

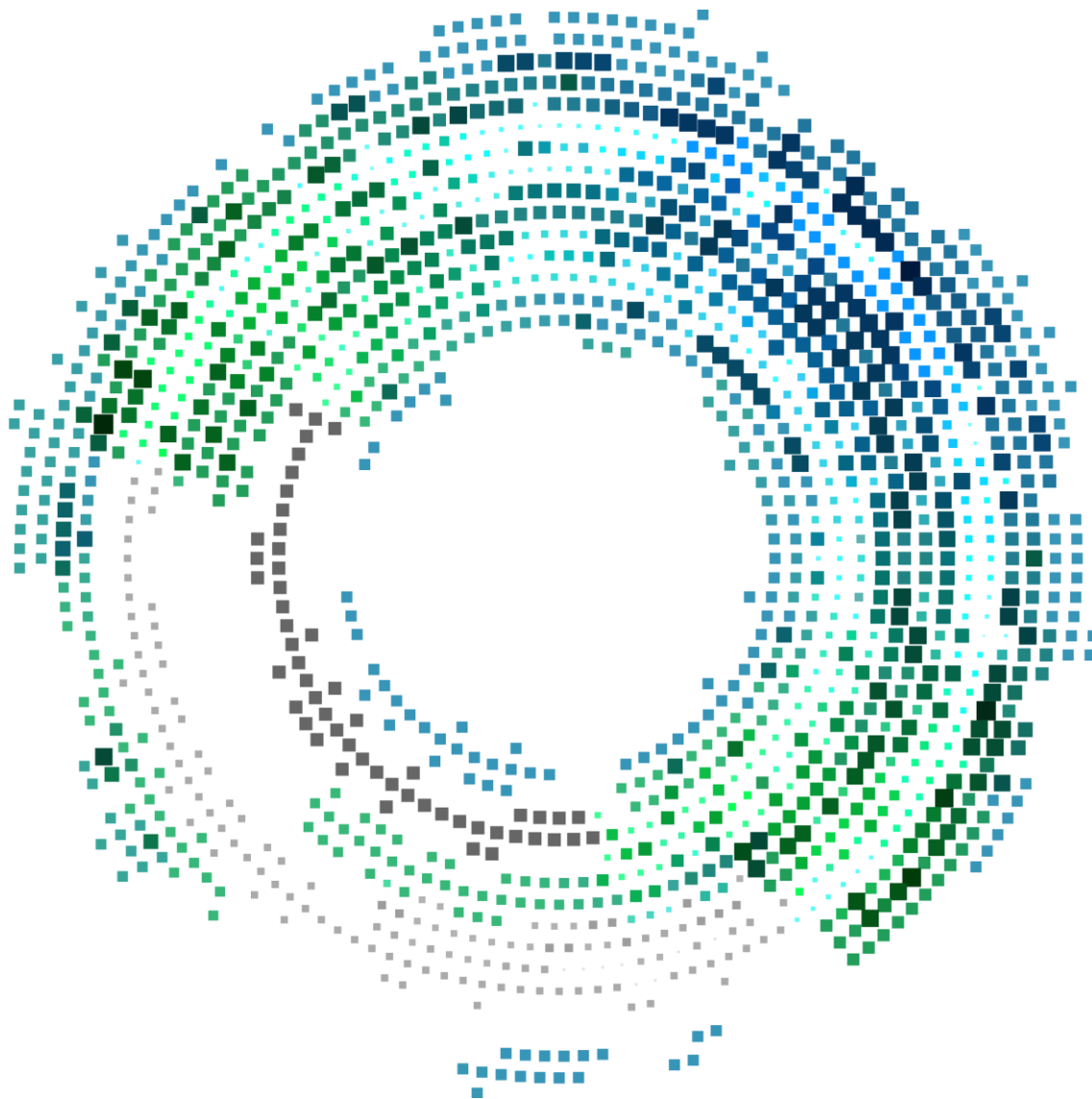
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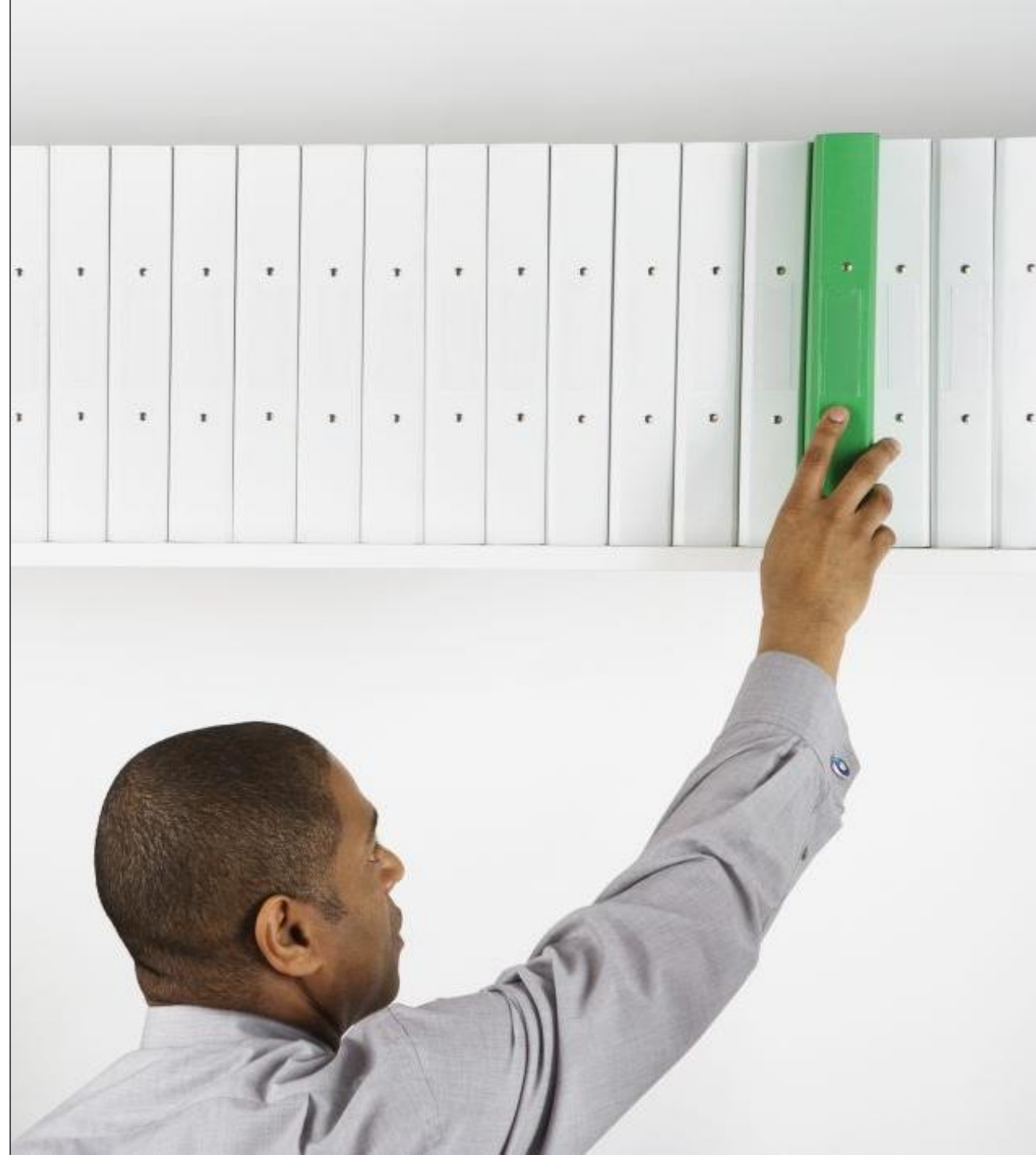
# Intelligent Document Processing

