

Ebook

9 Actually Helpful Ways to Use AI in Accounts Payable



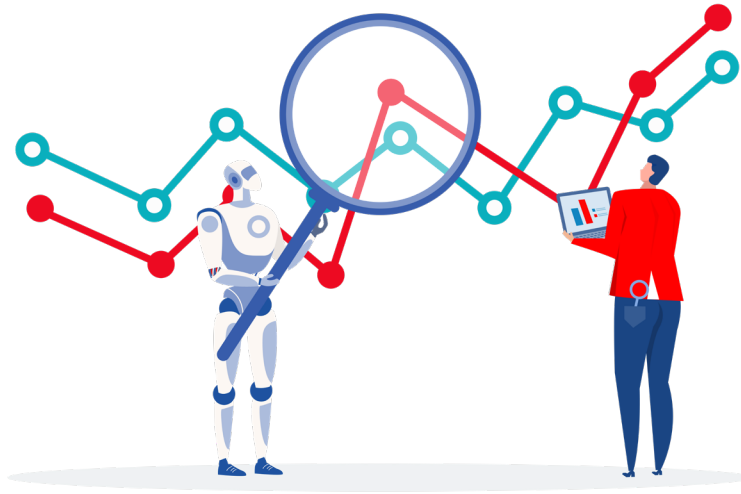
Table of contents

Introduction	3
Esker Synergy AI	4
Automated supplier onboarding questionnaire creation	6
Intelligent data extraction from supplier invoices	8
Automated invoice batch separation	10
Predictive supplier invoice coding	11
Anomaly detection in supplier invoices	13
Late payment predictions	14
AI-assisted email triaging	15
Generative AI-assisted responses	16
Esker Synergy Assistant for AP staff	17
Bring the power of AI to your AP department with Esker	19
We do AI differently	20
About Esker	21

Introduction

AI has well and truly burst onto the accounts payable (AP) scene — and it's only going to become more ingrained in the function as time goes on. According to Ardent Partners, an estimated 75% of all AP departments are using some form of AI today, and 61% of procure-to-pay professionals believe AI will have a major impact on their operations.¹

With all the buzz around AI and its ever-expanding capabilities, it's not always obvious how it can actually make day-to-day life in AP easier. So in this ebook, you'll learn 9 genuinely helpful ways that AI supports essential AP activities.



¹ Accounts Payable Metrics That Matter in 2025, Ardent Partners

Esker Synergy AI

How does the AI in an AI-powered AP platform work, and what capabilities does it have? Let's answer those questions using Esker Synergy AI (the collection of AI technologies that drives Esker's software) as an example.

Multiple types of AI working together

Based on more than 15 years of R&D, Esker Synergy AI includes multiple types of AI. Think of them as the brains behind the solutions. They're a robust set of technologies that simulate human intelligence and simplify even the most complex business documents. And they all work together seamlessly to deliver a truly automated experience that dramatically reduces or even eliminates the need for manual intervention at any point in the AP process.

While there are approximately 20-30 distinct categories or subfields of AI, only a select group of targeted AI technologies are best for use across business processes. These include:



Machine learning (ML)

ML is designed to imitate human intelligence, enabling systems to learn and improve from experience using data and algorithms.



Natural language understanding (NLU)

NLU is an AI subset capable of understanding text, extracting data, and discerning meaning, intent and emotion behind the input.



Generative AI (GenAI)

GenAI such as ChatGPT learns from large language models (LLMs) to generate original content that mimics human creativity (text, visuals, speech, etc.).



Deep learning (DL)

DL uses layers of artificial neural networks to recognise complex patterns and provide accurate predictions from raw input.



Retrieval augmented generation (RAG)

RAG is a progression of GenAI, combining the abilities of an LLM to understand and generate natural language originating from a knowledge base.



Agentic AI

AI-powered agents understand the user's vision and the context of the problem and then execute a variety of tasks that fulfill this goal.

Working together, these AI technologies can have a huge impact on AP performance. Here are two examples.

Intelligent data recognition

When receiving documents from suppliers, Esker Synergy AI extracts key information, automatically enters it into your systems and even matches the data against your own references.

It uses deep learning and NLP algorithms for first-time recognition in customer orders, supplier invoices, remittances and claims, allowing you to achieve high data recognition rates almost immediately. Synergy AI becomes even faster and more accurate over time thanks to machine learning's ability to remember how you manage documents and exceptions.

