

Evolution of early warning system for lenders



Speakers

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The ideal early warning framework

Getting started: getting past the theory

Innovative data sources

Re-calibration: learning from model performance

Critical success factors

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Traditional monitoring vs early warning

Characteristics of early warning signals

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Early warning transcends traditional monitoring through institutionalisation of a proactive risk culture

	Traditional monitoring	Early warning
Approach	<ul style="list-style-type: none"> Reactive 	<ul style="list-style-type: none"> Proactive
Focus	<ul style="list-style-type: none"> Primarily on big-ticket borrowers 	<ul style="list-style-type: none"> Across all borrower segments
Frequency	<ul style="list-style-type: none"> Quarterly/semi-annual borrower review 	<ul style="list-style-type: none"> Periodic, near real-time assessment of borrowers
Visibility	<ul style="list-style-type: none"> Information asymmetry b/w branches & RMD 	<ul style="list-style-type: none"> Borrower visibility across monitoring lifecycle
Breadth	<ul style="list-style-type: none"> Lack of consolidated borrower view 	<ul style="list-style-type: none"> 360-degree view of the borrower
Output	<ul style="list-style-type: none"> MIS based on manual data cleaning, analysis 	<ul style="list-style-type: none"> Risk-intelligence dashboards with drill-downs

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Traditional monitoring vs early warning

Characteristics of early warning signals

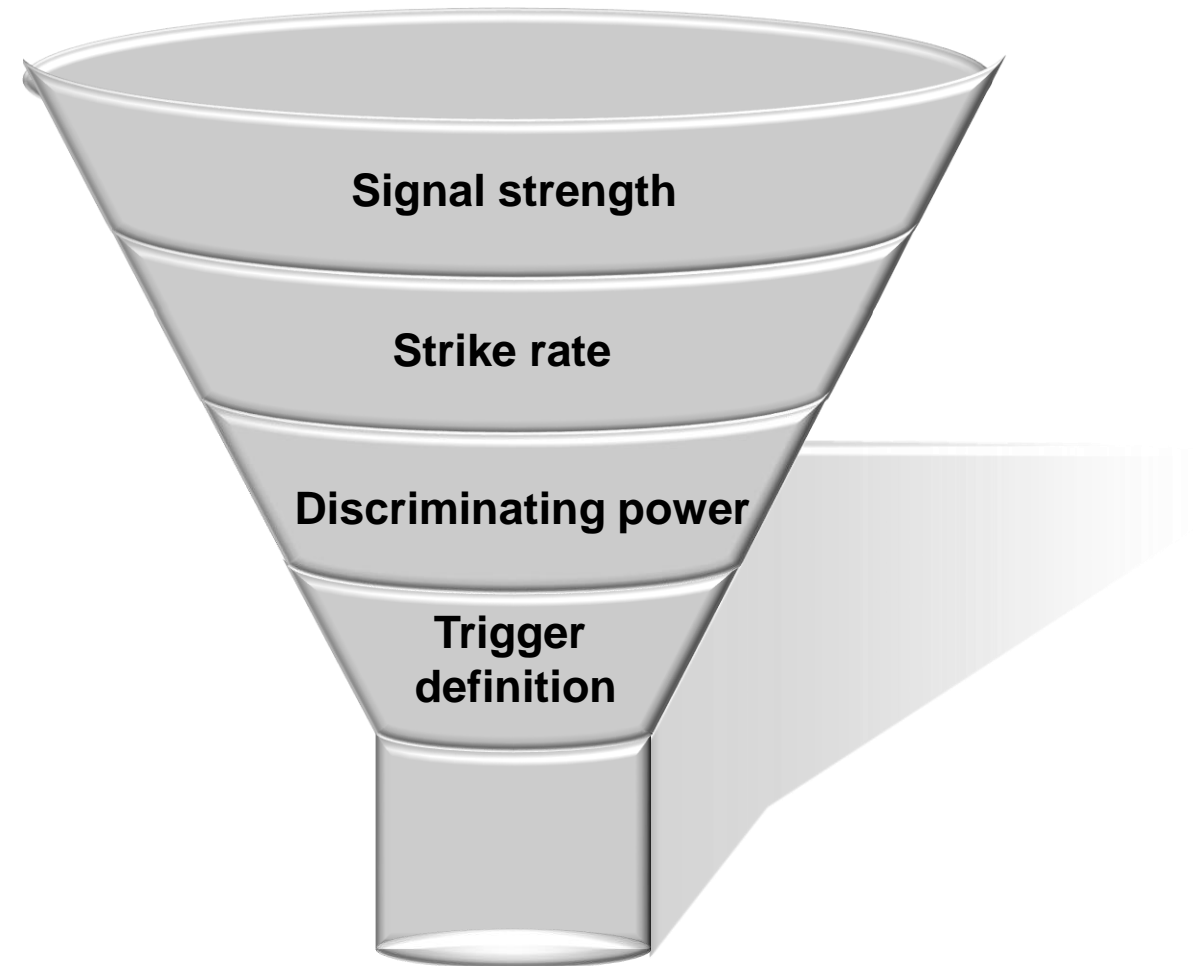
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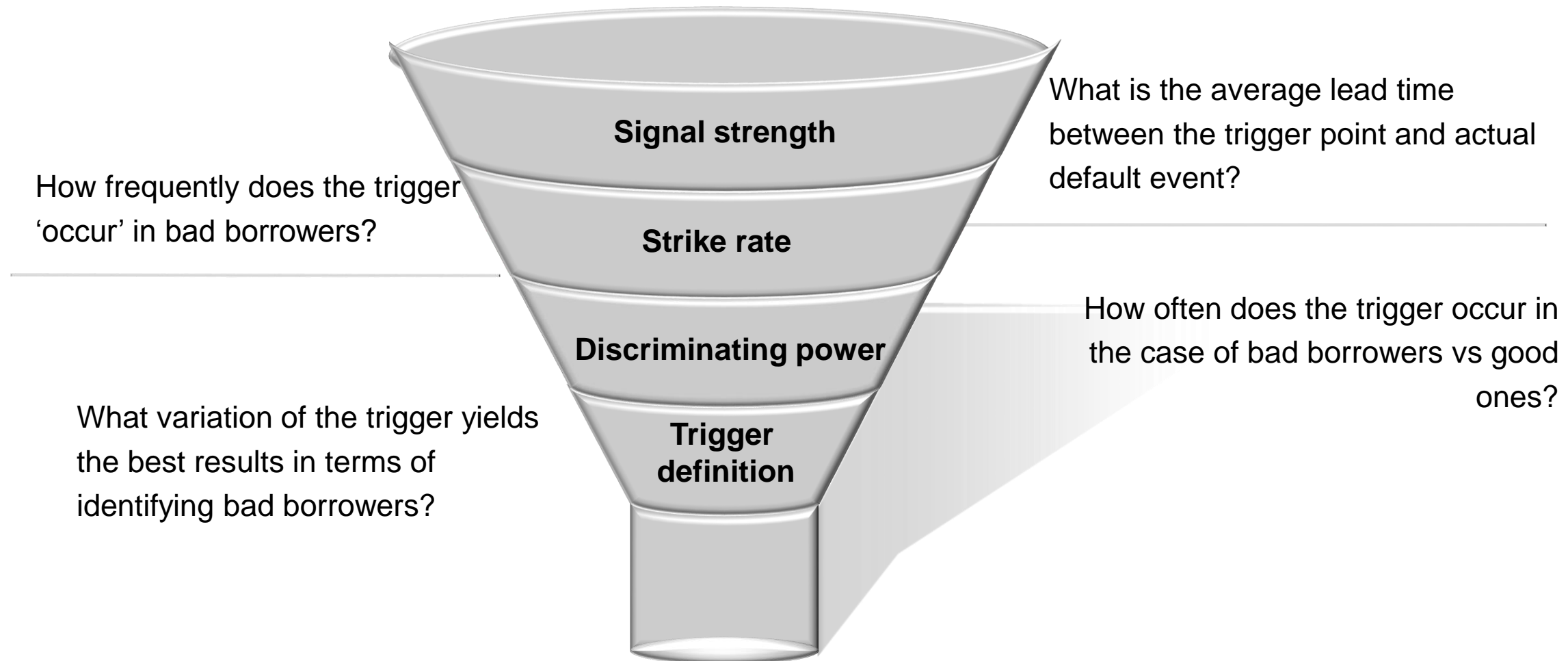
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Powerful early warning signals differentiate adverse behaviour, while minimising noise



