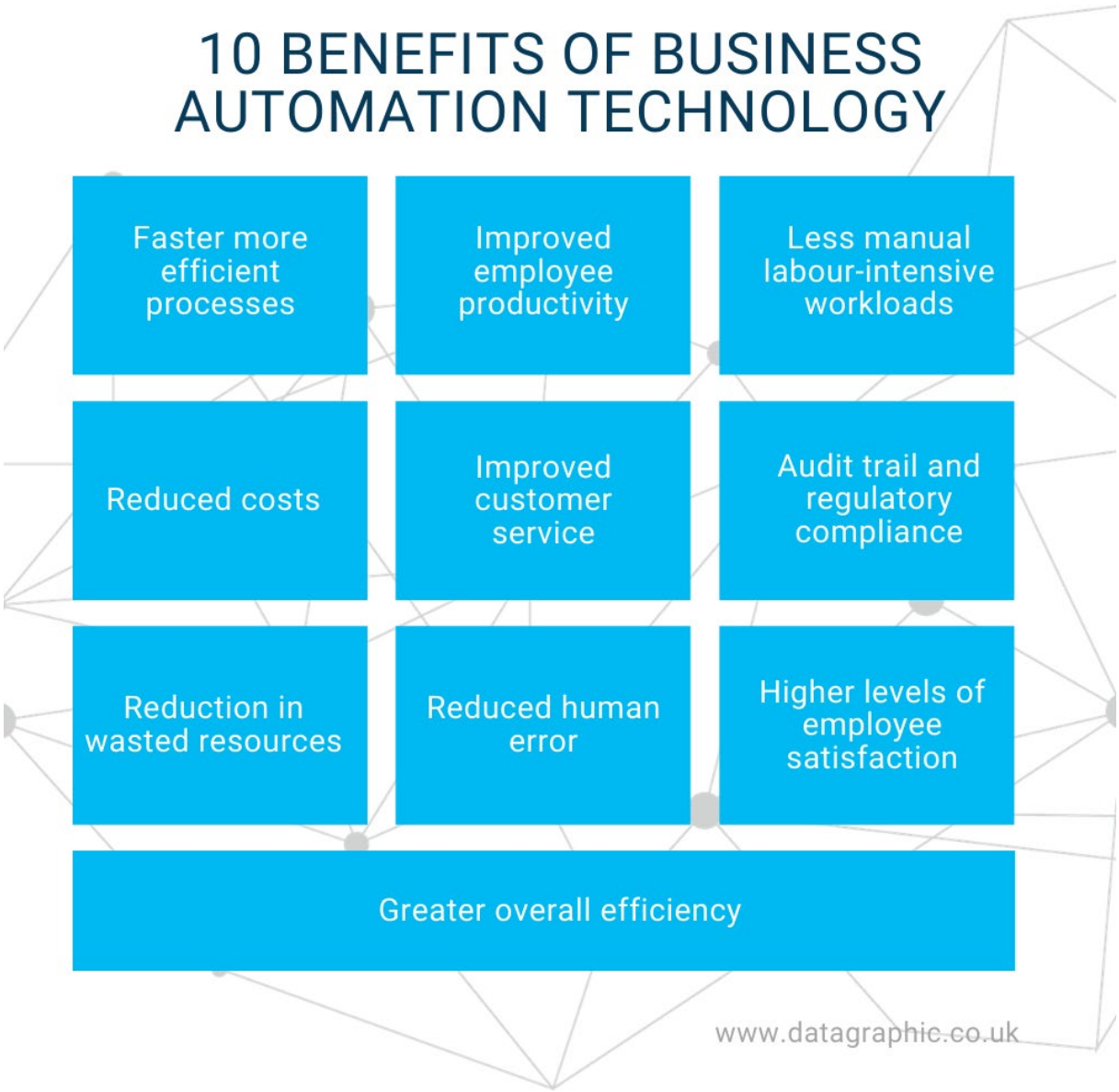
Here are just some of the benefits business automation tools can help organisations to achieve:

