

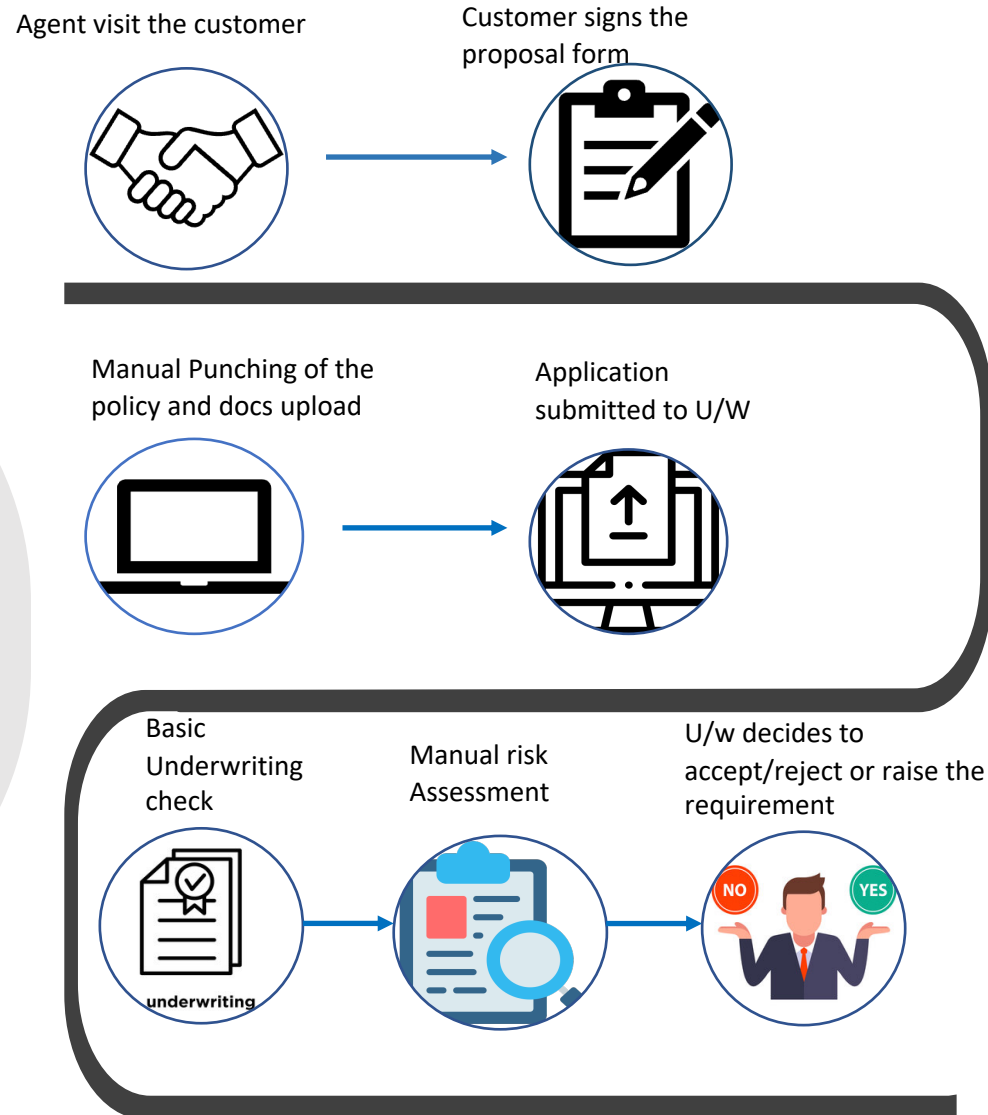
Redefining Underwriting using Advanced Machine Learning modelling techniques



