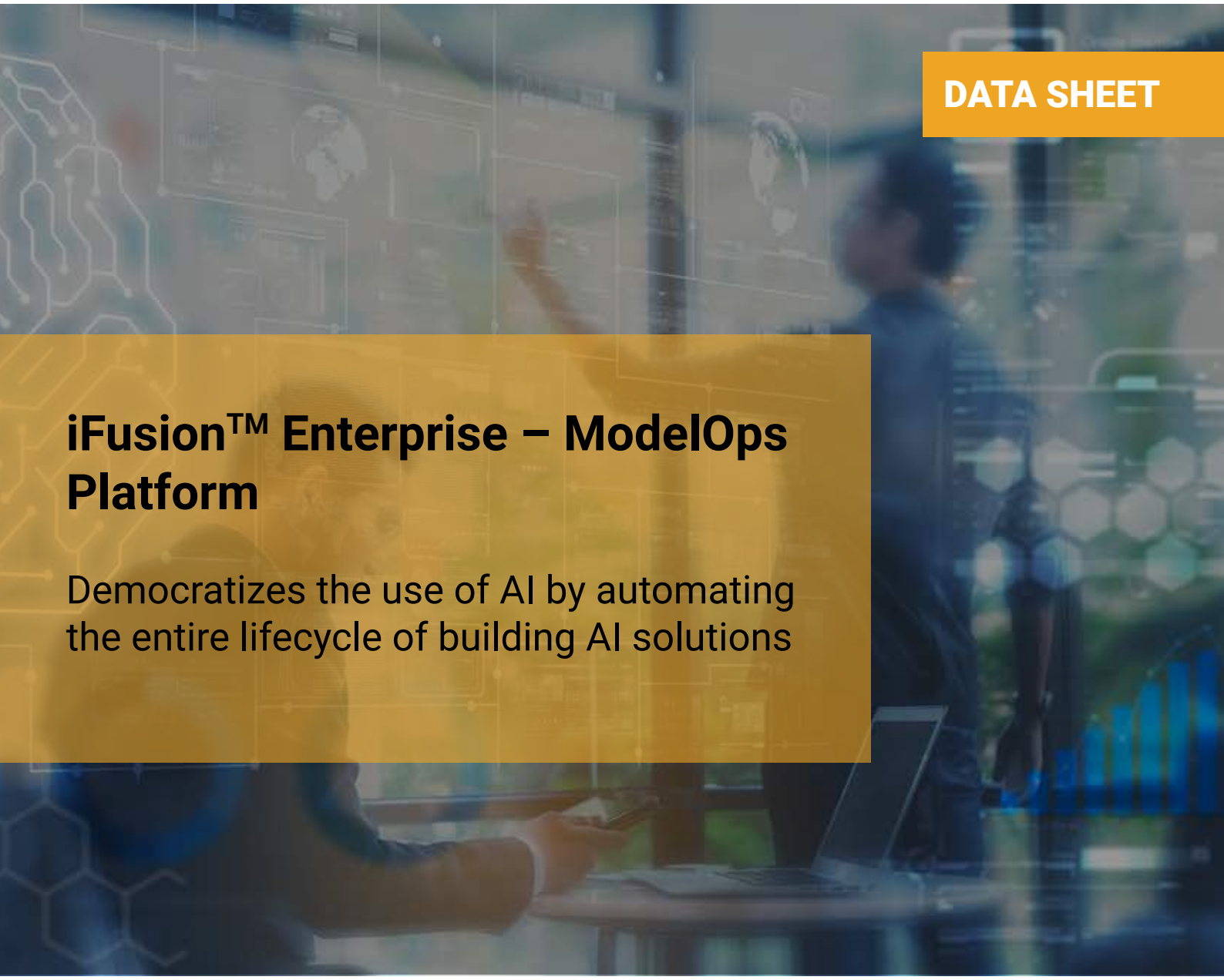
iFusion™

Innominds
Powering the Digital Next



DATA SHEET

iFusion™ Enterprise – ModelOps Platform

Democratizes the use of AI by automating the entire lifecycle of building AI solutions

