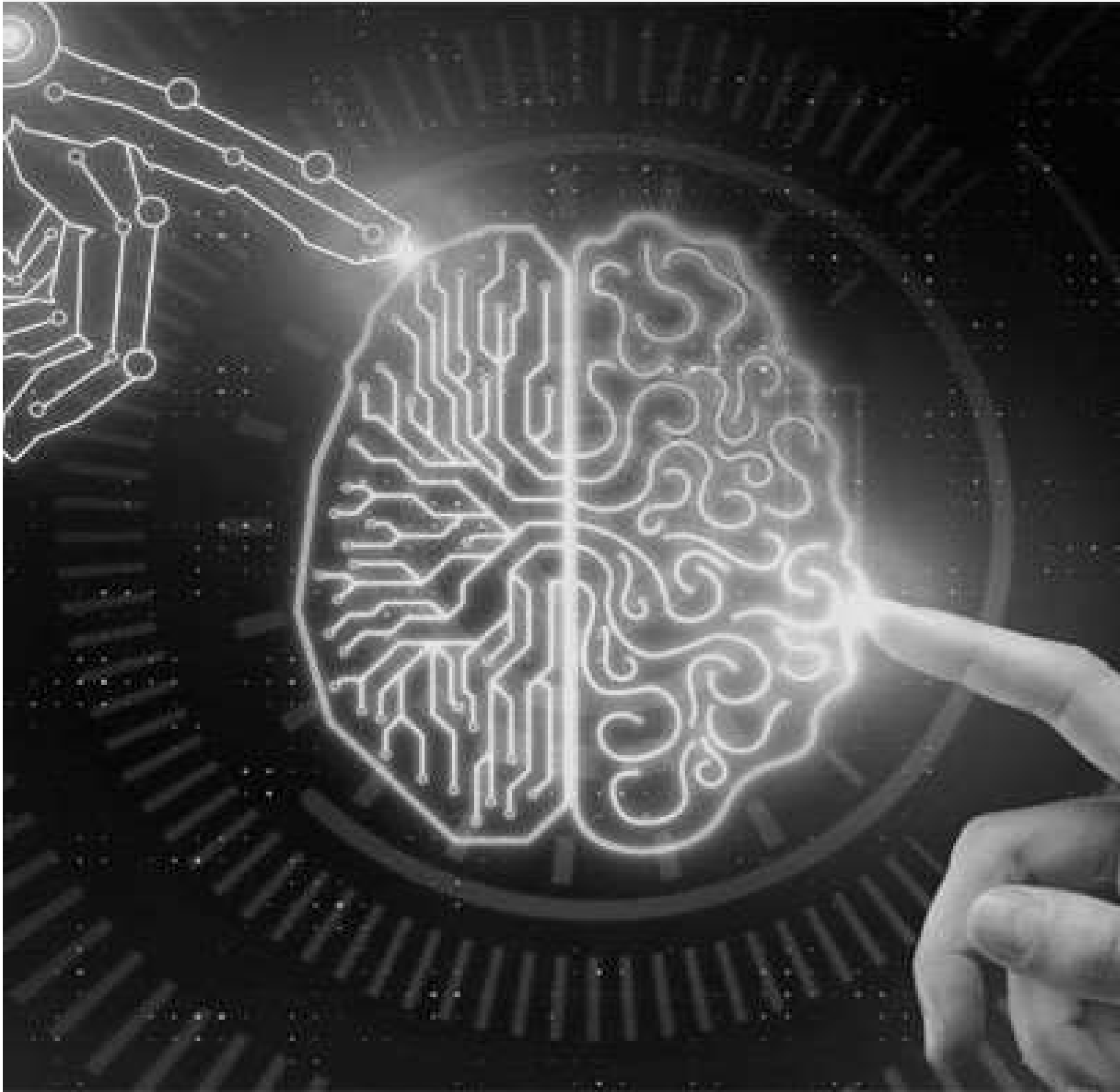# RevEL

Leveraging AI to move to the next level of digitisation

RevEl – part of the end to end Digilytics™ platform – is a one stop solution for secure loan origination that supports retail, wholesale and correspondent mortgage lending

Current Challenges across Mortgage Industry

In today's world, even after so much digitisation, many organizations still rely on traditional paper-based processes. Current Scenario of the Lending process across Banks has a huge scope for digitisation and automation as only 40% of the banks are "digitized", more than 50% are "paper based" and around 40% still require "manual" intervention.

Despite the advances in AI and ML industry, less than 30% of the lenders are leveraging AI. Origination of loans is still cumbersome and frustrating. Over 90% of Origination is still "Non-Intelligent" and follows the concept of "One size fits all".
AI can be leveraged to address the following challenges in Mortgage Origination:

Figure 1: Typical challenges faced by the Mortgage Industry

Upcoming Trends

AI trends in Mortgages focus on digitization, automation and customer experience to achieve seamless multi-channel browser experience, accelerate time to offer through digitization and reduce dependency on manual operations throughout the underwriting process.

