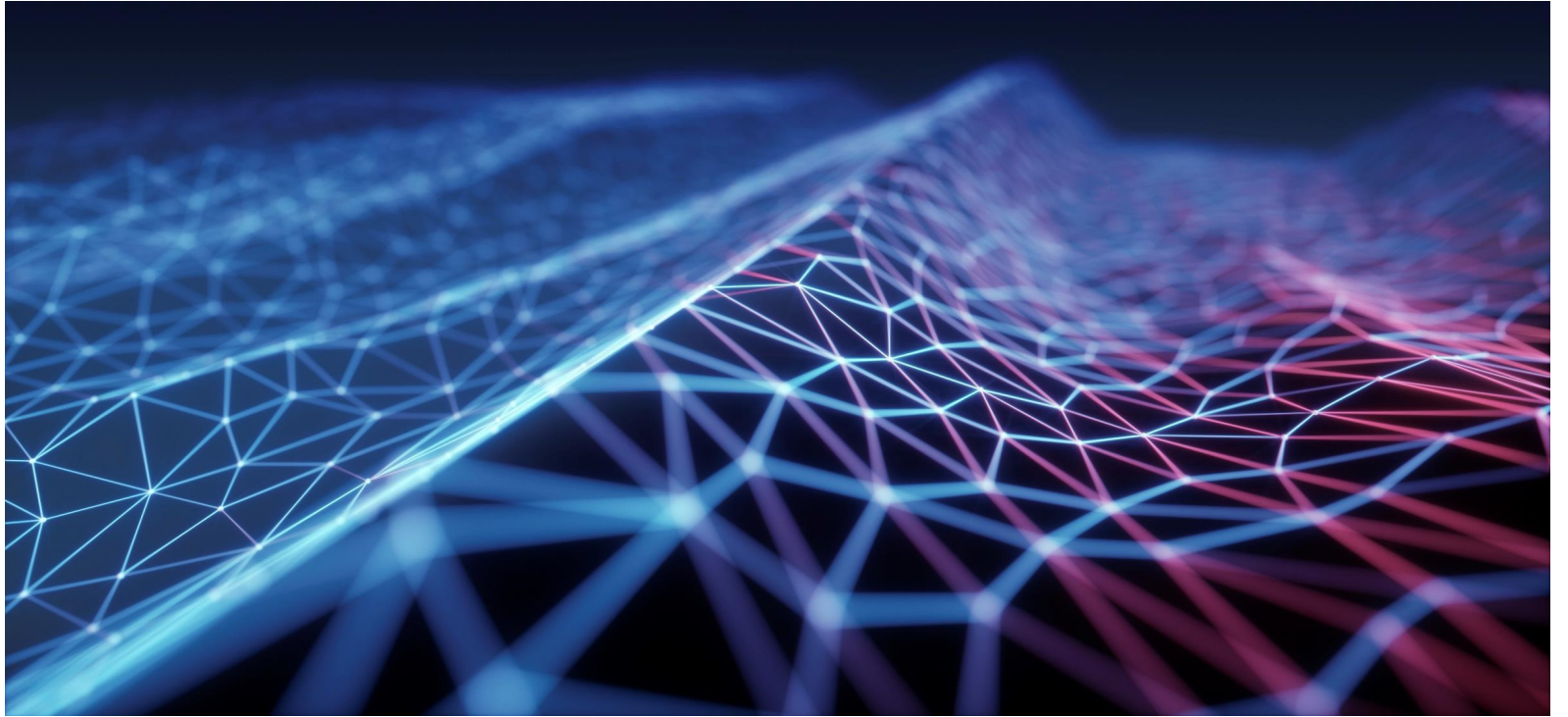


The Accure logo is displayed in white on a blue background. It features the word "ACCURE" in a bold, sans-serif font, with a stylized wave-like symbol above the "U".

ACCURE



MOMENTUM

ACCELERATING AUTOMATION WITH AI

Sam Ansari
President & CEO
sansari@accure.ai



We provide products and services to prototype, build, deploy and scale enterprise AI.

OBJECTIVES



Explore how a 1000-branch bank utilizes computer vision to automate key banking processes.

