



# iQ Decision Engine™

Power on the most advanced credit decisioning



LEND  
CONNECT 2020



## Evolution of Lending Infrastructure

Modern/Online Lending requires flexible systems to quickly adapt to changing consumer landscape and a highly competitive environment. This necessitates constant improvement in decisioning strategies.



### Integrated Systems

- Rigid acquisition and servicing flow
- Multiple databases and origination systems stitched together to make underwriting decisions



### Smart Systems

- Flexible and architecture agnostic systems
- Configurable options
- Extensive options on customer segmentation strategy
- Implementation of self learning modules





## Configurable Decision System

- **Easy configuration** of credit policies and underwriting rules
- **Pre-built integration** with major credit bureaus, subprime bureaus and alternate data sources
- **Quick replication** of credit policies (2-clicks)
- **Configurable** risk based pricing framework



## Support for vast array of scorecard algorithms

- Significant **speed to market** on implementing new scorecard algorithms
- Supports implementation of **scorecard algorithms** from SAS, R, Python etc.
- **Statistical** and **machine learning** (ML) algorithms



## Efficient and Transparent decisioning flow

- Data **cost optimization** and configurable caching
- **Centralized** data repository
- Easy to view **audit trail** of decisioning process
- **Monitor** response times and bottlenecks
- **Easy integration** into multiple loan origination systems



## Smart Decisioning

Robust decisioning in the current environment requires sophisticated utilization of data that spans marketing, credit and alternate data and needs seamless workflows to optimize the acquisition flow.

### Overlapping Marketing Channels

- Direct mail
- ITA
- Email
- Retargeting
- Lead Generation

### Disparate Data Sources

- Credit Bureaus,
- Alternate Data providers
- Bank Transaction Data,
- Fraud Data

### Agile Workflow

- Approve/Decline
- Manual Overrides
- Fraud Review
- Customer Offer Selection







- Azure based decisioning system
- Software as a Service (SaaS) model
- Support for implementing credit policies
- Unlimited credit policies
- Easy access to iQ Scores
- \$200MM+ in originations

#### Integrations







## Credit Policy Implementation

- Easy to use: Configuration driven implementation of Credit Policy Rules, addition of scores, A/B strategies etc.
- Combinatorial rules i.e., (A and (B or C) )
- Configurable order of evaluation

**Evaluation Group Create**

Name

Group Type

Process Type

Evaluation Process Type

**Evaluation Edit**

Name

Active ☒

Fail If Null ☒

Fail If Empty ☒

Datapoint	Operand	Value
Datapoint: IQ Fraud Score	<input type="text" value="Less Than"/>	Type <input type="text" value="Value"/> Value <input type="text" value="500"/>
Adapter: IQ Fraud		
Interface: IQ Fraud Model		



Container Detail

Name

Champion Strategy

+ Add Selector

+ Add Override Selector

+ Add Container

+ Add Rule

+ Add Container Grid

+ Add Matrix 1D

+ Add Matrix 2D

+ Add Action

Description

Champion Strategy

Container Type

Strategy ▾

Child Process Type

Ordered ▾

Percentage

75

Order

0

Active

☒

Output Data

Third Party

Global Datapoint	Action Value	Adapter	Interface	Datapoint	Order
<div>Back to Container</div> <div>+ Add Output</div>					



## Credit Policy Implementation

- Configurable A/B testing
- Unlimited segmentation possibilities  
i.e., lead source A & policy A, lead source A & policy B
- High level of specificity in channel segmentation i.e., pre-approved campaign A & lead source B





## Credit Policy Implementation

- Ability to specify product parameters within the underwriting policy i.e., APR, credit lines or installment loan amount, # of payments etc.
- Supports product parameters for closed-end and open-end (lines of credit) product types

**Schedule Edit**

Name:  Key:

Cells

Name	Order	
APR	1	<a href="#">Remove</a>
Term Months	2	<a href="#">Remove</a>

[Add](#)

Schedule

Amount	Term Months	
500	6	<a href="#">Remove</a>
700	12	<a href="#">Remove</a>
1000	12	<a href="#">Remove</a>

[Add Offer](#)

