How Can AI Help You?

**Transforming Customer Service
with Esker's AI-driven solution suite**

What's inside

Introduction

Great things can start out scary

Maybe you're old enough to remember a time before the Internet? If so, you'll also remember the rather sudden, all-encompassing metamorphosis into a world where we couldn't imagine living without it. In some ways, it has made things a bit more complicated, while in other ways it makes so many things so much easier.

And now here we are, at the dawn of the AI era. There is so much noise, with varying degrees of excitement and anxiety about what it can already do and possibly will be able to do soon.

We'd like to show you how it can be a useful tool in Esker's Customer Service solution suite: automation that utilizes AI to streamline and organize a shared inbox and much more. It frees up time that Customer Service Representatives (CSRs) can dedicate to other, more meaningful projects, thereby increasing their sense of achievement while at the same time eliminating repetitive, arduous effort.

An overview of AI in Customer Service

What is AI?

Artificial intelligence (AI) is a broad subject referring to the simulation of human intelligence processes by machines. It includes specific technologies such as natural language processing (NLP), machine learning and computer vision.

If you are interested in knowing more, we included a short glossary of AI terms and technology at the end of this ebook.

How AI is used in Customer Service functions

Despite all the noise about how "AI is coming for our jobs," the main goal of utilizing these technologies should be to increase the job satisfaction for those working in Customer Service. This is the result when the work is streamlined and effective, and when there is visibility over the processes.

Increased job satisfaction for CSRs doesn't just benefit the employees themselves, there are also measurable positive effects for the customers: Happier CSRs create a more pleasant purchasing experience, and the insights that AI provides can help CSRs understand the customer needs better and prevent miscommunications.

In short: Happy CSRs make happy customers!

What are some of the concerns about AI in Customer Service?

As with the Internet, the emerging AI technologies don't come without a set of valid concerns. Let's take a look at few of them and see how they can best be addressed:

⟶ **AI will make Customer Service too impersonal**

The idea isn't to remove the humans from the equation. Instead, AI can provide a streamlined user experience by filtering shared inboxes, "understanding" negative sentiments in customer messages and saving time by providing suggestions for applicable responses.

This is where conversational AI such as ChatGPT provides a helping algorithm to Customer Service automation.

⟶ **If AI takes over multiple CSR job functions, what happens when there are technical glitches?**

Again, the idea isn't to rely exclusively on the technology, it's simply there to enhance the experience for both the users and the customers. Ongoing monitoring and optimization will go a long way in preventing any problems, but there should always be a human there to take over the reins when the tech isn't working properly.[1]