Accelerate value and move up the curve



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# Intelligent automation. What's what?

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A quick overview of intelligent automation. Make sure your leadership team knows the facts.

## 1. WHAT IS INTELLIGENT AUTOMATION?

Automation has been around for decades, but only recently has it started to become what we think of as 'intelligent'. **Intelligent automation is the combination of Robotic Process Automation (RPA), Artificial Intelligence (AI) and other related automation technologies.**

Intelligent automation does things similar to those done by humans. It grinds through data, carries out tasks, and delivers reports. It listens, reads, interprets, speaks, analyses. The smartest automation also learns.

## 2. WHY IS INTELLIGENT AUTOMATION BETTER THAN RPA ON ITS OWN?

Survey results from our Automation with Intelligence<sup>1</sup> report reveal that intelligent automation uptake is driven by the expectation of **increased productivity and cost reduction; greater accuracy; and an improved customer experience.**

Executives estimate intelligent automation will provide **higher increases in revenue** as a result of their automations to date, compared to those using RPA alone (8.5 per cent versus 2.9 per cent).

It is clear that executives believe they derive more economic benefit and improve their competitiveness by integrating AI and RPA rather than using both in isolation.

## OTHER DEFINITIONS

**RPA** is the automation of business processes in which software performs tasks that can be codified by computers. It is often referred to as 'robotics' or 'robots', and is defined as the automation of rules-based processes with software that tends to utilise the user interface and which can run on any application.

**AI** technologies perform tasks that previously required human intelligence, such as extracting meaning from images, text or speech, detecting patterns and anomalies, and making recommendations, predictions or decisions. They include machine learning, deep learning, natural language processing and generation.

<sup>1</sup> In May 2019 Deloitte surveyed 523 executives in a range of industries in 26 countries across Africa, the Americas, Asia and Europe on their intelligent automation strategies and the impact on their workforces.

