Integrated model risk management platform: Monitor℠

Financial institutions use complex models to support almost all critical business decisions. However, risks attached with these models have made model risk management an imperative for successful financial institutions. Model review, model risk management, and continuous model monitoring are necessary, not just from the point of view of satisfying regulatory requirements but these also are crucial mechanisms for both de-risking the usage of models in the financial services industry and enhancing risk assessment and understanding.
An error in model risk can lead to financial loss, poor business and strategic decision making, or damage to a bank’s reputation. To ensure clear interpretation of existing model risk, achieve ongoing regulatory compliance, and stay ahead of their competition, financial institutions need a reliable and regulatory compliant Model Risk Management (MRM) framework.

**The challenge: Ensure ongoing model risk management with a competitive edge**

Model risk is the possibility that a financial institution suffers losses due to inefficiencies or embedded assumptions in the development and application of models. Model risk can lead to financial loss, poor business and strategic decision making, or damage to a bank’s reputation. To ensure clear interpretation of existing model risk, achieve ongoing regulatory compliance, and stay ahead of their competition, financial institutions need a reliable and regulatory compliant Model Risk Management (MRM) framework. The MRM framework needs to combine best-in-class model risk identification and reporting processes with robust and user friendly technology. Monitor™ is a proprietary platform developed by Genpact, specifically to address the growing MRM needs of financial institutions, in line with regulatory and internal policy guidelines.

**Integrated model risk management platform monitor™**

*Establishing an independent and highly-qualified MRM framework with the authority to delve into every aspect of model development and use across the enterprise is key to effectively managing model risk*

With advances in computing technology, predictive analytics has become a universally accepted tool for most types of financial decision making. Banks use predictive models for many purposes, and in recent years the Basel II, III, CCAR, DFAST etc. requirements have given them added impetus to do so. All too often, however, the complexity involved with modeling a wide range of real-world risks across multiple business lines has promoted organizational silos and inadequate visibility into underlying methodologies. With even more regulation now on the horizon, MRM has emerged as a critical challenge area due to the following issues:

- Lack of independent governance structure, adequate executive oversight and clear policies
- Unavailability of collaborative teams with a range of competencies and experiences
- Lack of comprehensive framework of validation process with a full toolbox of validation techniques and methods
- Absence of centralized repository and model repository and inventory
- Ineffective model risk reporting process and culture

At Genpact, we have been at the forefront of MRM for clients across the globe. Genpact offers monitor™ as an

- Automated
- Streamlined
- Regulatory compliant
- Highly evolved and
- Integrated

MRM platform covering an exhaustive questionnaire (400+ questions) based qualitative validation process and long list of quantitative KPIs to support statistical validation across a wide range of models including BAU, stress testing, ALLL, provisioning, expert judgment models.
Genpact MRM practice fact sheet

- 100+ MRM experts with advanced academic credentials and hands-on experience in model development methods
- 10+ years of working experience across consumer lending, commercial lending, treasury, and finance
- Development, independent validation, and monitoring of BAU decision scorecards, Basel II IRB approach compliant regulatory models, stress testing models, economic capital models, loss forecasting models etc.
- Independent validation of internal or vendor developed credit risk, market risk, operational risk, liquidity risk, interest rate risk and capital computation (regulatory and economic) models
- Supporting businesses totaling $600+ billion

credit portfolios with more than 1,000 analytical models validated
- A proprietary qualitative validation questionnaire with 400+ questions to facilitate reviews of model design, governance, use tests, and documentation sufficiency

Owing to global experience and a large body of work, Genpact has blended best in class practice and regulatory guidance to develop its technology enabled integrated MRM platform, monitorSM. MonitorSM is a web-based customizable MRM and governance platform.

The tool has been is developed on .NET framework with a reliable SQL server powered back end database. The SQL server holds computation algorithms that allows for user friendly and custom-made MRM process flow, key performance indicators (KPI), activities, and performance thresholds.

