## RiskProbe™ for IFRS9 Model Audit

Risk Model Audit is now a standard requirement by most Regulators and Board committees for complex and high impact risk processes like IFRS 9. This challenge of conducting a thorough Internal Audit of Risk processes increases with, the complexity of the process / regulation, number of teams involved, product diversity & business lines covered, involvement of external consultants, audit & disclosure frequency.

**RiskProbe™** provides a one stop solution for Internal Audit Teams to adequately assess the quality and strength of the risk processes and report the audit findings with explanatory commentary.

QAZIQUE
Knowledge. Performance. Impact.

TOTAL
RegTech Solutions

RiskProbe™ helps Auditors and Top Management in Banks manage all the following demands of a detailed and comprehensive IFRS 9 Audit.
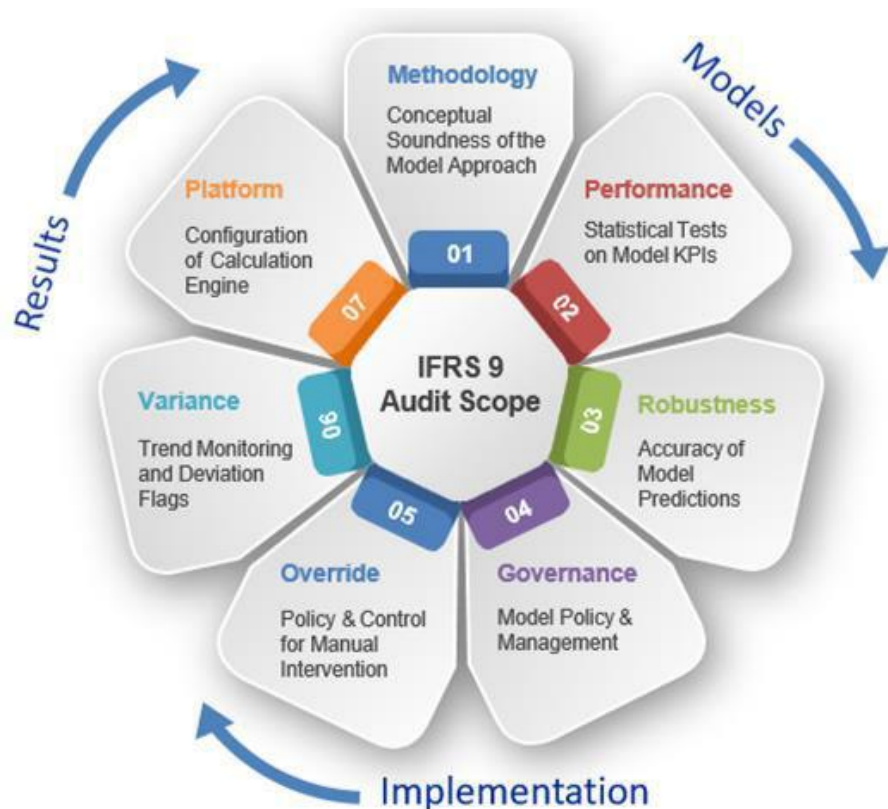


**Methodology:** There are a number of Models utilized for IFRS 9 like Probability of Default, Loss Given Default, Exposure at Default, Macroeconomic Overlays, Business Models, etc. The internal Audit team must review the approach and techniques used for building these Models and comment on the appropriateness of such methods

**Performance:** Each of the IFRS9 Models must be validated for its performance using statistical test. Quantitative KPIs like GINI, KS, R-Square etc. are expected to be calculated by internal auditors. Moreover, thresholds for each of these KPIs must be defined and results must be interpreted by the Internal Audit Team.

**Robustness:** The model predictions must be tested and back tested to confirm the suitability of Model outcome. Statistical measures like MAPE, RMSE, etc. are industry standard tests for determining the robustness of the models. Internal Auditing teams must have methods to compute these metrics and report them along with their conclusions.

**Governance:** Model Risk Management is key to every model lifecycle and is a regulatory focus for IFRS 9 implementations. Therefore, Internal Auditors are expected to ensure appropriate controls are in place to ensure Models built are managed in compliance with the prescribed Model Management Standards.

**Override:** There are several phases in any IFRS 9 framework where manual intervention and judgemental overrides may have been applied. Such overrides must be thoroughly assessed by Internal Audit team with the rationale for adopting the selected approach accompanied with the impact assessment remarks of the same.

**Variance:** The results of the Expected Credit Loss calculations and its distributions across segments & stages must be tracked across time for any major deviations from the expected trends. This analysis requires Internal Auditors to define Key Risk Indicators to be flagged for any deviations beyond the defined acceptance levels.

**ECL Calculations Platform:** The ECL Calculation engine should be reviewed for its configurations and capabilities. In context of IFRS 9, the accuracy of the results significantly depends on the configuration of this calculation engine and Internal Auditors are expected to review the accuracy of the system settings.

## Validation

**Statistics: Quantitative Tests** embedded in RiskProbe™ is the entire spectrum of KPIs needed to assess a Model's performance. The test results are presented in graphically intuitive format, graphs are cursor sensitive, analysis with suggested audit observations, are on the screen categorized into red, amber green to allow easy interpretation of results for Internal Audit reporting.

