

Cut inbound email processing times from **HOURS** to **SECONDS** with intelligent automation

A GUIDE TO AUTOMATING CUSTOMER EMAIL WITH AI

With the SmartMail solution from Ushur, enterprises can dramatically shorten email processing times while improving customer experience and realizing a 5x–10x return on investment. Learn more about SmartMail benefits and technology, and see why the solution is indispensable for companies that need to get control of their inbound email and free their staff to focus on higher-value work.

Large enterprises everywhere face the same challenge: A tsunami of email from customers, employees and partners.

Whether your team is responsible for Customer Service, IT, HR or Sales, your constituents expect timely responses. However, with thousands if not hundreds of thousands of emails arriving in your bulk inboxes each month, it can be impossible to reply to everyone quickly. The manual, sequential process of reviewing email content and attachments, determining purpose and forwarding to the appropriate team is highly inefficient, and it requires an army of staff that would be better utilized on more business-critical tasks.

Global 2000 companies are turning to Ushur to solve this problem. Cloud-based and powered by AI, the Ushur platform combines conversational AI with intelligent process automation. Ushur's SmartMail solution can process thousands of incoming emails, attachments and photos; categorize and classify them based on predetermined business rules; auto-respond to each sender; and forward each email to the appropriate internal team for processing — all in under one second.

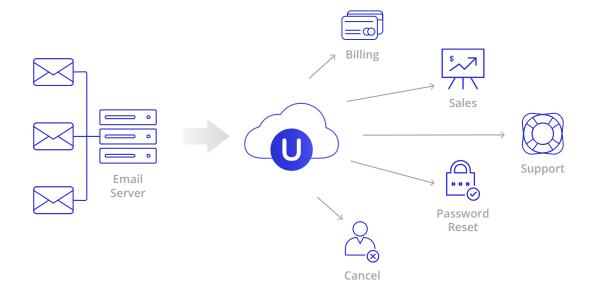
Email Made Smarter.

Email Triage

Ushur can apply its SmartMail solution to any inbox. Once deployed, SmartMail uses conversational AI and language bots to perform three key tasks:

Scan each email's subject line, message body and attachments — including PDFs, spreadsheets, images and many other formats.

Classify and categorize the main intent based on hundreds of predetermined categories and subcategories. Route each email to the appropriate internal group.



Auto Respond and Info Collect

During triage, if SmartMail detects an actionable email that's missing critical information like a date of birth or account number, the Ushur bots can proactively engage with the sender to request and obtain the missing information. Then they will forward the information to the appropriate internal team.



Email Made Smarter.

In this scenario, SmartMail can:

- Extract relevant customer data such as name, phone number, email, policy number, date of birth or mailing address from incoming emails and attachments.
- Determine what information is missing based on previously determined business rules for that case type.
- Automatically respond with a call to action to the sender to request the missing data.
- Upon getting a response, collate all the required information to build the case file.

Email to back-end, CRM or work management systems

Once all the information has been collected, SmartMail can forward it to the relevant team for processing through automated emails, spreadsheets, batch jobs and autopopulation into back-end systems like Salesforce, a work management system or other systems of record via an API.



Data extraction and form population

For email workflows that involve populating fields in forms (e.g., claims filings like Accord and mortgage origination applications), SmartMail can save valuable resources and reduce errors by extracting relevant information from attachments and then populating the forms. SmartMail can even integrate with existing enterprise work management systems like Zarion to make teams more productive.



Technology and Process.

SmartMail is powered by some truly amazing tech.

Since Ushur was founded, we have made it our mission to automate the two-way communications that form the basis of most customer, employee and partner journeys. Our technology sets us apart because it can accurately understand the intent and sentiment of each communication — and it can do so across multiple channels using secure, encrypted pathways. Ultimately, our solutions deliver the fast, error-free service today's enterprises need.

Ushur's Language Intelligence Services Architecture (LISA) is the AI engine that drives our platform's natural language processing (NLP) and machine learning infrastructure. LISA enables seamless building, deployment and operationalization of machine learning models at scale. It powers our bots to do three things: understand the meaning of bodies of textual information, whether they're in a document, an image or a conversation; take action when necessary; and continue the journey across channels, including SMS, email, Invisible App, social, voice or web.

The Ushur platform offers pre-trained models that are augmented/re-trained with enterprise-specific data. Enterprise customers share training data in simple CSV format, and Ushur provides tools that make it easy to strip PII information from the data. This data is then fed into a pre-processing pipeline that validates it, transforms it, and augments it if necessary. This training job is then taken over by LISA's AutoML layer, which manages a large set of processing clusters to train multiple deep learning models in a distributed fashion. These models are built using "transfer learning" techniques, wherein complex prebuilt models are initialized and fine-tuned with current training data.

Ushur Cloud SaaS Platform LISA Deep Learning UI Builder Deep Learning Visualization Persistent Store

The majority of the training data is used to create the machine learning and deep learning models. A smaller fraction of the data, referred to as the "hold-out" set, is used to validate the performance of each of these deep learning models. Finally, results from all optimized models are aggregated to form a final, stacked ensemble, and ensembles are versioned and stored in model repositories.