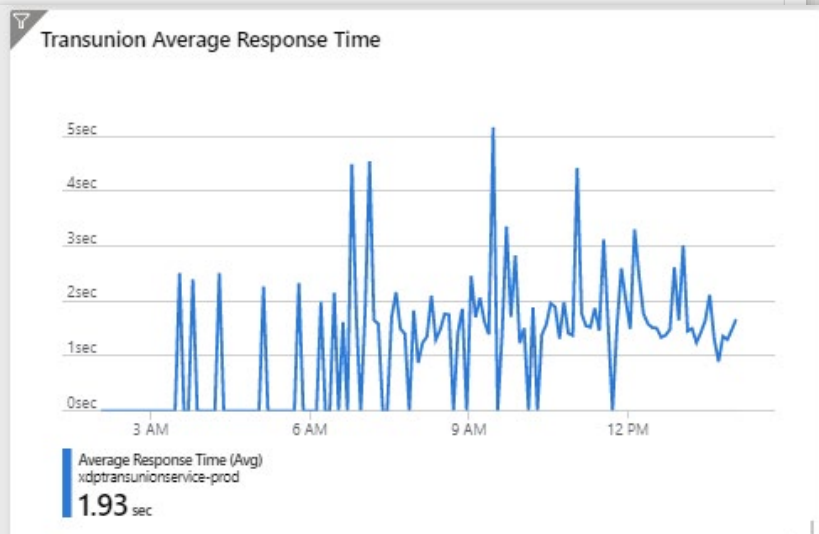
[Save](#) [Cancel](#) [Delete](#)



Datapoint

Name	<input type="text" value="FICO Score"/>	Output Name	<input type="text" value="FICO_Score"/>
Value Type	<input type="text" value="Integer"/>	Datapoint Source Type	<input type="text" value="Adapter"/>
Return Type	<input type="text" value="Single"/>	Inline Type	<input type="text" value="-- Select --"/>
List Root Node Name	<input type="text"/>	Property Name	<input type="text"/>
Reporting Required	<input type="checkbox"/>	Reporting Name	<input type="text"/>
Xpath	<input type="text" value="creditBureau/product/subject/subjectRecord/addOnProduct[code='00W18']/scoreModel/score/results/text()"/>		

[Back To Version](#)