Policy processing without AUSIS and PRODX

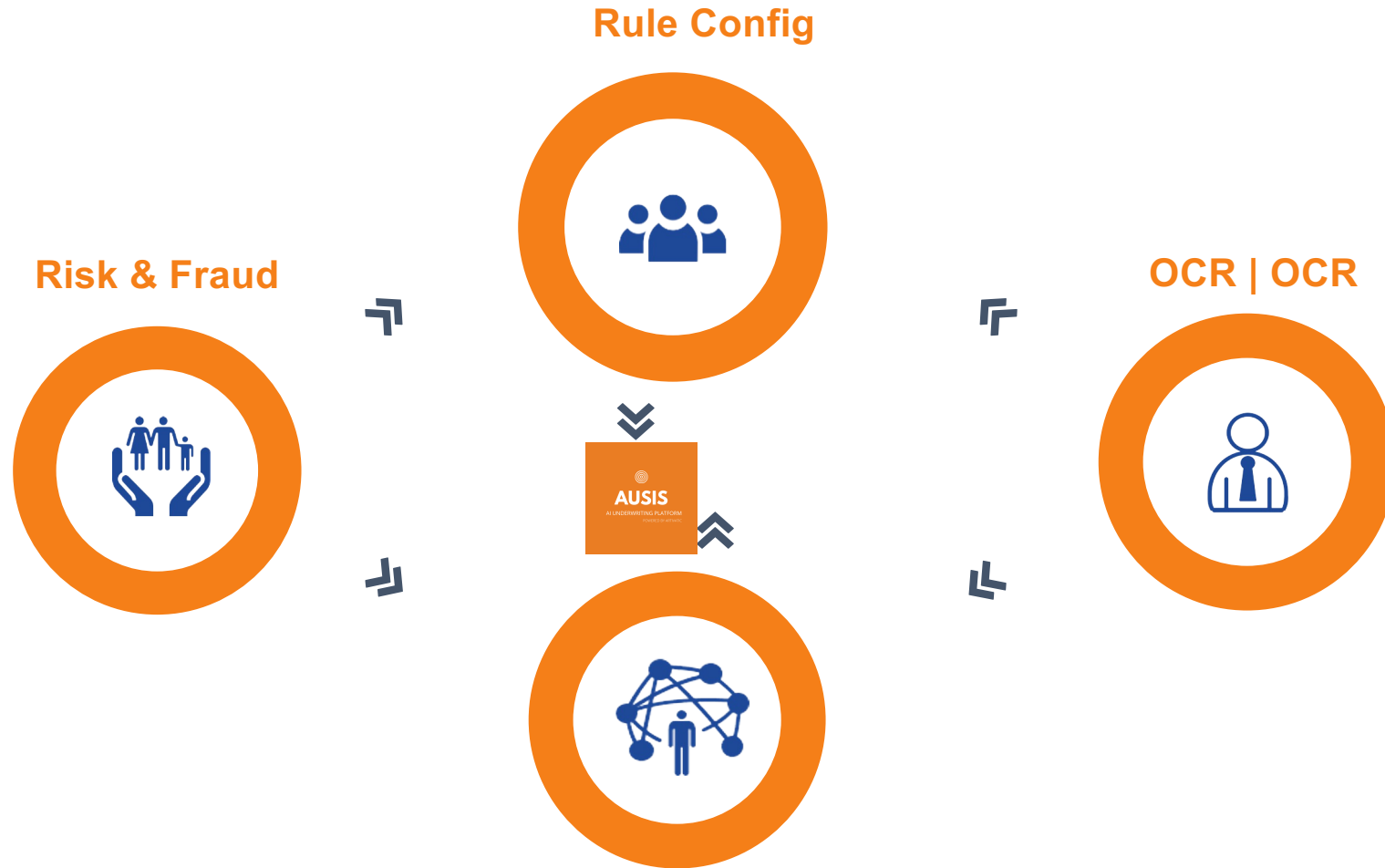
Average TAT to issue the policy:

- ❖ STP cases: 3-5 days
- ❖ Medical case: 7-15 days
- ❖ High costs
- ❖ High Risk & Fraud
- ❖ High imbalance of data & information
- ❖ Multiple systems & no transparency
- ❖ Poor customer experience
- ❖ High claims loss ratio



- The entire underwriting process is manual, can not take benefit from past experiences.
- The existing u/w platform is not scalable, user friendly, automated and was not an integrated solution
- There is no external sources of data aiding in making underwriting decision
- Basic level of Automated decision making exists.
- Multiple systems & connect to manage costs high and need lots of manpower to manage
- High early claims and risk, fraud causes more losses

Full stack AI Underwriting, Risk Assessment & Dynamic Rule Configuration



Decision | Instant Policy

End to End Platform for decision making, medical risk, digitization and instant policy issuance.

AUSIS – Smart Underwriting Solution



Handles over 1500+ insurance specific attributes



Pre-trained models to recognise, process and digitise data from over 80 document classes



Integrations with over 12 external APIs to enrich proposal data



Enriched data is used for inbuilt Business Rule Engine and Underwriting recommendation using AI/ML models



Over 15 different scores implemented in production to provide detailed insights into every new business proposal