Toggle the screen to see what a KS, R-Square, GINI, Accuracy Ratio etc. mean in an IFRS9 ECL Model Validation Context!
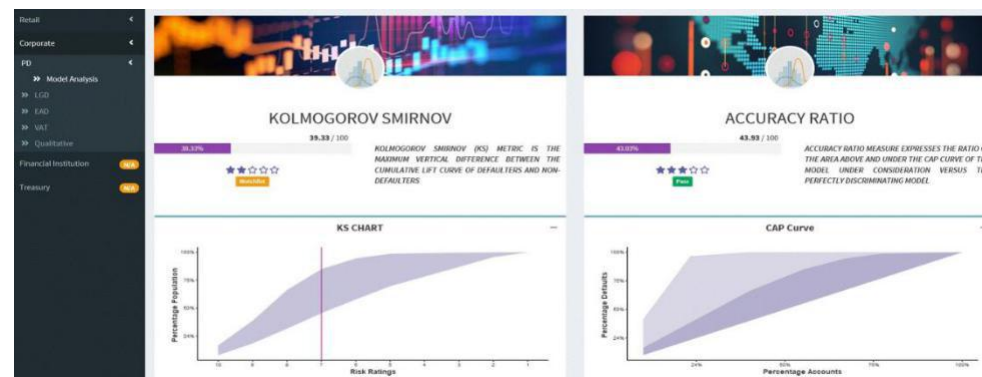
**Statistics: Variance Across Time (VAT)** analysis is a powerful audit technique supported by RiskProbe™ to uncover hidden anomalies in the IFRS 9 implementation by tracking defined metrics and ratios over time such as Population v/s Stage, ECL v/s Stage. The trends are compared against a threshold window to flag any abnormalities in the results.
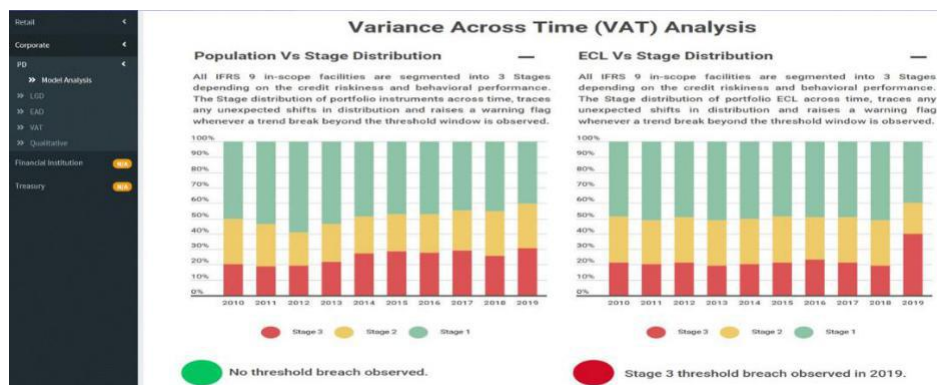


**Scoring** transforms the qualitative assessment into an objective framework covering all subjective aspects related to IFRS 9 Implementation. Such as;

- Model Governance, addressing Model Ownership, Policy, Monitoring & Overrides.
- Model Design, including Model Structure & Documentation.
- Model Use, such as Component Usage & Model Updates.
- Input Data Quality, covering Input Data Quality, Validation, Enrichment & Archiving.

Resulting in a quantitative assessment of the subjective aspects



| GOVERNANCE | DESIGN | MODEL USE | DATA QUALITY |
| --- | --- | --- | --- |
| 30% | 35% | 20% | 15% |

With the **Supervision functionality**, Senior Management can monitor the progress status and team members output.

## Analysis and Reporting, *With the click of a button….*

- Built in Dashboards provide the individual results, as needed, filtered by Portfolio, Model or Analysis type.
- Perform ad-hoc analysis using an intuitive self-serve portal and export results.
- Retrieve Fully Automated Internal Audit Reports for Board or Regulatory submission

RiskProbe™ automatically generates intelligent analysis of the results into a word document with detailed observations and interpretations of the Statistical Model KPIs, Scores, Governance & ECL Results!

Benefits
- Automated (Intelligent) Audit Report for IFRS9 (in MS-Word) with elaborate interpretation of each and every assessment performed.
- Quantitative evaluation of accuracy and strength of models, estimates and forecasts.
- Qualitative evaluation of subjective aspects (governance, data quality, conceptual soundness, etc.) against best practices.
- Objective Summarization of review results into scores and conversion of scores into interpretations.
- Variance Across Time Analysis to detect abnormalities in results (like ECL, Exposures, etc.).
- All Models can be supported and assessed on RiskProbe™.
- Intuitive Graphical User Interface, you can go through your tasks with mouse clicks. No statistical programming required.
- Supervisory Module to monitor progress of Audit Assignment, Processes and evaluate Audit Process Efficiencies.
- Dynamic Dashboarding to perform visual analysis.

## One Partner, Multiple Solutions
Our risk management solutions extend to complete Financial and non-Financial ERM.

We provide Advisory Services, Software Solutions and Data Automation Management Solutions spanning Liquidity Risk, Market Risk, Value at Risk, Liquidity Risk, Credit Rating, IRB & IFRS9 Model Design, Validation & Basel Capital Adequacy. A comprehensive framework for IFRS 9 (ECL classification, measurement, accounting and reporting) is fully supported. In addition to the above, we provide the capabilities to conduct stress testing in an integrated and user friendly framework.

Our financial risk management solutions are complemented by market leading GRC platform enabling financial institutions to ensure regulatory and internal policy control and regulatory compliance, record incidents & losses, conduct risk & control self-assessment, create issues and actions, managing IT and Information Asset Management Risk in a proactive and dynamic way.

We have served 60+ Financial Institutions in EMEA, including global, regional and domestic banks.