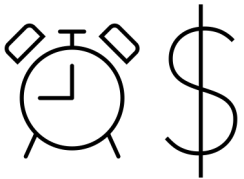


How CV helps the bank meet regularity compliance requirements



How the bank saves more than 50% by deploying CV based process automation

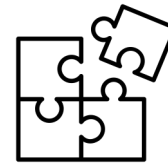
CHALLENGES IN BANKING AUTOMATION



Enterprise process automation is **time consuming** and **expensive**.



Automation usually requires **different tools** from **multiple vendors**.



Interoperability challenges of tools presents yet another level of complexity.



End-to-end automation is difficult as it requires a wide variety of disciplines.

THE SOLUTION: DEMOCRATIZED AI DEVELOPMENT

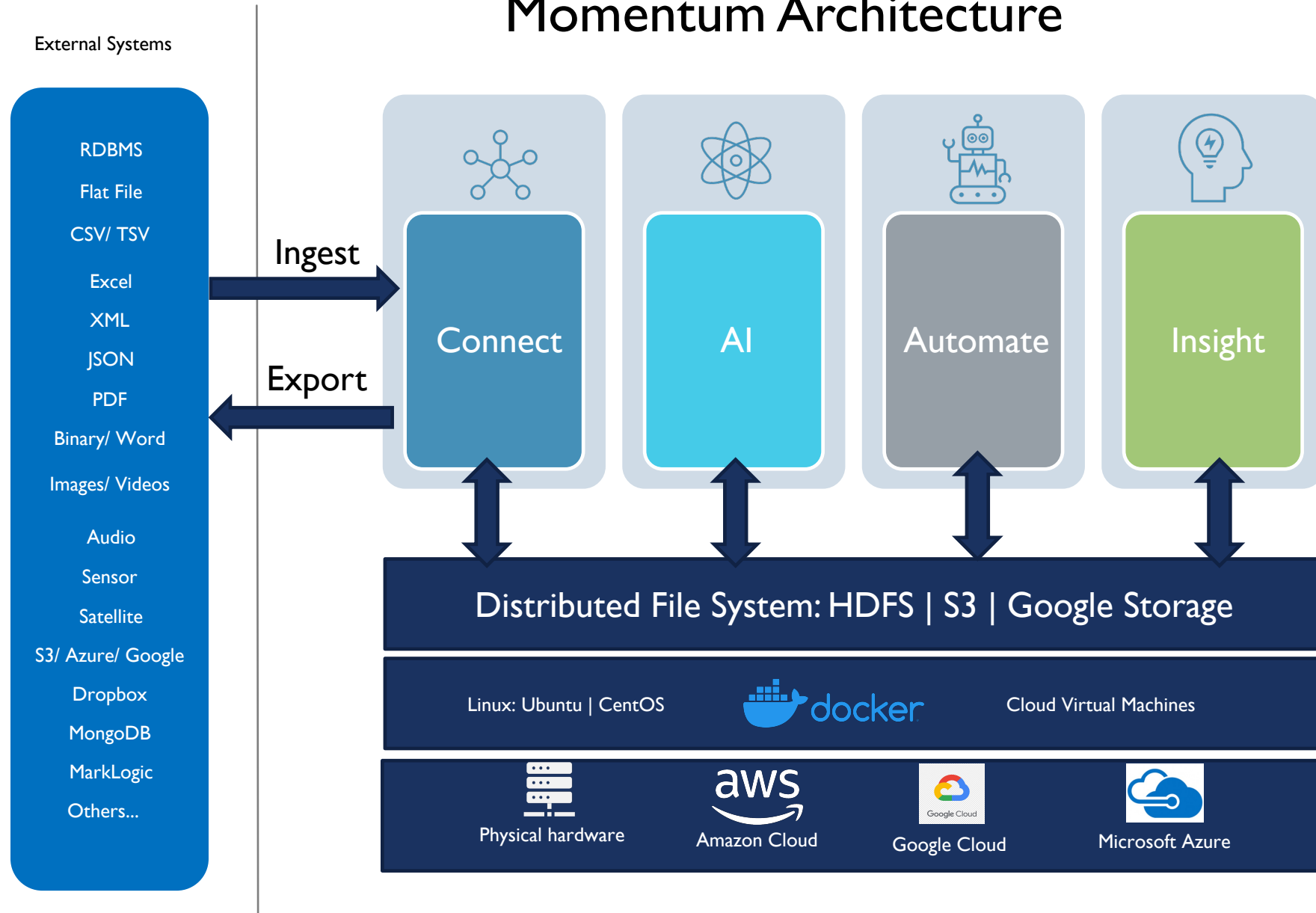
We utilize **Momentum AI Platform** to enable end-to-end banking automation without any third-party dependency