**“** *Every once in a while, new technology, an old problem, and a big idea turn into an innovation* **”**

**– Dean Kamen**

## This is a test

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What is Intelligent Document Processing?

- A New technology
- B A solution to an old problem
- C A big idea
- D All of the above

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# Documents are everywhere

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## DOCUMENTS PERSIST IN BUSINESS

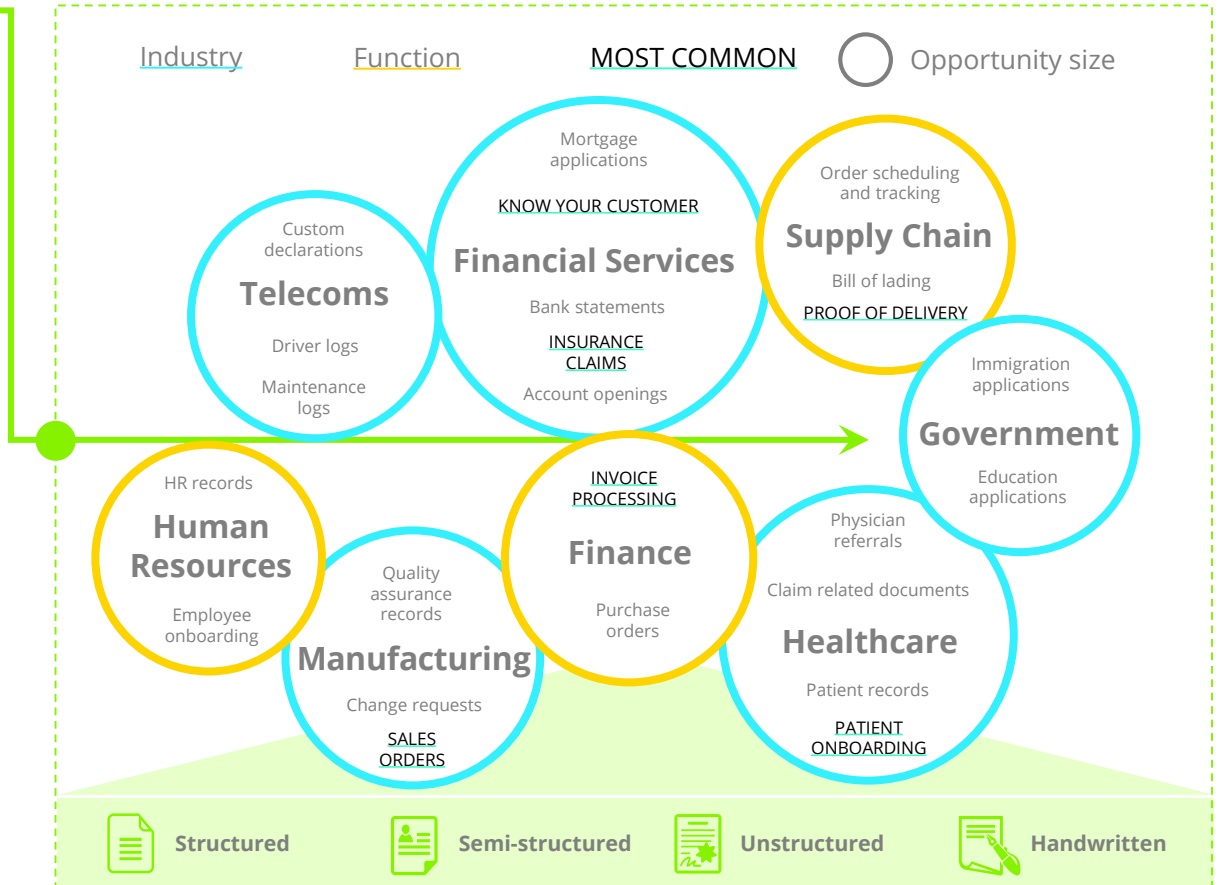
Documents are everywhere in our personal lives, from membership applications to charity donation forms and more.

**It's the same in business.** Documents still exist in a quarter of business operation scenarios. Pick any industry and you'll find them, likely in large volumes, hampering digital transformation. Particularly problematic are the semi-structured and unstructured documents – businesses typically struggle to process these with precision and speed.

Immersed in the daily challenges of business, many leaders have little time to imagine the efficiencies at stake from transforming document processing. And yet, **pioneering, innovative organisations are capitalising on the opportunity today.**

The **starting point** is often in **business functions** such as Finance and Supply Chain as well as in **industries** from Financial Services to Healthcare (see the bubbles to the right). Industry-specific examples of processes ripe for digitisation and transformation include:

- Know your customer
- Insurance claims
- Proof of delivery
- Patient onboarding



# Technology is ready

## ON THEIR OWN, HUMANS AND RPA BOTS CAN STRUGGLE

Mundane, time-consuming and error-prone – we face many challenges processing documents manually. Enter **RPA, a step in the right direction**. But as organisations scale their RPA initiatives, they **frequently encounter limitations** capturing and processing the information in documents.