Powerful early warning signals differentiate adverse behaviour, while minimising noise



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Getting started: getting past the theory

Principal early warning dimensions and triggers

Putting the pieces together

Innovative data sources

Re-calibration: learning from model performance

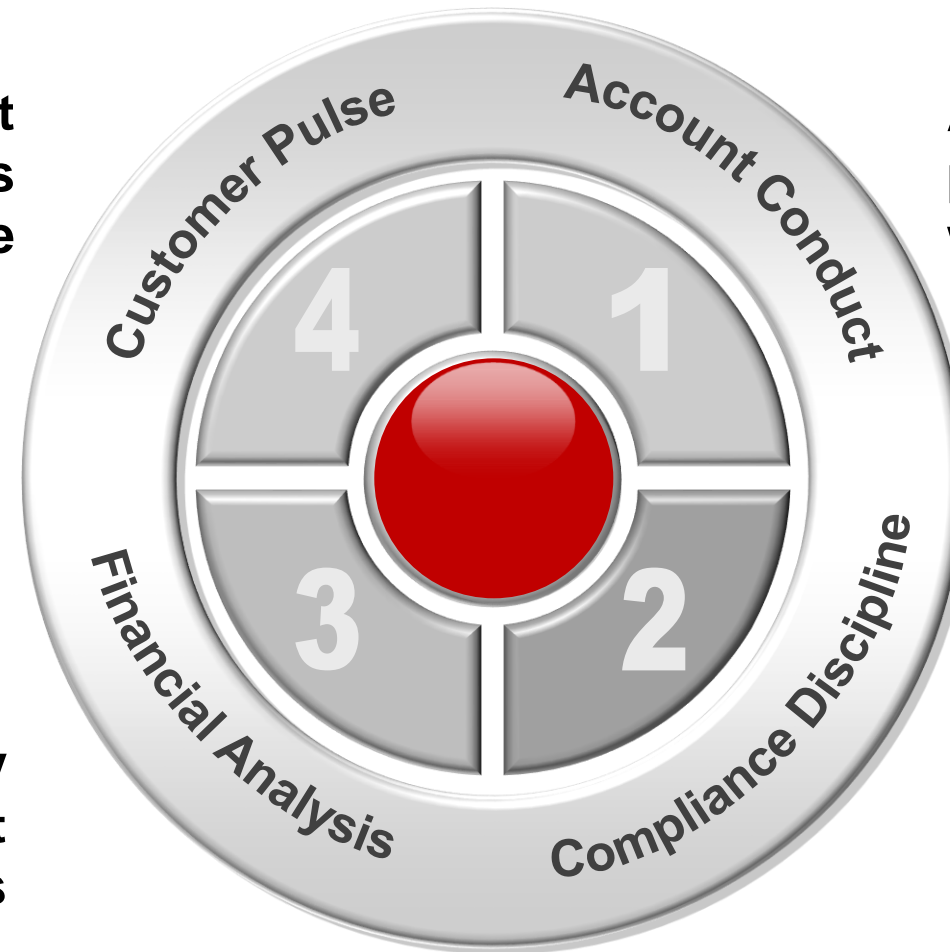
Critical success factors

Getting Started – Setting up a trigger library

Traditional Trigger Dimensions

On-the-ground signals the most effective indicators of potential stress though difficult to automate

Financial analysis provides a reality check through benchmarking against peers/estimates