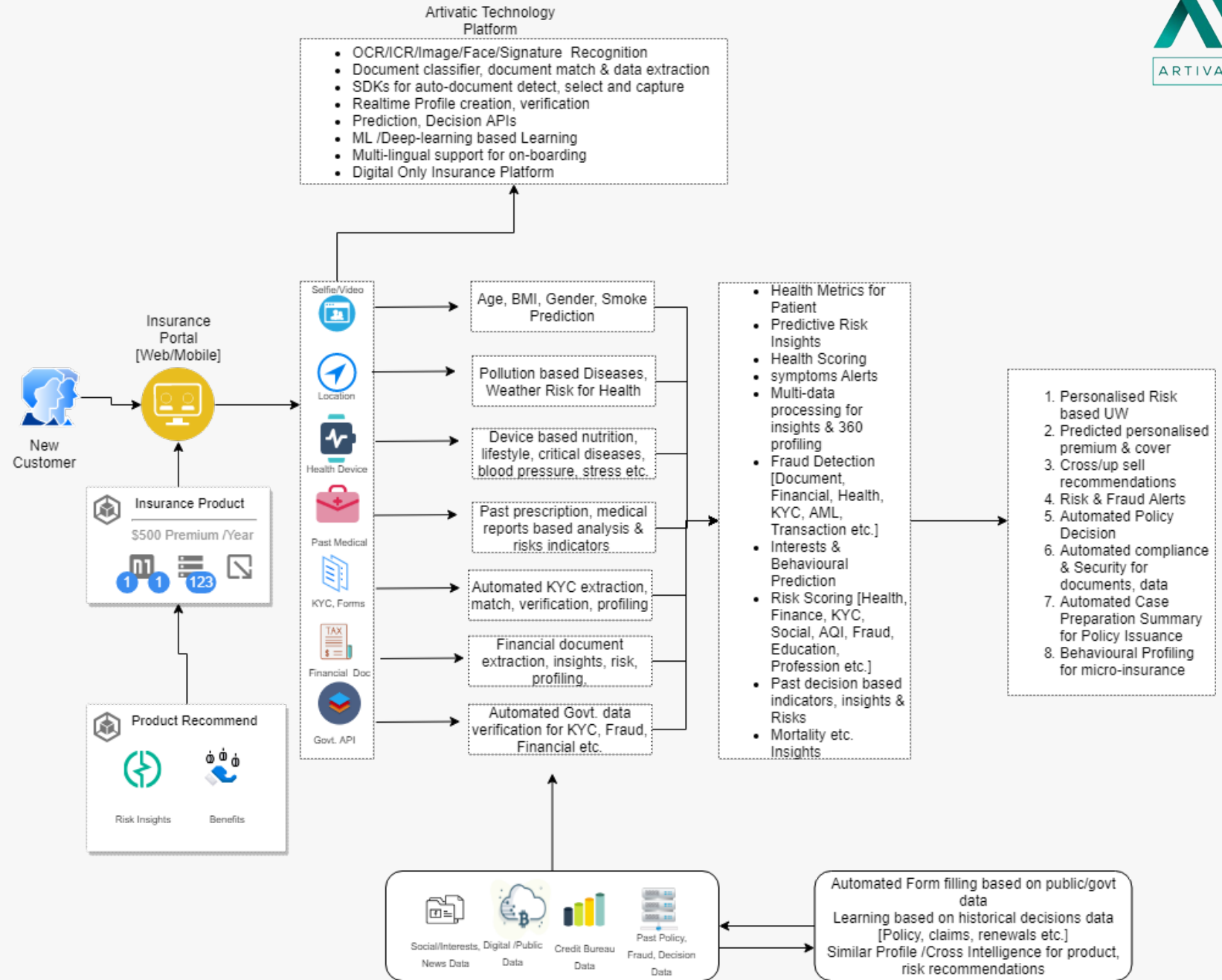


Highly configurable Business Rule Engine (ProdX) integrated to configure all underwriting guidelines to provide a rule based decision (With over 350 parameters, 200 rules and 2500 sub-rules already configured)



Go Live- 2-4 months depending on the number of integrations to be done

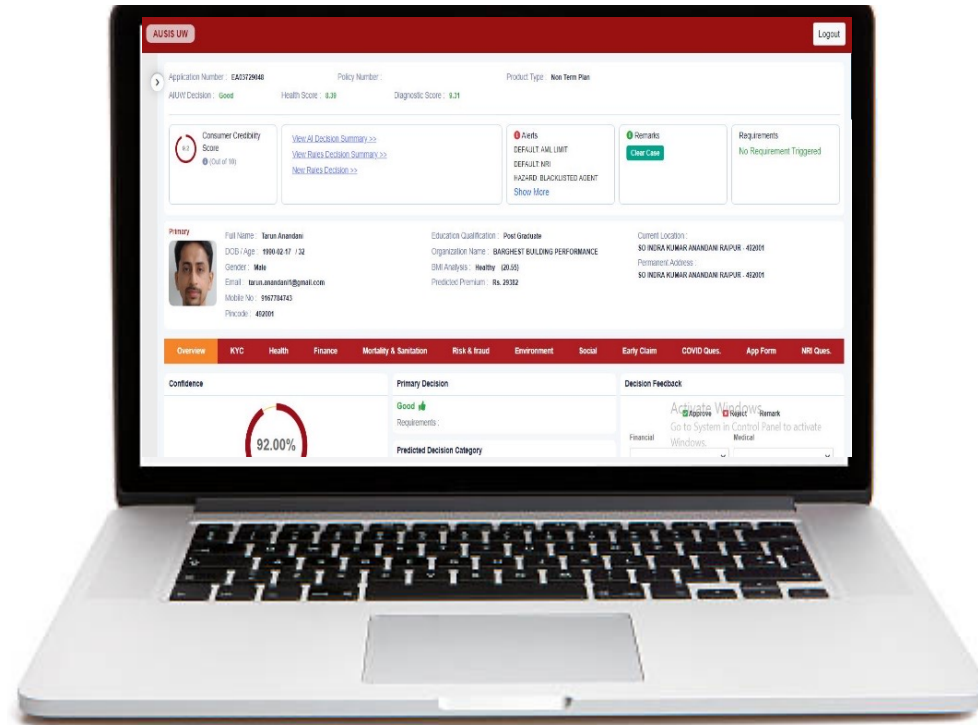
New Age Underwriting and Risk Assessment View