1. A single platform with no coding, and a UI driven approach, builds complex automation tasks rapidly.
2. No third-party dependencies saves on license costs and avoids integration complexity.
3. No specialized skills are needed to work with the platform.
4. An enterprise scale data science platform to train machine learning, computer vision, AI and NLP models that enables intelligent automation.

AI Software Platform MOMENTUM

Momentum is a suite of software platforms that enables data engineers, scientists and analysts to efficiently solve machine learning problems and automate business processes.

Momentum Architecture



WHAT DOES MOMENTUM HELP YOU DO?



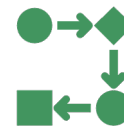
Ingest

From all RDBMS, NoSQL, delimited, text, pdf, image, video, audio, sensor, satellite, Restful, medical image, S3, Google Cloud, Dropbox, and more.



Transform

Highly scalable, simple, UI based engine to transform, merge, join, blend and filter all your data from multiple sources at scale and speed.



Data Pipeline

Automate data ingestion, transformation, processing and exchange by building customized pipeline to work with data in realtime, scheduled or batch mode.



ML & AI

With no-coding AI platform, perform automated feature engineering, train AI models and deploy them production.



Computer Vision

Train and deploy image and video-based classification, object detection, and facial recognition models. Use pretrained and customize OCR/ICR models.



NLP

Use or train models for language modeling, text summarization, POS, NER, sentiment analysis, document similarity and more.



Automation

Create digital workforce by automating repetitive tasks. Utilize AI models to build complex business process automation using UI driven approach.

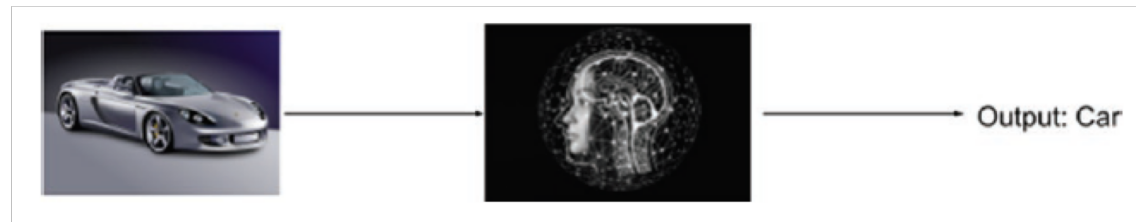


Visualization

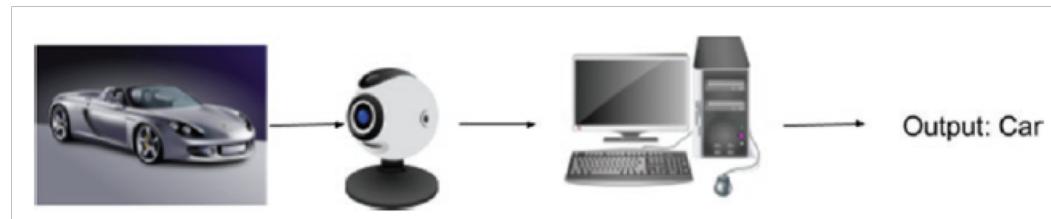
Visualize AI outcomes, monitor and track KPIs using intuitive web-based dashboard with graphs and charts. Perform validation and verification with customizable workflow.