Traditional Optical Character Recognition (OCR) technologies and those in RPA platforms can struggle with:

- Varied document formats
- Interpreting natural language
- The presence of distortion

Insufficient intelligence means lower accuracy and straight-through processing rates, impeding productivity improvements.



## NOW, MORE SOPHISTICATED, COMPLEMENTARY TECHNOLOGY IS DRIVING OPPORTUNITY

Increasing sophistication of intelligent automation technologies is **improving precision in processing documents** compared to traditional OCR solutions. Combining the “arms and legs” of RPA with the “eyes” of OCR and “brain” of machine learning (ML), is helping business overcome the challenges in processing semi-structured and unstructured documents.

For instance, integrating OCR and ML helps systems learn and get better as they are exposed to larger volumes of documents. This synergy results in **higher straight-through processing rates** and enhanced productivity for the human team, who can focus on dealing with the exceptions and more complicated scenarios.



**70-80%**  
MARKET  
GROWTH  
NEXT 2 YEARS

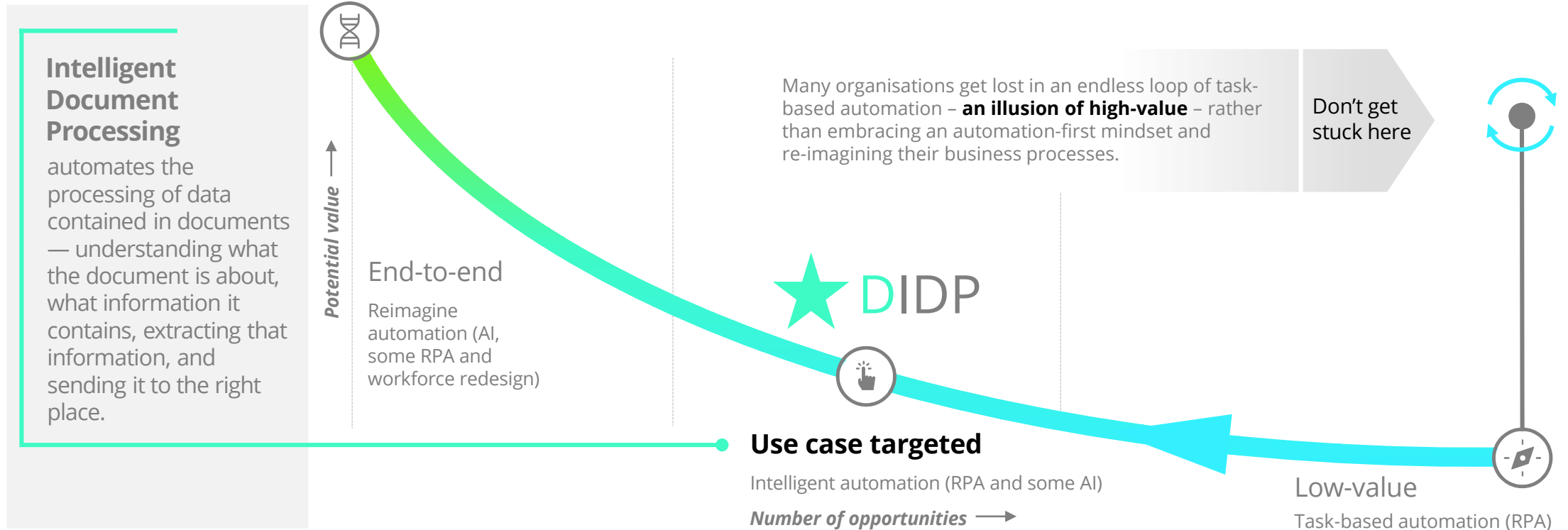
**Many organisations are devoting more financial and human resources to deploy intelligent document processing capabilities.** Success by forward-looking organisations is driving confidence in a market expected to grow 70-80% over the next two years to US\$1.1 billion<sup>2</sup>.

<sup>2</sup> Everest Group, 2019

# Move up the curve with Intelligent Document Processing

Having exhausted many of the low-value opportunities available through such simple task-based automation, **organisations are now seeking to implement next-generation solutions.**

With Deloitte Intelligent Document Processing (DIDP), organisations can transform business processes – integrating more intelligent technologies to **automate document-driven use case targeted opportunities.**