■ ■ ■ **“Esker’s AI-based recognition has significantly reduced manual work.
■ ■ ■ We can now focus on improving other factors within our department.”**

■ ■ ■ Wynona Ho | Accounts Payable Manager, Pet Lovers Centre

Prescriptive & predictive analytics

Using data accumulated from the millions of documents processed on its digital platform over the last decade, Esker Synergy AI can predict customer and supplier trends and behaviours, deliver accurate forecasting and provide intelligent recommendations. Having all of this information easily available can enrich both day-to-day decision making and long-term forecasting.

As you can see, AI is a powerful, versatile tool for AP teams. In the following pages, you’ll learn 9 specific ways AI is solving some of AP’s most bothersome pain points.

01 Automated supplier onboarding questionnaire creation

An onboarding questionnaire is an important tool for collecting information from your suppliers about their compliance practices, risk management efforts and alignment with your company's business requirements.

Building such a questionnaire isn't for the inexperienced. It requires expertise and effort to ensure you're including all the correct questions for the regions and industries you and your supplier are operating in. Now imagine having to build a brand new questionnaire every time you onboard a new supplier. Talk about a bottleneck.

That's where AI comes in. Using a generative pre-trained transformer (GPT) — a type of large language model (LLM) — you can generate onboarding questions tailored to the industry, region and supplier type you need in mere seconds.

How does it work?

Simply prompt the GPT with your general requirements, such as compliance, certifications, risk factors, how many questions it should include, if you'd prefer yes/no or open-ended questions, etc. In moments, the GPT generates a comprehensive, generic due diligence questionnaire that covers all the aspects you provided in your prompt and can be easily edited.

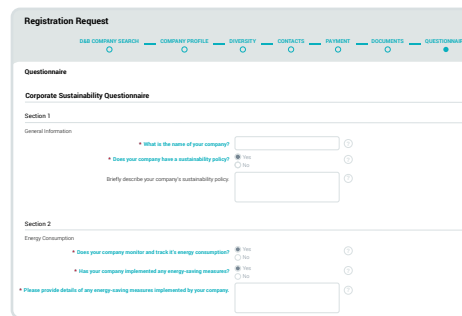
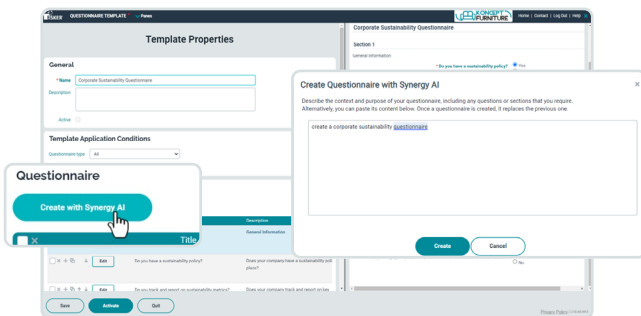
It's basically ChatGPT for supplier questionnaire creation. See how it works in [this short video](#).



What's the big deal?

Automating supplier questionnaire creation is incredibly beneficial for companies with growing supplier networks because it:

- **Saves time and resources:** Less manual effort spent on questionnaire development means more time for your team to focus on higher-value tasks like risk assessment and relationship management.
- **Ensures consistency:** AI creates standardised questionnaires that cover essential due diligence criteria across all suppliers, reducing variability and maintaining uniformity in supplier data collection.
- **Enhances compliance:** Ensures you avoid missing critical compliance-related questions and keeps you aligned with regional and industry-specific regulatory requirements.
- **Scales:** AI creates generic questionnaires that can be used across multiple suppliers, simplifying onboarding for suppliers of different sizes and industries.
- **Is user friendly:** Anyone on the team can build a questionnaire, even if they don't have loads of expertise, because AI helps guide the process while ensuring quality.



AI leverages **advanced natural language processing capabilities** to design and execute surveys precisely and easily



Esker integrates those generated questionnaires directly in the **supplier onboarding process**

02 Intelligent data extraction from supplier invoices

Is there anything more tedious than manually keying in invoices? It takes up so much time, delaying payment processing, diverting resources away from more strategic tasks and filling your team's days with unending monotony.

Invoice data extraction is one type of work AI really excels in. Using a collection of technologies working together in harmony, it can pull the necessary information off an invoice in a flash.