COMPUTER VISION

Make computer recognize images and information contained in it



Human Vision



Computer Vision

APPLICATIONS OF MACHINE LEARNING WITH CV IN BANKING

Image Classification

- Classify scanned documents, e.g.
 - Checks
 - Deposit slips
 - Withdrawal slips
 - Demand draft
 - Purchase orders

Object Detection

- Document segmentation
 - Sections of useful information
- Localization and extraction
 - Location of fields and associated values
 - Text extraction
 - Handwriting recognition
 - Signature matching

BANKING AUTOMATION WITH COMPUTER VISION

Processes

Concurrent	Inward	Outward	KYC	Ledger validation and reconciliation
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Data Volume: 650,000 documents per day

Document Types: Checks, deposit slips, withdrawal slips, demand drafts, purchase orders, term deposit, and more

CV MODELS

Doc Classifier

Doc Segmentor

Printed Text OCR

Handwriting ICR

Crossing Detector

Signature Matching

Watermark Detector

Void Detector

Seal Detector

Backside Sign Detector

INTEGRATIONS

Scanned documents
and Reserve Bank APIs



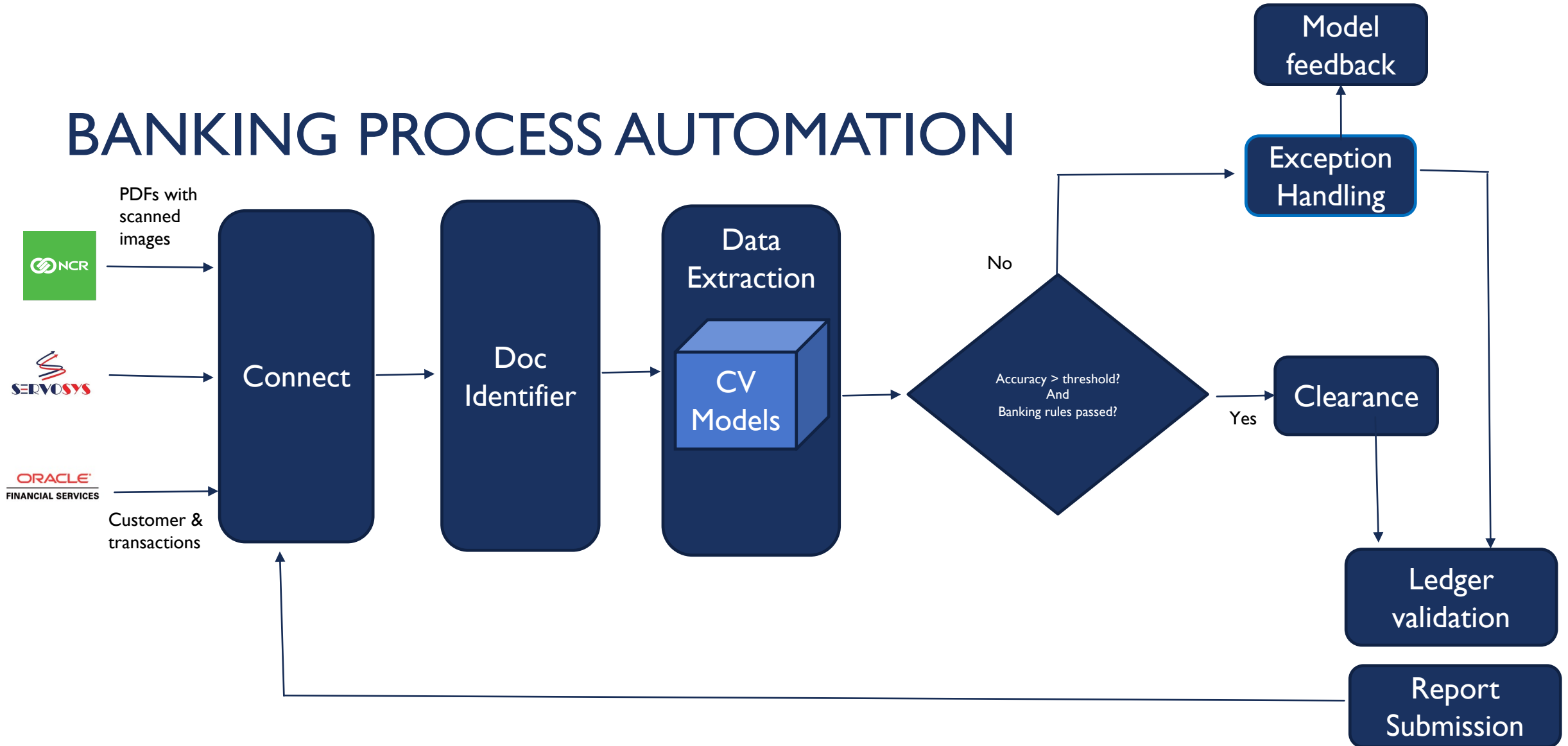
Core Banking System



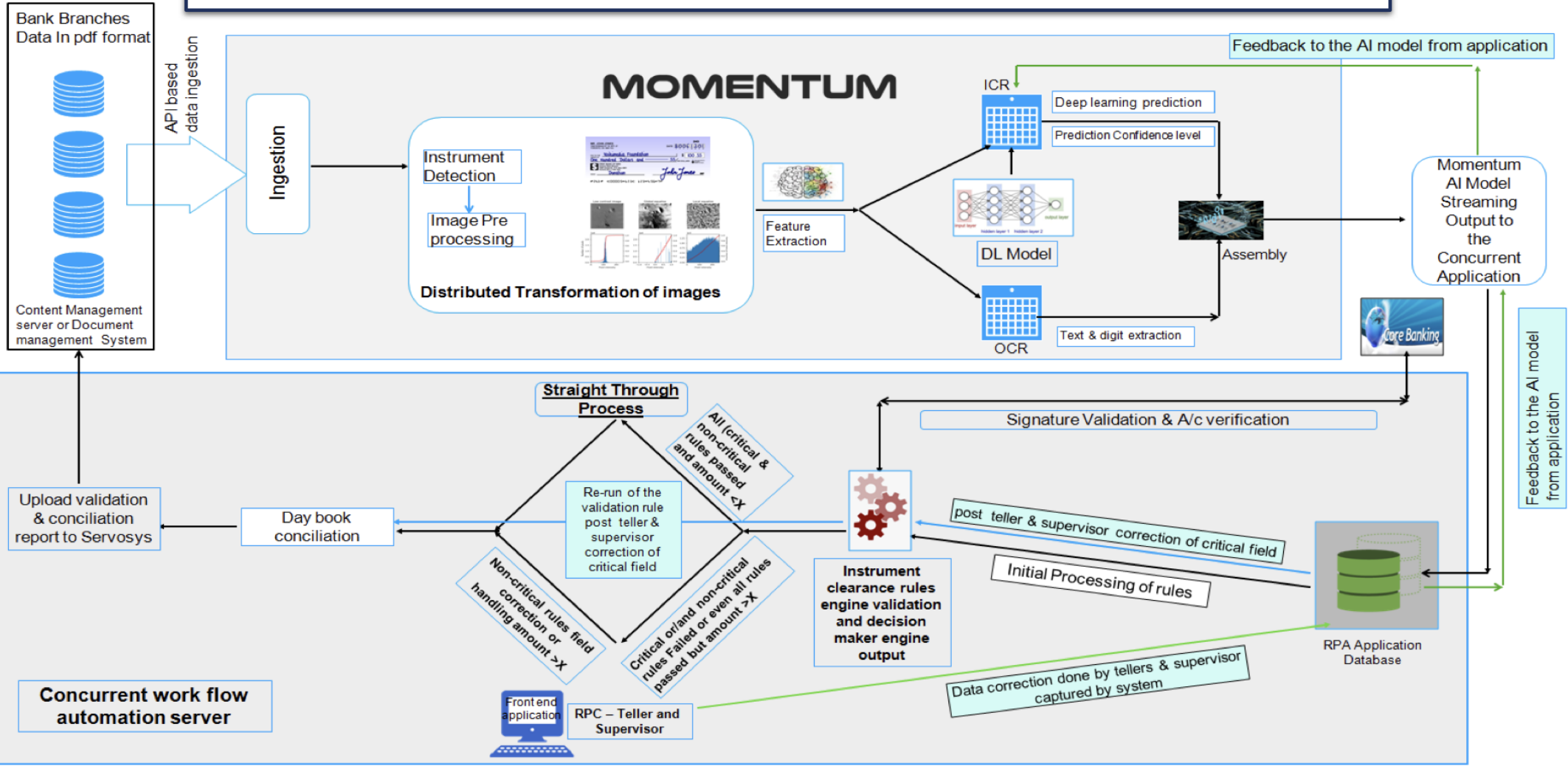
Active Directory



BANKING PROCESS AUTOMATION



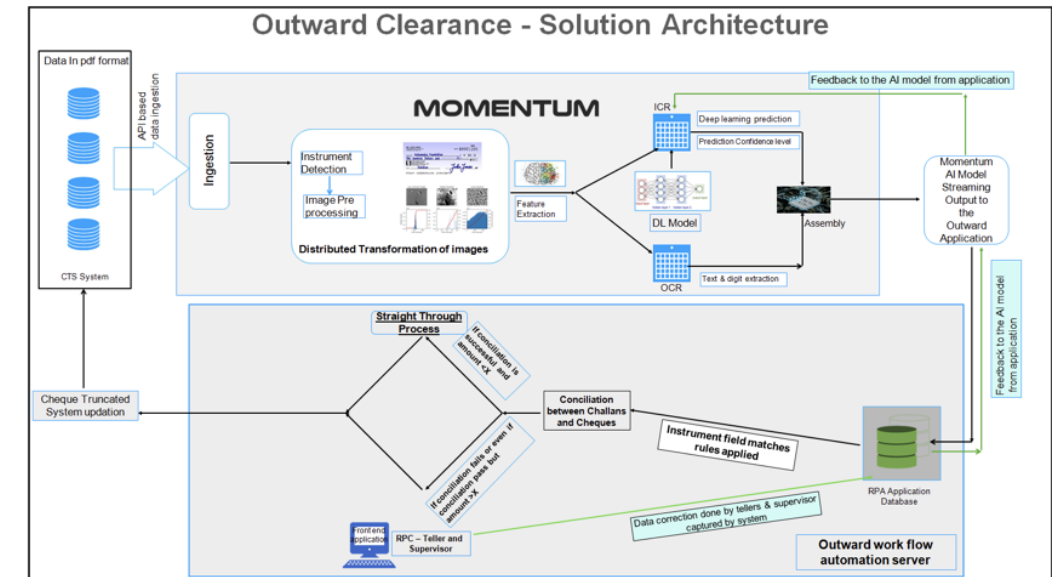
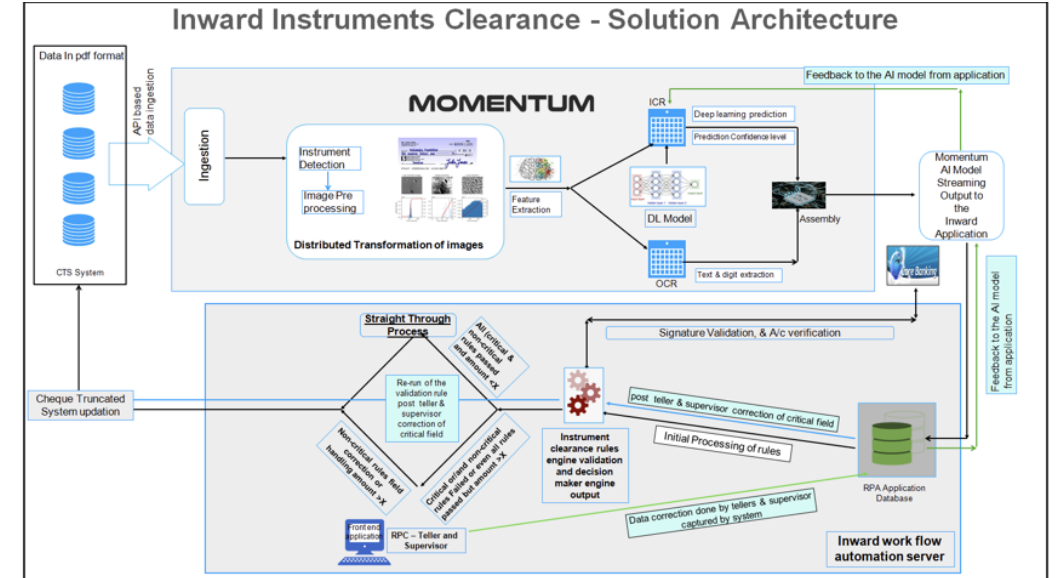
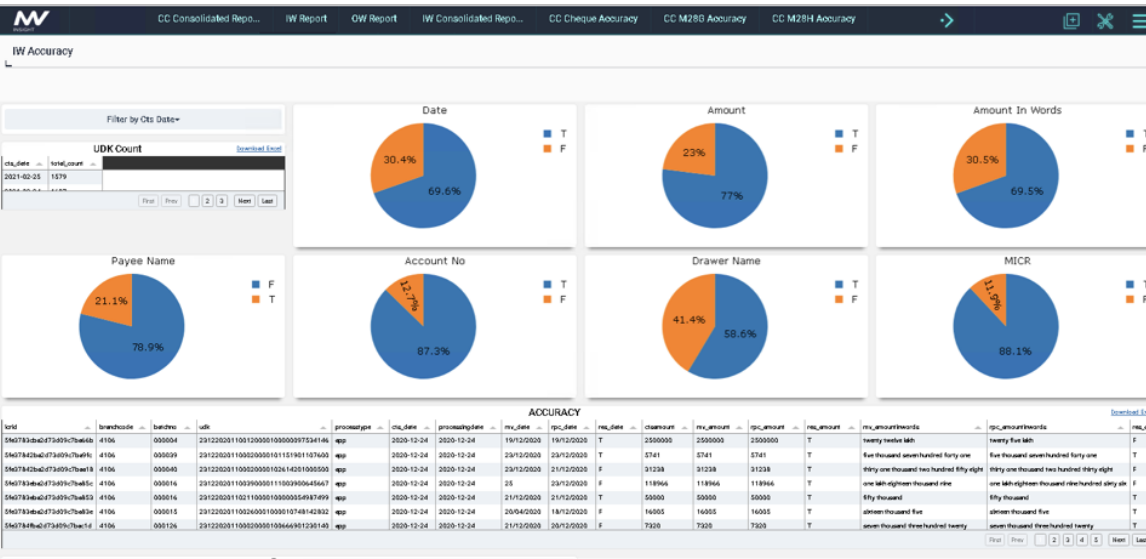
CONCURRENT PROCESS ARCHITECTURE