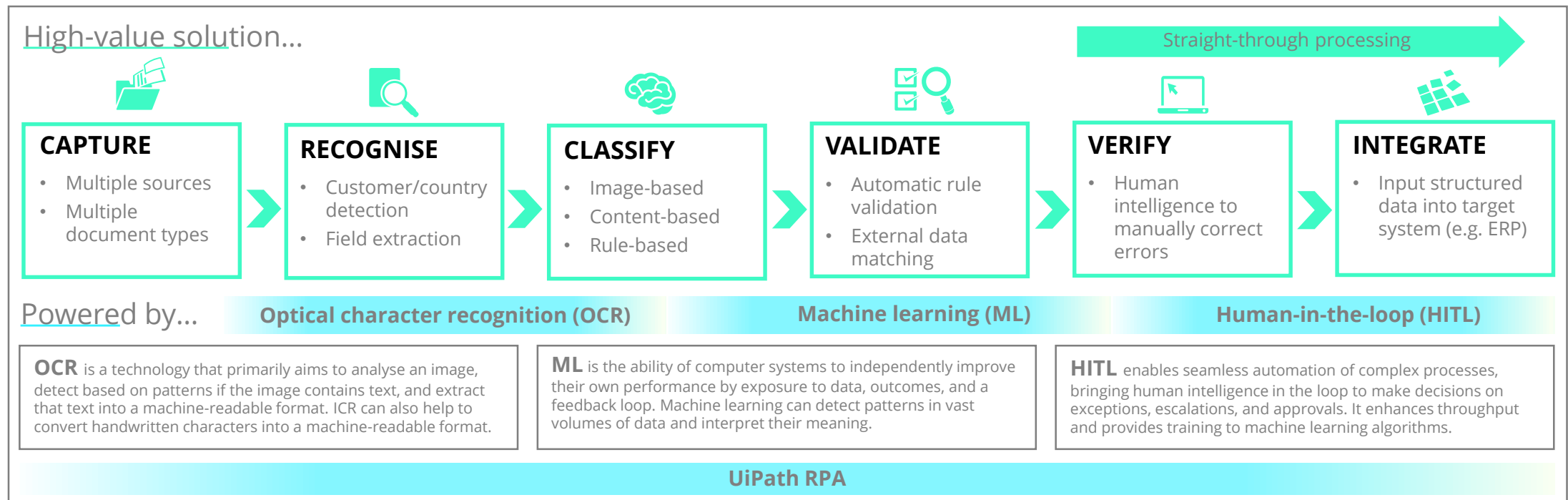


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# DIDP is a high-value, accelerated solution

**Deloitte Intelligent Document Processing (DIDP) is an automation accelerator, delivering a capability which captures documents before extracting, classifying and verifying their data for further processing.**

The solution is delivered in the cloud through automation as a service (DARA) or on premises. It uses an integrated technology set of Optical Character Recognition (OCR), Human-in-the-Loop (HITL), Machine Learning (ML), and UiPath Robotic Process Automation (RPA). The power of DIDP is its ability to handle multiple document types - processing any type of structured or semi-structured documents, ranging from invoices to know your customer forms to patient records.

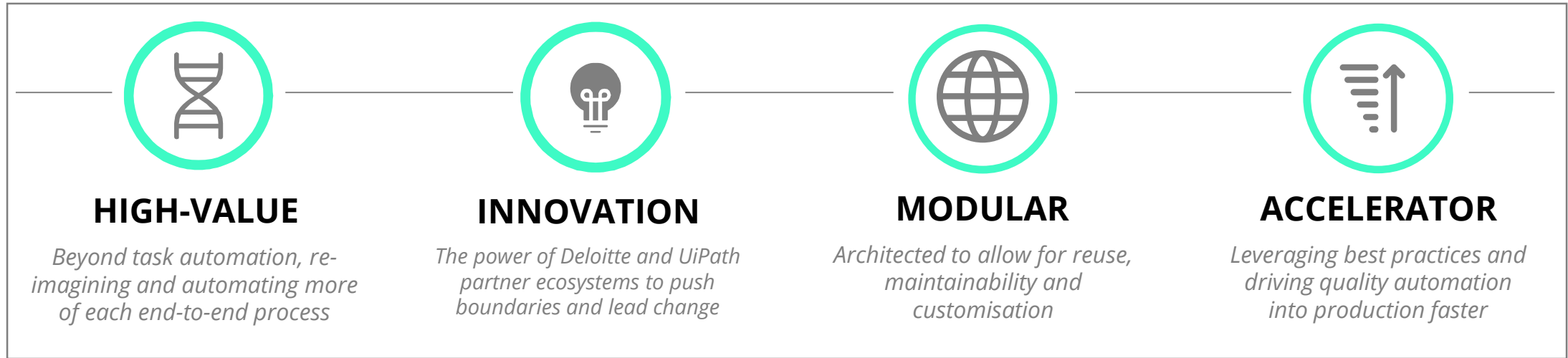


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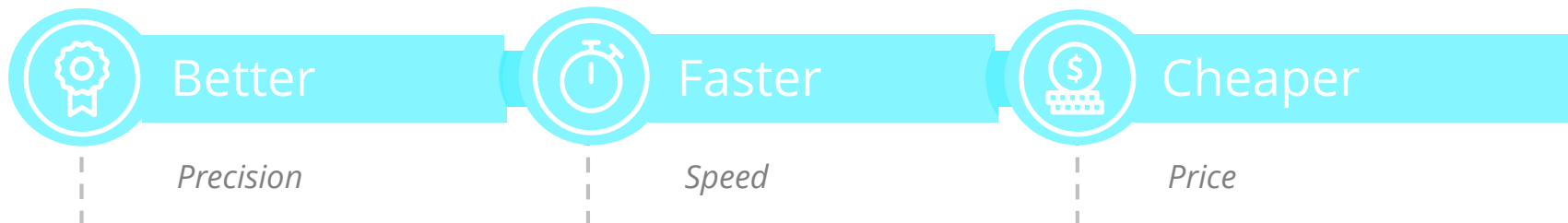


