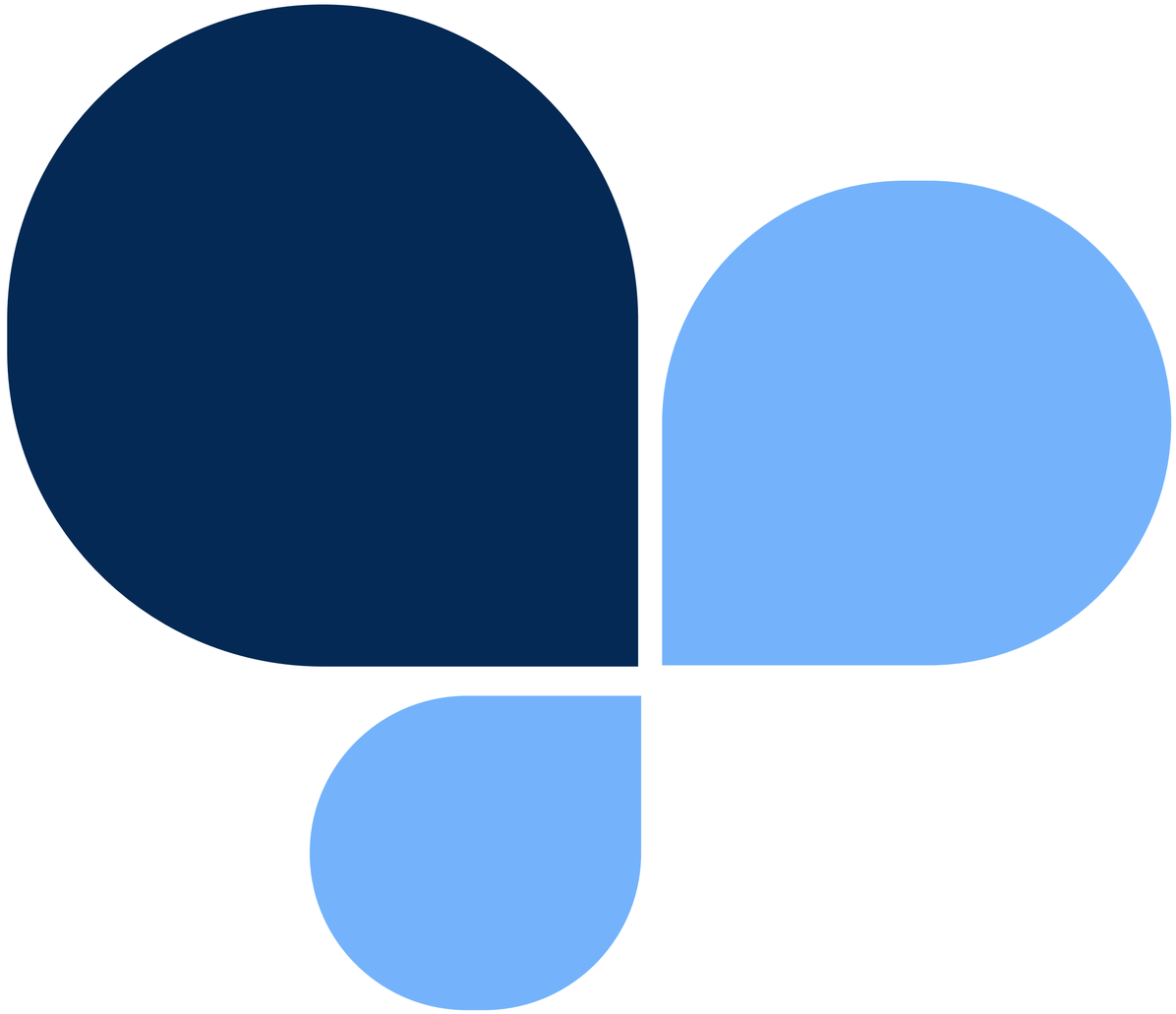
What are ready-made AI models? And why you need them.



