

LLM Empowered Dispute management in Credit Reports

2025

Subrotho Kumar - Advisor Machine Learning

Rahul Mathur – Director Data Science



Hi, I'm **Subrotho Kumar** — I work at the intersection of AI and real-world problems, mostly in the financial space.

Over the past 15 years, I've built AI systems that help organisations handle fraud, automate dispute management, and make sense of messy data using LLMs and machine learning.

When I'm not experimenting with new AI models, you'll probably find me outdoors with a camera — I'm a wildlife photographer always chasing light and moments (and sometimes birds!).

I'm here because I enjoy turning complex ideas into useful solutions — and I love learning from others who do the same.

Agenda

We deliver credit monitoring services to millions through our platform and API integrations, supporting a wide range of financial institutions and aggregators. While we've seen strong growth in recent years, it's brought operational challenges—especially a rise in consumer disputes.

UK regulations require that individuals can easily challenge inaccuracies in their credit reports. A recent regulatory review reinforced this need, and we are focused on improving our credit report dispute process to ensure it remains clear, accessible, and responsive as we continue to grow.

We will dive into:

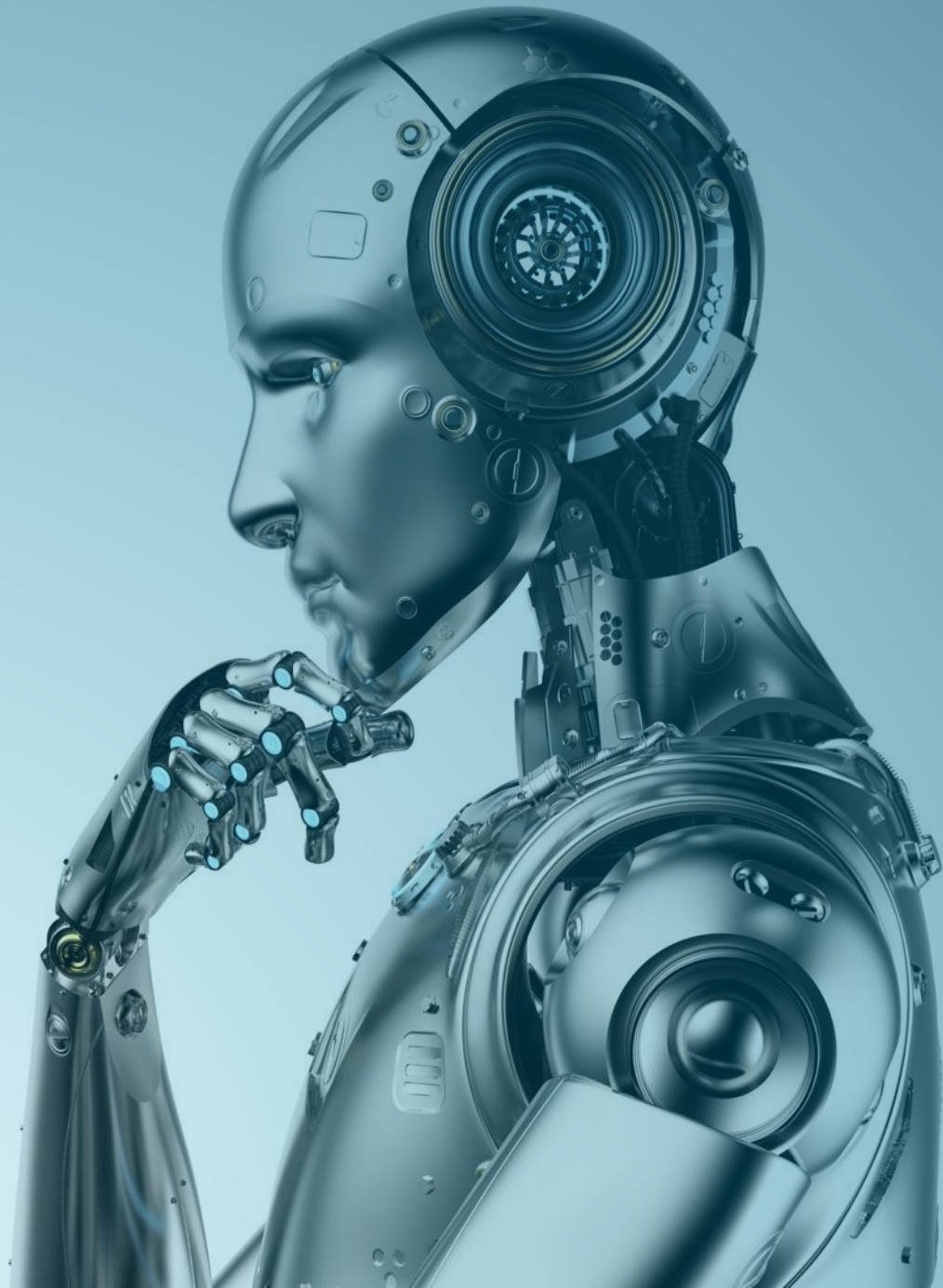
- Approach to AI at TU
- Background & motivation
- Solution overview