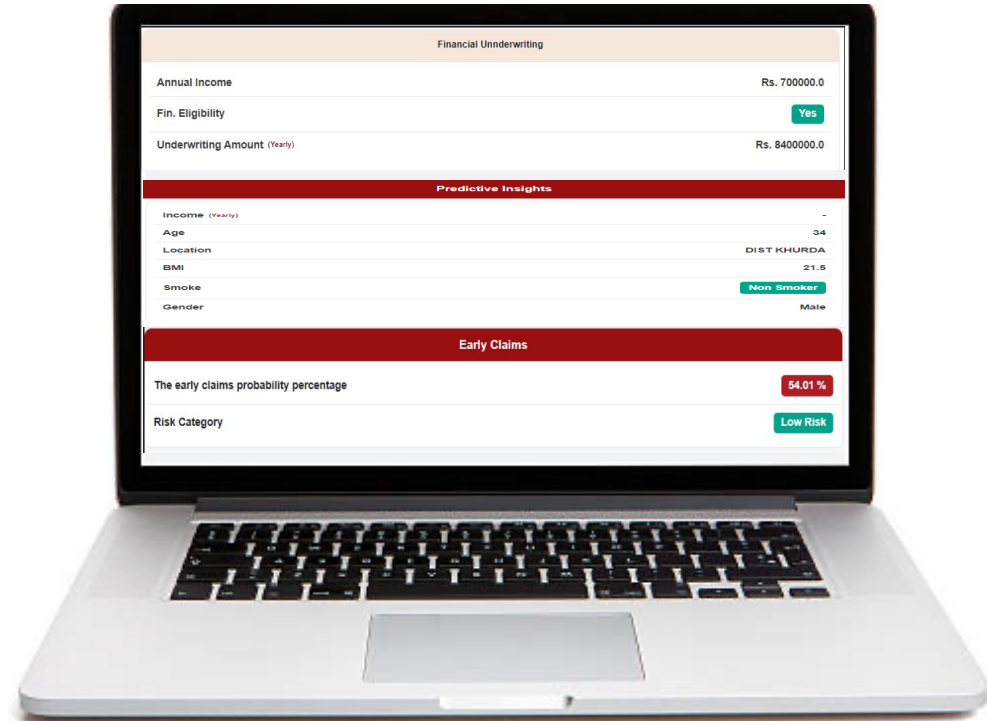
Note:

- Health Trends, Covid, alternate data, location, utility, ABHA, Indiastack, AA's etc.

AUSIS- AI Smart Underwriting Platform



UW Decision Dashboard



UW Risk | Early Claims | Prediction

Writing rules with Prodx



Average time to write one rule:

- ✓ 5 min

Average time to execute rules in a proposal :

- ✓ 5 sec
- ✓ Reduction in manpower
- ✓ Faster product design & connect for GTM
- ✓ No Code infrastructure
- ✓ Reduction in IT & Infra cost

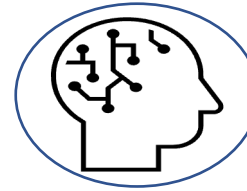
Login to Prodx



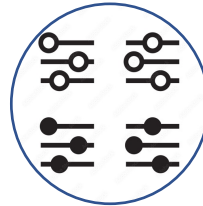
Create parameters



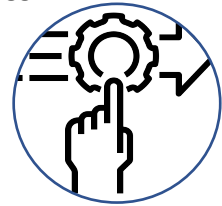
Create sub rules



Attach parameters to sub rules



Define action/loading/test suggested etc.