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01
Introduction

AI continues to be a business disruptor. As organizations look to adopt the evolving technology, they face challenges, such as infrastructure limitation, talent scarcity, regulatory compliance and keeping pace with rapid change. Some organizations are still struggling to show a return on investment on their AI initiatives. This is where ready-made AI models can be implemented into business strategies, providing easier access to AI with greater success and less risk and overhead.

Here are a few reasons why ready-made AI models make sense in an ever-changing AI market.

Accelerating AI adoption

According to PricewaterhouseCoopers' (PwC) Business Predictions report, businesses that fail to integrate AI into their operation will fall behind.

To accelerate AI adoption and innovation, AI access must be simplified for the organization to break down infrastructure challenges. Legacy systems need to work with new AI technology. Ready-made AI models are lightweight, pre-packaged, industry-specific offerings designed to accelerate AI adoption and are easily implemented across a variety of IT infrastructures.

Overcoming the talent gap

Enterprises must deal with a widening AI skills gap as AI advancement is outpacing skills development. Upskilling or reskilling employees takes time and resources. Unfortunately, this can slow AI adoption. If an organization needs to build a model from scratch, it requires a deep understanding of machine learning algorithms, data science and domain expertise. It also necessitates niche roles like data engineering, data science and MLOps engineering. Ready-made AI models require less technical expertise and reduce the burden on in-house data science teams.

Keeping flexibility in mind

AI needs to be flexible for organizations of all sizes and in various industries. There are different approaches to ready-made AI models based on business needs. Organizations can choose from fully pre-trained models that handle data collection, training and parameter estimation. Or they can opt for customizable pipelines that allow the organization to train models on their own data. This flexibility allows organizations to tailor AI to unique requirements to maximize the potential of the technology.

Navigating regulatory compliance

Regulatory compliance is a critical consideration for organizations adopting AI technologies – especially those operating in highly regulated industries or across multiple jurisdictions. Leaders consistently ask, "How can we accelerate innovation with AI while remaining compliant?"

Ready-made AI models offer a compelling answer. These models are designed with built-in safeguards to meet diverse regulatory requirements, eliminating the need to develop compliance frameworks from scratch. By understanding the nuanced differences across regional, national and industry-specific regulations, ready-made AI models are engineered to align with key standards – whether for data privacy, security or ethical AI use.

Their isolated and portable nature enables deployment within specific environments, ensuring greater control and compliance without compromising agility. This approach not only simplifies adherence to global and local regulatory mandates but also empowers organizations to innovate confidently and responsibly.

Building future-ready innovation

The potential for AI uses continues to expand, making it challenging to keep up. With AI, industries will discover more use cases to solve core business problems. By democratizing access to advanced AI capabilities, ready-made AI models are positioned to drive significant advancements across industries, such as health care, banking, insurance, manufacturing and the public sector.

What's next in AI, and how will your organization adopt the latest innovation? It's coming fast and furious. As technology advances, we can expect AI and human interaction to become seamless with user-friendly prompts and chatbots. Organizations will be able to interact with complex models using natural language processing without requiring deep AI expertise.

Synthetic data will be more commonly used to solve many data acquisition and management problems so data scientists can train models faster with complete, representative and trusted data. Synthetic data will fill holes where real data is hard to come by or when rare-case scenarios need to be detected.

Agentic AI will be infused into the technology to understand a request and then take an intelligent action semi-autonomously or autonomously on behalf of humans. With so much change and disruption, ready-made AI models are a quick and safe approach to solving problems and making decisions faster. They buffer organizations from unintended financial or reputation risk while remaining nimble to evolving technology.

What you can expect in this e-book

In this e-book, we will explore ready-made AI models in greater detail. We will cover benefits, examine real-world use cases and provide practical guidance to integrate ready-made AI models into business strategy. Whether you are a business leader or technology end user, this e-book will equip you with insights to use ready-made AI models to drive business forward with more trust and less risk.

"This shift from reactive to goal-driven AI will further enhance accessibility and decision making, making AI an even more valuable partner in business operations."