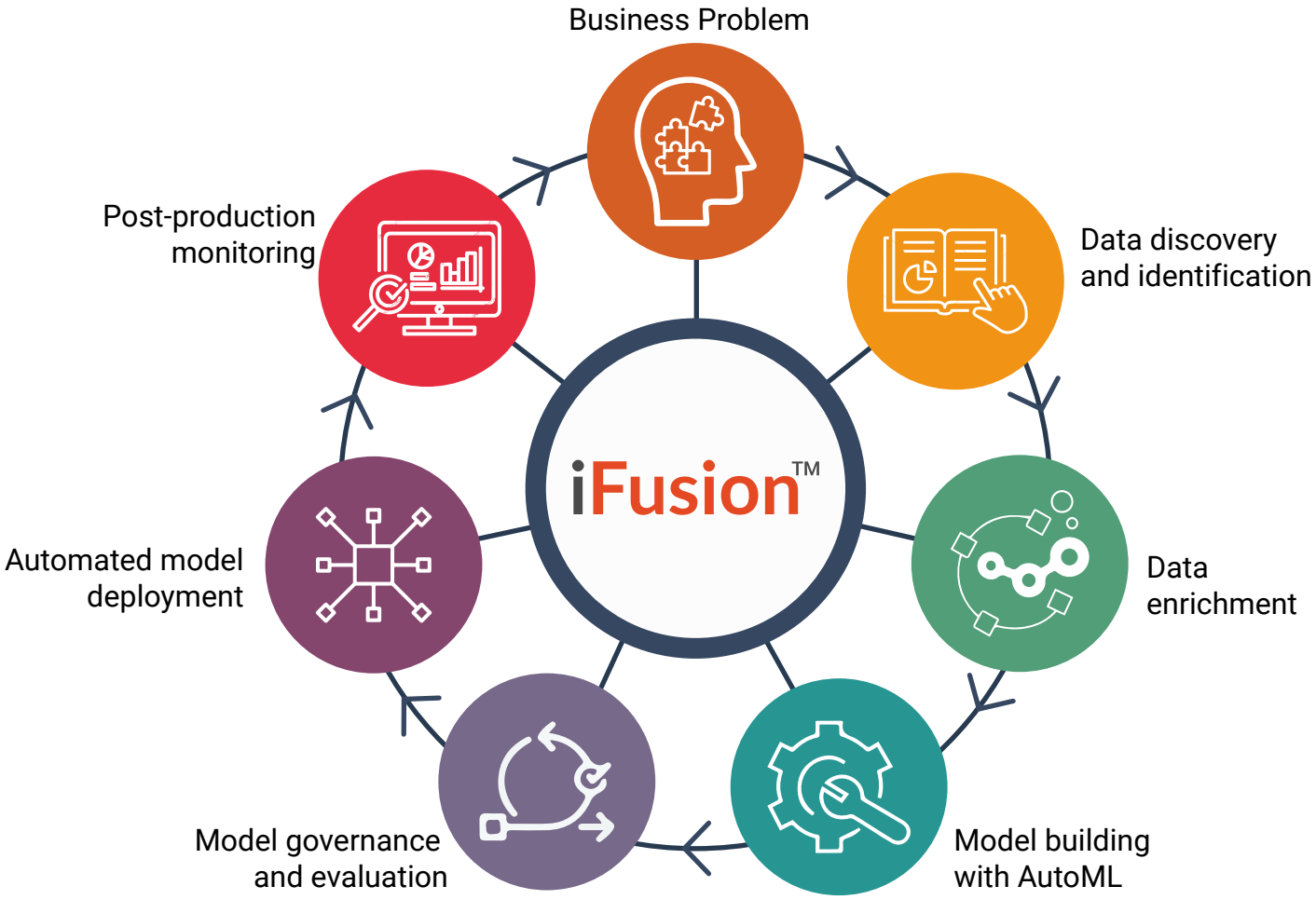
Business Challenges

Building AI models to solve business problems starts with data. True enterprise problems need data from more than one source and the process of getting data into the platform is incredibly difficult to achieve at scale. Additionally, there is no one-size-fits-all answer to which model will work best for a given business problem and hence, arriving at a near perfect model is not easy. It involves a lot of experimentation and delays the time to production. The problem doesn't end there – models in production need to be constantly monitored for performance and governed to minimize risk.

Key Benefits

- Increases efficiency with end-to-end best-of-the-breed technology blending
- Operationalization of models at scale with production ready MLOps environment
- Reduces the need for expertise through automated machine learning techniques
- Total governance, interpretability and control of AI
- Significant cost reduction through decoupling storage from processing

iFusion™ Enterprise – ModelOps is a full lifecycle AI management platform that automates the entire journey from data collection to model creation to model deployment, including post-production monitoring and governance.



Key Features

Data discovery and identification

The platform has a rich set of data collectors available out-of-the-box with the ability to connect to different sources and collect data required for analysis from almost anywhere - across silos, internal or external, in streaming or batch mode, structured, semi-structured, or unstructured data. It extracts catalog information of all sources and combines it into a single metadata server helping users with data discovery and identification.

Data enrichment

The platform unifies data from heterogeneous sources powered by a data virtualization layer. It scans the data, extracts, and enriches metadata to infer informative summary and further gain an in-depth understanding of the data. It transforms data in any form, including unstructured data, to analytics-ready form through advanced adapters.

AutoML

The platform enables model selection to try and choose the best models by iterating through model architectures, layers, hyperparameters, and data management using cross-validation. It logs the versions of the models along with the data and the parameters to enable model comparison, collaboration, and future use of models. Moreover, it equips users with the interpretability of models by providing model summaries in an interactive way.

The platform facilitates the modularization of networks with the ability to break any complex architecture into subunits. It performs transfer learning and incremental learning through feedback loops. Additionally, it guides the selection of network architectural components through meta-learning. This helps users design and build hybrid models by combining the best aspects from different models. The platform accelerates the development time by using pre-trained networks as a model baseline and building models upon them.

Model governance and evaluation

The platform compares and contrasts models over a desired metric to choose the best performing model for the specific use case. It also evaluates the models in terms of generalizability, overfitting, back predictions, and whether the model has been trained using the right data.

Automated model deployment

The platform deploys the models to any environment – cloud or edge autonomously. It enables automated model deployment through containerization and auto elasticity, microservices for self-contained business workflows, continuous deployment pipelines along with security and non-repudiation features.
It facilitates the deployment on edge through ONNX, TF Lite, PyTorch, etc., and provides quantization, edge monitoring, and OTA updates.

Post-production monitoring

The platform continuously monitors the performance of models through data drifts, prediction distribution drifts, and business KPI drifts and retrains the models when drifts are greater than the threshold. It uses guardrails to ensure that model predictions are explainable and consistent with human insights.

About Innominds

Innominds is an AI-first, platform-led digital transformation and full cycle product engineering services company headquartered in San Jose, CA. Innominds powers the Digital Next initiatives of global enterprises, software product companies, OEMs and ODMs with integrated expertise in devices and embedded engineering, software apps and product engineering, analytics and data engineering, quality engineering, and cloud and devops, security. It works with ISVs to build next-generation products, SaaSify, transform total experience, and add cognitive analytics to applications.