- Reduce human error and risk
- Improve data security
- Offer a faster service
- Remove labour-intensive tasks: to allow employees to focus on higher-value work
- Repurpose the wage bill to create new functions working with automated processes
- Provide an audit trail
- Improve data quality
- Improve overall performance

A study by Forrester Consulting demonstrated that automation speeds up decision making time and frees up employees to focus on more meaningful tasks. For example, creating new and innovative products or services for your organisation or servicing more customers with greater attention. This could be the factor that sets you apart from your competitors.

We will revisit the possible benefits of automation throughout this document with real-life case studies, so read on.

Almost half of UK businesses are still yet to feel the benefits that automation can provide.



Understanding automation types

As mentioned earlier, there are a few approaches when considering automation in the business context.

In this section, we will discuss the main ones in a bit more detail.

Robotic Process Automation (RPA)	Artificial Intelligence (AI)	Machine Learning (ML)
Uses bots to carry out tasks previously conducted by humans	Replaces a simple, repetitive task with a system	Teaches a computer or robot to think like a human and then mimic actions
Follows a set number of rules	Replicates the human brain and begins to understand the world around it	Systems learn and improve from experience
Uses structured rules in conjunction with people to automate processes	Learns, interprets and analyses data	Does not have to be reprogrammed to improve
Follows predefined programmed applications	Recognises patterns, makes predictions, suggestions and recommendations	Computers study and construct algorithms to learn and make predictions on data

Robotic Process Automation (RPA)

RPA uses technologies to create a workflow based on structured inputs and logic (or rules) to automate processes.

- **Robotic:** technology that mimics human actions
- **Process:** a sequence or process of a task
- **Automation:** applications to enable a 'robot' to perform a specific task with no human input

RPA is best for processes that are repetitive, time-critical, prone to error, data-driven and rule-based.

Typically, RPA has the following characteristics:

- It is system agnostic, which means that it can easily work across multiple system types
- It is fast and efficient for automating routine tasks
- It is scalable and easy to integrate
- It is simple to use

The way RPA works is with software robots, known as 'bots ‘, to carry out tasks using applications:

- Probots – follow simple rules to process data
- Knowbots – search the internet to collect information specific to the user
- Chatbots – virtual agents, used to respond and action customer queries in real-time

How is RPA being used in organisations?

RPA is commonplace in our everyday life. It could be an algorithm that learns style preferences to recommend new products to the online shopper. Online help chatbots or using a service like Google Translate to let the machine do the hard work.

Without realising it, you may have already interacted with RPA using:

- Live chats for customer service
- Document processing for applications, e.g., automatically approving (or rejecting) and distributing outbound communications
- Managing foreign exchange payments, audit requests or processing insurance claims
- Onboarding as an employee with HR and submitting timesheets
- Monitoring inventory levels and tracking shipments for supply chain management and procurement

Technology insight specialists, AI Multiple, found a typical rules-based process can be 70-80% automated using RPA tools.

An example of automation in action

thinkmoney saves 54 hours per month

As a digital-first business, thinkmoney predominantly services customer accounts online. It still, however, produces around 40,000 documents each month in print or Accessible Standard formats for customers.

thinkmoney implemented the secure multichannel communication platform, Aceni, to automate printing these documents, many of which had previously been completed manually.

A prime example was the fulfilment of re-print account statements following a customer request. This was a manual process that would take six minutes

each time a request was received to complete.

Aceni now automates print and distribution requests for customers through its outbound mail service.

Overall, it resulted in:

- 75% reduction in re-print account statement processing time
- 54 hours of staff time saved monthly versus previous manual process
- Improvement in staff morale following removal of the repetitive task
- Delivering automation without changing their banking software or harming staff workflows
- Business costs were reduced by 75%, thanks to improved processes

Artificial intelligence (AI)

In short, **AI replaces a simple, repetitive task with a system that behaves the same way humans would.**

AI essentially replicates the human brain. It begins to understand the world around it and make decisions to carry out an activity.