Write rule



Define effective/expiry date



Attach sub rules to rules



Attach product to rules



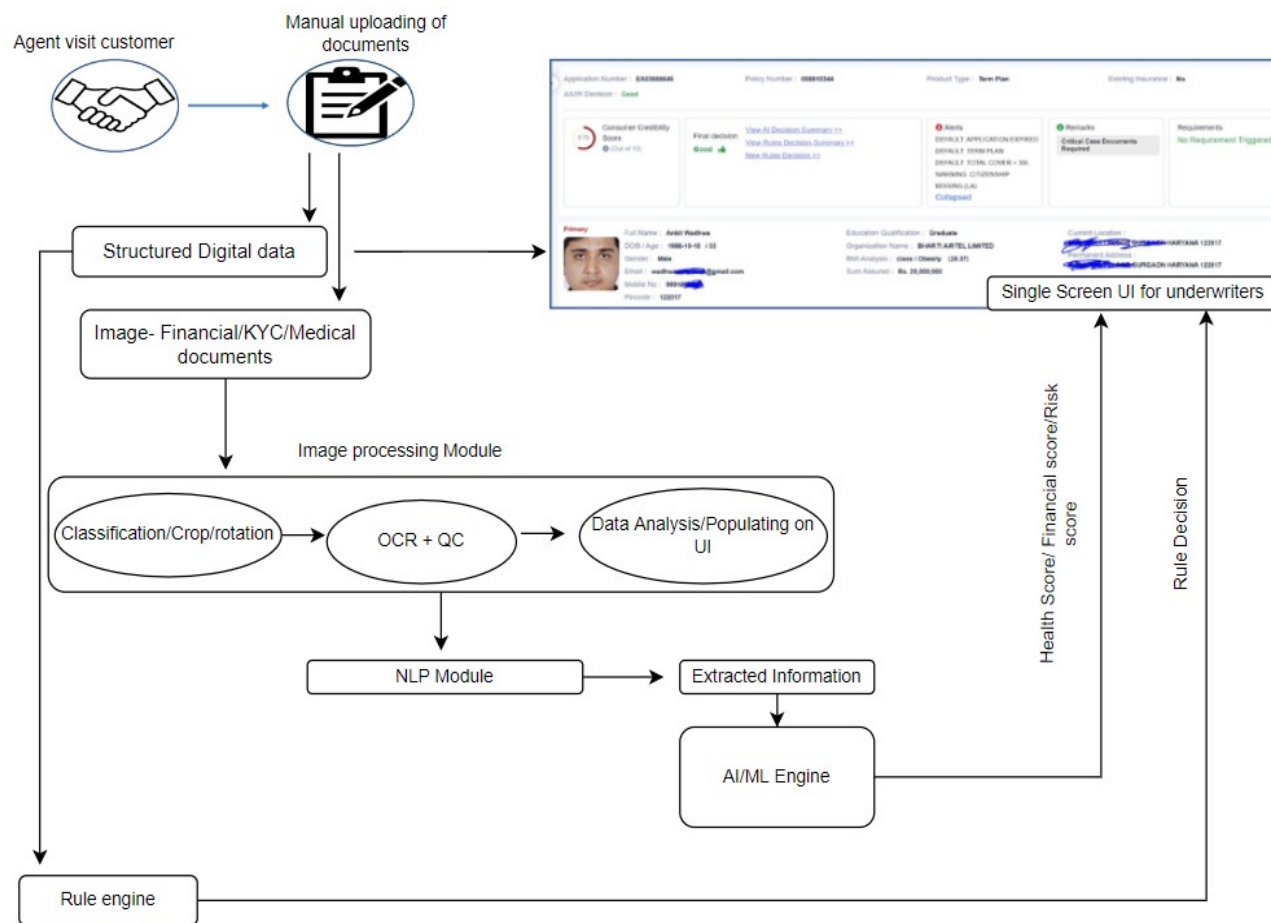
- ✓ Easy to configure underwriting rule engine with over 900 frequently used parameters.
- ✓ Easy to add and configure new parameters and rules.
- ✓ Provides the ability to configure complex underwriting rules through easy user interface.
- ✓ Authority levels in place to configure and approve rules with start date and expiry date for rules.
- ✓ Underwriting rule decision integrated with AUSIS to provide quick underwriting rule decision for every proposal

Policy processing with AUSIS and PRODX



Average TAT for underwriting recommendation

- ❖ STP cases: 5 minutes
- ❖ Medical case: 5 minutes
- ❖ Up to 10% Reduction in Early Claims
- ❖ Up to 30% Increase in STP
- ❖ Reduction in Cost up to 50%
- ❖ Up to 70% increase in digital data & connected intelligence



- Integrates with the clients policy admin system and underwriting system through microservices.
- Risk scoring model built-in to provide recommended decision for every proposal.
- Risk model is self-learning and considers both digital data and OCR data for decision making
- API integration with external sources of data such to provide health score, financial score, weather/sanitation score, location risk score to enable providing an overall underwriting risk score
- Platform provides detailed and in-depth risk insights with a 360 degree view to the underwriter along with risk scores – Graphical and visual representation and comparisons for easy understanding
- Platform has the capability to process and digitise all kinds of physical documents related to KYC, financials and medical reports. The digital data is analysed to identify fraud risk, health risk, credit risk and identity theft attempts to provide a recommended underwriting decision

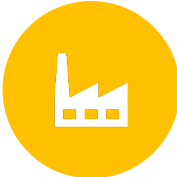
Underwriting Rule Engine (ProdX)



Easy to configure and set up rules. GTM less than 2 months



Over 350 insurance specific parameters pre-built



Over 200 rules and 2500 sub-rules in production



Capability to configure complex parameters and rules through user friendly interface