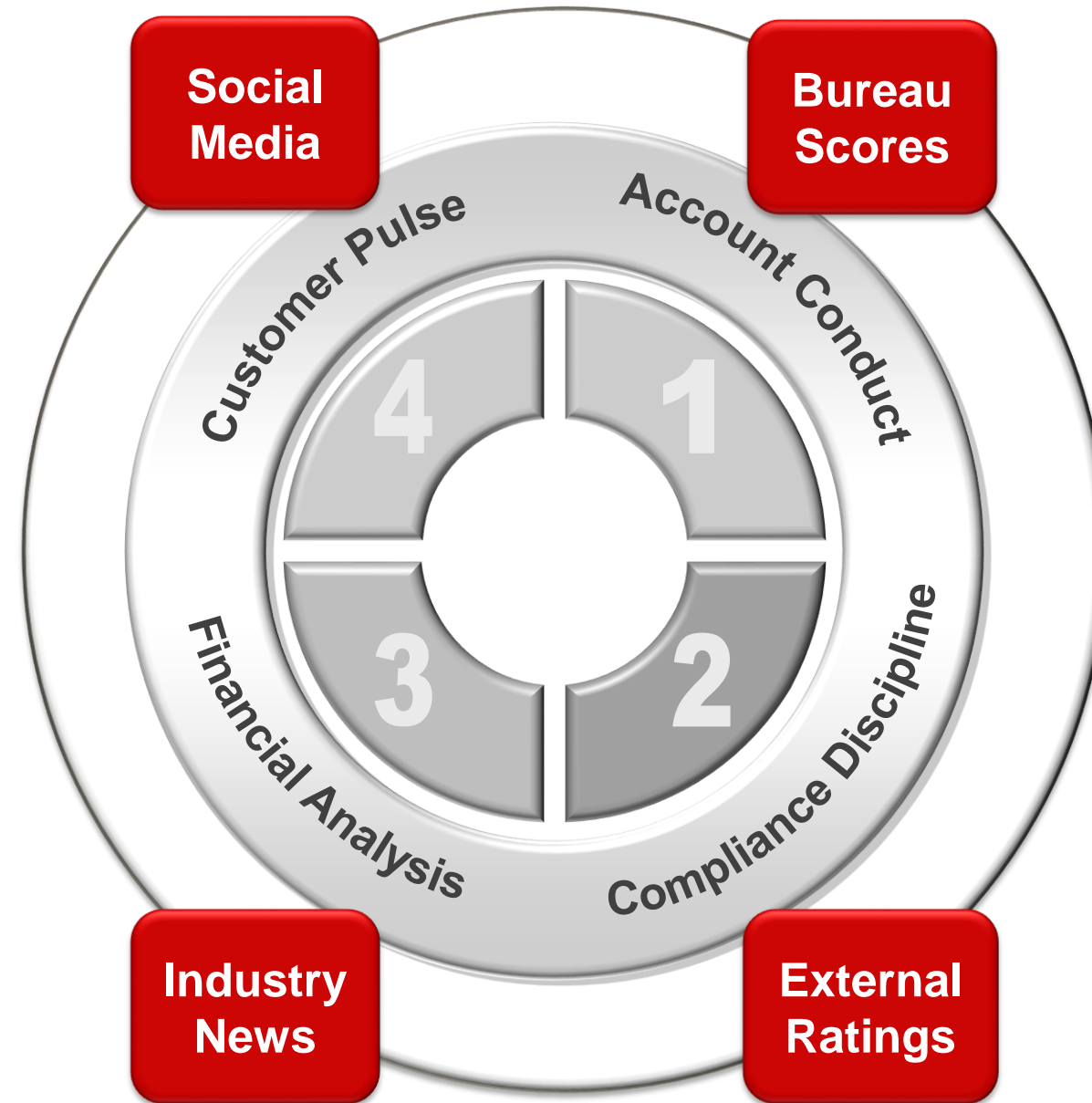


Analysis of account conduct behaviour provides a dynamic source of early warning information

Monitoring of compliance discipline among borrowers helps enhance risk detection

Getting Started – Setting up a trigger library

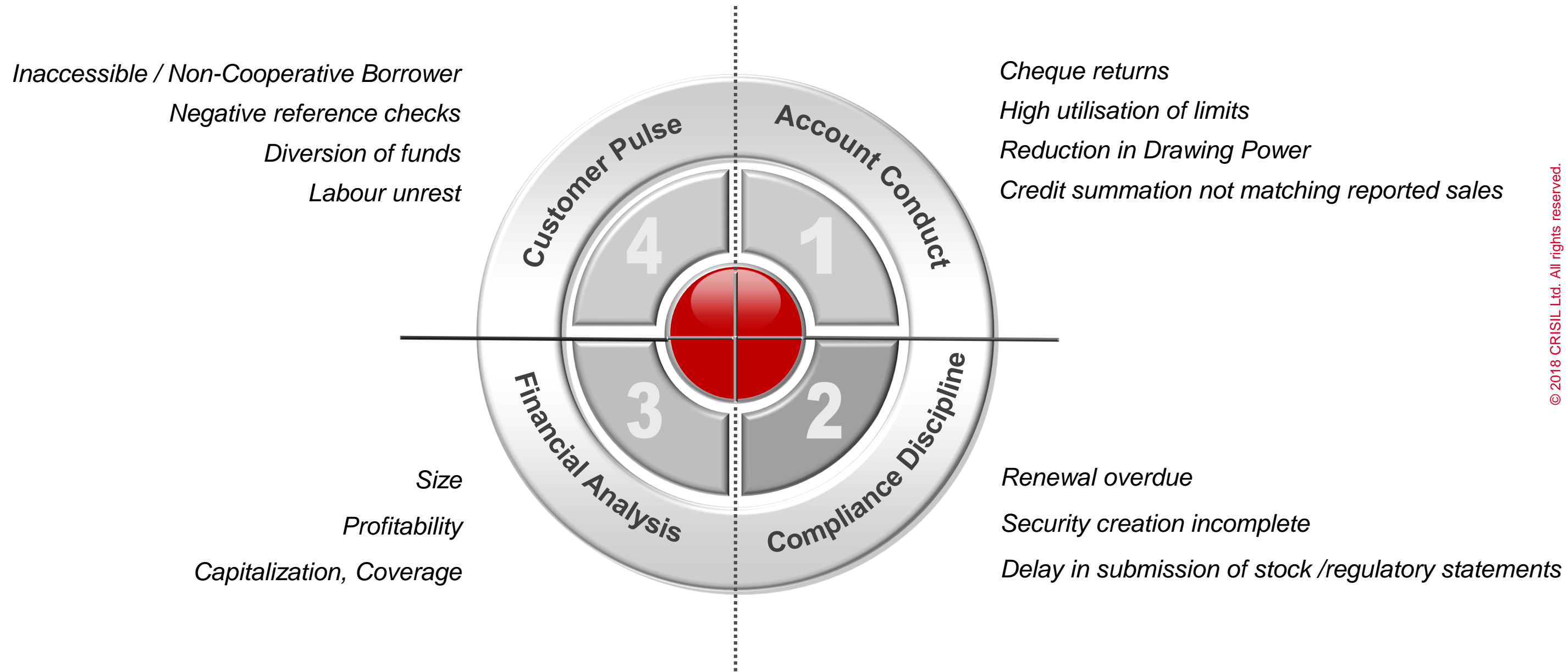
Identifying a library of powerful early warning signals is the most critical component of the overall EW process



A multidimensional trigger library ensures holistic risk assessment of borrowers

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Traditional Trigger Dimensions



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Principal early warning dimensions and triggers