Approach to AI

Building solutions that helps consumers





AI is the new electricity

Around 1 in 6 UK organisations have embraced at least one AI technology

AI/ML means **different things to different people**, but our customers raise common themes

Classical ML



Performance

Models that beat those built
by traditional methods

Weak AI



Automation

Models that reduce dependence
on specialized expertise

Strong AI



Accountability

Models that generate decisions
humans can understand

**TransUnion Data
Science & Analytics
(DS&A) team takes a
highly pragmatic
approach to AI/ML,
committing
substantial resources
to rigorously evaluate
and assimilate
emerging methods**

To be adopted by TU, new AI/ML methods and technologies must satisfy several criteria



Solve a business problem for our customers



Provide lift over existing methods



Support regulatory requirements and industry standards



Cover the cost of complexity



Background and motivation

Reasons for building a GenAI solution



Key Opportunities and Focus Areas

CIUK is experiencing strong business growth, presenting exciting opportunities to expand our impact and reach. As we grow, we recognize the importance of aligning our capacity and service levels to address increasing demand whilst maintaining high standards.



Supporting Sustainable Growth

Rapid growth is a sign of success, and we are focused on scaling our operations to match this momentum. By investing in capacity and service improvements, we can continue to grow while maintaining quality and reliability.



Streamlining Onboarding

We aim to simplify and strengthen the onboarding experience for new lenders. Reducing downstream disputes and improving system efficiency will make it easier to welcome new partners and expand our network.



Strengthening Relationships

We value our relationships with existing lenders and are working to reduce the cost and complexity of dispute management. By enhancing our systems and processes, we can foster stronger, more collaborative partnerships.