How it works

Esker uses multiple layers of technology to extract data from invoices:

- **First-time recognition** extracts data from invoices seen for the first time by identifying predefined fields on the document and, if configured, comparing that data against historical documents and ERP master data.
- **Auto-learning** is a machine learning (ML) technology that automatically learns from user corrections to increase future recognition rates.

Esker's AI can identify key information on invoices from headers and footers (such as dates and vendor info) as well as line items (like quantities and amounts). As the data is extracted, the AI puts it into the correct fields in the system. But what if you receive paper invoices? Not a problem. Esker AI digitises them into formats that allow data extraction — no manual data entry needed.



What's the big deal?

What's not to love about technology that takes over the soul-sucking grunt work of manual data entry from supplier invoices?

- **Increased speed and efficiency:** AI can process large volumes of invoices in seconds, significantly reducing turnaround times and ensuring timely payments.
- **Accuracy and consistency:** AI can extract data accurately, even from complex layouts and unstructured documents – plus machine learning helps it keep improving over time.
- **Cost savings:** Automated data entry reduces labour costs and minimises the impact of errors or delays.
- **Scalability:** Handle a growing workload without adding additional headcount.
- **Improved employee satisfaction:** Your team can focus on higher-value tasks, improving job satisfaction and reducing burnout from repetitive, low-value work.
- **Real-time insights:** Always have accurate, up-to-date financial information for smarter decision-making.
- **Enhanced compliance and tracking:** Integrated workflows and detailed audit trails ensure proper processes are followed and all necessary approvals are received.

The screenshot displays a software interface for processing vendor invoices. The left pane shows the 'Invoice Processing' workflow with fields for Company code (UK01), Invoice type (Non-PO Invoice), Invoice status (To verify), and Receipt method (Email). Below this, 'Invoice Details' include Invoice number (117887), Order number, Invoice date (3/23/2018), Posting date (3/23/2018), Net amount (144.00), Tax amount (36.00), Balance (0.00), Invoice currency (GBP), and Payment terms (Due date: 4/30/2018). The 'Vendor Information' section lists Number (10000), Name (London Postmaster), Street (10 North Lake Avenue), City (London), ZIP code (N12 5XY), and Country (GB). A 'SHOW HISTORY' button is also present.

The right pane shows a 'Document preview' of a scanned invoice from 'London Postmaster' at '10 North Lake Avenue, N12 5XY London, GB'. The invoice is from 'CRONUS London RC' to 'Jack S. Richins' at 'Kensington Street, 22, N12 5XY London'. The invoice number is 117887 and the date is 3/23/2018. The invoice title is 'INVOICE'.

Order No	Job Number	Spec	Quantity	Price
Not quoted	S2-84-0024	S_FI	80	1.80

03 Automated invoice batch separation

Scanned or emailed invoices often come in batches of multiple invoices in one big file. Manually separating batches into individual invoices is yet another menial, time-consuming task that AI can take over.

How it works

Using deep learning technology, Esker's AI trains itself to automatically recognise individual invoices within batches and suggest splits that a user can review and confirm. The AI can do this even if some invoices are multiple pages long or have attached documents, keeping all related pages and documents together during the splitting process.



What's the big deal?

The biggest benefit of this use case is saved time. When your team doesn't have to painstakingly split batches of invoices, those invoices can be processed and paid faster. Plus, staff can spend their time on bigger picture tasks that bring more value to your business.

04 Predictive supplier invoice coding

Non-PO invoices are the bane of every AP department. But they're a fact of life, especially in spend categories such as office supplies or admin costs that often require splitting the invoice cost among different cost centres and G/L accounts.

Sorting through this mess manually is not only time-consuming, but the potential for errors is high. AI-based predictive coding can suggest the correct coding for non-PO invoices for you. (Fun fact: Esker actually has a U.S. patent on this innovation.)

How it works

The AI observes and learns from a user correctly coding non-PO invoices. From there, it uses those examples to recommend applicable coding for future non-PO invoices. The AI continues to learn from user corrections and continuously improves its prediction accuracy. Typically, after only a few repetitions, non-PO invoices are automatically allocated to the correct G/L account, cost centre, cost type and tax rate.



Watch it in action in this quick video.

What's the big deal?

Accuracy is the key benefit here, not to mention efficiency. Faster invoice processing leads to more on-time payments and happier suppliers.