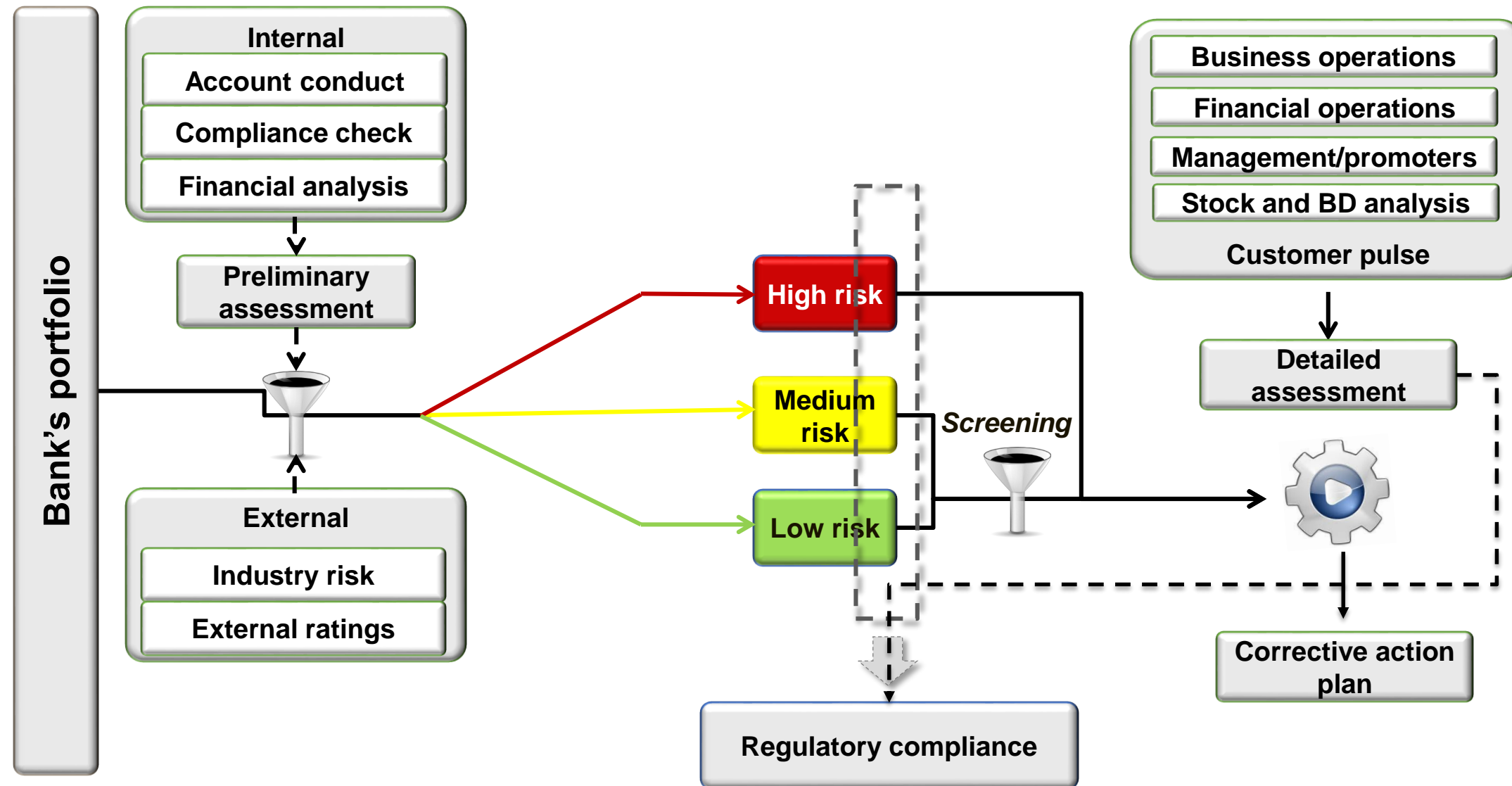
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A holistic risk assessment of the borrower leverages multiple data sources – both internal and external



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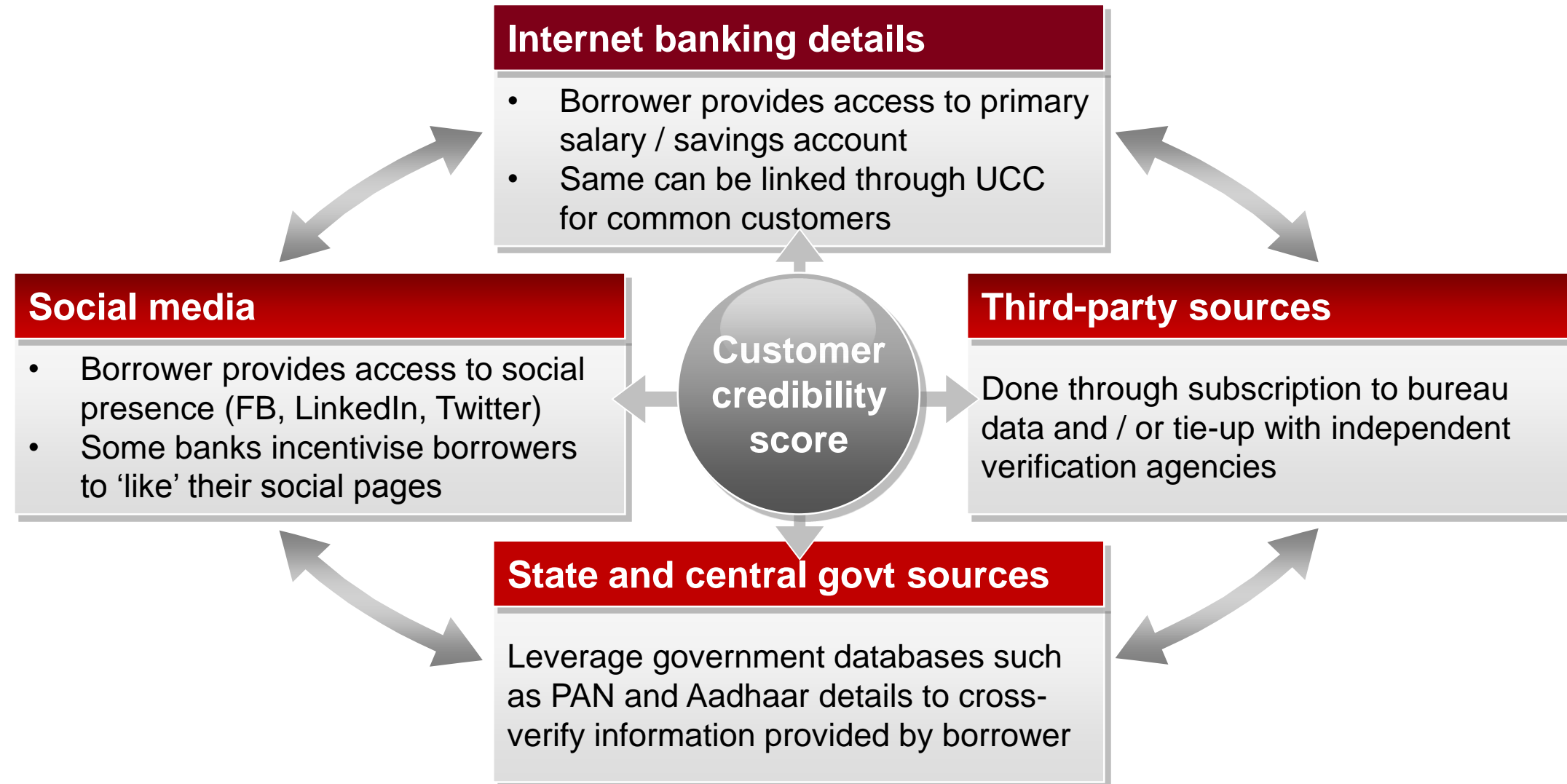
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Alternative data sources can provide insights on customer credibility