Detailed audit trail available



Underwriting decision within 60 seconds

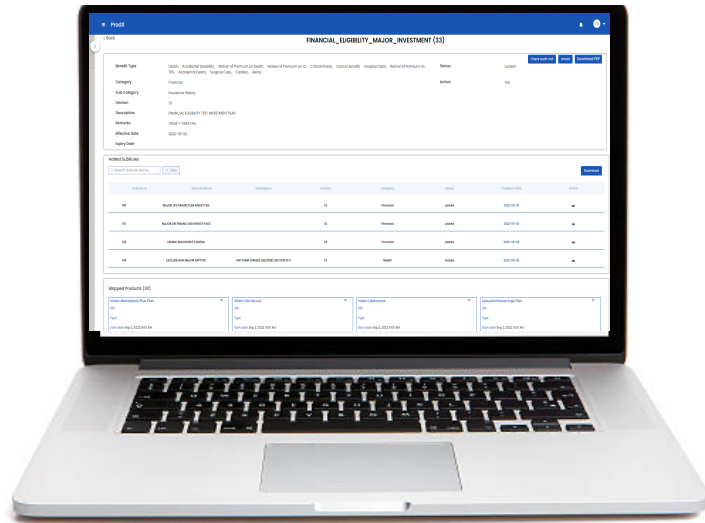


Speed up product launches

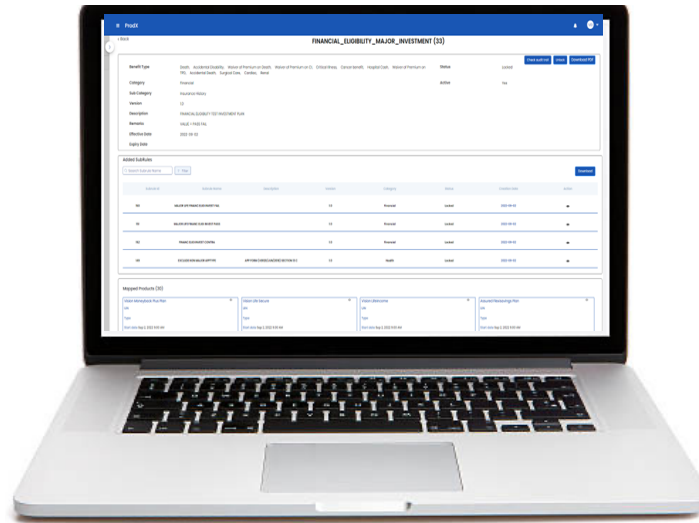


Low technology maintenance

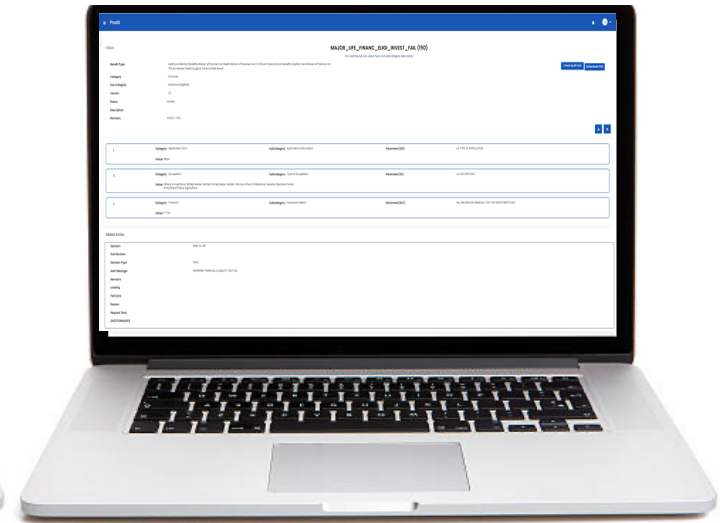
ProdX Engine: Dynamic Rule Config



Fast Parameter Config



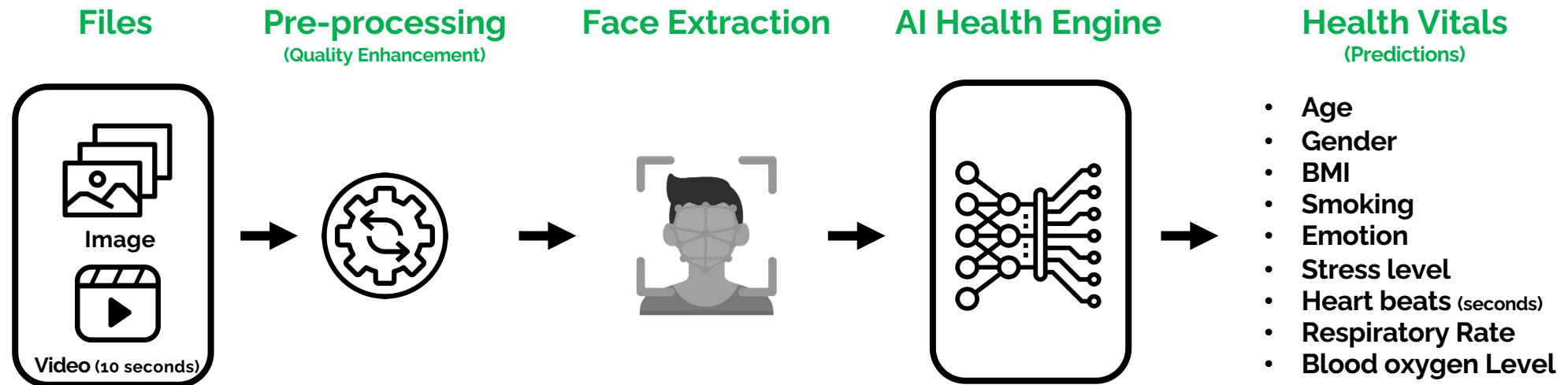
Instant Sub-rule Config



Immediate Rule Design

Complete No-Code Platform for Insurers

Facial Health Intelligence (Images and Videos)



