OPERATIONAL RISK MANAGEMENT
FUNCTIONALITY DOCUMENT

RiskNucleus® ORM automates the process of Incident Management, loss data & analytics, risk and control self assessment, control testing, key indicators, capital charge calculation for operational risk and reporting


BenchMatrix>

INTRODUCTION
RISKNUCLEUS® ORM

Operational Risk Management (ORM) has become a key focus of the regulators during the last several years and has been recognized as one of the most crucial components of risk management. In developed markets this subject has been extensively researched resulting in paradigm shift in overall enterprise risk man-agement.

Management of operational risk is heavily dependent on manual processes and majority of the companies use conventional tools for implementation. Risk information is being collated as a simple one-dimensional register and risk assessment is done based on subjective unit scores. However, these firms are beginning to realize the need for effective and efficient risk management practices to improve overall delivery of the services products in the market and company's financial performance through an integrated risk management solution.

RiskNucleus® ORM empowers the organizations to effectively manage their operational risk within an enterprise risk framework. It combines powerful components of ORM enabling organizations to analyze, manage and mitigate operational risk in a simple and efficient manner.

RiskNucleus® ORM is a single firm-wide solution for ORM which covers all the key modules including Incident Management & Loss Analytics, Risk & Control Self-Assessment (RCSA), Key Indicators (KI), Action Plans, Internal Control Testing and Self Certification.

RCSA

Control Testing

Key Indicators
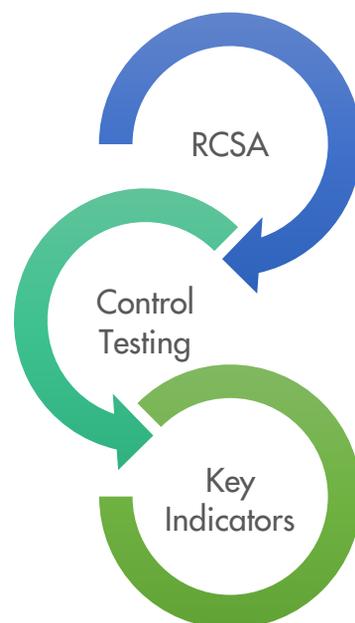
- **Basel Compliant:** Standardized and in line with the Basel II rules and regulations.

- **Cultural Change:** Contributes to effectiveness of overall risk mitigation culture in an organization

- **Decentralization:** Promotes decentralized model for implementation across the organization.

- **Cost-effective Implementation:** Stand-alone system with easy configuration settings and low cost imple-mentation phases.

- **Configurable Workflows:** Each and every module in RiskNucleus® ORM relies on a workflow for approval, review and completion. This workflow can be configured by master users to meet the needs of the organization

- **Quick Installation:** Online solution that saves you the time and effort to manually install it for every user. Hence, Installation is quick and hassle-free.

- **Flexible Features:** Dynamic and configurable solution that you can mold to your organization's needs.

- **Dynamic and Meaningful Reporting:** System reports allow you to drill-down to the source, enabling greater insight into every report for better analysis.

- **Incident Management & Loss Data:** the incident management module of RiskNucleus® ORM is comprehensive, covering not only internal losses, but also allows integration with external and public losses. Reporting of operational risk incidents is independent of user licenses

- **Risk and Control Self-Assessment (RCSA):** Identifying risks and aligning them to entity's goals and processes. Assess risks and controls and compare the effectiveness of controls in a workshop environment using weightages and a voting approach

- **Key Indicators:** RiskNucleus® ORM allows the firm to use this tool as a business intelligence solution allowing single point data fields modelled into a valuable key indicator with scores, thresholds and frequencies.

- **Issues and Action Plans:** It allows users to assign and manage action plans in order to completely mitigate risks.

INCIDENT MANAGEMENT & LOSS DATA
RISKNUCLEUS® ORM

Operational risk incident is an event resulting from breakdowns or weaknesses in any process, control, systems, or external event affecting the operations. Operational risk events include cases where Bank's standard or normal processes or procedures were not followed or where they were inadequate to prevent the occurrence of an operational loss event. Loss events may result from errors in human judgments, processes and system failures, or business interruptions.

The loss impact increases exponentially with increasing discovery time i.e. time lag between date of event occurrence and date of event reported. Therefore, it is a primary goal of organizations to reduce this lag in order to avoid catastrophic losses.