1 Taylor, Tristen: "4 Concerns Customer Service Pros Have & How to Address Them" Hubspot Blog, July 12, 2023.
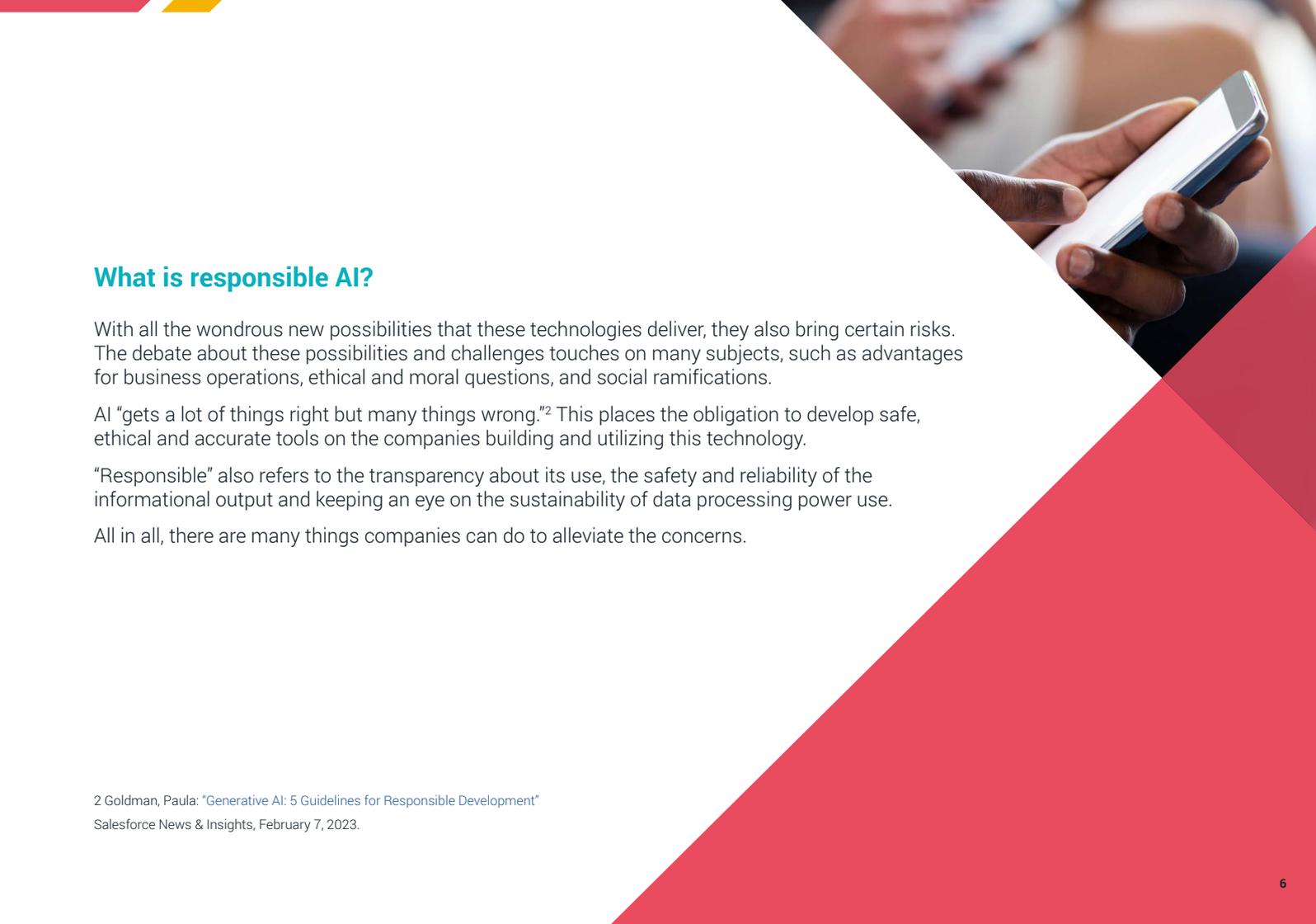
What is responsible AI?

With all the wondrous new possibilities that these technologies deliver, they also bring certain risks. The debate about these possibilities and challenges touches on many subjects, such as advantages for business operations, ethical and moral questions, and social ramifications.

AI "gets a lot of things right but many things wrong."[2] This places the obligation to develop safe, ethical and accurate tools on the companies building and utilizing this technology.

"Responsible" also refers to the transparency about its use, the safety and reliability of the informational output and keeping an eye on the sustainability of data processing power use.

All in all, there are many things companies can do to alleviate the concerns.

2 Goldman, Paula: "Generative AI: 5 Guidelines for Responsible Development"
Salesforce News & Insights, February 7, 2023.

AI in Esker's Customer Service solution suite

The interplay of the various technologies in Customer Service automation provides for a seamless process when handling questions, order placements or claims. AI does everything from categorization, key data extraction, exception handling and automatic ERP integration, while robotic process automation (RPA) can manage the data exchange between the internal systems and external portals.

The common denominator is that AI technologies leverage large data sets to learn and improve decision-making processes:

- **Capturing data from incoming documents**
- **Classifying emails**
- **Detecting unusual quantities in orders**
- **Proposing relevant answers to customer requests**

Esker Customer Inquiry Management

In Customer Service, where shared inboxes are common, AI capabilities built into Esker Customer Inquiry Management provide a helping hand to the team by auto-classifying incoming requests by type, routing email inquiries that CSRs can't answer to the person or department that can, or sending them to other applications.

