

SAS and KPMG Model Lifecycle Management

Transforming data into models, and models into actions



Business Impact

An organization's model has the ability to reveal hidden opportunities by turning complex data into insights, and insight into actions. The use of models to generate these insights varies across and even inside organizations. In the banking and financial industry, models may examine fraud activity, marketing opportunities, or credit risk of a loan application. For retail and telecommunications, models may look at customer retention, advertising response, or cost controls. Regardless of industry, models are developed and deployed to help organizations make data-driven decisions, gain competitive advantage, and maximize their return on investments. But how they are developed and deployed often determines whether organizations succeed or not.

Delivering insights from models can take weeks, months or even years in many organizations' model lifecycle. The complexity is compounded by the availability and quality of the data, the type of variables to analyze and the complexity of the model. In addition, model development involves many team members - data architects, modelers, validators, and business stakeholders.

Without the proper strategy, technology and services, model results can lead to ineffective, outdated or even inaccurate business decisions. Innovative companies are adopting modern

technologies such as SAS[®] Viya[®] and SAS Model Manager, and automated techniques with SAS Intelligent Decisioning, to manage the entire model lifecycle for data-driven decisions.

The Challenge

Every organization relies on models to transform raw data into meaningful actions. As data models continue to grow in sophistication, the need for governance in the model lifecycle only increases. Many of our clients experience challenges in the following areas:

- Takes weeks, months, or even years to build a model and deploy it.
- Staff spends too much time with logistical tasks and not enough on strategic or analytical exploration.
- The number of models causes governance shortfalls and is increasingly complex and expensive to manage.
- Ongoing monitoring is nonexistent to ineffective to address real model deterioration.

SAS and KPMG can help you overcome these challenges with our joint offering to streamline the process and deliver faster insights about your business.

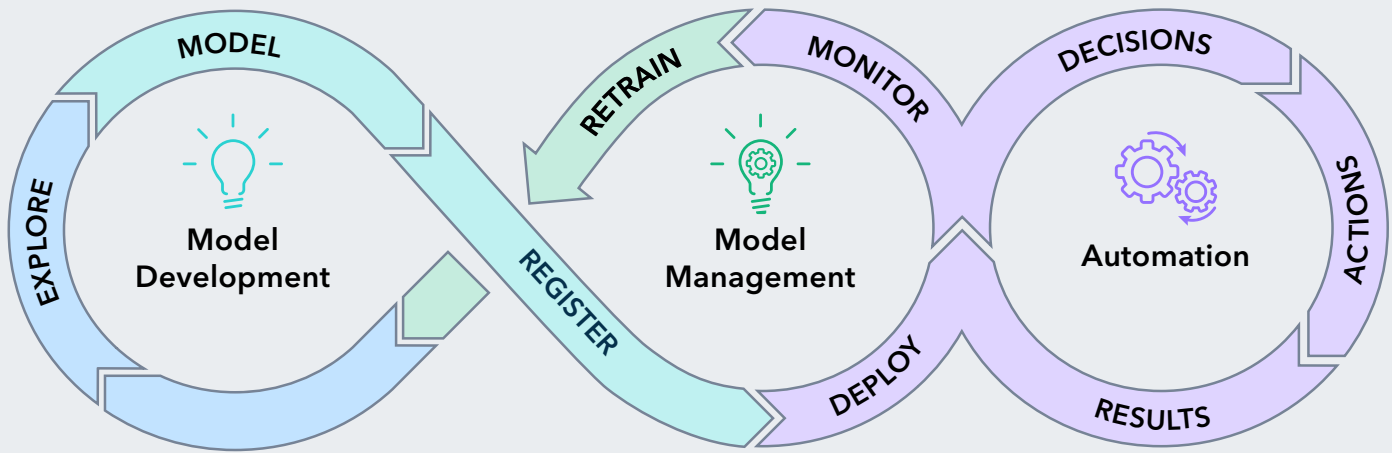


Figure 1: SAS and KPMG Model Lifecycle

Our Joint Approach

SAS and KPMG have joined efforts to develop a complete offering - SAS and KPMG Model Lifecycle - by combining market-leading technology, operational delivery excellence, and demonstrable services for our clients. Our joint approach can help clients with the entire data model lifecycle - a continuous process of updating, reviewing, decision making, and analysis - as shown in Figure 1 - that includes:

- **Model Development:** prepare the data, explore the data, and develop the model.
- **Model Management:** register the model, monitor for validity, and retrain the model for repeatability.
- **Automation:** deliver results, actions, and decisions to enable results for a data-driven organization.

The Model Lifecycle offer from SAS and KPMG is tailored to the developer, validator and user audiences. The first two

stages - Model Development and Model Management - are for developers and validators to develop and manage the quality of the data models. The third stage, Automation, is for the users to create custom workflows that match your business requirements and processes.

The Benefits

The Model Lifecycle from SAS and KPMG provides tremendous benefits and added value across the enterprise:

- Streamline the model lifecycle.
- Accelerated time to value.
- Build once, deploy models everywhere.
- Open ecosystem with R, Python, SAS, and other languages.
- Ensure model governance and transparency.
- Continuous monitoring of model performance.
- Save time and resources by automating the model lifecycle.



To learn more, visit sas.com/kpmg



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