In doing so:

- Human input is reduced or eliminated and so too are corresponding human errors
- Timescales shrink by removing the labour-intensive or time-specific element of roles
- Productivity improvements are made across the board
- Job satisfaction improves as employees focus on more satisfying tasks

Productivity improvements are made across the board

Machine learning (ML)

Many modern AI applications are enabled through a sub-field of AI known as 'Machine Learning'. It is often considered to be the next iteration of artificial intelligence.

What is machine learning?

The basis of ML is to teach computers to learn from data on a continuous cycle so that they can get smarter. It uses AI techniques that mimic 'human' actions to assist employees in decision-making, completing tasks or meeting goals.

Its understanding develops over time, and the output or process improves without having to be reprogrammed.

In short, it studies and constructs algorithms to learn and make predictions on data.

ML adapts and learns from experience

For example, ML applications can:

- Read a text and decide the nature of a message, e.g., a complaint or a request for more information
- Recognise music tastes and suggest new artists to listen to
- Automatically translate large chunks of text

How is machine learning being used in organisations?

Nowadays, organisations of all types have adopted several ML techniques to gain competitive advantage, including:

- Online chat with virtual agents and chatbots

- Product recommendations based on browsing history
- Dynamically targeted advertising
- Predictive analytics
- Voice and speech recognition

An example of automation in action

Butcher's Pet Care deliver payslips in minutes

Butcher's Pet Care – the pet food business – needed a solution to make time savings when paying their 353 employees.

Using the secure Epay online portal, Butchers quickly and easily deliver online payslips to all their employees. This saves almost one day per month of administration time.

> ***"It has reduced a very laborious task to only a few minutes, and I cannot believe we didn't do it years ago!"***
>
> Payroll Manager, Butcher's Pet Care.

In doing so, the process of delivering payslips has been reduced to a few minutes. And employees and the payroll team have easy access to Epay anytime. Epay also gives the company options to automate the delivery of other payroll documents too such as P60s and P45s.

Selecting the right automation tools for your organisation

So, by this point, you understand what automation is as a concept and have seen the difference between the most common automation techniques: RPA, AI and ML.

Most importantly, we have established there is a competitive advantage up for grabs by introducing automation into forward-thinking organisations.

In fact, CBI and Oracle reported that the adoption of digital technologies, along with better management practices, could add £100 billion to the UK economy and cut income inequality by 5%.

In response to this, an estimated 72% of companies expect to embark on digital transformation, investing in technology to increase competitiveness.