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Trigger attributes: fine-tuning the trigger library

Enhancing a heuristic framework using performance data

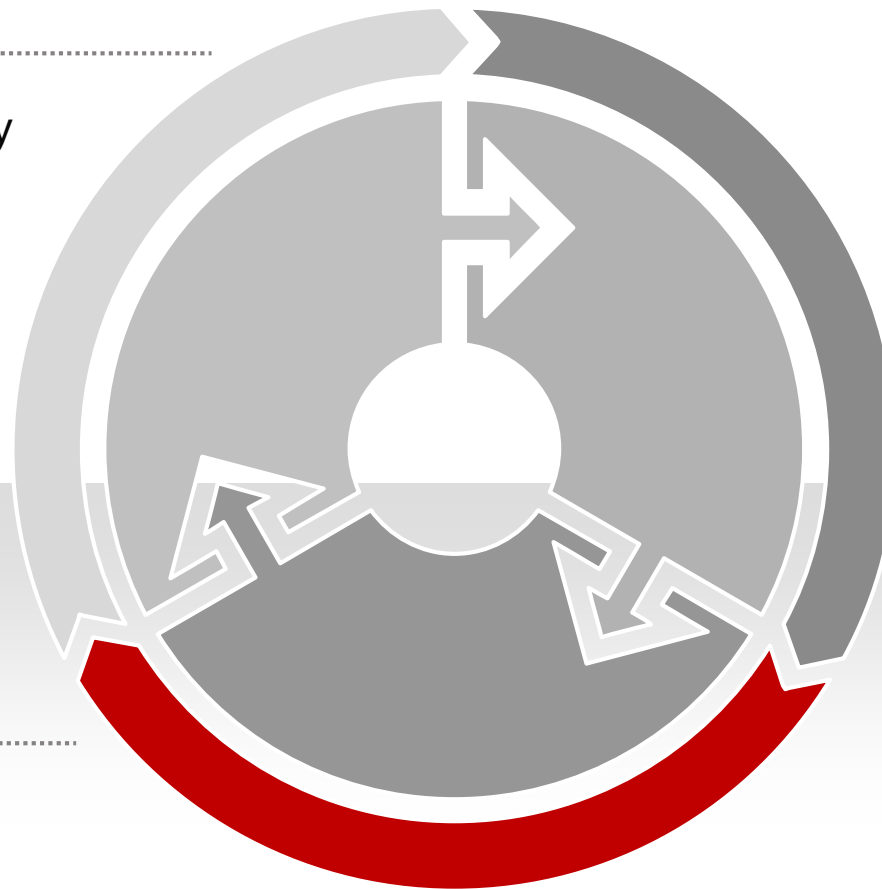
Criticality indicates the weight of a trigger in the overall borrower score

Criticality recalibration

Recalibrating the trigger library to reduce rate “bad” accounts being classified as good and vice-versa using statistical analysis of gathered historical data

Benchmark recalibration

Action points



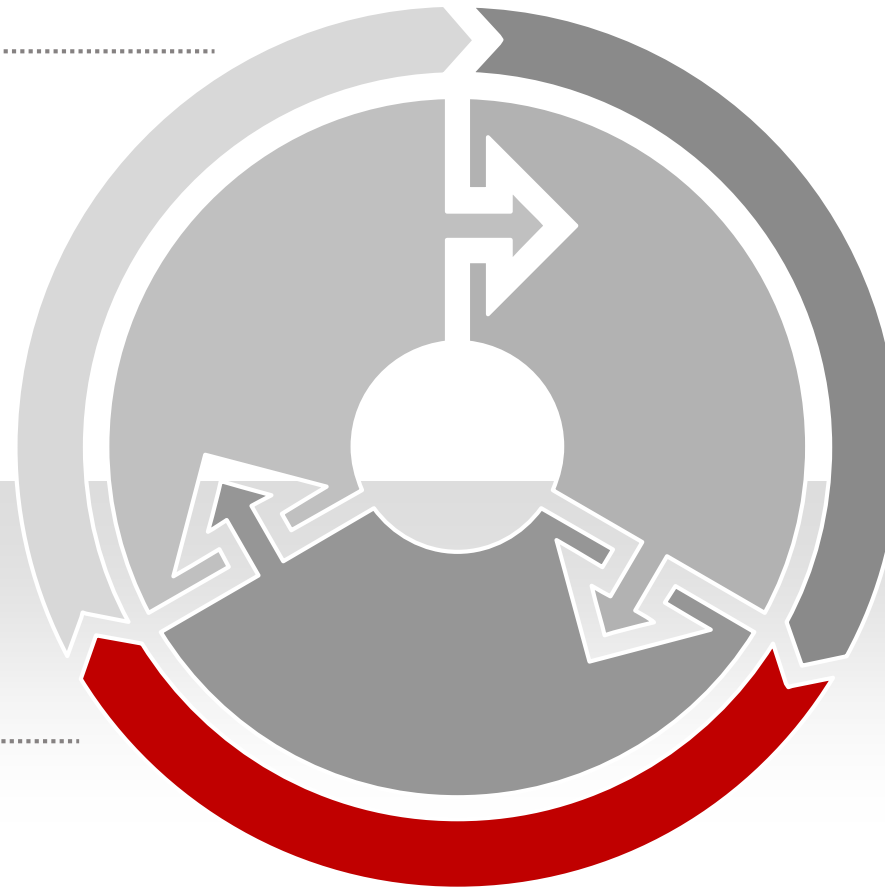
Trigger attributes: fine-tuning the trigger library