Mortgage lenders see a lot of potential uses for AI and machine learning. Lenders also want to use AI/ML for borrower default risk assessment, which would involve machines examining all available information or data to predict the likelihood of a borrower defaulting on a loan. Yet another priority for lenders is the idea of AI/ML-assisted borrower prepay assessments to predict the probability of a borrower refinancing or retiring a loan.

Typical Challenges of Fragmented and Non-Collated Cases

- Data capture and input from multiple sources
- Manual Data Extraction
- Documents stored in multiple locations, systems and media
- Parallel processing of cases is not possible due to fragmented cases
- Case documents are not searchable and electronic material cannot be annotated
- Maintaining and controlling document versions in case of repetitive uploads
- Comparison of multiple

RevEl – A Digilytics™ Solution

RevEl leverages Digilytics™ platform to provide unique features to make it a user-friendly, web-based solution for you to streamline your entire origination process, access information anytime/ anywhere, increase loan production and reduce operating costs and time to offer.

RevEl utilizes three of the core modules of the Digilytics™ product

RevEl Application - Intelligent Data Capture Solution from Digilytics™

Addresses the challenges introduced by fragmented and non-collated case material to get complete control, audit compliance & a single source of truth, abolishing nonvalue added manual data entry, adding intelligence & immensely improving the user experience. Tap into robust features such as:

- ML based, intelligent document classification
- Document Versioning & managing document duplication
- Seamless and automated data extraction & auto population from documents, emails and other sources
- Instant validation of supporting documents for Completeness, Correctness and Consistency.
- Searchable query on digital annotations made on any document page within a case
- Concurrent document viewing (e.g. signature comparisons, select & share option directly from the case e-File)
- Ability to verify documents
- Ability to integrate with document mailing and archiving solutions
- Ability to connect to multiple data sources – (CRM, SAP, Salesforce, Magento)

RevEl Tracker – Embedded, Visual and Conversational Analytics from Digilytics™

The best in class technology that provides an AI-based capability to capture real time status of the cases, maintaining the tracking history along with the essential notes. It also provides an enhanced consumption of insights keeping you updated with all the notifications related to pending tasks or missing documents of all the cases in the queue leading to improvement in the origination productivity.

A host of features aimed to assist business users to easily consume insights through a visual & conversational interface:

Visual Dashboards
Interactive visualizations using graphs, charts and relevant filters giving the user, real time visibility of the case status.

Ask Osler?
Inbuilt chatbot to answer complex queries, configure chat Intents & ML Models to improve the chat output performance.

Community Engagement
Share insights & comments along with relevant reports to colleagues & management to engage in insight analysis discussion & near real time collaboration of insights.

Alerts & Notifications
Real time notifications on pending cases and missing documents. Further analysis is done to roll out predictive alerts on SLA breaches and doc expiry.

Embedded into Workspaces
Easily integrated with transactional systems.
Also, Integrateable with commonly used systems such as CRM and LOS systems.

Role Based Access
Activity based advanced role-based access to manage data security along with intent to user mapping to ensure secure & restricted user access to relevant dashboards.

RevEl Underwriting – Intelligently modelled case risk calculation from Digilytics^{TM}

Aims at amalgamating with the power of AI to speed up the underwriting process in the mortgage industry by doing the right kind of mortgage calculations to intelligently prioritize the cases in your queue.
This in turn leads to a faster Time-to-Offer along with increasing the number of cases for which the loan is sanctioned to the borrowers, thus increasing the overall productivity of the entire mortgage process.
Tap into robust features such as:

- Uberification of Underwriting
- Intelligent prioritization of cases
- Modelled case risk calculation
- Intelligent case classification into multi-speed queues
- Automated case-load balancing
- Case rationale model explainability for compliance
- Predict the chances of refinancing or retiring a loan

Potential Use Cases & key benefits of Digilytics^{TM} RevEl solution

- ✓ Online Applications - Improved customer/intermediary experience through auto verification of application pack
- ✓ Approval / Decision in Principle - Near real-time AIP/DIP based on ML-based enhanced decisioning logic - Enhanced pricing and profitability performance through ML-based pricing/rating logic
- ✓ Dynamic Pricing - Enhanced pricing and profitability performance through ML-based pricing/rating logic
- ✓ Case Classification - Reduced average time to offer/fund by creating multi-speed queues
- ✓ Auto Decision Support - Reduced stress on experienced underwriting capacity
- ✓ Origination Assistant - Reduced origination process times. Improve colleague and intermediary experience
- ✓ Applicant KYC - Improved customer/intermediary experience through auto recognition of documents in fail cases
- ✓ Behavioral Analysis - Targeted selling and SLAs based on customer and intermediary behavior analysis
- ✓ Personalized Offerings - Greater conversion rates in prospect sourcing
- ✓ Augmented Credit Scoring - Reduced credit risk and higher approval rates

