# Leveraging Al in Asset Servicing Operations

#### Background:

In recent decades, leading financial institutions have poured considerable resources into transforming their asset servicing operations. Their focus has spanned everything from technological modernization and bolstering straight-through processing (STP) rates to tightening risk and control frameworks.

While legacy systems have managed to drive down transaction costs, the indispensable need for expert, knowledge-driven operations teams remain—and is now becoming more pronounced than ever. The surge in transaction volumes has only amplified the demand for seasoned professionals and heightened operational risk.

Enter artificial intelligence: over the past few years, AI has ushered in a transformative shift in the outlook for Corporate Actions operations. Purpose-built models now open new horizons, offering fresh opportunities to reimagine efficiency. A spectrum of innovative use cases leveraging AI is emerging, each with the potential to reshape the landscape of asset servicing.





#### Types of use cases leveraging AI

## 1. Transforming Data Extraction and Free-Text Intelligence

In the high-speed world of capital markets, Al-driven data extraction is transforming Corporate Actions. With advanced LLMs, teams can instantly decode complex documents, surfacing crucial insights—tax rules, regulatory nuances, client needs—faster than ever. The result? Less manual grind, smarter risk mitigation, and more time for strategic moves. When every decision counts, Al-powered intelligence turns operations into a true competitive edge.

### 2. Predictive Insights Driven by Operational Users.

Predictive analytics is now essential for organizations.

Advanced machine learning models, trained on production data, recommend likely actions for each transaction, helping teams make informed decisions quickly. By using diverse features and context, these models generate

accurate predictions that help leaders allocate resources, reduce risk, and resolve issues faster. For executives, this means greater agility, better decision-making, and improved performance in a fast-paced market.

#### 3. Detection of Anomalies

Not every anomaly is actually a mistake, but it's important for the team to spot them early and handle them before they turn into bigger issues. If something's off in announcement data, payment info, or even just in how something was entered manually, it can cause a lot of headaches later—like having to redo work or risking money and reputation. Using AI to pick up on these unusual patterns can give your team a heads-up so you can deal with them before they cause trouble.

#### 4. Configuration optimization

These days, most product solutions have a powerful configuration engine to meet different business needs and handle tricky process flows. Al tools that use real

production data and configs can suggest ways to fine-tune things on a regular basis—so you're always running at your best. Taking it up a notch, some AI tools can even tweak and fix configurations on their own, learning and optimizing as they go.

#### 5. Knowledge Management

Instead of relying on old-school manuals or long-winded procedures, Al can help by giving operations teams quick, clear answers to any question about the app or business process. With smart tools that tap into all those docs in the background, users can just ask and get the info they need, right when they need it.

#### 6. Automated Correction of Business Transactions

Users often update fields like payout rate or option type after seeing details in announcement data. Usually, this happens because the system that sends the info has its quirks, so people step in to fix things manually. With smart auto repair using AI, the

system can catch these situations and make the right changes automatically, saving time and keeping stuff running smoothly.

## Identification of AI tool and Data dependencies

There are lots of different AI tools and algorithms out there that can tackle specific challenges, but it really comes down to picking the right one for your organization. You want something that can handle all the behind-thescenes data work, make sense of it, crunch the numbers, and suggest the best approach for whatever business problem you're facing. While normal ML algorithms can be used for typical clustering or classification problems, the interpretation of free text has become very convenient with the usage of LLM/SLM's. Companies are investing in the development of AI agents designed to operate independently in the background and address specific problems.

Further to running the ML models, the data residing in asset servicing applications need to be cleaned/denormalized and provided as an input to the Al tool. 'Training data' sets play a key role in defining the prediction accuracy of a model. While synthetic data can be created and used for training, there is always a preference to train the models on production data.

Bringing together a smart AI tool that can handle data, host different AI agents with all sorts of techniques—like ML algorithms and LLMs—and connect seamlessly with your asset servicing application makes adopting AI in operations much simpler and more effective.

#### **User Experience of AI Output**

User experience plays a significant role in the development of any application

feature in the context of operations users being exposed to multiple kinds of apps in their daily life. Any AI output needs to be plugged into the core application in such a way that the user experience is not inhibited in any way. Suggestions should be displayed alongside any business exceptions on the relevant page reviewed by the user. Likewise, AI-related workflows should be integrated into the core application processes. Also, in AI use cases, which use the context of the page from where the request is invoked, it is important that the output is delivered to the same page within the business process flow.

#### Trust in AI Output and feedback loop

ML algorithms rely on historical data for training and testing purposes and provide a confidence score associated with the output. While a high degree of confidence denotes higher accuracy of the output, there are outliers which sometime make the results incorrect. Thus, it is important that the financial services institutions identify the importance of the business transaction and enable review controls on the AI output. Low-importance transactions may be updated via straight-through processing (STP) using Al-generated outputs. For other transaction types, initial user acceptance is required. Additionally, it is essential that feedback on the acceptance or rejection of Al suggestions be provided to the AI system for ongoing retraining and algorithm optimization.

# Outlook of Asset Servicing systems leveraging AI.

Financial institutions increasingly use AI to optimize operations, allowing teams to focus on key tasks instead of routine work and ensuring resources go where they matter most.

Use cases around providing suggestions in the operations workflow (based

on historical actions taken) as well as allowing the user to query for answers (Q&A) will become a mandatory feature in all transaction processing applications. Concepts around self-optimization/self-healing are gaining traction and could disrupt the way in which business flows are configured.

As Al becomes an integral part of asset servicing, the evolution of standard operational procedures is not just inevitable, it's essential.



Pradeep S
Product Manager,
TCS Financial Solutions (TCS BaNCS)