Udo Sglavo

Vice President of Applied AI and Modeling R&D, SAS

02

Built-from-scratch AI models versus ready-made AI models

Getting models into production is a tedious process. According to a Gartner survey, on average, only 48% of AI projects make it to production, and it takes eight months to go from AI prototype to production. A notable difference between built-from-scratch AI models and ready-made AI models is the success rate of getting models into production. Ready-made AI models have a significantly higher success rate because they remove all legwork and guesswork.

Built-from-scratch AI models

Key steps:

1. **Data collection:** Gather relevant, high-quality data.
2. **Data preparation:** Clean and transform data for modeling.
3. **Model selection:** Choose the right model based on the problem.
4. **Model development:** Build and train the model.
5. **Model testing:** Evaluate performance with validation techniques.
6. **Deployment and monitoring:** Implement and continuously monitor the model.

The time it takes to deploy built-from-scratch AI models can vary greatly. It can take weeks or months depending on the business problem, data preparation, training, tuning and deployment.

Ready-made AI models

Key steps:

1. **Select** a ready-made AI model.
2. **Customize** the model to organization specifications.
3. **Integrate** the lightweight, pre-packaged AI model into existing IT ecosystems.
4. **Monitor and deploy** on-premises or scale in the cloud.

If implemented correctly, a ready-made AI model can move into production in as little as a week.

"Ready-made AI models are easier to integrate and faster to deploy with a higher success rate when compared to traditional modeling approaches."

Udo Sglavo

Vice President of Applied AI and Modeling R&D, SAS

Tailored across industries:


Health care


Banking


Public sector


Manufacturing


Insurance

Organizations need access to AI with fewer barriers. Ready-made AI models ensure:

Easy, intuitive and accelerated IT implementation.

Proven AI with predictable ROI.

Trusted decision making while mitigating risk.

03

Real-world use case for health care: Medication adherence risk model

Health care and insurance organizations seek better insight to predict and improve patient adherence to prescribed medications. A ready-made AI model enables customers the ability to quickly identify where resources are needed for targeted interventions, resulting in enhanced patient engagement, better health outcomes, improved quality metrics, lower health care costs and a significant return on investment.

Why it matters

Medication adherence is crucial to effective treatment outcomes. Non-adherence can lead to worsening health conditions, increased hospitalizations and higher health care costs. Low adherence rates can result in monetary deductions and decreased patient satisfaction for health care organizations. Traditional adherence models fail to account for the inherent bias found in health care claims and often require statistical training for implementing and interpreting the results.

How it works

The SAS Medication Adherence Risk model uses machine learning models to identify patients' risk of being non-adherent based on past patient behavior, patient demographics and social determinants of health data.

Key features include:

- Using a prediction model and scoring code tailored to the end user's population and drug class.
- Determining the patient's risk of being non-adherent starting from the first fill.
- Identifying the pharmacy and ordering provider most frequently associated with a patient to aid in care coordination.
- Identifying geographic areas containing high concentrations of high-risk patients.
- Incorporating model validation checks to aid in running the model and prevent end user error.
- Incorporating social determinant data to help control for bias.

Health care organizations can use this model to tailor interventions, such as personalized reminders, educational resources and support programs. Using the results of the model, customers can identify individuals and geographical regions at greater risk of non-adherence and intervene for a greater chance of improved health outcomes, patient care and efficient resource utilization.

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Benefits:

- Quickly identify patients and geographical areas at risk.
- Control social drivers of health.
- Automate interventions to get patients back on track.
- Lessen the burden on limited health care resources.

"Ready-made AI models are easier to integrate and faster to deploy with a higher success rate when compared to traditional modeling approaches."

Jennifer Hargrove
Senior Data Scientist
Applied AI and Modeling R&D, SAS

04

Real-world use case for banking: Fraud models

Rapid technological development is changing how fraud and financial crimes are committed and enabling new forms of fraudulent activity to occur with greater frequency, speed and effectiveness. AI-driven fraud models can be used to reduce false positives, detect risks early, minimize disruption to the customer experience and protect institutional reputation.