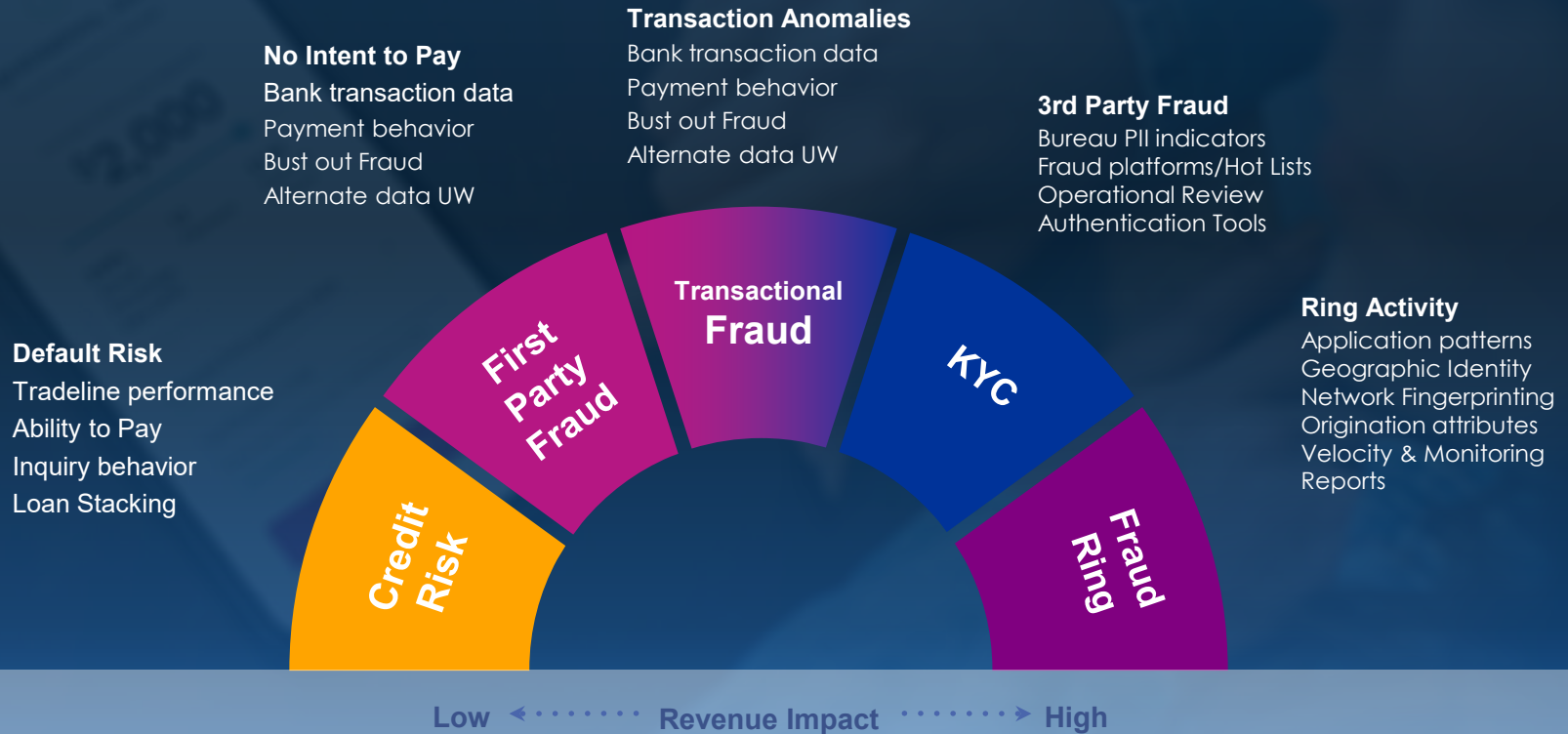


## Credit Policy Implementation

- Easy integration with data sources and real-time capability to monitor third party data sources.



# Loss Spectrum – Underwriting Challenge in Online Lending





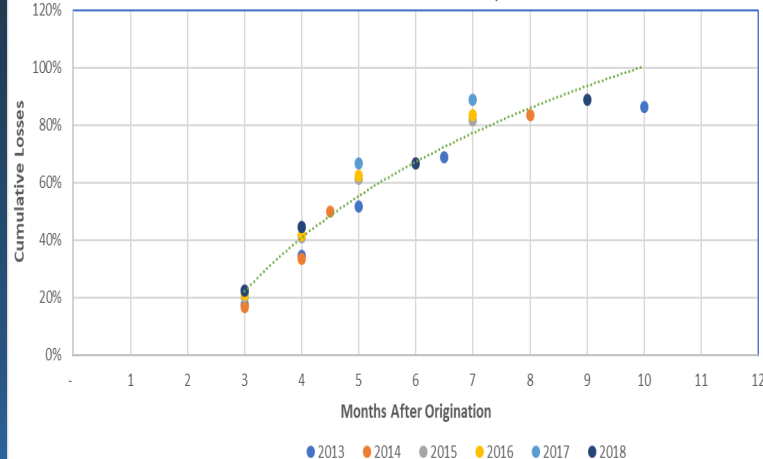
# Early Loss – Underwriting Challenge in Online Lending

**80%** of the losses occur within first 8 months based on market data, of which **20%** are never pay/straight rollers

...**10%** improvement in never pay leads to **~30%** improvement in Risk Adjusted Margin

## Public Subprime Company

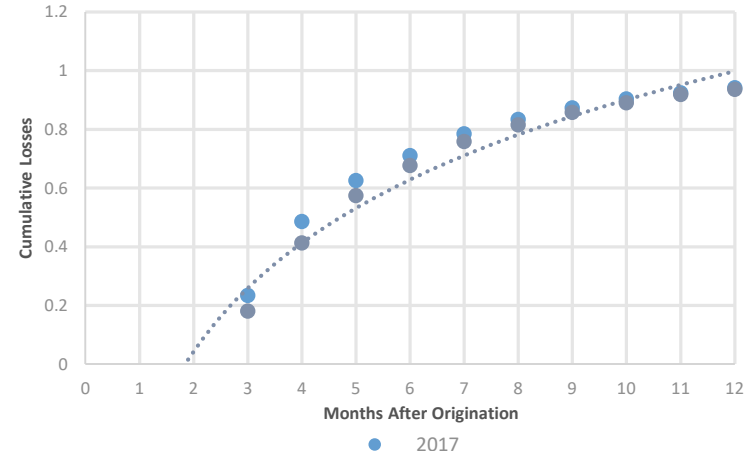
Loss Timing Experience - 80% of defaults occur by the 8th month due to short duration. Losses are also faster as loan composition moves towards faster maturation line-of-credit products