Incoming messages with a negative tone are identified using sentiment analysis, while AI-assisted replies create consistently relevant answer suggestions and can easily be personalized.

Process	AI used	What does AI do	Result
A customer sends an inquiry (pricing, availability, order status, claim)	NLP	Analyzes content of incoming emails Data extraction/sentiment analysis	Customizable AI categorizes & routes emails to correct recipient/department/application Identification & prioritization of inquiries with negative sentiments that require special attention
Response suggestions	Generative AI	Suggests a response to the inquiry	Shorter response times & consistent & accurate yet personalized answers, leaving CSRs with more time to handle added-value tasks that improve the customer experience
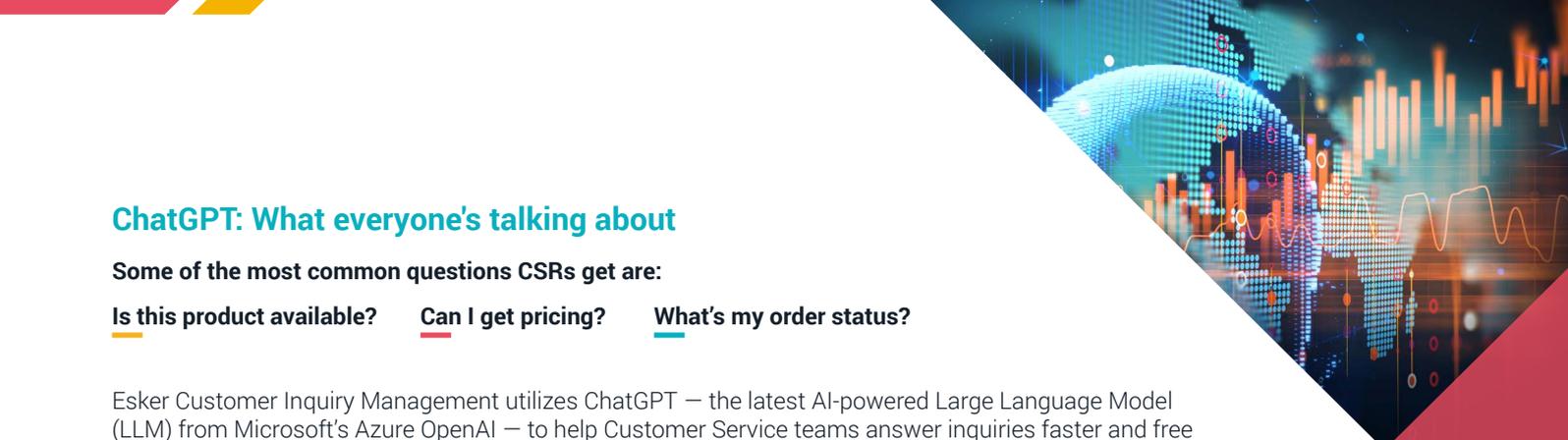
ChatGPT: What everyone's talking about

Some of the most common questions CSRs get are:

Is this product available?   **Can I get pricing?**   **What's my order status?**

Esker Customer Inquiry Management utilizes ChatGPT — the latest AI-powered Large Language Model (LLM) from Microsoft's Azure OpenAI — to help Customer Service teams answer inquiries faster and free up time for more impactful functions. ChatGPT analyzes inbound customer emails, queries different systems and generates an answer for the CSRs to use. The technology even classifies and tailors responses based on the sentiment of the email.

The "secret sauce" in this is that humans are not replaced by ChatGPT. The decision to use the suggestions from ChatGPT remains with the human to either accept or edit the recommended message. If the easy questions can be handled quickly, CSRs can spend more time interacting with customers that need more attention.

Also, Esker's ChatGPT is being hosted through Microsoft Azure. This means your company data isn't being used by OpenAI to improve their models – the data stays yours.

Esker Order Management

Esker Order Management identifies orders in the flow of emails sent to the Customer Service shared inbox, which can then be processed from there directly. Similarly, order data is automatically transferred to the ERP and urgent orders can be pinpointed and processed quickly. Anomalies are detected by analyzing historical order data.