Operational risk events occur on a regular basis in every organization. However, it is the efficiency in management of these events and their prompt mitigation that counts. The Incident Management & Loss Data features of RiskNucleus® ORM starts with incident reporting at the granular level. These incidents then converge into losses/gains/near misses after approval. The entire life cycle of an incident is monitored by relevant departments to ensure reduction in the loss impact and avoidance of future incidents.

Loss identification and reporting is supported by the Incident Capture Form. Once a loss is reported, it goes through multiple levels of approval before it can be recognized and booked as an operational loss. This approval chain is configurable.

The Incident Management & Loss Data module of RiskNucleus® ORM is a comprehensive data management tool that allows users to track loss events throughout their lifecycle.

Incident Reporting · Review & Approval · Loss Data · Attrbution · Recoveries

- **Incident Capture Form:** All operational risk events can be reported through this form. All employees of an organization will have access to the Incident Capture Form.

- **Configurable Approval Flow:** The approval process of the Incident Management module is customizable and can be modified according to the organization's need.

- **Classification:** Every loss recorded in RiskNucleus® ORM can be classified according to various loss event type and causal categories.

- **Action Tracking:** Create action plans against loss events. The progress of these action plans can be monitored within the application allowing organizations to address control failures

- **External & Regulatory Incidents:** RiskNucleus® ORM has the capability to classify incidents as external or regulatory. Each external incident needs to be further classified with an external sub category. For regulatory events, the submission date and the person who submitted the incident to the regulatory body can also recorded.

- **Opportunity Costs & Gains:** Operational risk incidents can sometimes result in gains or opportunity costs for the organization. RiskNucleus® ORM allows recording of these amounts

as well for analysis and forecasting future loss occurrences.

- **Loss Attribution:** It is often the case that a single loss amount needs to be attributed to multiple business lines. Percentage wise distribution of the Gross/Net Loss can be done to multiple business lines. The approval chain of the incident is modified automatically.

- **Dashboards & Reports:** Regulatory authorities require specific reports of loss data and assurance of efficient operational loss event management practices. Single Event, Loss Events Summary, 56-Cell Matrix, and Events with Open Actions are some of the standard Loss Data reports. Each report has a certain set of dropdowns and checkboxes which allows users to filter by department, approval status, date etc.

- **Capital Charge Calculation:** Configure all capital charge calculation approaches of Basel. Dashboard shows a comparison of the three approaches extended over a period of time for analysis and decision making.

- **Audit Trail:** Any changes in the loss events recorded in RiskNucleus® ORM are also tracked and saved through a strong audit trail functionality.

RISK & CONTROL SELF-ASSESSMENT
RISKNUCLEUS® ORM

RCSA is a process of identifying key risks of an organization and systematically addressing those risks by deployment of adequate controls for desired risk targets. This entire process requires integration with various components of ORM and is effective through decentralization of risk mitigation and control assurance activities.

Through the RCSA module of RiskNucleus® ORM a firm can identify key risks and controls within their business, evaluate the risk exposure, and score the design and performance of controls. Users can link risks to corporate goals and entity processes and make decisions and assign action plans in order to mitigate unwanted risks.

- **Decentralized Model:** Every department is in charge of creating and assessing its own risks and controls.

- **Ongoing RCSAs:** With RiskNucleus® ORM identification, assessment, management, and monitoring and ongoing assessment can be done

- **Multiple Risk Appetite Matrices:** Create a different Risk Appetite Matrix for every business function. This allows for relevant and more accurate assessment at the ground level and also enables managers to aggregate risks and monitor the total amount of exposure in the organization

Risk Managers can effectively assess and monitor identified risks and controls within their organization and focus on areas of control failure.

- **RCSA Workshop:** Assessment of risks and associated controls are improved through the RCSA workshop tool. Adding/importing risks, selecting participants, assessing risks and controls, selecting management action etc. can all be done within a single screen. Workshop Tool allows users to conduct RCSAs in an effective and systematic manner. All risks are assessed by each of the participants. Results are consolidated using predefined weightages

- **Control Assessment:** With every risk, users can attach a set of controls. These controls can be assessed along with the risk in order to calculate residual exposures.