1

Esker's predictive coding algorithm

Searches among all posted invoices to find the most similar one & recommends the right coding



2

New invoices automatically coded

New similar invoices are automatically coded thanks to historical non-PO invoice data



Predictive coding of non-PO invoices



3

Improved touchless processing rate, efficiency & accuracy

Anomaly detection in supplier invoices

When an uncommonly large or small amount shows up on a supplier invoice, it's important to flag it so you can confirm if it's legitimate or a mistake. AI can spot those in flash. (Bonus: It can spot anomalies in purchase requisitions as well.)

How it works

You can set up Esker's Synergy AI to automatically warn you in case of unusual quantities or amounts for a given item and/or supplier. It will analyse your historical order data and invoices to detect anomalies in payment amount or order quantity and alert you so you can act before any damage is done.

 **This short video shows you what it looks like.**

What's the big deal?

Instead of your staff having to dedicate their valuable time to poring over purchase requisitions and supplier invoices hunting for oddities, AI takes on the task – and does it faster and more accurately. Identifying all anomalies decreases your risk of placing an incorrect order or making an erroneous payment, protecting you from costly financial losses.

Benefits:



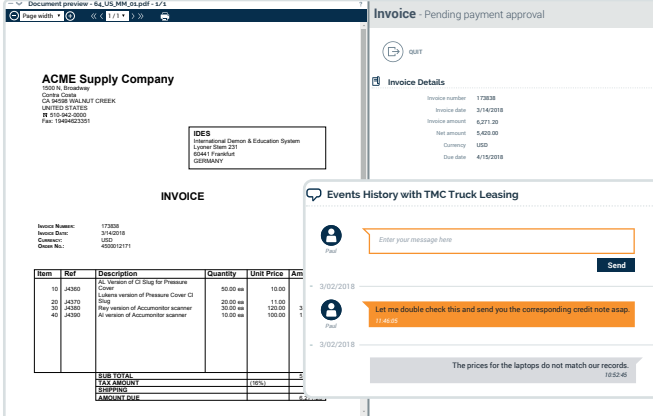
Decreased risks of erroneous payments



Reduced burden on AP



Less potential work



ACME Supply Company
1000 N. Rosemead
Santa Ana, CA 92705
UNITED STATES
P: 949-442-2000
F: 949-442-2001

Invoice Details
Invoice number: 170838
Invoice date: 3/14/2018
Invoice amount: 6,271.20
Net amount: 5,420.00
Currency: USD
Due date: 4/15/2018

INVOICE

Item	Ref	Description	Quantity	Unit Price	Am
10	J4380	Qty. 10 of C1 Slip for Pressure	30.00 ea	10.00	
20	J4370	Lotus version of Pressure Cover C1	20.00 ea	11.00	
30	J4380	Qty. 30 of Accumulator scanner	30.00 ea	120.00	3
40	J4380	Qty. 40 of Accumulator scanner	10.00 ea	100.00	1
SUB TOTAL					0
TAX AMOUNT					105.00
SHIPPING					0
AMOUNT DUE					1155.00

Events History with TMC Truck Leasing

3/02/2018
Enter your message here
Send

3/02/2018
Let me double check this and send you the corresponding credit note asap.
Cancel

3/02/2018
The prices for the laptops do not match our records.
105246

Late payment predictions

When you're managing hundreds, if not thousands, of supplier invoices every month, you run the risk of missing payment due dates. Nobody wants to be the customer who gets a reputation for being a late payer. Plus, not paying your invoices on time can lead to blocked shipments and other unpleasant consequences. Thankfully, AI can help you keep an eye on due dates so you never miss another payment.

How it works

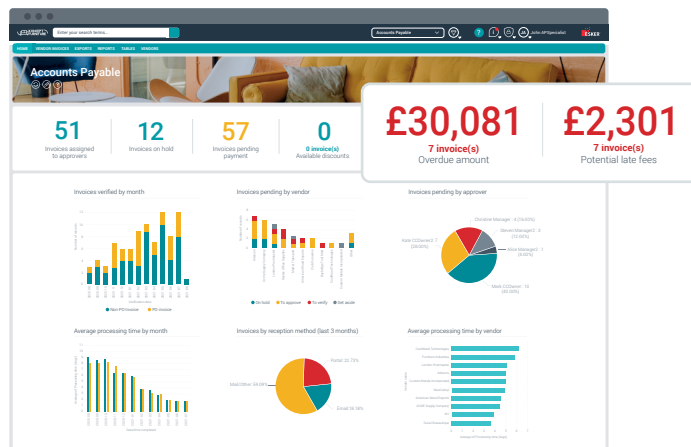
The machine learning within Esker Synergy AI uses historical data (such as the supplier, the type of items and users involved in the workflow) to predict the likelihood of an invoice being paid late. It creates a list of these at-risk invoices that displays on the user's home screen. The user can then drill down to the actual invoices to see what's holding up the process and take action to get them moving.