Process	AI used	What does AI do	Result
Order reception	NLP	Identifies orders amongst other requests or documents, pinpoints & classifies urgent orders	Correct routing of incoming orders regardless of format/channel, categorizes urgent orders in separate queue for priority processing
Order data extraction	Deep learning/ neural networks	Extracts relevant data from orders using neural networks specifically designed for this function	Higher accuracy, faster & continuously improved processing performance
Order data extraction	NLP	Understands free-text orders, extracts key order information	Pre-populated form containing key order data (product codes, quantities), ready for CSRs to approve or edit, if needed
Order data extraction	Machine learning	Users make corrections from which the algorithms "learn"	Recognition improves automatically over time
Anomaly detection	KNN	Identifies orders with potential quantity anomalies, by comparing them with historical orders	Orders with potential anomalies are highlighted so CSRs can verify them

Success story

The Customer Service email inbox at Fuchs Lubricants Co. was receiving around 600-700 emails a day. The various tasks were not distributed among the 18 CSRs. Instead, everyone was doing a little bit of everything. Supervisors had neither visibility nor control over workflows. Additionally, it was difficult to measure the amount of time it took to process orders.

Esker Order Management and Esker Customer Inquiry Management changed the game: NLP algorithms now sort out the shared inbox and send each item to the correct CSR, while machine and deep learning make order processing faster, measurable and seamless.

Due to a restructuring of the department that divided tasks into order entry, administrative and phone categories, the workload was rebalanced. While CSRs are now assigned to specific roles, they are also cross-trained and can perform any task when needed. Supervisors can now efficiently manage their teams rather than mainly distribute emails. The interplay of the solutions provides visibility over the volume and processing speed of orders and enabled the team to perform more customer-oriented activities.

Benefits

- Enabled CSRs to focus on specific tasks
- Created efficient workflows
- Improved employee satisfaction
- Reduced data entry

Apprehension & opportunity

The fears we have about AI are valid. The impacts of unleashing powerful AI models are still hotly debated. However, just like any change, the uncertainty about abilities and effects of new technologies is an important part of the process, because only with a lively and honest debate can we make these technologies serve our needs and improve our lives.

Esker is not new to the realm of AI, having first dipped its toes into the technology pool over 15 years ago. The newest technologies like ChatGPT are only an addition to the wide range of AI tech that Esker uses to empower both people and processes, creating more agile and disruption-proof businesses.

One of the main positive impacts that AI has for those working in Customer Service is that it will remove the monotonous, boring and sometimes frustrating tasks from these jobs, thereby having the potential to greatly improve job satisfaction.

Supporting Customer Service functions with AI can:

- Free up staff for more impactful work
- Create a foundation of sustainable & durable growth by creating efficient, long-term & resilient organizations
- Facilitate more informed & impactful decision making
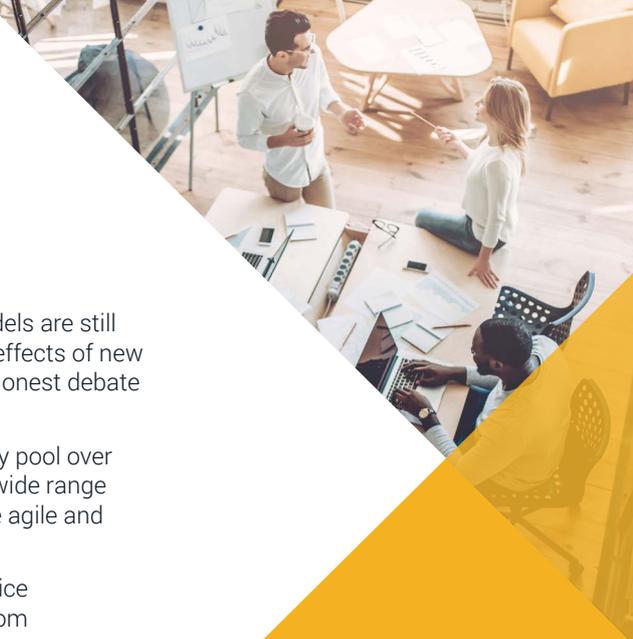
Safety first

Not just for the automation solutions we create, but also for every other aspect of company operations, Esker keeps its focus on positive-sum-growth. This theory is based on the idea that when your company succeeds, it never happens at the expense of any team, individual or enterprise in your business ecosystem — everyone wins!