Business Problem

A mortgage lender had an inefficient Underwriting capability with average Time to Offer (TTO) of 23 days

Key challenges observed:

- Non value added tasks & highly manual nature of processing
- One size fits all processing & product/underwriter specific process
- Inadequate granularity of SLAs & poor visibility of case/queue status
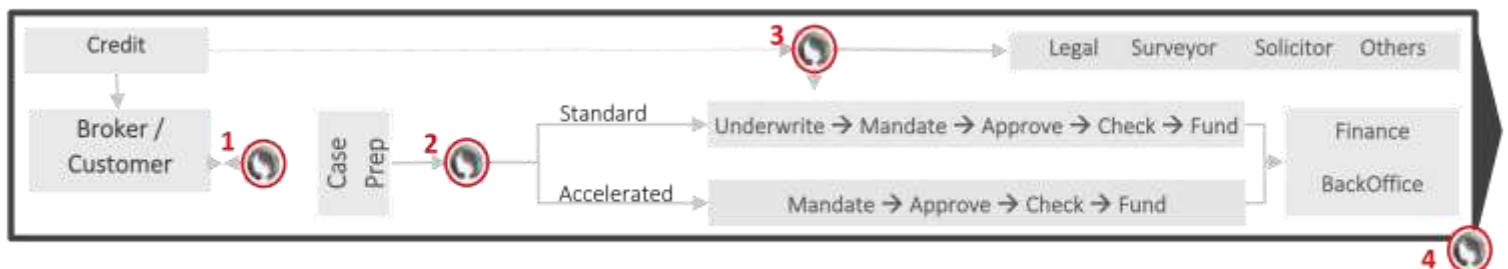
Solution & Benefits

1. e-File creator

AI-enabled OCR module embedded Into existing LOS transaction system with document archiving

3. Data validator

RPA tools for automating repeatable manual tasks

Credit				Legal	Surveyor	Solicitor	Others

Broker / Customer — 1 — Case Prep — 2 —

Standard → Underwrite → Mandate → Approve → Check → Fund

Accelerated → Mandate → Approve → Check → Fund

Finance

BackOffice

3

4

2. Case router

Machine learning model to identify auto-underwriting cases embedded into LOS

4. Case viewer & VisCons

Visual & Conversation Analytics embedded into LOS transaction system

20 – 40 % increase in productivity realised

- ✓ 100% digital case processing
- ✓ Highly automated underwriting for significant percentage of applications
- ✓ Improved SLA compliance
- ✓ Future proof with extension setup for open banking, AVM
- ✓ Streamlined and optimized for reduced TTO (Time to Offer)
- ✓ Improved broker/customer engagement with more transparency and quicker TTO

About Digilytics™

Digilytics™ is an AI platform to deploy AI-solutions Better, Faster and Cheaper for businesses that are trying to become "Insights-driven". Digilytics™ services business users that would like to improve their experience of consuming insights generated by analytics and AI techniques unlike others who focus on efficiency of insight generation; Digilytics™ focuses on insight consumption.

Digilytics™ mission is to help clients achieve profitable growth and deliver excellence, through the intelligent use of rapidly expanding universe of data they operate in.

Digilytics™ is:

Embeddable. Enterprises have well-entrenched transaction systems. AI technology must be embeddable into these without replacing them

Actionable. AI technology must translate to simple actionable instructions for business operations

Simplified. In regulated industries, AI must be simplified and explainable to compliance and regulators

Integrate-able. Enterprises have integrated workspaces to facilitate smooth business operations. AI technology must seamlessly integrate with existing workspace technology.

The world of data is witnessing explosive expansion. Petabytes of data are being generated by the extended enterprise, from customers to regulators to colleagues and partners. Data Science and AI projects are mushrooming across the enterprise, but more than 80% fail to deliver results.

Digilytics™, the convergence of business know-how, data science and analytics technology, focuses on insights experience, making it easy for businesses to consume Data Science and AI technology in everyday operations and delivery tangible deliver business value.

Digilytics™ is a closed loop AI-enabled cloud hosted SaaS platform. It ingests data of any variety, at any velocity and of any volume to generate real-time visual and conversational insights, using advanced analytical & AI techniques, that are embedded into transactional and decision support systems. Solutions developed on the platform create a consumer-grade insights consumption

WHAT IS DIGILYTICS™

BUSINESS UNDERSTANDING
+
DATA SCIENCE
+
TECHNOLOGY

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