Enhancing a heuristic framework using performance data

Benchmarks indicate the tolerance zone for each trigger

Criticality recalibration

Action points



Benchmark recalibration

Modifying the benchmarks for red-amber-green classification at a business level: Analysing the performance of the model so far, and judging the operational cost of monitoring accounts flagged by the framework, the business may relax / tighten the borrower score benchmarks

Trigger attributes: fine-tuning the trigger library

Enhancing a heuristic framework using performance data

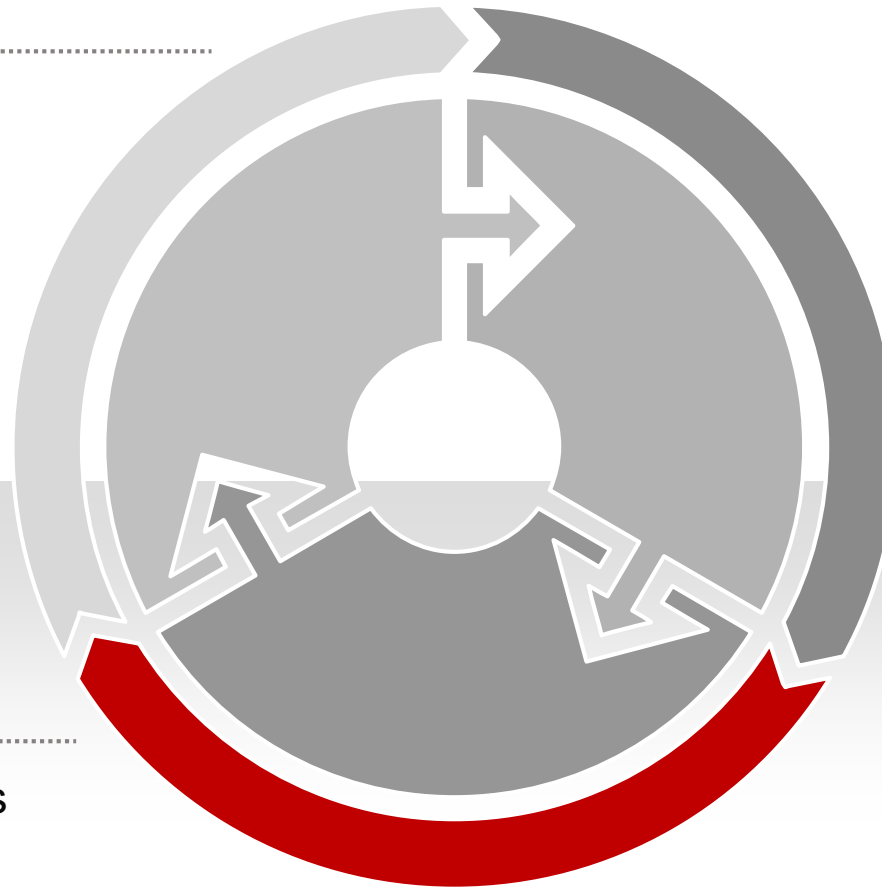
Corrective action plans are defined / established against a combination of triggers