Source: Seeking Alpha

## Our prior experience

Loss timing is similar to that of Elevate/Industry



Source: Cortex and iQDE platforms



# Optimized Online Underwriting w/ iQ Scores

- iQ App Score • iQ Fraud Score • RAZR • iQ Risk Score • iQ Propensity Score

Data from **15+** credit bureaus & data providers

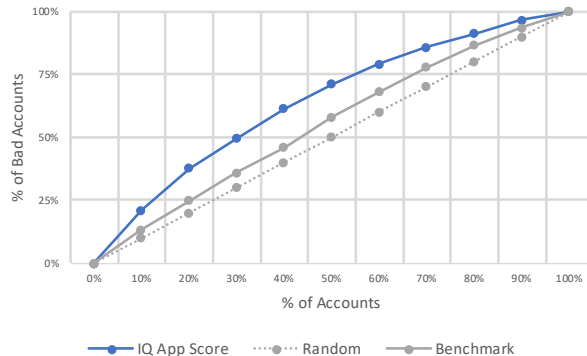
Performance data on over 3.7+ million loans

30+ terabytes of marketing, risk, and credit bureau data

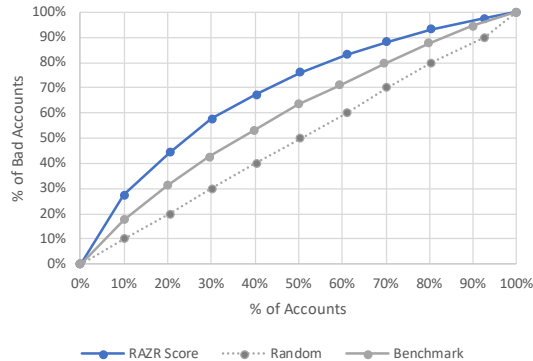
Credit data on 10.3 million consumers

12<sup>th</sup> generation models

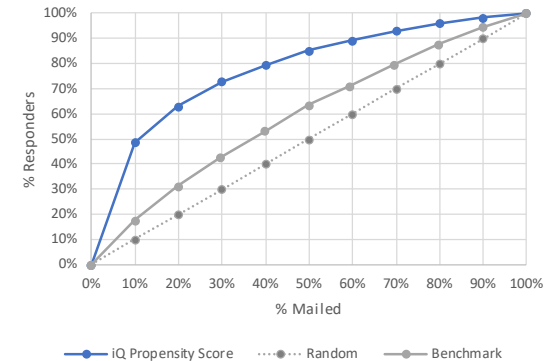
iQ App Score (Risk)  $KS = 31$



RAZR Score  $KS = 33$



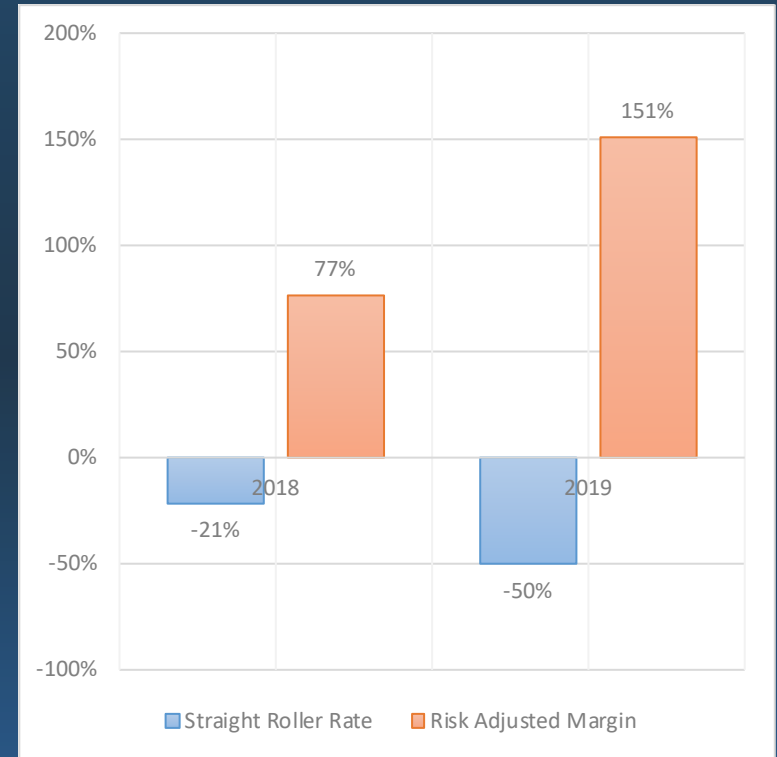
iQ Propensity Score  $KS = 43$





...**151%** improvement in Risk Adjusted Margin  
over 2 years by implementing iQ Scores

- iQ App Score
- iQ Fraud Score
- RAZR
- iQ Risk Score
- iQ Propensity Score



Data indexed to 2017 vintages