[Check it out in this 50-second video.](#)

What's the big deal?

Not paying your invoices late is a great way to get more early payment discounts, avoid late payment fees, reduce the risk of shipping delays and maintain good supplier relationships.



07 AI-assisted email triaging

Even if you have one dedicated email inbox for all supplier communication, sorting through it to determine which emails are questions, invoices, status update requests or payment reminders can feel like a full-time job by itself. Why not let AI help?

AI can triage incoming emails to separate out the invoices (explained on this page) AND generate appropriate answers to any incoming emails (explained on the next page).

How it works

Using AI and NLP, Esker automatically identifies any invoices received in your AP mailbox with 95% accuracy. Non-invoice emails (a.k.a. enquiries) are also identified and classified. Emails are seamlessly and automatically redirected to the Esker platform for processing or response.



[This video explains the process in more detail.](#)

What's the big deal?

AI-assisted email triaging significantly enhances the efficiency and accuracy of AP teams by:

- Speeding up invoice identification and processing
- Providing transparency with trend analysis and performance metrics
- Increasing employee satisfaction by eliminating manual email triage
- Improving vendor relationships with quick responses and on-time payments

Generative AI-assisted responses

When your suppliers email you, they expect a quick response that thoroughly answers all of their questions. But that's easier said than done. Good responses to supplier enquiries means sorting out the requests so they can be routed to the right people, researching internal systems for needed information and drafting helpful replies. It's labour-intensive, time-consuming work that often results in frustrated employees and annoyed suppliers.

As mentioned in the previous section, Esker Synergy AI not only triages incoming emails so requests are separated out from other types of emails, but it can also find answers and draft responses for you.

How it works

First, the AI reads the email to determine what's being asked. Then, if necessary, it searches your company's internal data for the answers. Finally, it drafts a response using a ChatGPT-type technology. Using this AI-enabled tech means the responses aren't static, template-based replies, but dynamic, context-aware answers tailored to the specific needs and emotional tone of each request.

An AP team member can review the AI-generated response to ensure accuracy and relevance. You can either send it as-is or personalise it even further to add a human touch — either way, you're always in control.



You can see it in action in this video.

What's the big deal?

Leveraging AI to respond to supplier queries:

- Accelerates response times so your suppliers aren't left hanging
- Delivers consistent and accurate answers that build trust and satisfaction with your suppliers
- Enhances team productivity and morale by reducing time-consuming, repetitive tasks

Esker Synergy Agent for AP staff

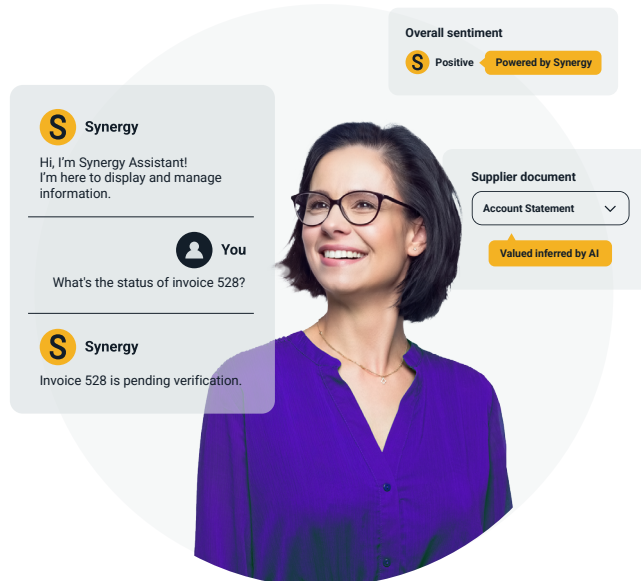
Even if all of your sourcing, procurement and accounts payable information is digitised, locating the exact information you need in a pinch can still feel overwhelming — or even worse, like finding a needle in a haystack. Whether you're trying to create a custom report or need to know which invoices are in a specific status, AI can stop the stress by helping you pull together the data you're looking for.