# Benefit from DIDP differentiation

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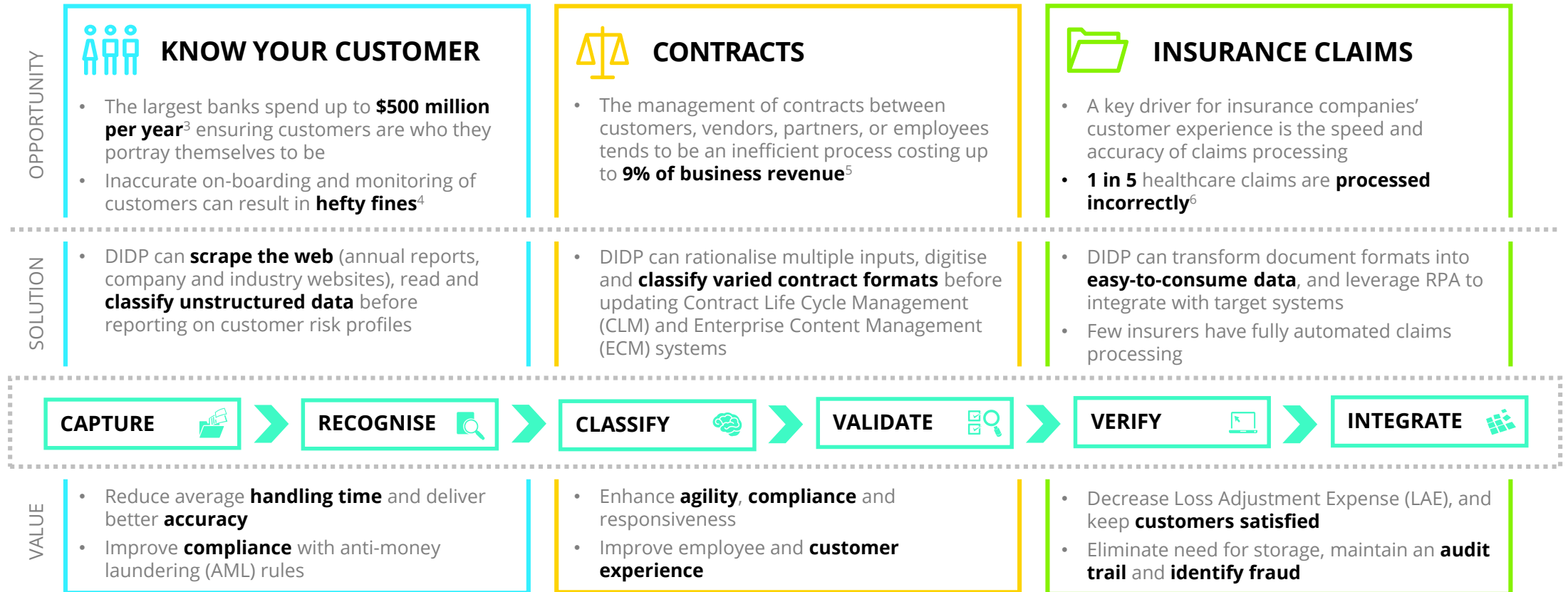
To get work done...



Please note, DIDP is a set of packaged components, which can be tailored to specific client environments, to accelerate speed-to-value, on premises or in the cloud.

# Accelerate **DIDP** value in your business

DIDP VALUE IS EVERYWHERE. **HERE ARE THREE EXAMPLES:**



<sup>3</sup> Consult Hyperion, 2019

<sup>4</sup> KYC-related fines against banks totalled \$26 billion over the past 10 years. Fenengo, 2019

<sup>5</sup> International Association for Contract Management, 2018

<sup>6</sup> American Medical Association, 2019

# Your DIDP journey

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## 1 ESTABLISH FOUNDATIONS AND PROVE IDP VALUE

- Define the business case and roadmap of critical activity required to achieve scaled IDP
- Deliver workshops to prioritise a backlog of IDP opportunities within high-value customer journeys
- Setup infrastructure and deliver best practice pilot (e.g. invoice processing)