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Staying ahead of the curve: Best in class MRM with monitorSM
**Monitor**<sup>SM</sup> features: Key highlights

**Integrated model risk management workflow**
- Sets expectations for models to be reviewed with defined periodicity
- Defines criteria and requirements for independent validation or monitoring of models
- Embedment of internal policy controls, and executive governance model within monitor<sup>SM</sup> process flow mechanism. Also alignment of the same with executional rules of monitor<sup>SM</sup>
- End-to-end process flow of model risk management covering definition of owners, schedule of validation or monitoring, action requirement triggers, delegation hierarchy, responsibility assignment controls and process monitoring mechanism
- Enables a hierarchical supervisory structure for granular activity level monitoring of model risk management process

**Centralized model inventory**
- Maintains a comprehensive set of information for models implemented, under development or recently retired
- Describes product, and portfolio details of models. Also defines the purpose of the models with details of model owners, independent reviewers and ongoing monitors
- Creates a centralized electronic binder of reports, policies, procedures, and control systems related to each existing model

**Comprehensive and regulatory (local and Basel) compliant MRM techniques for independent model validation and ongoing monitoring**
- Proprietary conceptual soundness or qualitative validation powered by a comprehensive ready repository of 400+ sections
- Long list of quantitative KPIs, loaded to assess statistical accuracy, discriminatory powers, and stability both at model and factor levels

- Customizable settings of performance thresholds (RAG status for conceptual soundness checks and industry best practice performance thresholds for statistical tests) to gauge level of prevalent model risk

**Structured model risk reporting capability**
- Clear and unambiguous articulation of model aspects that are reviewed, highlighting potential deficiencies over a range of preset conditions, and determining whether adjustment or other compensating controls are warranted
- Best-in-class customizable MRM reporting structure, in line with regulatory expectations

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**Key features of monitor**<sup>SM</sup>

All versions (32 bit and 64 bit) of the following operating systems are supported by RA:
- Designed to suit granular needs of the model risk management community
- Model agnostic (compatible to all types of models) MRM capabilities
- Guideline agnostic (in line with local and Basel guidelines) MRM capabilities
- Unique features, covering:
  - User friendly interface and navigation
  - Centralized model inventory
  - Integrated workflow
  - Questionnaire based qualitative validation
  - Streamlined and built-in statistical tests
  - Intuitive and customizable model risk reporting
  - Technology enablement with easy deployable options
  - Easy to customize based on your specific need
MONITOR℠ value additions

- Designed to suit granular needs of the model risk management community
- Model agnostic (compatible to all kinds of models) MRM capabilities
- Guideline agnostic (in line with SR 11-7, BCBS WP 14 and other guidelines) MRM capabilities
- Unique features, covering:
  - User friendly interface and navigation
  - Centralized model inventory
  - Integrated workflow
  - 400+ questionnaires based qualitative validation
  - Streamlined and built-in statistical tests
  - Intuitive and customizable model risk reporting
  - Remediation actions tracker
- Technology enablement with easy deployable options
- Easy to customize based on your specific need

“Impressive list of statistical KPIs which makes validation simple, fast and accurate
- Head of model validation, Large US based bank

“400+ questions for the conceptual soundness check is remarkable. It is really valuable from a regulatory standpoint
- CRO, Large Europe based bank

About Genpact
Genpact (NYSE: G) stands for “generating business impact.” We design, transform, and run intelligent business operations including those that are complex and specific to a set of chosen industries. The result is advanced operating models that support growth and manage cost, risk, and compliance across a range of functions such as finance and procurement, financial services account servicing, claims management, regulatory affairs, and industrial asset optimization. Our Smart Enterprise Processes (SEP℠) proprietary framework helps companies reimagine how they operate by integrating effective Systems of Engagement℠, core IT, and Data-to-Action Analytics℠. Our hundreds of long-term clients include more than one-fourth of the Fortune Global 500. We have grown to over 70,000 people in 25 countries with key management and a corporate office in New York City. Behind our passion for process and operational excellence is the Lean and Six Sigma heritage of a former General Electric division that has served GE businesses for more than 16 years.

For more information, contact, analytics.marketing@genpact.com and visit www.genpact.com/home/solutions/risk-management-services

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