- **Configurable Workflow:** A particular risk can have any one of the following status: Pending Submission, Pending Approval, and Approved. However, before the risk is sent for approval, the risk creator has to make sure that all the relevant details pertaining to that risk are complete.

- **4 Assessment Methodologies:** RiskNucleus® ORM allows users to conduct assessment using one of the four models available i.e. Hybrid, Subjective, Quantitative and Scoring.

- **Entity Risk View:** The risk profile of organizational entities can be viewed in the system. All risks attached to the entity can be viewed on inherent and residual heat maps.

- **Overall Control Mitigation Values:** Each control has a mitigation value once inherent and residual assessment of the risk it is linked to is assessed. This value represents the amount of exposure the control is mitigating. Risk mangers can assess the effectiveness of controls through listing of the controls showing the exposure they are mitigating of each risk they are linked to

- **Assessment History:** The assessment history of a single risk can be viewed through the single risk summary screen. All past assessments of this risk are saved by date.

- **Classifications:** Linkage to multiple products, processes and causal categories.

- **Single Risk Summary:** Clicking on a risk in the risk register shows the complete details of the risk including inherent, target, residual assessments, control assessments, suggested management action, linkage to products, processes and causal categories etc.

- **Dashboards & Reports:** RiskNucleus® ORM offers a variety of reports RiskNucleus® ORM offers a variety of reports for this module. Risk profile by Entity, Workshop Summary Report, 56-Cell Matrix and Single Risk Report are some of the standard reports in this module. These reports also represent information in graphical formats and allow the user to categorize each report according to business lines and organizational hierarchy.

# INTERNAL CONTROL TESTING
RISKNUCLEUS® ORM

Internal control testing has become an integral part an organization's risk management framework. In order to ensure key controls are performing the way they ought to, they need to be tested on a regular basis.

RiskNucleus® ORM internal control testing module allows the user to create control test plans, link controls with test cases and assign them to multiple users in the organization. Notifications are generated when test plans are assigned and completed. Each test plan follows a configurable approval chain in order to validate test results.

- **Recurrence Frequency:** Each test plan is assigned frequency of recurrence. The test plan is reassigned at the end of this period. This functionality allows continuity in the process through automation and less reliance on human resources.

- **Testing Results:** Testing results are aggregated at the control level. The user can view all tests conducted against the control and the results of those tests. Based on the weightage assigned to each test case, the system uses weightage average to determine whether the control has passed or failed.

- **Dashboards:** Through the control testing dashboard, users can view the controls from various perspectives i.e. total number of controls passed, number of controls unassigned, number of key controls which have failed and their details etc.

- **COSO Classifications:** The controls are classified using the categories of COSO including classification, category, component, type etc. These can be viewed by the user who is performing the tests.

- **Integrated Framework:** An integrated framework ensures that linkages across modules are managed. The controls are linked with products and processes. These links can be viewed single control details screen. The controls being tested are also linked to certain risks during RCSA. These risks are also listed in this screen along with their inherent and residual scores

There are certain risks within an organization that require continuous monitoring. KIs of these risks can be developed within RiskNucleus® ORM and their thresholds can be monitored with ease on a regular basis. Furthermore trends can be analyzed to indicate any abnormal activity that might lead to additional risk exposure.

The identification of key indicators and associated thresholds can help organizations assess trends and fluctuations in risk levels and consequently shoot down unwanted risks. The key indicator module of RiskNucelus® ORM captures data from different sources within an organization and produces results based on configurable metrics and departmental dashboards

Data Points Setup → Key Indicator Setup → Dashboard Setup → Data Input, Review & Reports
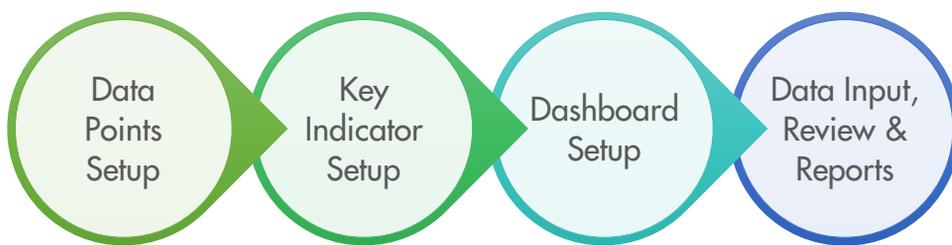
- **Data Field Management:** The process starts with identification of data fields which are then linked to one or more key indicators. Once the indicator is developed and updated, data is updated on regular basis by users/third party systems.