## 2 SCALE PILOT AND DELIVER FURTHER IDP OPPORTUNITIES

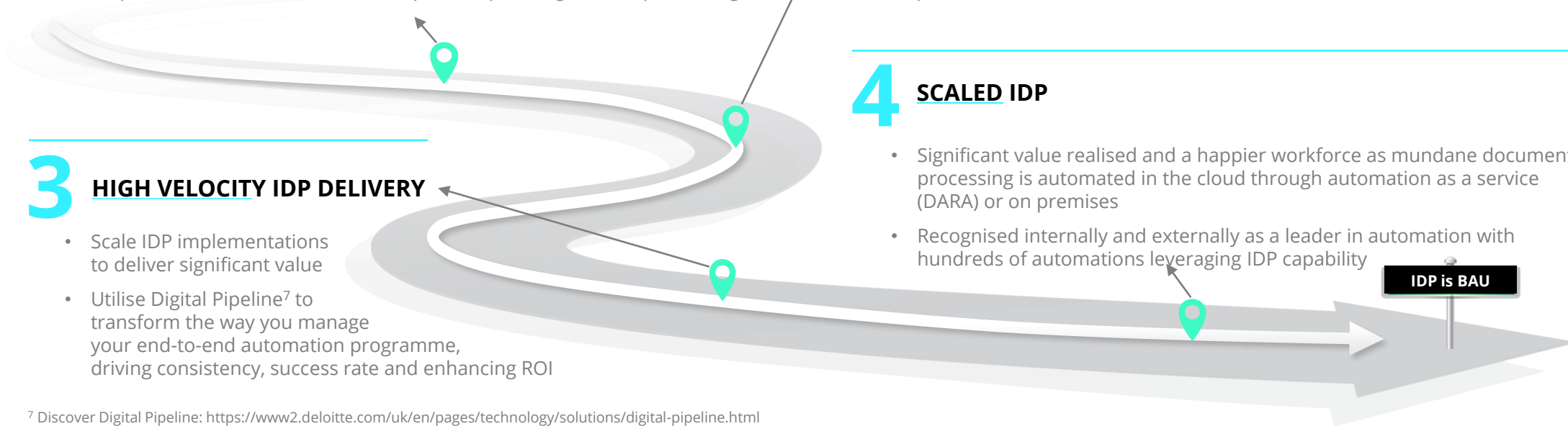
- Scale pilot (e.g. invoices by country or top vendors cross-country)
- Implement further IDP opportunities such as know your customer forms or purchase orders
- Establish agile practices to deliver rapid change and mobilise scale delivery pods across cost-effective locations

## 3 HIGH VELOCITY IDP DELIVERY

- Scale IDP implementations to deliver significant value
- Utilise Digital Pipeline<sup>7</sup> to transform the way you manage your end-to-end automation programme, driving consistency, success rate and enhancing ROI

## 4 SCALED IDP

- Significant value realised and a happier workforce as mundane document processing is automated in the cloud through automation as a service (DARA) or on premises
- Recognised internally and externally as a leader in automation with hundreds of automations leveraging IDP capability



<sup>7</sup> Discover Digital Pipeline: <https://www2.deloitte.com/uk/en/pages/technology/solutions/digital-pipeline.html>

# Accelerating value processing invoices @DHL Supply Chain



## DHL Supply Chain Accounts payable

### ISSUE

Invoice processing has always been highly manual for this **€15bn global logistics company**. It involves dozens of people processing hundreds of thousands of invoices on an annual basis.



DHL Supply Chain embarked on an RPA programme where a number of Finance activities were reviewed to determine which could be automated.

At the time, one of the areas they wanted to automate was invoice processing. However, following an assessment, the decision was made to **deprioritise invoice processing due to the complexity of semi-structured documents coupled with a lack of extensive intelligent document processing capabilities** within their RPA platform. This was a common issue for many organisations.

### SOLUTION

With the **increasing sophistication of technology**, DHL Supply Chain was able to benefit from an intelligent invoice processing proof of concept, which could be applied to a number of different document types.



Old problem



New technology



Big idea

**Deloitte and UiPath re-engaged the Accounts Payable team and began to prove the value of IDP.** Deloitte analysed the current process and designed the future process prior to implementing a solution, that could be scaled and reused.

The IDP solution captures invoices using UiPath. It then extracts, classifies and validates invoice data through ABBYY FlexiCapture which includes machine learning for ongoing training of invoices. If there is data that cannot be matched, this goes for verification by a human but the points that need to be checked are clearly highlighted, so takes minimal effort. The invoice is then processed in the ERP system using UiPath.