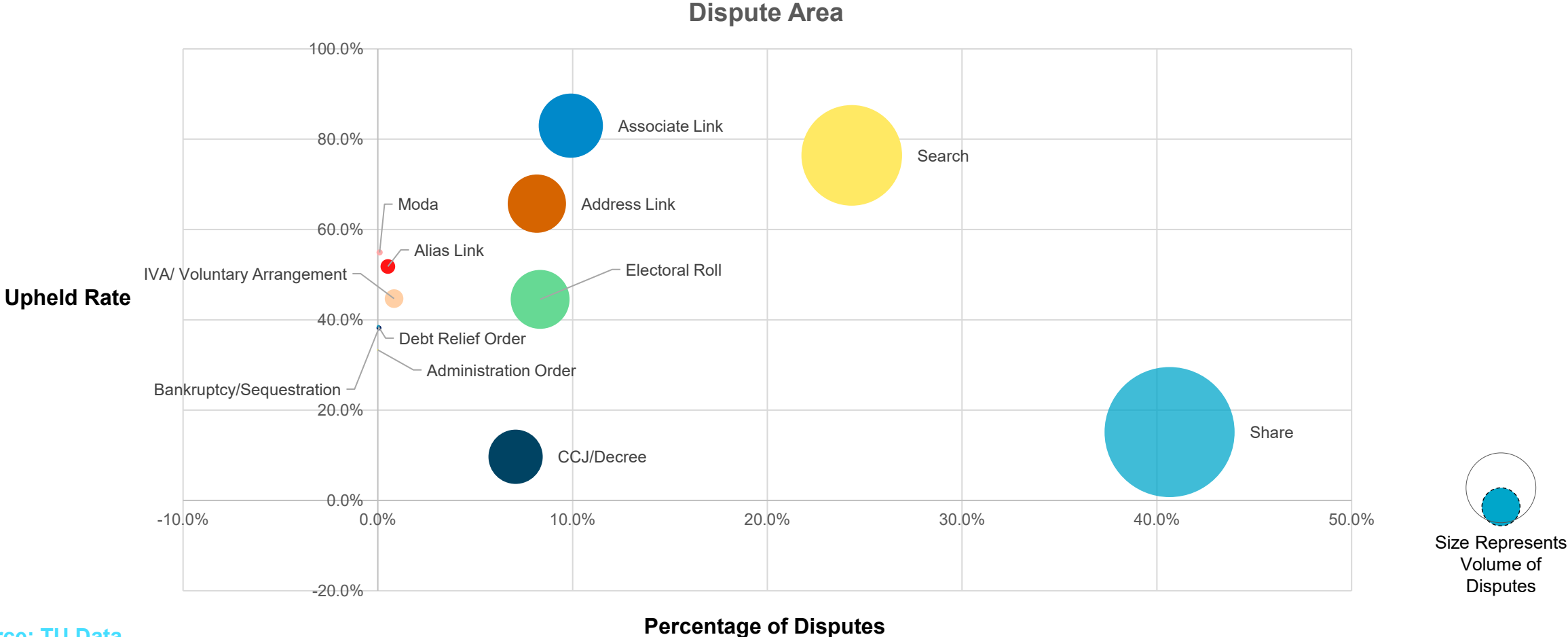


Reputation Enhancement

By improving our dispute processes and service delivery, we can enhance our reputation among consumers and lenders. A more seamless experience builds confidence and reinforces our commitment to excellence.



A significant number of disputes were raised in 2024-25, with 43% of them being successfully upheld.



Source: TU Data

Objectives

01

Volumes Reduction (Disputes Minimization)

- Reducing 'erroneous' disputes i.e. those disputes that are automatically rejected or would never be upheld
- Identifying and reduce the occurrences of fraudulent disputes
- Consumer Support teams backlog reduction

02

Cost Avoidance

- Support cost avoidance
- Better staff attrition and enhanced turnaround times

03

Enhanced Consumer Experience

- Improve the Consumer Experience and CSAT scores



Solution Overview

Deep dive into the RAG based chatbot for credit report disputes



Consumer Experience AI

Disputes Minimisation



Consumer facing GenAI conversational bot understands user intent and provides requisite information to help resolve consumer queries. Thus, negates the need to raise disputes

Benefits

- Improved Consumer Experience
- Reduced Dispute volumes

Proactive Disputes Mitigation



Predictive Models highlight potential areas of disputes via assessing consumer credit patterns and provide mitigative steps.

Benefits

- Intelligent & Automated Bureau capabilities
- Enhanced Consumer satisfaction

Data Sources Used

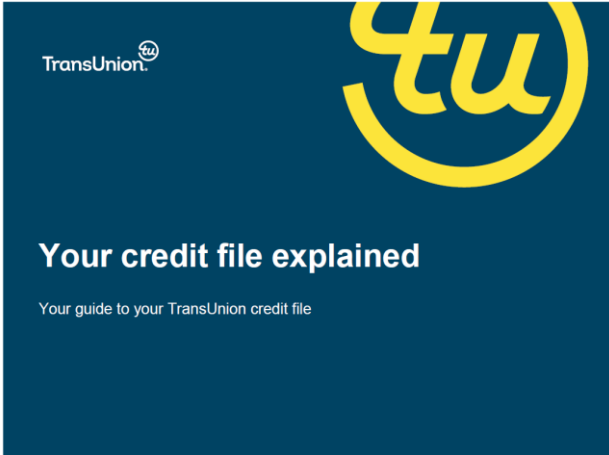
Key to the solution

Intent Identification

Dispute Data

Search ID	Creation Date	LastChange Date	Account Number	Dispute Item	DisputeItem Text	ExtraInfoFromCustomer
xxxxxxx	15/01/2025	16/01/2025	12345	SHARE	The regular payment amount on this account is incorrect	This was a loan with Halifax who accepted a payment plan facilitated by Step Change in Summer 2024. No payments have been missed under this plan. The debt move to PRA around Nov/Dec.
yyyyyyy	19/11/2024	24/11/2024	23456	Associate Link	This financial connection is no longer valid	John Fleming, last known address: One Park Lane Leeds LS3 1EP. I am no longer financially connected with this person as our joint account has closed. Please financially disassociate me.
zzzzzzz	30/11/2024	02/12/2024	56789	SHARE	The account history is incorrect	I made a payment on the 2 nd of November