Key points

Banks and financial institutions rely on AI-driven fraud detection models to counter increasingly sophisticated financial crimes in real time. These models rapidly analyze volumes of behavioral and historical data to detect anomalies and threats before they cause harm.

By continuously learning and adapting to new fraud patterns, AI models enable institutions to assess risk instantly, stop fraudulent activity before it occurs and minimize financial losses – all while ensuring a seamless, secure experience for legitimate customers.

Ready-made AI models can accelerate this capability, delivering fast, scalable protection without disrupting existing workflows.

Key fraud detection applications include:

- Payment fraud: AI models monitor wire transfers for suspicious activity, flagging anomalies like unusual transfer amounts, destination mismatches or velocity spikes across accounts.
- Credit and debit card fraud: Machine learning models assess real-time transaction behaviors, spotting out-of-pattern purchases and location mismatches.
- Application fraud: AI verifies applicant identities, detects fraudulent documentation, and assesses credit risk by analyzing deep behavioral and financial history.

By using AI-powered risk scoring and continuous learning, banks can stop fraud before it occurs – all in milliseconds – minimizing losses while ensuring seamless customer experiences.

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"The reduction of manual creation in the model saves a significant amount of time because there isn't as much need for modeling and domain knowledge."

Artin Armagan
Sr. Manager
Applied AI and Modeling R&D, SAS

A look at the numbers from a current customer use case:

40%
reduction in case alerts.

35%
improvement in fraud detection.

18%
reduction in false positives

05

Real-world use case for public sector: Payment integrity for food assistance model

State and county agencies responsible for determining eligibility are constantly balancing adequate resourcing to meet the demand for benefits and timely processing of applications. Stressors on the eligibility system can lead to problems with payment errors from either fraud or inadvertent mistakes reaching into the billions of dollars per year. A ready-made AI model can be implemented to identify cases with high payment error probabilities or fraud. This approach enhances agency proficiency and reduces the burden on low-income families by minimizing payment errors. Take a closer look at payment integrity data and visualizations to explore the problem.

Why this model matters

- Payment error reduction: Minimize overpayments or underpayments.
- Improve efficiency: Faster and more accurate processing of Supplemental Nutrition Assistance Program (SNAP) benefits.
- Greater trust: Accurate and reliable benefit distribution builds trust in the system, encouraging more eligible families to apply for needed benefits.
- The SAS Payment Integrity for Food Assistance platform aids the quality control teams in risk assessment to identify cases that are most likely to have payment errors.
- SAS Payment Integrity for Food Assistance eases the workload of the Eligibility Unit and reduces the processing time to identify payment errors, leading to faster adjudication of these errors.

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"The model incorporates automation and advanced analytics to expand accuracy and efficiency while reducing the manual work agencies have historically done."

Shawn Romero
Principal Data Scientist
Applied AI and Modeling R&D, SAS

Benefits:

Focused data quality scoring of benefit issuances.

Improved payment integrity.

Improved productivity with reporting.

Automated detection.

06

Real-world use case for cross-industry: Document analysis model

Important organizational information might not always be readily available. This is true of scanned document images that need to be transformed into structured data for reporting and analytics. A ready-made AI model can be utilized to simplify digital transformation by converting unstructured data into useable formats, optimizing batch processing and supporting robotic process automation.

Why this model matters

This model has broad use across industries for organizations struggling with digital transformation. Organizations may be overwhelmed with data and document images and unable to derive insights from unstructured data sources.

Unlocking valuable information

Many organizations accumulate vast archives of scanned documents containing critical data locked in an inaccessible format. Without structured extraction, these records remain difficult to search, analyze or integrate into modern workflows. This model enables organizations to tap into this hidden resource, turning static images into actionable insights.

Improving efficiency and reducing costs

Manual data entry and processing are slow, error-prone and costly. By automating large-scale document analysis, this model significantly reduces the time and labor required to extract key information. This allows organizations to reallocate resources to higher-value tasks while minimizing human error in data processing.

Enhancing compliance and risk management

Many industries, such as finance, health care and legal services, require accurate recordkeeping for regulatory compliance. Without efficient document

processing, critical information may be overlooked or mismanaged. This model helps organizations meet compliance requirements by ensuring that data from scanned documents is accurately captured, stored and retrievable.