Criticality recalibration

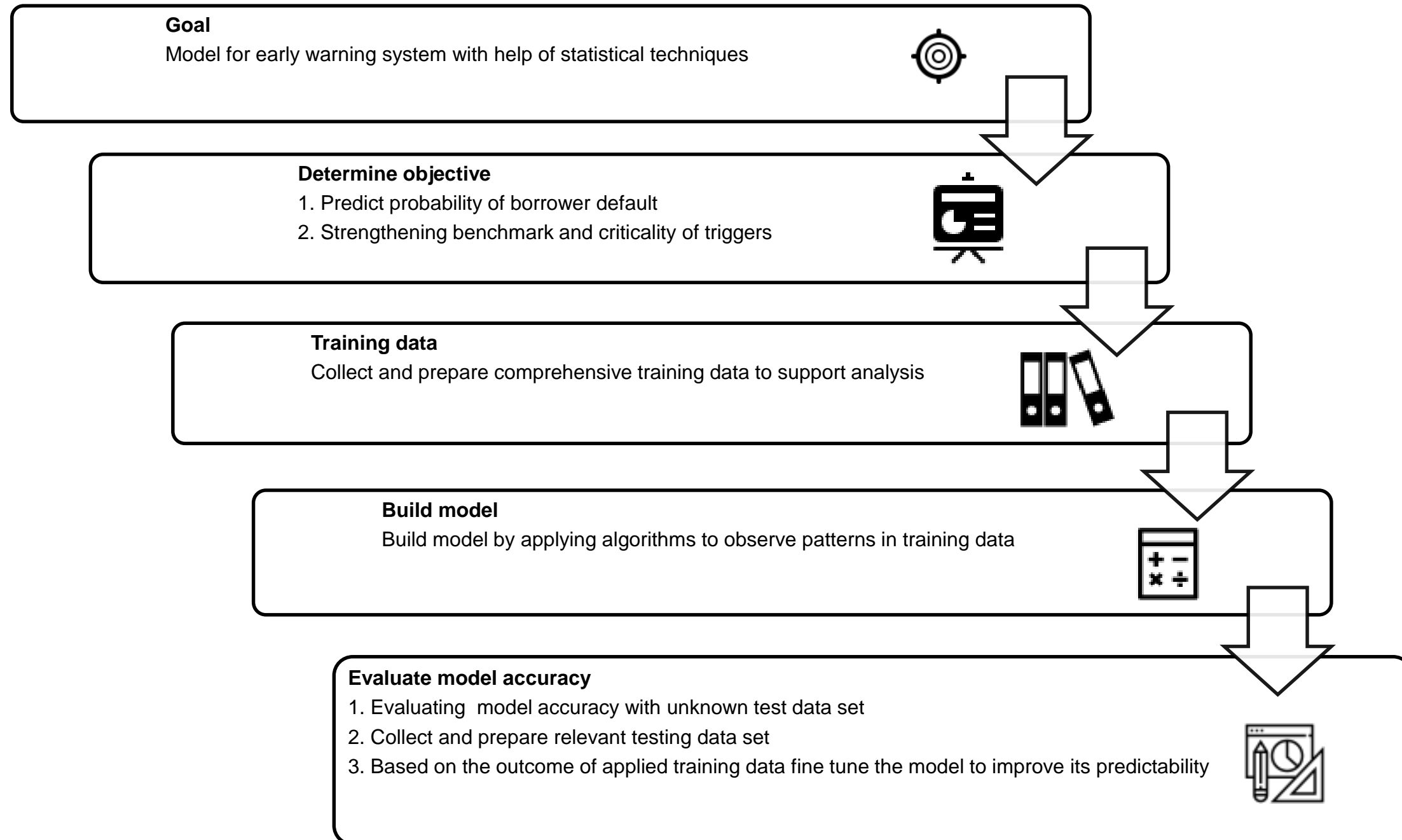
Benchmark recalibration

Action points

Capture corrective action points against accounts that led to normalisation of borrower score to build an automated action point definition against trigger breaches