- **Formula Builder:** Each key indicator can be linked to one or more data points in a variety of ways through our formula builder.

- **Recurring Reporting Frequency:** For every indicator, the user can define the frequency at which data for it is required to be populated and the number of working days after which input will be restricted. Data input by the users can be viewed in the View KI Data Points screen.

- **Escalation:** Pre configured escalation settings will ensure that email notification are generated to the respective users upon a breach. The KI is also linked to a weightage indicating its importance/criticality.

- **Integration with allied systems:** RiskNucleus® ORM allows data fields of key indicators to be mapped to third party systems within the organization for fetching data

- **Customizable Dashboards:** Users can create personalized dashboards which allow users to keep a close check on key indicator limits and trends.

- **Risk Budgeting:** Risk managers can aggregate risk exposures across the organization. Through this screen the user can manage, compare and set targets for operational risk budgets of any defined department(s) of the organization. The selected department's inherent, residual, and target risk exposures are shown as a percentage of the organization's revenue. The variation of residual risk from the target risk is also shown in order to determine the need for any action.

- **Overall Control Mitigation Value:** A list of the risks to which the control is attached is shown below every control. The user can see the weightage of a particular control along with the residual and inherent exposures of every risk it is attached to in order to determine the significance of its OCMV

- **Capital Charge Calculation Dashboards:** Interactive dashboards allow users to compare different operational risk capital charge calculation approaches. They also help you analyze past data helping you make better decisions. The users can select the range of years for which they want to compare the operational risk capital charge values.

- **Self Certification Questionnaires:** Qualitative risk assessment can be conducted through this tool. Risks which are not covered by RCSA and key indicators can be captured and assessed here. The questionnaires can be circulated to multi-le departments and their results against each question can be viewed in an overall dashboard.

- **Action Tracking:** All modules of RiskNucleus® ORM are intricately linked with the action tracking. The user can create action plans with any key indicator, risk or incidents. Multiple tasks can be created within each action plan which can be assigned to different users in the organization with an expected completion date. Tasks can be interlinked with dependencies do that one task cannot start before the other is completed.

RISKNUCLEUS® PRODUCT SUITE

RiskNucleus® is a web-based, modular fully configurable and integrated application that streamlines the process of:

- **Consumer Loan Origination & Risk Rating –** Loan origination, credit approval management, credit policy, limit monitoring, financial documentation management, risk rating models, notifications, and integration with core systems.

- **Corporate/Commercial/SME Loan Origination, Risk Rating & Credit Administration –** Credit policy management, credit approval management, collateral management, ORR & FRR models, financial spreadsheets, facility and limit management, post granting functions, pricing models and exception monitoring.

- **Regulatory Compliance –** Regulatory compliance analysis, rulebook libraries, audit observations, self assessments, correspondences, action tracking and reports.

- **Anti-Money Laundering –** Watch list screening, transaction monitoring, customer due diligence and risk assessment, scenario management and reporting.

- **Corporate Governance –** Streamlines the entire process of shareholder, board and management meetings to save time, effort & cost whilst ensuring accountability and good corporate governance.

- **Enterprise Risk Management –** Pre-configured reports, capital adequacy ratio, liquidity ratios, data capture & integration, and data management.

- **Operational Risk Management –** Loss data & analytics, risk assessment, control testing, key indicators, and reports.

- **Market & Liquidity Risk –** Structural liquidity analysis, liquidity stress testing, exposure monitoring, funding analysis, flexible ratio analysis, and limit monitoring

- **Business Continuity Management –** Business impact analysis, business continuity strategy, crisis management, disaster recovery, plan monitoring, review and testing

- **Learning Management –** Customizable courses, question bank, exam management, certificates, dashboards, reports, delegated user management, and profile based workflow

With high-standard and easy-to-integrate technology, a simple and user-friendly interface, and comprehensive functionalities, RiskNucleus® will simplify the process of risk & compliance management at your organization and enable you to focus on your strategic business objectives.

BenchMatrix is a leading advisory services and automated GRC solutions provider with a focus on developing practical and customized approaches to risk management for organizations.

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