Knowledge Repository

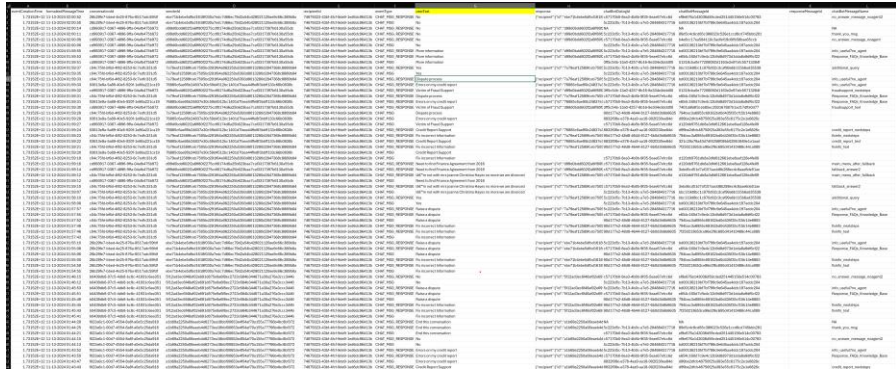


Your credit file explained
Your guide to your TransUnion credit file

FAQ's -
<https://www.transunion.co.uk/consumer/credit-report-help>

Dispute FAQ's -
<https://www.transunionstatreport.co.uk/DisputesFAQs>

VA Chat Logs

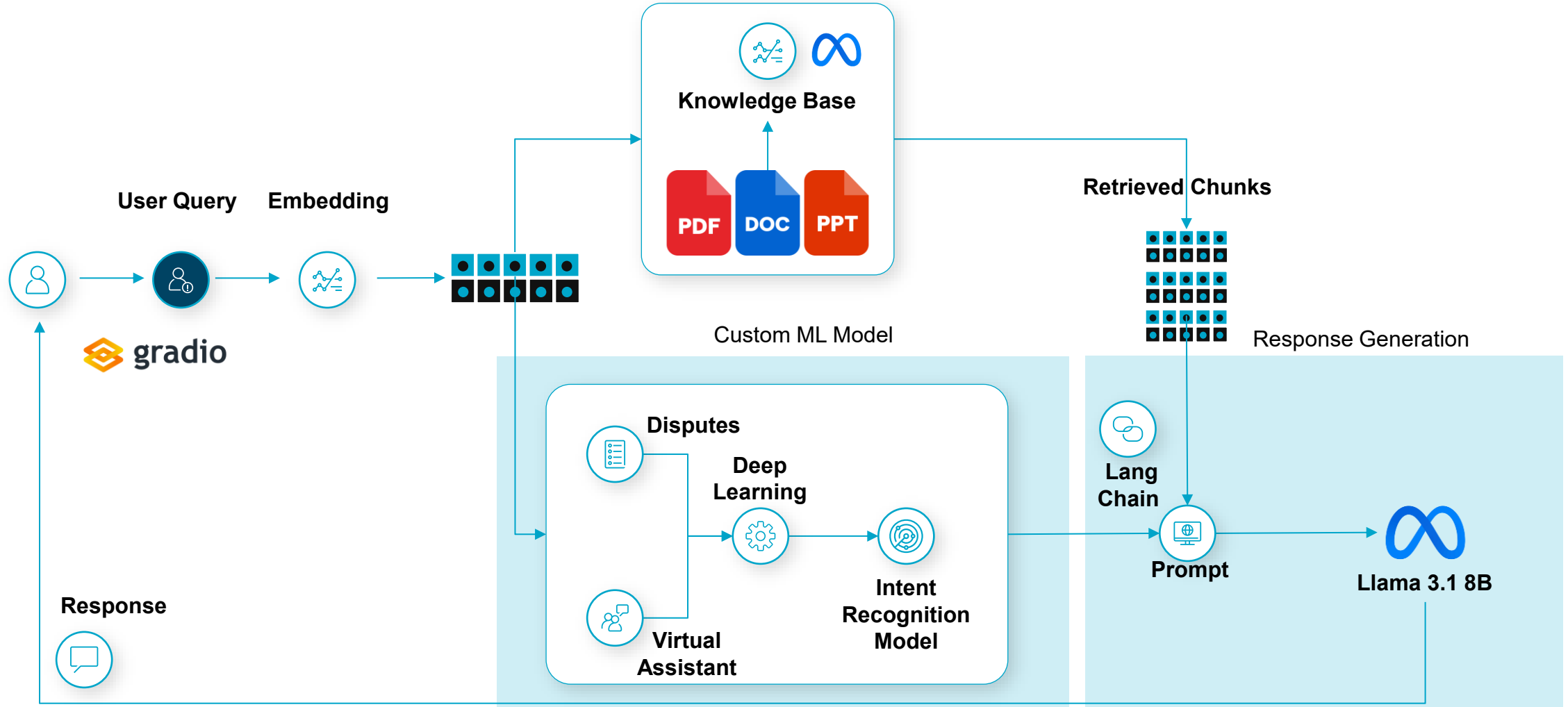


Workflows

Event	Event	Decision	Yes	No
The account has been closed (Display date box)	Please tell us the date you closed your account	Decision: Supplied close date or last account update date?	Yes	No
Doesn't recognize this account	Your credit reports are provided by TransUnion. We recommend that you check TransUnion's quick FAQs guide as a first step in getting help with your credit report. Please be aware that it can take between 4-6 weeks for account changes to appear on your reports. If there is incorrect information on your report, in some cases it may be quicker for you to contact the original bank or lender directly as TransUnion can take up to 28 days to respond as they need to speak to the account provider on your behalf to check whether the information is accurate or not. Do you wish to continue with this dispute? (Only Yes)	Decision: Debt collection account?	Yes	No