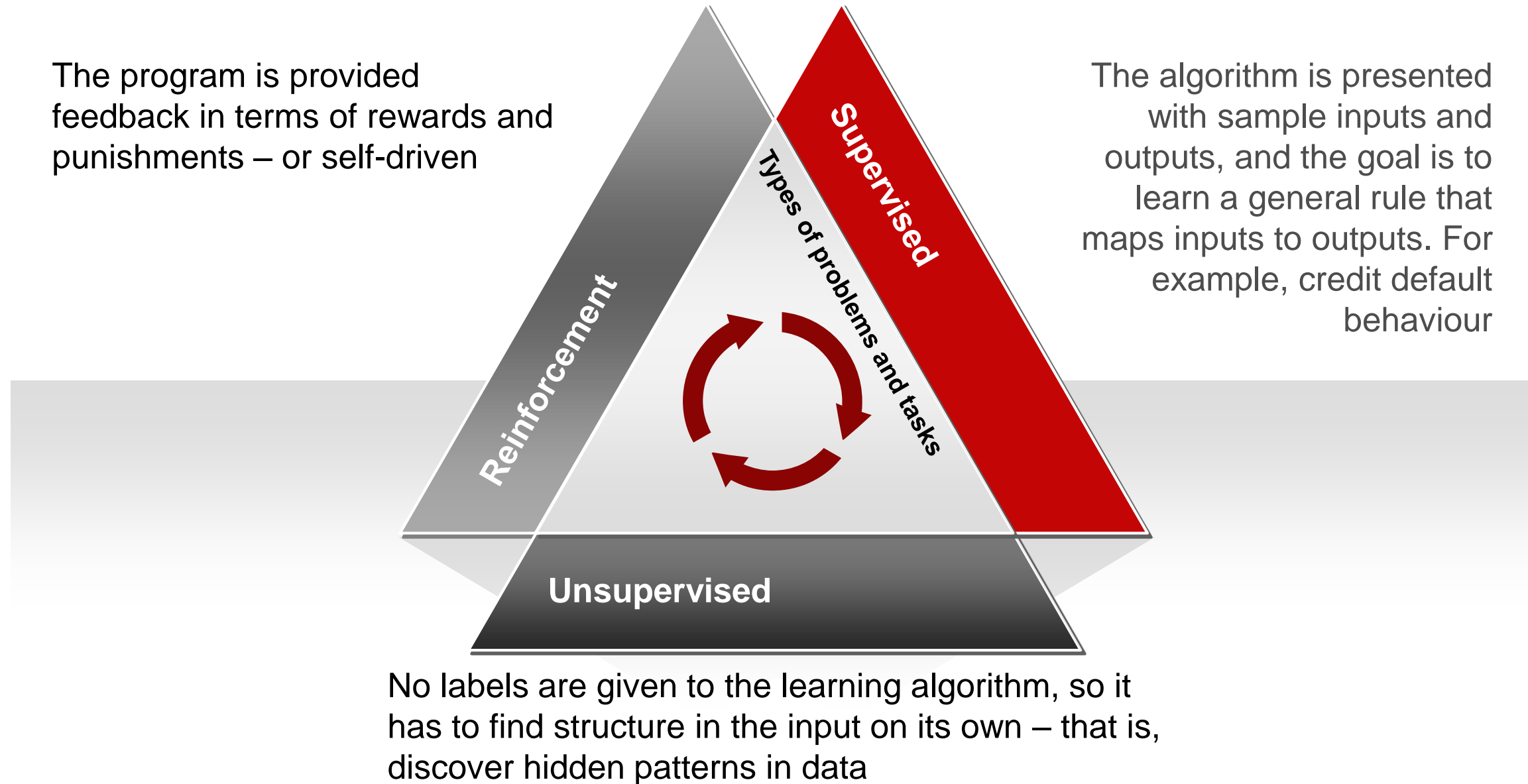


Statistical recalibration of triggers in early warning systems



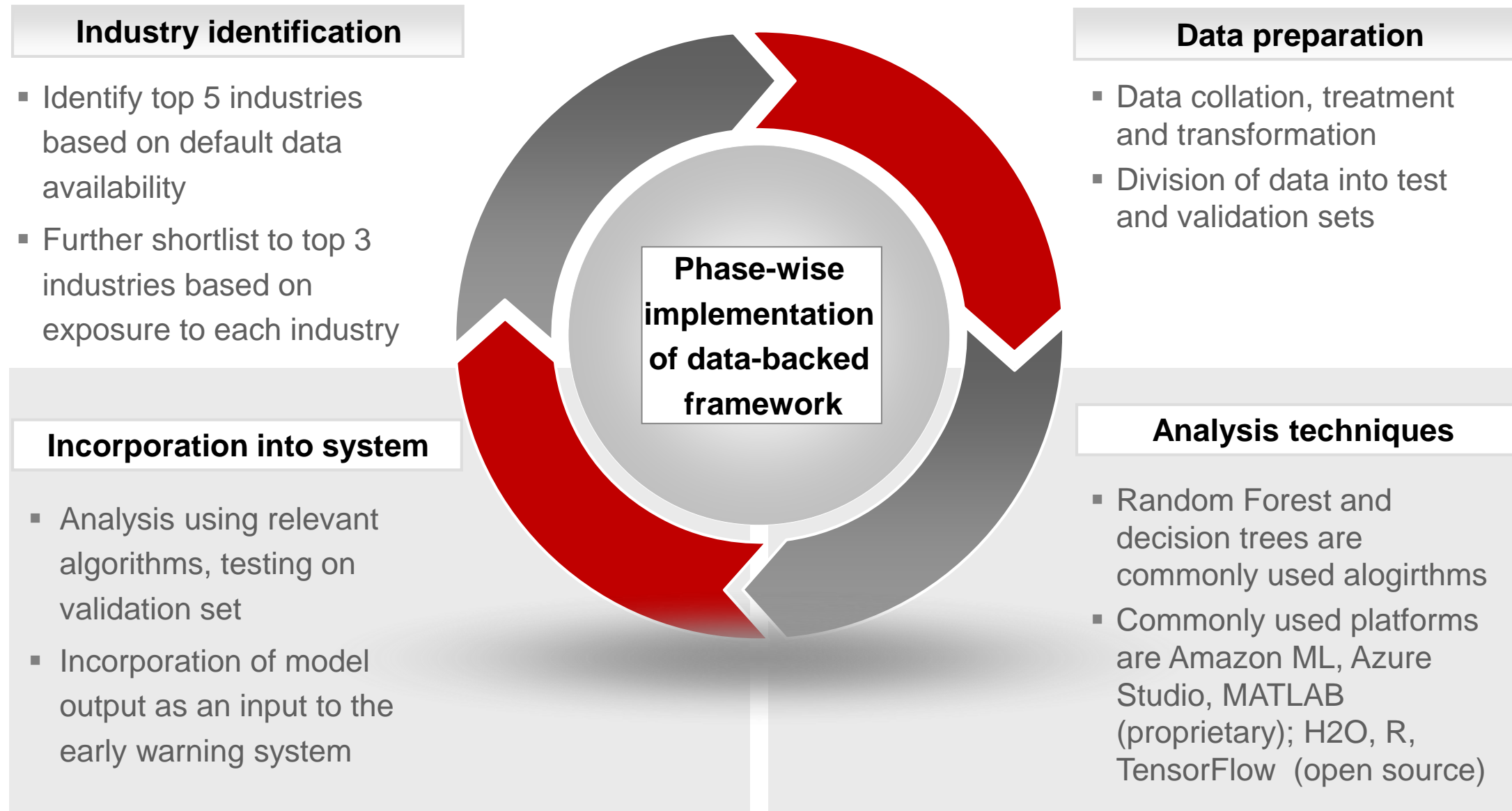
Emerging methods for data analysis

Increasing use of machine learning algorithms for large-scale data analysis



Development of niche, industry-specific models

Increased predictive power through narrower focus, new analysis methods



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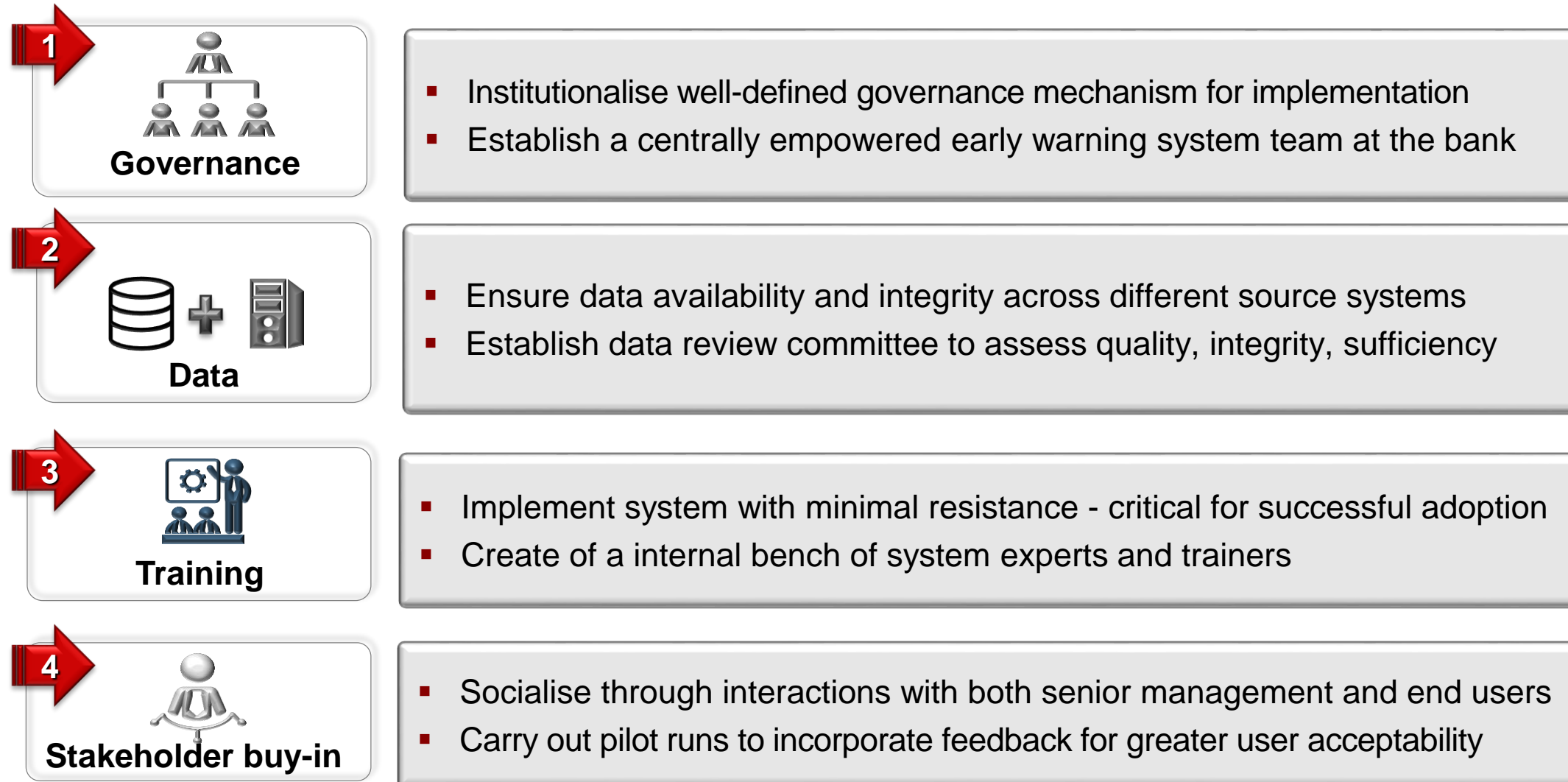
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Critical success factors for effective early warning system implementation



Thank you!

Send in your queries to:

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