It's no different when it comes to AI. We are doing what we can to ensure that these technologies are used intentionally and inclusively, always keeping an eye on safety, accuracy and ethically sound use of both the technology and the data.

As a company that builds solutions for automating business processes, we take our responsibility to handle all data with the highest degree of security extremely seriously. We take all available and feasible measures possible to not only protect the data of our customers, but that of their customers, too!

Even though many businesses embrace automation technologies to improve their operational efficiency, they soon recognize the additional value that an improved employee experience brings with it: more satisfied customers that keep returning.

AI glossary

- **Alignment:** Aligning AI technology with how we expect it to behave.

- **ChatGPT** (Chat Generative Pre-Trained Transformer): An AI chatbot developed by OpenAI based on an LLM that enables users to refine and steer a conversation towards a desired length, format, style, level of detail, and language used.[3]

- **Deep learning:** Part of the machine learning algorithms based on artificial neural networks (see *Neural networks* below) that uses multiple layers to progressively extract higher-level features from raw input.[4] In Esker, it recognizes layouts and structures on documents and extracts relevant data.

- **Generative AI:** AI capabilities for generating text, images, or other media by learning the patterns and structures of the training data to generate new data with similar characteristics.[5]

- **LLM** (large language model): AI that uses massive data sets and deep learning to perform a variety of NLP tasks.

- **Machine Learning** (ML): An umbrella term for problem-solving algorithms. Rather than being programmed, ML helps machines "discover" their "own" algorithms.[6] In Esker, it improves data extraction by auto-learning from user corrections, while also utilizing historical data analysis to predict outcomes.

- **NLP** (natural language processing): Technology that includes tools capable of understanding text and extracting data, discerning the meaning, intent and emotion behind the input, and even proposing appropriate answers.

- **Neural networks** (in AI): A subset of machine learning that simulates the human brain's connective neurons and nodes to translate input data into desired output data.

- **KNN** (k-nearest neighbors): Machine learning classifier algorithm using proximity of data points to make predictions and classifications.

[3] https://en.wikipedia.org/wiki/ChatGPT // [4] https://en.wikipedia.org/wiki/Deep_learning // [5] https://en.wikipedia.org/wiki/Generative_artificial_intelligence // [6] https://en.wikipedia.org/wiki/Machine_learning

Hi, we're Esker

Founded in 1985, Esker is a global cloud platform built to unlock strategic value for Finance, Procurement and Customer Service leaders and strengthen collaboration between companies by automating source-to-pay (S2P) and order-to-cash (O2C) processes.

38
years of experience with 20+ years focused on cloud solutions

1,000+
employees serving 850K+ users & 1,700+ customers worldwide

15
global subsidiaries with headquarters in Lyon, France

€159.3
million in revenue in 2022, with 90+% of sales via SaaS activities
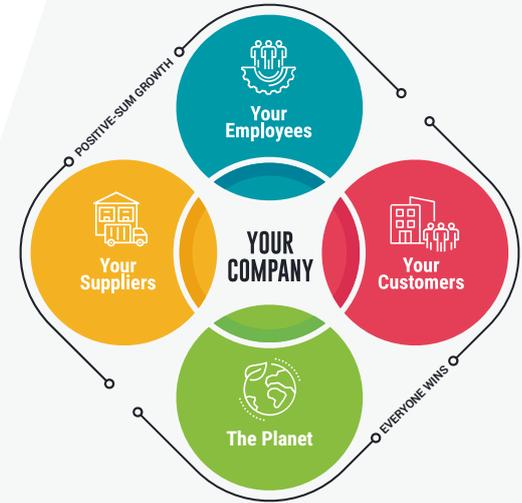
Business success is best when shared

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.

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