Prediction of Health Vitals in discussion for pilot with ABSLI team

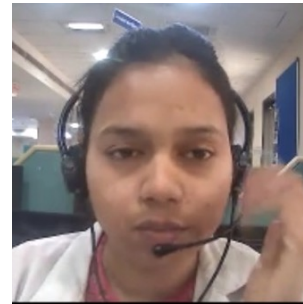
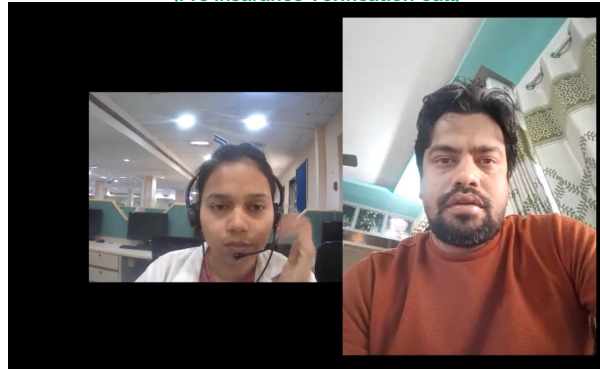
Facial Health Intelligence (Images and Videos)

Health Vitals

(Predictions)

Raw Video File

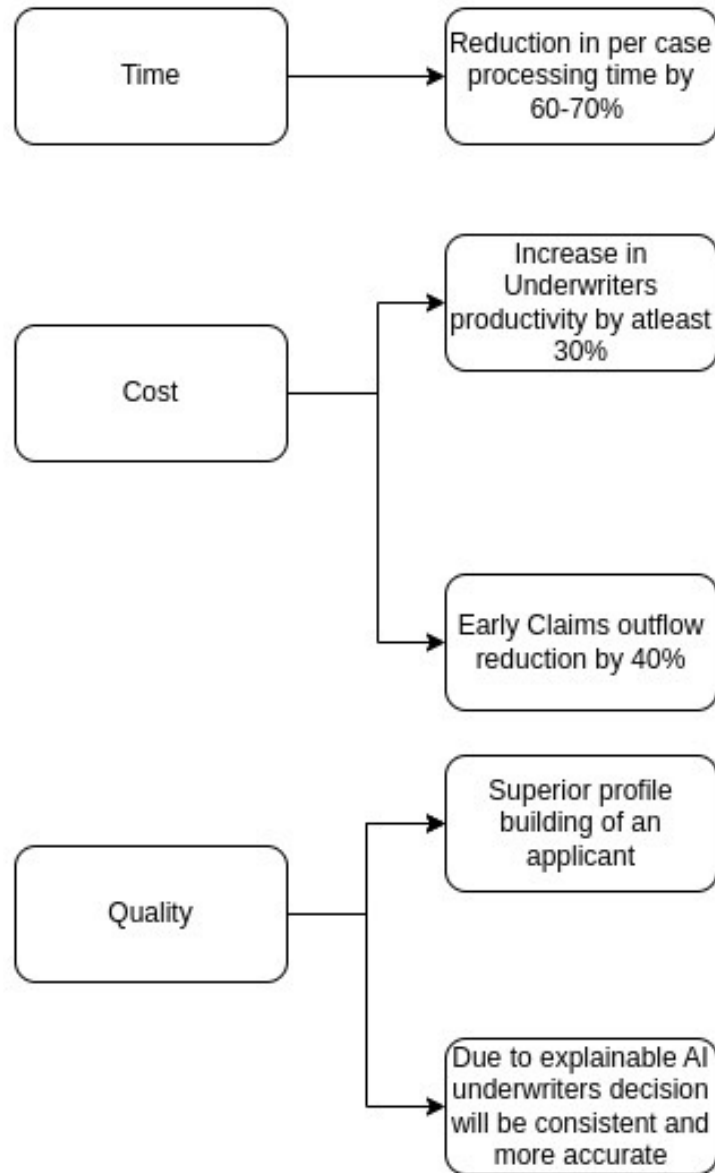
(Pre Insurance Verification Call)



Age: 25
Gender: Female
BMI: 23
Smoking: Non-Smoker
Emotion: Neutral
Stress level: Low
Heart beats (seconds): 72 - Normal
Respiratory Rate: 16 - Normal
Blood oxygen Level: 97 - Normal



Age: 29
Gender: Male
BMI: 26
Smoking: Smoker
Emotion: Sad
Stress level: Mild
Heart beats (seconds): 78 - Normal
Respiratory Rate: 18 - Normal
Blood oxygen Level: 98 - Normal