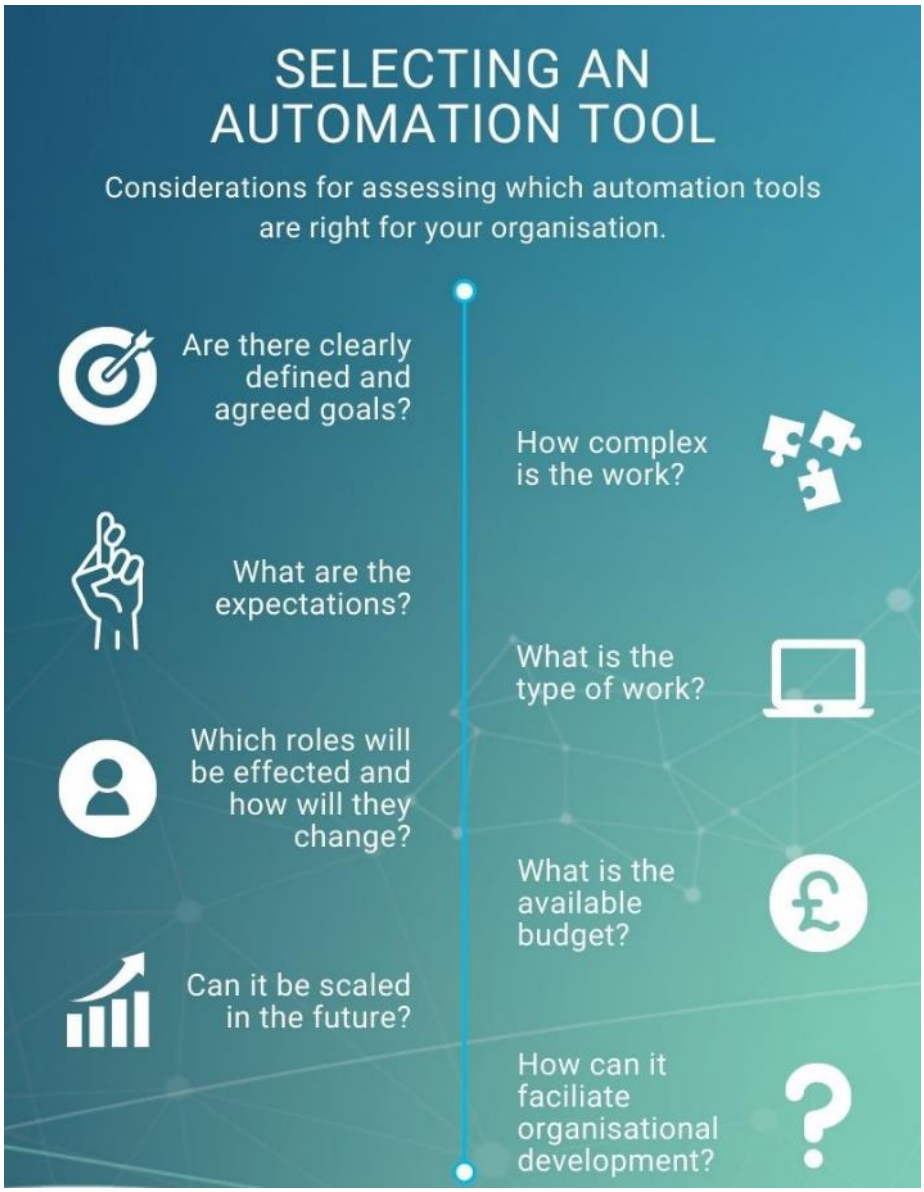
An estimated 72% of companies expect to embark on the process of digital transformation

Choosing the right techniques for your organisation's needs

When selecting an approach to automation, the main thing is not to get too caught up in choosing the type of technology initially.

Instead, focus on learning the end goal of where these technologies can work in your organisation and add value to your current capabilities. Consider your organisation or, on a smaller level, by department, and assess where you can deliver the best results.

You need to understand how the technologies can meet the goals of different projects. Mismatched technology can ironically lead to inefficiency.