Meet Esker Synergy Agent. Think of it as a know-it-all coworker eager to help you find and organise information.

How it works

Open the chat window and type in your question or request. You can even use voice-to-text to ask your question if you prefer. Then Synergy Assistant goes to work. In seconds, this AI-powered helper processes your request and responds within the chat. Answers are typically in the form of a graph, a filtered list or information pulled from documentation.

Say you want to find out which invoices are in set-aside status for a particular supplier. Type in your question and the assistant pulls up a list of that supplier's invoices in that status. From there, you could ask it to sort the list in ascending or descending order by amount. You could also ask it to tell you the average DPO of these set-aside invoices. You can even download any graphs or reports the assistant generates for you.



And that's just the tip of the iceberg. Check out [this short video](#) to see more of what the Esker Synergy Agent can do.

What's the big deal?

An AI-powered assistant gives you near-instant access to useful analytics, metrics and documentation about your automation solution. It helps newer AP specialists get up to speed faster because they can simply turn to the assistant when they have questions. And on top of that, it's a new and enjoyable way to interface with your AI-driven automation tool.



Bring the power of AI to your AP department with Esker

Manual, paper-based AP processes are so last decade. Finance teams who want to stay competitive and agile in a shifting world are embracing AI-driven solutions today so they don't have to play catch-up later on.

While many solutions exist that can automate piecemeal parts of the AP process, Esker created AI-based solutions for the entire source-to-pay and order-to-cash cycles. So you can bring the AI advantage to all facets of your financial operations.

See for yourself by visiting our [demo library](#) to learn what AI-enabled AP and AR processes look like.



We do AI differently

Esker Synergy AI has been in the making for over 15 years, and we continuously work on addressing the evolving questions about AI useability, security and sustainability. Our wealth of AI experience and patents creates a solid foundation that good businesses and relationships are built on.



Security – your data stays yours

All Esker solutions are hosted on Microsoft Azure, including Synergy GPT functionalities, to ensure that the data is not used or saved by a third party. Customer data does not travel over the internet, ensuring data security and privacy. The Esker-trained AI models only respond to specific tasks. They do not process personal information, and conversations are not saved.

Esker registers at Levels 3 (limited risk) and 4 (minimal risk) for the European Union AI Act and continues to maintain the ISO 27 001 certification.



Purposeful & responsible

We only use AI in targeted, purposeful and value-added scenarios. Since some Esker Synergy AI features don't require a big model, Esker trains its own LLM. The result is a model that is approximately 600 times smaller than ChatGPT-4.

Features requiring a larger model use shared servers. This directly results in a lower carbon impact.

New models are continually evaluated for finding the best ratio between performance and carbon footprint.



LLM as a Service

GenAI features are integrated into Esker solutions and do not require a separate contract with LLM providers. Esker manages the prompt engineering, version updates and secure scaling, bringing down the cost of ownership by reducing the need for AI-trained staff.

AI-assisted responses are generated using each customer's own data to make it as up-to-date and relevant as possible, while maintaining solution-inherent data security.

Hi, we're Esker

Founded in 1985, Esker is the global authority in AI-powered business solutions for the Office of the CFO. Leveraging the latest in automation technologies, Esker's Source-to-Pay and Order-to-Cash solutions optimise working capital and cashflow, enhance decision-making, and drive better collaboration and human-to-human relationships with customers, suppliers and employees.



40

years of experience
with 20+ years focused
on cloud solutions



1,100+

employees serving
1.12M+ users & 3,000+
customers worldwide



15

global locations
with headquarters in
Lyon, France



€205.3

million in revenue
in 2024



Business success is best when shared

At Esker, we believe the only way to create real, meaningful change is through positive-sum growth. This means achieving business success that doesn't come at the expense of any individual, department or company — everyone wins! That's why our AI-driven technology is designed to empower every stakeholder while promoting long-term value creation.

ESKER[®]

www.esker.co.uk

©2025 Esker S.A. All rights reserved. Esker and the Esker logo are trademarks or registered trademarks of Esker S.A. in the U.S. and other countries. All other trademarks are the property of their respective owners.

PHOTO: KAPLUNKA