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# Accelerating value processing invoices @DHL Supply Chain





**DHL Supply Chain**  
Accounts payable

## IMPACT

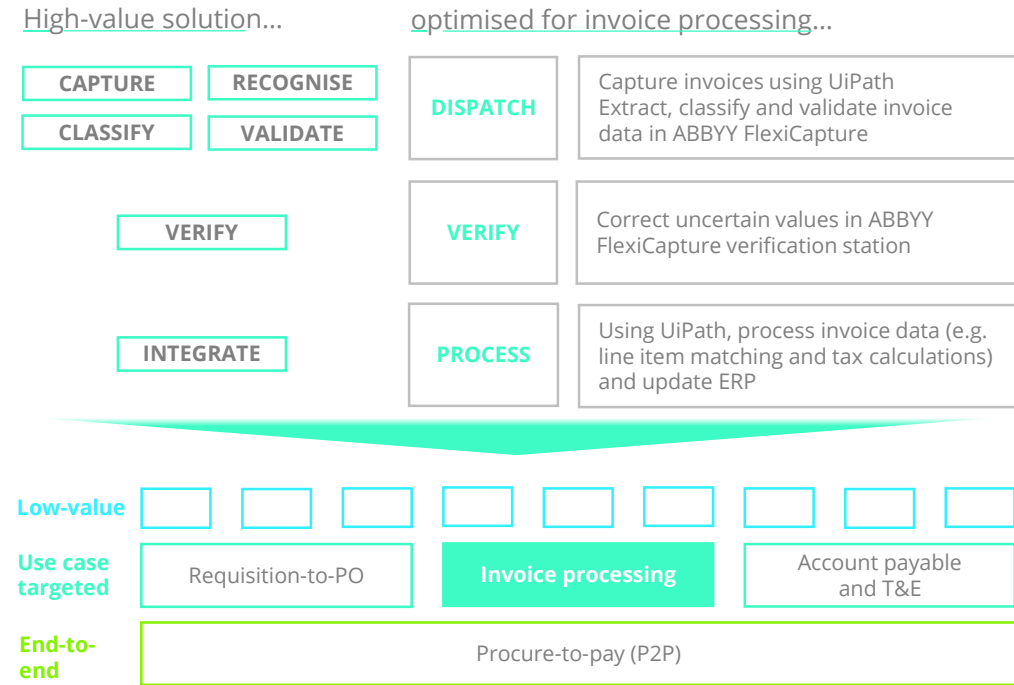
-  Automatically processed thousands of invoices from **124 different vendors**
-  Extracted 98.9% of Dutch and English characters correctly
-  Reduced errors and **increased productivity**

## PATH FORWARD

-  Investigating a **global roll-out plan for invoice processing**
-  Exploring the **potential for additional IDP opportunities** such as proof of delivery and sales orders

### THE VIEW FROM ABOVE

Moving up the automation curve beyond task-based automation, the Accounts Payable team are reaping the benefits of automating more of their end-to-end procure to pay process.



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# Make the call



D: Hi. Accounts payable, Dina speaking. G: I'm sure it was!

G: Hello Dina. It's Gerald here.

D: Gerald the CFO? How can I help you today?

G: I hear you've been on a **DIDP journey** this year. I want to know what you've learned.

D: A lot. How to process thousands of documents, continuously learning to improve accuracy, straight-through processing and productivity.

G: Not what DIDP has delivered! What have you learned?

D. That higher value automation is possible – though it was hard work!

D. But it's worth it. DIDP isn't just about new technology solving an old problem and improving your bottom line. It's a whole new way of thinking and working. Are you ready for that?

G: I think I need to be.

D. OK, let's do it. We've demonstrated success in Finance, but there are many other parts of the business who could benefit from DIDP.

G: **I'm banking on it.** As are HR, Supply Chain and Operations. I'll send you an invite for Monday morning.



## FINAL THOUGHTS

**Advances in automation technology are putting pressure on businesses to adapt.** Semi-structured and unstructured documents can now be automated faster and with greater precision, leading to more satisfied customers. **Exactly what it means for your business is a different question.**

- What documents do you currently process manually?
- What value would automating these deliver for your organisation?

Our research shows that 58 per cent of organisations have started their intelligent automation journey, but only 8 per cent are currently operating at scale (up from 4 per cent last year).

As business leaders scale to gain **competitive advantage in an automation-first era**, they'll need to unlock higher value opportunities by processing documents more efficiently, and turning that information into deeper insights faster than ever.

**That will require new technology and a group of people with the skills to make it happen.**

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# Let's talk

If you'd like to explore how leading companies are approaching intelligent document processing and the value it could deliver for you, we'd welcome the opportunity to talk.

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Deloitte Robotic & Intelligent Automation (R&IA) provides a portfolio of services and assets to imagine, deliver and run intelligent automation. Through immersive events we expose and explore opportunities to define the vision, strategy and business case for widespread adoption across the enterprise. We help executives refine the design, tools and methods necessary in order to rapidly scale up automation. As the business transformation takes shape and the benefits are realised at scale Deloitte provides bot management, maintenance and enhancement.

UiPath is leading the automation-first era championing one robot for every person, delivering free and open training and collaboration and enabling robots to learn new skills through AI and machine learning. Led by a commitment to bring digital era skills to more than a million people, the company's enterprise Robotic Process Automation (RPA) platform has already automated millions of repetitive, mind numbing tasks for business and government organizations all over the world, improving productivity, customer experience, and employee job satisfaction

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