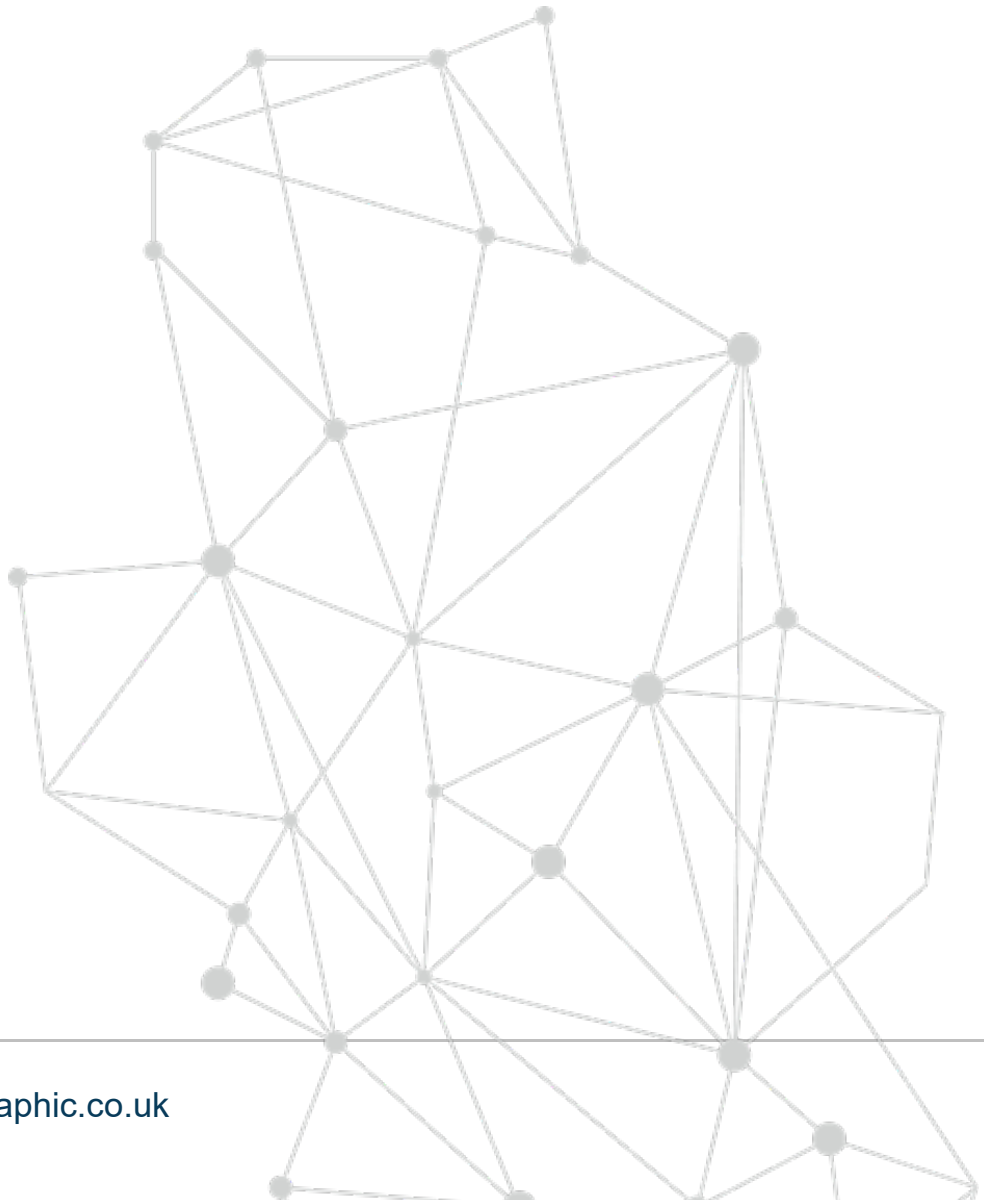
A too complex tool can over-engineer a process and come in at a much higher cost. If it is too basic, it might fall short of the objective. Therefore, it is best to work through criteria to identify which approach will bring the desired outcome.

Factors will include:

- **Business goals.** Is it understood, clear and agreed on what the automation will achieve?
- **Complexity of the work.** Would a rule-based approach work, or is more creative thinking needed?

- **Staff involvement.** Do staff have the skills to use the technology, or are third-party experts needed?
- **Type of work.** Would the technology be replacing simple, repetitive tasks or more strategic ones?
- **Project expectations.** Is an immediate change expected, or is the project part of a wider transformation?
- **Budget.** How much resource has been allocated to the project?
- **Scalability.** Can the technology be scaled as the organisational needs change, or is it a one-time solution?
- **Organisational development.** Will it bring new processes, projects, more agile structures, offer employee development, and create positive cultural change?

