



The Future of Document Generation is Here

PDF Report - AI-Enabling Typesetting
Intelligent Documents



Table of Contents

01

Redefining Document Generation with Artificial Intelligence

Key Takeaways

05

02

How It Works: From Template to PDF

The Press Language and Typesetting Pipeline

06

03

Partnerships Accelerating the Future of Intelligent Document Generation

Building the Ecosystem for AI-Powered Communication

07



Pioneering the future of document generation through artificial intelligence and intelligent automation.

Papermill

At Papermill, we believe the way documents are created is fundamentally broken. Enterprises spend millions of hours each year manually assembling reports, proposals, and compliance documents from fragmented data sources. Our document generation platform eliminates this bottleneck entirely, transforming structured and unstructured data into pixel-perfect, brand-consistent documents in seconds. From financial reports to regulatory filings, Papermill's intelligent typesetting engine unlocks your designers potential, delivering output that rivals hand-crafted publications. Send your data to us, receive a publication in return.

Dr. David White, Chief Executive Officer

Executive Summary

Redefining Document Generation with Artificial Intelligence

Where AI meets precision typography, every document becomes extraordinary.

Papermill's approach to document generation is transforming how enterprises produce, manage, and distribute critical documents across many different industries. Our platform gives ultimate control to designers so the exact documents that they want to produce can be automatically created from different data sources. These designs are both semantically rich and visually flawless.

Traditional document workflows involve dozens of handoffs between content authors, designers, and compliance reviewers — a process that is slow, error-prone, and expensive. Papermill collapses this pipeline into a single intelligent step. By ingesting raw data, applying brand templates, and enforcing regulatory constraints in real time, our platform reduces document production timelines from weeks to minutes. Early adopters have reported a reduction in production time, a decrease in document errors and artifacts, and significant cost savings across their document operations. As enterprises face mounting pressure to deliver faster, more accurate, and more personalised communications, Papermill stands as the definitive solution for the AI era.

Key Takeaways

AI-Enabling
Typesetting

Compliance
Automation

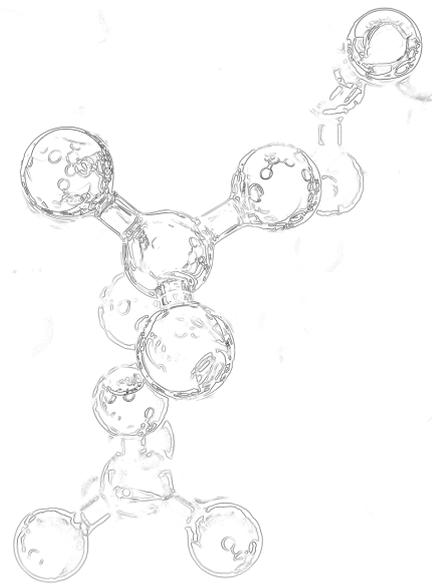
Enterprise
Scalability

Data-Driven
Personalisation

Seamless
Integration

Papermill's intelligent document generation platform combines cutting-edge AI research with enterprise-grade reliability to transform how organisations create, manage, and distribute documents. By automating the entire pipeline from data ingestion to pixel-perfect output, Papermill eliminates manual bottlenecks, ensures regulatory compliance, and delivers beautifully designed documents at any scale.

Intelligent document generation that combines AI precision with beautiful design at enterprise scale.



Key Takeaways

01

AI-enabling Typesetting

Papermill's proprietary layout engine gives precise control to designers, so they choose how a document looks when any content is provided. AI can also override layout properties, for fine tuning on a per-document basis.

02

Enterprise-Grade Scalability

Process thousands of documents simultaneously with consistent quality. Our distributed architecture handles peak loads seamlessly, from single reports to batch runs of millions of personalised documents across global operations.

03

Data-Driven Personalisation

Send your choice of data format, be it CSV, JSON, or XML, and let Papermill intelligently map content to templates, creating uniquely tailored documents for every recipient while maintaining brand integrity.

04

Customisation

Completely redefine how you create documents, including features such as automated contents page generation or referencing.

05

Seamless Integration

Deploy Papermill within existing workflows via our REST API. Get PDFs generated from your data and delivered back to your platform in real-time, instead of minutes or hours.



The Future of Documents

Documents are the interface between organisations and the world. Papermill will make every document beautiful and effortless.

How It Works: From Template to PDF

The Press Language and Typesetting Pipeline

01 Design Your Template

Templates are written in Press, a custom XML language built for print. Designers define layouts, styles, components, and assets in a template, while content and data are provided separately as a payload. One template generates unlimited document variations.

02 Intelligent Layout

Frames are the fundamental building block: they stack vertically or horizontally, support percentage, fixed, or fill-based sizing, and nest to create any layout. Named flows allow content to break across frames and pages automatically.

Press

Purpose-built for print: native page breaking, precise positioning, and content flowing across pages without manual intervention

HTML

Designed for screens: CSS page-break hints are unreliable, and Puppeteer rendering lacks fine-grained layout control

03 Components and Styling

Custom Press elements are defined once and reused throughout a document, accepting attributes and slots for content injection. Styling uses three layers: inline attributes, named aliases, and global tag rules. Conditional rendering adapts the template based on the data provided.

04 Send Data, Receive a PDF

Send a payload containing your data as JSON, CSV, or XML along with content flows. Press merges it with the stored template, resolves expressions, iterates over repeating content, and returns a pixel-perfect PDF directly in the response.

Partnerships Accelerating the Future of Intelligent Document Generation

Building the Ecosystem for AI-Powered Communication

- **Research At Papermill**

Papermill actively researches how AI can be applied to and benefit document generation. Our research has led to innovations in areas as diverse as branding inference and intelligent image overlays, reducing the need for manual intervention.

- **Development Partners**

Papermill works closely with a set of development partners to identify solutions to new challenges that arise as AI advances and their businesses grow.

- **Press language**

Papermill created the Press language to specifically serve the needs of print. Press enables complete control over the design and rendering of documents, enabling customisation over styling, components, conditional rendering, and adaptive sizing.



The best documents are generated intelligently, at scale, with precision.

Transform Your Document Workflows with Papermill

The era of manual document creation is ending. Organisations that embrace automatic and intelligent document generation today will gain a decisive advantage in speed, accuracy, and customer experience. Papermill's platform is ready to deploy — whether you need to automate a single report type or transform your entire document ecosystem.

Schedule a demo with our solutions team to see how Papermill can eliminate your document bottlenecks, reduce compliance risk, and free your teams to focus on what matters most. Our enterprise architects will work with you to design a deployment roadmap tailored to your specific industry requirements, data infrastructure, and brand standards. Join the hundreds of forward-thinking organisations already generating smarter documents with Papermill.



Every document read is a conversation. Papermill ensures it's a pleasant one.

Get in Touch

Guiding you toward sustainable success

- 📍 Renold Building, 81 Sackville St, Manchester
- 🌐 papermill.io
- ✉️ hello@papermill.io
- ☎️ +44 161 820 2100

