# brillio

# Achieving 95+% Accuracy with AI-Driven Document Processing for a Top Wealth Management Firm

With a history of over 94 years and serving clients in 48 countries, this organization stands as one of the leading U.S.-based wealth management firms.

Despite its global scale and technological sophistication, cheque processing remained largely manual – reliant on rigid, template-based systems that couldn't handle the variability of real-world documents.

Throughout the engagement, Brillio acted as a strategic partner, contributing to the client's long-term AI vision.

The volume and diversity of incoming cheques – ranging from printed to handwritten, multi-page documents embedded in unstructured PDFs – led to mounting inefficiencies. Data extraction was inconsistent, processing times were prolonged, and operational costs kept climbing.

# From Manual Bottlenecks to Intelligent Automation

To address this, the firm made a strategic decision to pursue intelligent automation, not just to modernize a process, but to align it with broader digital transformation goals.
With deep AI expertise and a proven track record in intelligent document processing within highly regulated industries, Brillio emerged as the ideal partner to lead the transformation effort.

Early in the engagement, a series of live demonstrations were conducted using actual client data, during which Brillio's AI capabilities achieved up to 95% accuracy in extracting complex cheque fields. These outcomes provided immediate validation and helped accelerate stakeholder alignment across business and technical teams.

# Scaling AI with a Tailored, Four-Pillar Framework

To tackle the unique challenges of cheque processing at scale, Brillio designed a tailored solution architecture featuring four integrated AI components, each mapped to a specific stage of the workflow.

Pre-processing techniques such as image normalization, scaling, and sharpening were used to optimize document quality.

A custom vision model was developed to extract cheque images - both front and back -from multi-page PDFs.

GPT-4 was then used to interpret and extract printed and handwritten details, including names, dollar values, and annotations.

In parallel, computer vision models identified and extracted specialized elements like MICR codes, which had proven difficult for traditional OCR-based systems.

The solution extended beyond basic automation, introducing contextual intelligence that enabled accurate interpretation of each cheque – regardless of format, structure, or input quality.

# Enterprise-Grade Governance

Before going live, a rigorous validation process was ensured, evaluating model accuracy, architecture integrity, and compliance with internal security protocols.

The final solution was deployed in the client's private environment, with all endpoints secured to meet both internal governance policies and external regulatory standards.

By leveraging private infrastructure, the deployment ensured granular data access control and end-to-end operational transparency - critical factors in the firm's high-compliance environment.

# Tangible Results from Day One

Upon activation, the solution delivered measurable impact across key performance dimensions. Monthly throughput increased to 170,000 cheques, and the average time required for processing each cheque was reduced to six minutes.

Accuracy improved across all categories, with 100% front-side detection, 95% back-side extraction, 98% field-level recognition, and over 91% accuracy for other complex fields.

Beyond operational efficiency, the organization experienced a shift in workforce productivity, with staff previously allocated to manual review now reallocated to higher-value functions. Data integrity and auditability were significantly improved, enabling smoother downstream processing and regulatory reporting.

## 76% faster
average time per document

## ~950 hours saved
on total monthly processing time

## 75% reduction
in FTE efforts and per-check processing time

## ABOUT BRILLIO

**Brillio is a digital technology services company that drives AI-first engineering and design-led experiences for global enterprises.** Born digital in 2014, its consulting-led services span Customer Experience, Data & AI, Product Engineering, and Digital Infrastructure. With an industry-leading NPS of 71, Brillio accelerates time to market through its proprietary BrillioOne.ai platform, powered by AI-ready talent with deep domain expertise.

Brillio is the official Digital Transformation Partner and the official Data and AI Services Provider of Atlassian Williams Racing. Brillio partners with leading technology providers including Microsoft, AWS, Google Cloud, Salesforce, Adobe, Databricks, and Snowflake and operates with 6,000+ "Brillians" across 15 global delivery centers. Consistently recognized as a Great Place to Work® since 2021, Brillio blends innovation, talent, and purpose to deliver measurable outcomes for clients and fulfilling careers for employees.

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