Enabling advanced analytics and decision making

Structured data is the foundation of business intelligence and predictive analytics. When information remains trapped in scanned documents, organizations miss opportunities to gain valuable insights. By transforming these documents into structured formats, this model supports reporting, forecasting and strategic decision making.

Supporting scalable automation

Incorporating this model into a broader automation strategy enhances efficiency at scale. It seamlessly integrates with process automation and other digital workflows, enabling continuous, high-volume document processing. Organizations can streamline operations, reduce processing delays and improve overall productivity.

Industry uses:

- **Health care:** Apply a ready-made AI model to review medical records in various formats for better patient care and outcomes.
- **Public sector:** Apply a ready-made AI model to review paper documents that are typically error- prone and resource intensive.
- **Across industries:** Many organizations lack an AI Center of Excellence (CoE) or in-house data scientists. They rely on human capital to manually sift through volumes of scanned documents. Common OCR capabilities can help organizations utilize intuitive systems that emancipate employees' time and drastically accelerate their access to valuable context at various touchpoints of their daily workflows.

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"Organizations often house massive archives of scanned document images whose content remains difficult to search, analyze or integrate into automated workflows, severely limiting their value. Document analysis models unlock this vast resource by automating large-scale data extraction, empowering organizations to leverage historical and archived information that was previously inaccessible."

Jim Georges
Principal Data Scientist
Applied AI and Modeling R&D, SAS

Benefits:

Unlock previously inaccessible content.

Utilize Natural Language Processing (NLP). Improved productivity with reporting.

Automate existing manual review workflows.

A look at the numbers from a current customer:

70%
increase in productivity, enabling quicker clinical decisions and faster patient interventions.

07

Real-world use case for manufacturing: Strategic supply chain optimization model

Supply chain efficiency is important to organizations across industries with more tailored applications in manufacturing. The need to orchestrate forecasting and demand planning to optimize supply chains. The strategic supply chain optimization model incorporates demand plans, logistics, supplier capabilities and cost data to enhance decision making for purchasing, production, inventory, transportation, distribution and sales a weekly or monthly granularity.

The strategic supply chain optimization model

- Comprehensive and synchronized business plans across the supply chain.
- Improved product availability and customer satisfaction.
- More profitable growth.
- Ability to analyze end-to-end supply chain performance improvements.

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"The ready-made AI supply chain model gives organizations the power to predict supply chain KPIs to identify corrective actions to maximize efficiency and profit. All possible without requiring deep technical expertise."

Sone Sanders
Sr. Product Manager
Applied AI and Modeling R&D, SAS

Quickly estimate the financial and operational impacts of multiple scenarios across the supply chain, including:

Demand fluctuations.	Labor constraints.
Manufacturing capacity limitations.	Natural disasters that cause distribution center or plant closures.

08

Trustworthy AI

With any emerging AI technology, a common concern is: “How can we trust the AI?” Institutions evaluating AI models often ask critical questions:

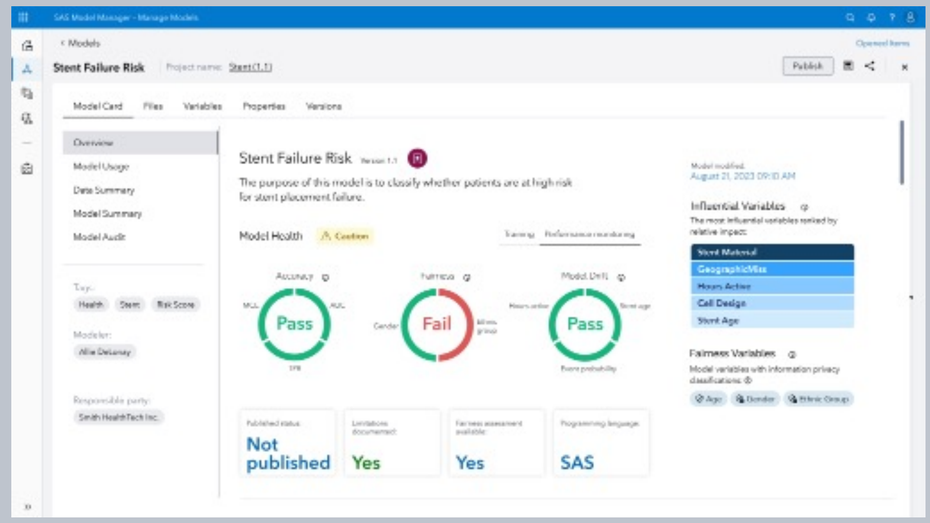
- How transparent are the model’s decisions?
- What data was used to train the model, and could that data introduce bias?
- How will the model be monitored, updated and validated over time?