SAMPLE FIELD ACCURACY



IW Consolidated Report		UDK Details	
processingdate	uik_code	uik_name	uik_desc
2021-01-19	4204135000000000	001575	2972
2021-01-19	4204135000000000	001592	7072
2021-01-19	4116270000000000	000512	59977
2021-01-19	4401350000000000	002405	21240
2021-01-19	4204135000000000	001592	21099
2021-01-19	4204135000000000	000135	5563
2021-01-19	4101350000000000	001331	19087
2021-01-19	4204290000000000	004124	2525
2021-01-19	4101350000000000	000309	14387



LEDGER VALIDATION, KPIS, AND REPORTS

Momentum Insight

Inward

- UDK Inventory
- UDK Audit
- V&V Audit
- Extraction Accuracy

Outward

- UDK Inventory
- UDK Audit
- V&V Audit
- Extraction Accuracy

Concurrent

- Doc Inventory
- Transaction Reconciliation
- Extraction Accuracy

BENEFITS TO BANK

Before Automation

Decentralized	Manual	Error prone	Compliance issues
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1600 people

After Automation

Centralized	Automated	Detects errors	Helps meet compliance
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Momentum

600 people



DEMO

THANK YOU

- [HTTPS://ACCURE.AI](https://accure.ai)
- [INFO@ACCURE.AI](mailto:info@accure.ai)
- MOMENTUM@ACCURE.AI

ACCURE