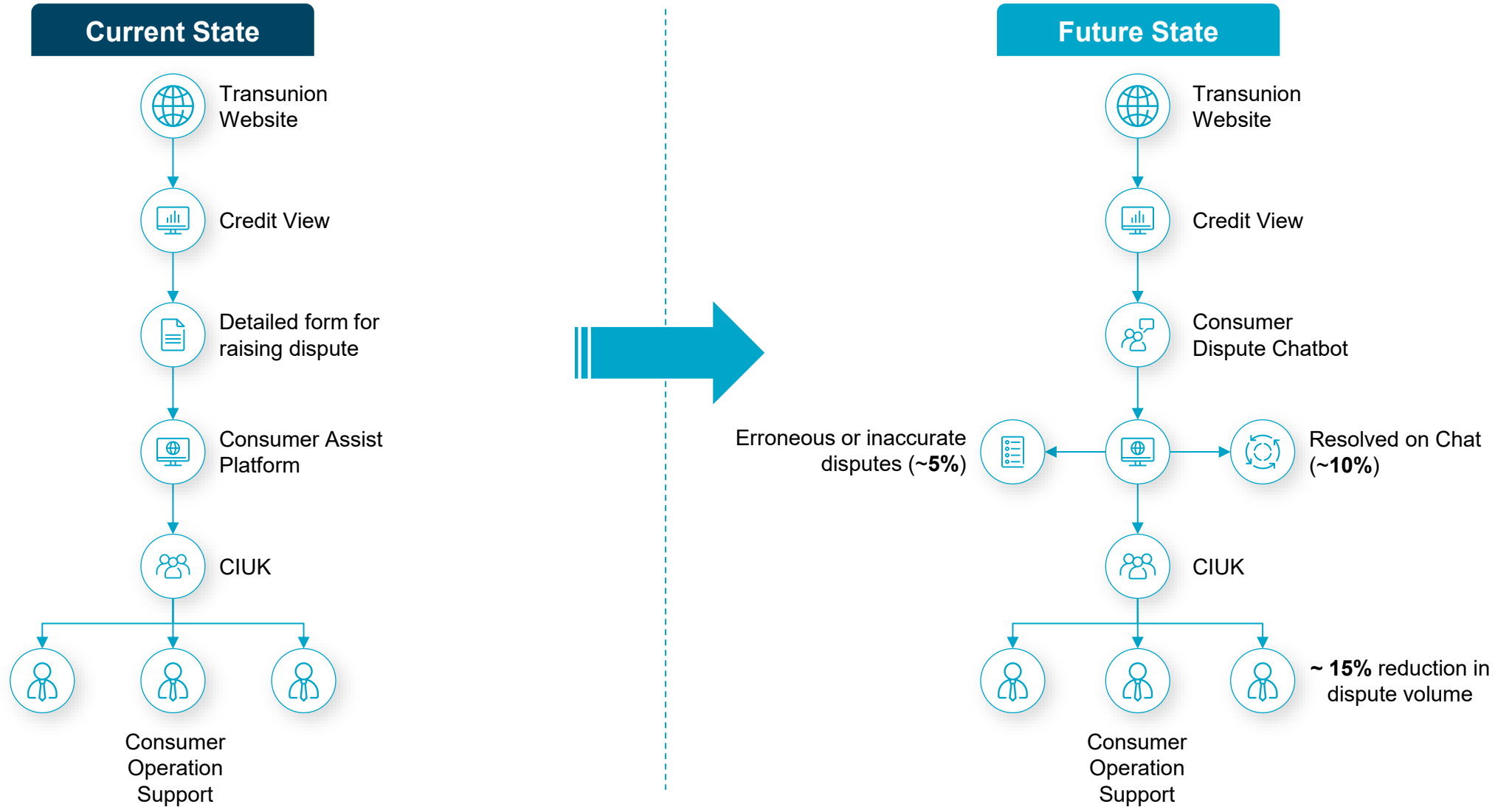


High Level Architecture



What will change

Benefits





Thank You

Subrotho Kumar