Our fine-tuned models are built on decades of proven industry experience, accelerating innovation while enabling trust. They are:

- Highly performant and trustworthy.
- Continuously maintained and monitored to ensure optimal performance.
- Safe to deploy in production, with seamless integration into existing oversight and control frameworks.

Our robust engineering and deployment processes ensure models are securely contained within environments that meet institutional standards for data handling, oversight and auditability.

Health care example identifying patients at risk of stent failure.



“SAS is taking a thoughtful approach to how it helps customers embrace AI, focusing on the practical realities and challenges of deploying AI in real industry settings. Model cards will be valuable for monitoring AI projects and promoting transparency.”

Eric Gao

Research Director, Analyst Firm IDC

09

Looking ahead: AI when, where and how you need it

AI is disrupting traditional approaches to business, and organizations are adopting innovative solutions to remain competitive. However, to get the most from the evolving technology, organizations must overcome barriers to entry, such as infrastructure limitation, data scarcity and shortage of AI talent. This is where ready-made AI models can be implemented into business strategies and tailored to industries for more flexibility with less risk and overhead.

An AI accelerator

Ready-made AI models have revolutionized the way organizations approach AI by democratizing access. They are API-enabled, seamlessly integrate into existing IT ecosystems and are cloud-ready and infrastructure agnostic. They support AI teams lacking domain-specific knowledge, allowing organizations to adopt AI with less risk and in a controlled and safe manner. Innovations such as model cards, which provide intricate details about the models, ensure transparency, explainability and trust.

The real-world applications of ready-made AI models are limitless. In health care, they can enhance medical imaging by detecting subtle abnormalities that might be difficult for the human eye to catch. In manufacturing, computer vision models improve worker safety and solve data management and quality issues. Ready-made AI models also address the rapidly changing regulatory environment, lessening the burden on human resources and allowing organizations to innovate responsibly with privacy-conscious, secure and transparent outputs.

Closing thoughts

Looking to the future, ready-made AI models will continue to advance and integrate with innovations such as conversational interfaces for more collaboration and autonomous decision making to determine the best business approaches. The use of next-generation technologies like synthetic data and agentic AI will further drive innovation. The future of AI lies in making technology more accessible, allowing organizations to iterate and strategically proliferate AI across their tech landscape as needed with proven ROI at low risk.

The SAS difference

We will continue to innovate with our in-house AI modeling team, using deep industry expertise and intellectual property to expand AI's impact across both commercial and public sectors. You can expect SAS ready-made AI models to be steadily developed and available to solve industry-specific business challenges with trust at the foundation.

"SAS ready-made AI models are designed to be lightweight and address real-world use cases. The models are based on SAS' core assets, talent and IP from its wealth of experience working with customers to solve industry problems."

Kathy Lange, Research Director, AI Software, IDC

"Ready-made AI models cater to diverse business needs across various audiences. By tailoring our approach to understanding specific industry needs, our frameworks empower businesses to flourish in their distinctive environments and drive more innovation."

Udo Sglavo
Applied AI and Modeling R&D, SAS

Want to learn more about ready-made AI models?

Visit SAS for specific details about models available in your industry of choice.

Read more about applied AI and modeling from SAS data scientists.

To contact your local SAS office, please visit: **sas.com/offices**