Working through these will clarify which type of automation technology to use to deliver you the best results, without large capital costs and lengthy implementation times. For many organisations' AI and ML are often too complex for their automation projects, and RPA is more suitable as a starting point.



Automation trends to watch

With the impact of COVID-19, organisations have altered dramatically.

Operating during the pandemic called for completely new practices that have presented options to embed a step-change.

It is no longer a requirement to have people working in centralised and fixed locations. Data from the Office of National Statistics (ONS) revealed that almost half the UK's workforce did some work from home during the pandemic.

Now is, therefore, the time to shift the focus and consider new automation technologies in your organisation.

Here are the trends that we see for the future of automation for organisations.

Trend #1: Automation will continue to adapt to remote working

Remote working processes will continue to be streamlined through automation techniques. We will see technology with AI capabilities adapting further to facilitate on-site tasks to be completed from home efficiently.

We believe that we will increasingly see partners and tasks being shifted to remote processes, even with some return to workplaces.

Aceni Hybrid Mail – which automates outbound mail printing and distribution – is a great example. Hybrid Mail takes care of all the documents teams traditionally print and mail from an office or mailroom. So now, whether office-based or working remotely, teams are using Hybrid Mail to automate their outbound mail delivery.

Trend #2: Hyperautomation

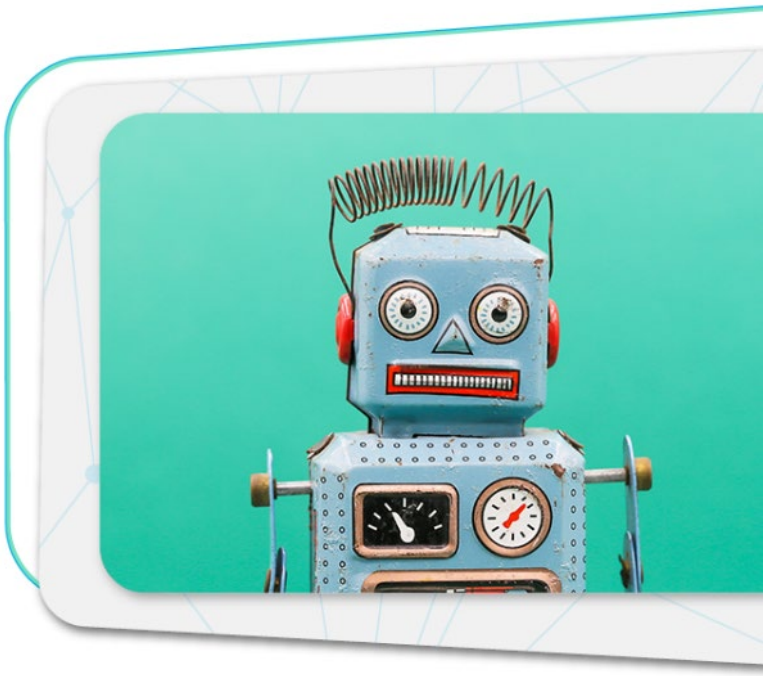
Hyperautomation combines RPA and ML with AI processes to enable organisations with little or no coding ability to automate low-level digital tasks.

Trend #3: Artificial intelligence of things (AIoT)

AIoT is a joining of the Internet of things (IoT) and Artificial Intelligence (AI). Internet-connected devices will begin to learn from the data they collect and automate decision making. For example, smart technology that not only detects who is in a room but also how to set lighting and heating options.

Trend #4: Increased use of automation in cybersecurity

Automation will be used increasingly to help to prevent cybercrime. For instance, identifying patterns or preventing cyber-attacks by learning to identify unusual activity.



Learn more

Datagraphic helps teams automate their document processes with flexible and secure digital and physical document solutions.

With over 30 years of experience, we're at the forefront of outbound multichannel communications delivering data-driven, customer, employee and supplier-facing documents.

To understand how Datagraphic can help you take document automation to the next level, contact our experts:

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