Why AUSIS for Smart Underwriting Processes

- **Deep Understanding** – Our models recognize over 1500 data attributes specific to Insurance business
- **Data Handling** – We use the latest algorithms and carry the expertise to handle large datasets with our customized inhouse proprietary solutions
- **Data Enrichment** – The data is cleansed and enriched for accuracy and deep insights. Data is enriched through IIB, Bureau, Account Aggregator, COVID database, Environmental / Weather / Sanitation data, Location Wise AQI, Industry negative pin codes, Fraud / Blacklisted Medical centers, Location Risk model, ABDM, NHA for Abha Id etc
- **Pre-Trained Models** - Our models are pretrained on over 4 million new business data and over 100,000 claim data
- **Domain and Data Engineering Expertise** – We carry indepth domain expertise and have very well qualified data engineering experts
- **Case level Insights with Explainable AI** – For every proposal, our models provide attribute level insights, with detailed risk scores and inferences for assisting underwriting decisions
- **Proven Results** - In all our implementations and POCs, our models have enabled our clients to uplift STP ratios, Reduce potential early claims and helped in significant improvement of underwriter's productivity

Case Study of AUSIS

KPI | Business Value

Decision Time – after analysis of all digital data and BRE decision



Image Processing (per document in seconds)



Pre-trained system for accelerated model building



Number of pre-trained models for document processing



Number of images processed



STP Improvement



Outcome | Benefit

<60
Seconds for one proposal

2-5 KYC	5 - 10 Financial	5 - 12 Medical
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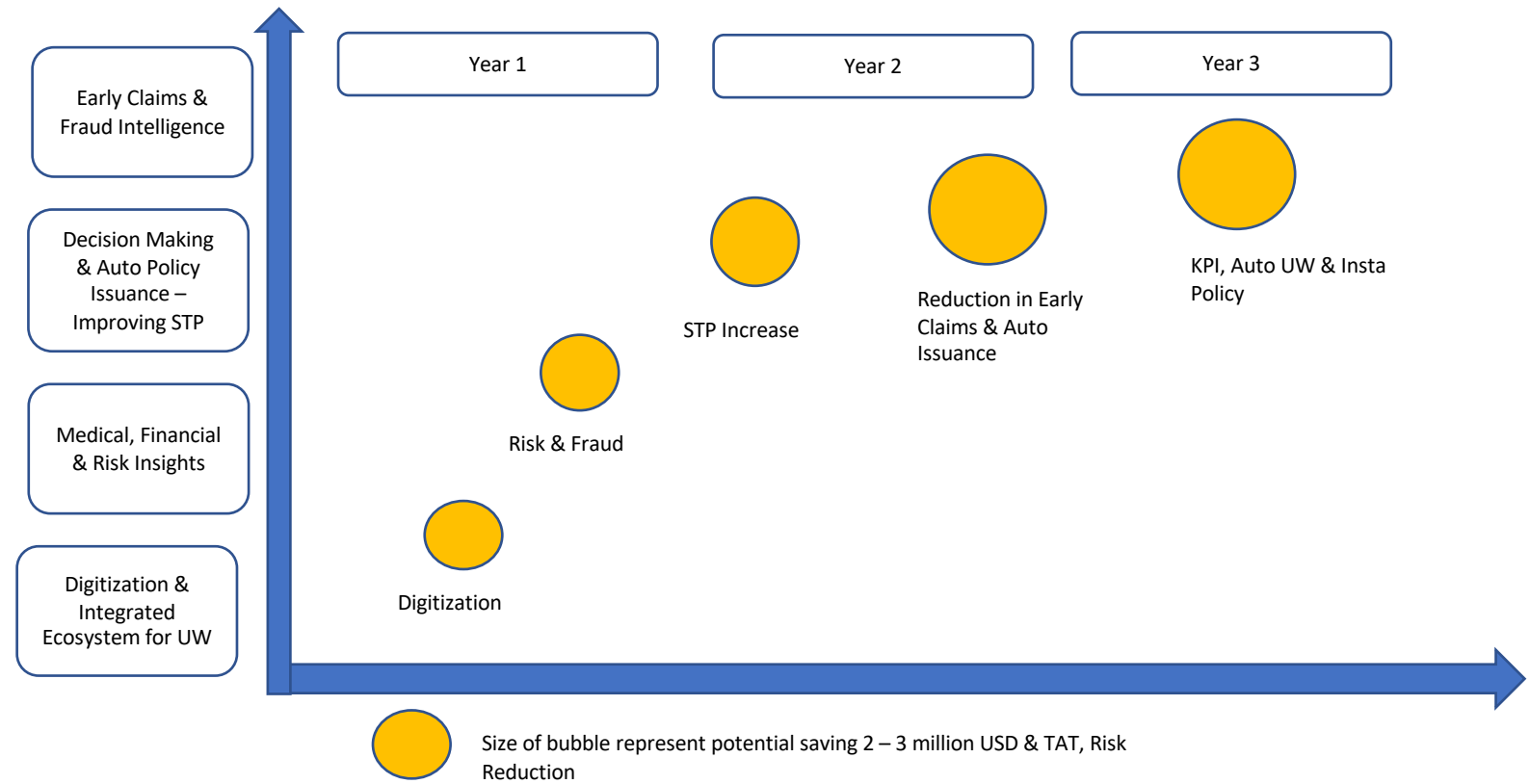
>3 million proposals	>100K claims
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>65
document classes (including handwritten)

>10 million
images processed in 2 years

>35%
Achieved

Insurance UW Transformational goals – Use Cases



THANK YOU
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