Post-training, the models are automatically deployed to Ushur's real-time prediction pipelines in the LISA inference fabric. The inference fabric is made up of numerous auto-scaled, loosely coupled and containerized microservices. As incoming emails or API requests arrive into the Ushur platform, the pertinent data (e.g., email body, attachments, etc.) is extracted and forwarded to the LISA inference fabric. Prediction results from the fabric are further processed by the Ushur platform or sent out as outbound email responses based on the Ushur configuration. All this data science delivers best-of-breed classification and categorization..

Analytics and reporting

The Ushur Dashboard captures and displays real-time data, including detailed analytics on classified categories, confidence scores and sentiment for every email processed. The data can be easily exported into a variety of reports or third-party party BI systems.

Ease of deployment and maintenance

Companies routinely deploy Ushur's SmartMail in a matter of weeks, with few IT resources and no need for an external professional services team. Thanks to Ushur's architecture and deep learning approach to NLP, setup and training can happen in a matter of hours compared to the months it often takes with other solution providers. Also, once SmartMail has been deployed, users need very little technical or training support.

Start automating your bulk email processing today with Ushur SmartMail. Contact us for a demo at info@ushur.com.

The **Benefits**

CLASSIFY INTO OF CATEGORIES

CUT EMAIL PROCESSING FROM **DAYS & HOURS TO** SECONDS

> **CUT COSTS BY** (5x-10x ROI)

IMPROVE NPS SCORES

Ushur Platform Components.

FlowBuilder

A secure, web-based portal to visually build, deploy and track all your automations, FlowBuilder requires no code, supports an infinite number of automations and provides real-time analytics.

Features and benefits of FlowBuilder:

- Imports through CSV, JSON, XML or dynamically through API.
- Includes an export API and JavaScript in Dev Mode.
- Provides templates for common use cases.
- Supports Normal, Super and Admin modes.
- Enables creation of automation in minutes.

LISA is the core of the Ushur automation platform.

A purpose-built AI engine, LISA uses NLP, NLU, NLG, topic classification, data extraction and sentiment analysis in 60 languages to extract meaning from communication flows and bring intelligence to automation. It allows automated workflows to interpret structured and unstructured content from virtually any data source and then take predetermined actions. LISA is the brain that powers Ushur.

Deploy Ushur's
SmartMail in a
matter of weeks,
with few IT
resources.

LISA offers:

- Data extraction: LISA can intelligently find, interpret and extract critical information from webforms, emails, SMS texts, voice messages, PDFs and legacy back-end systems.
- Automated two-way communications: LISA powers rich two-way communications via text, email, voice and SmartMail's Invisible App to minimize calls, emails and friction.
- **Support for multiple ingestion sources:** LISA can extract structured and unstructured data from sources including API, PDF, CSV, JSON, XML and FTP.
- Language support: With support for 60 languages, LISA allows companies to communicate seamlessly with their customers, partners and employees. Users in different offices across the globe can use SmartMail in different languages as well.
- Language translation: LISA can translate any one of 60 incoming languages to extend coreteam capabilities and provide an exceptional customer experience.

Ushur Platform Components.

Omni-channel

Ushur offers a single platform that enables conversations and notifications across many different channels, so constituents can communicate the way that works best for them.

Supported channels include:

- Email
- Two-way SMS
- Invisible App (secure/encrypted)
- Two-way voice
- Website widget (secure/encrypted)
- Social media channels (i.e., Facebook Messenger and WhatsApp)

Invisible App for desktop and mobile

This fully secure, white-labeled communication channel enables companies to directly interact with constituents without having to build, test, deploy and support apps.

Features and benefits:

- Requires no code, deploys in minutes, and supports on-the-fly changes.
- **Provides analytics** that drive new customer and business insights.
- **Delivers** a white-labeled branded Unum experience.
- Supports text, voice, video and images.
- Offers image and location capture.
- Includes optical character recognition (OCR).
- Delivers powerful security.
- Facilitates transfer to a live representative.

Integrations

Ushur integrates into virtually any back-end system of record — including CRM, ERP or ticketing — whether it's off-the-shelf or proprietary, new or legacy. Automations can dynamically read and write information to companies' critical systems.

Analytics

Ushur offers detailed, real-time stats on automation work activity, engagement rates and step-bystep responses — all time-stamped and logged. Users can easily create reports for recordkeeping, analysis and compliance filings. Easily export to Excel or Tableau.

ABOUT USHUR

Ushur offers an intelligent automation platform that automates work and conversations. We believe the experiences of customers, employees and partners are transformed when we remove friction and tedium from everyday tasks. Using artificial intelligence and bots, our visual, drag-and-drop tools automate front- and back-office work across virtually any channel: text, web, voice, social, email and machine-to-machine. Working with existing back-end systems, our end-user driven, intelligent automations augment your existing workforce, reduce process times from weeks to hours and elevate the customer experience.

Embrace the smart-enterprise movement, free your people to focus on higher-value tasks and make your work flow.



Make your work flow.

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