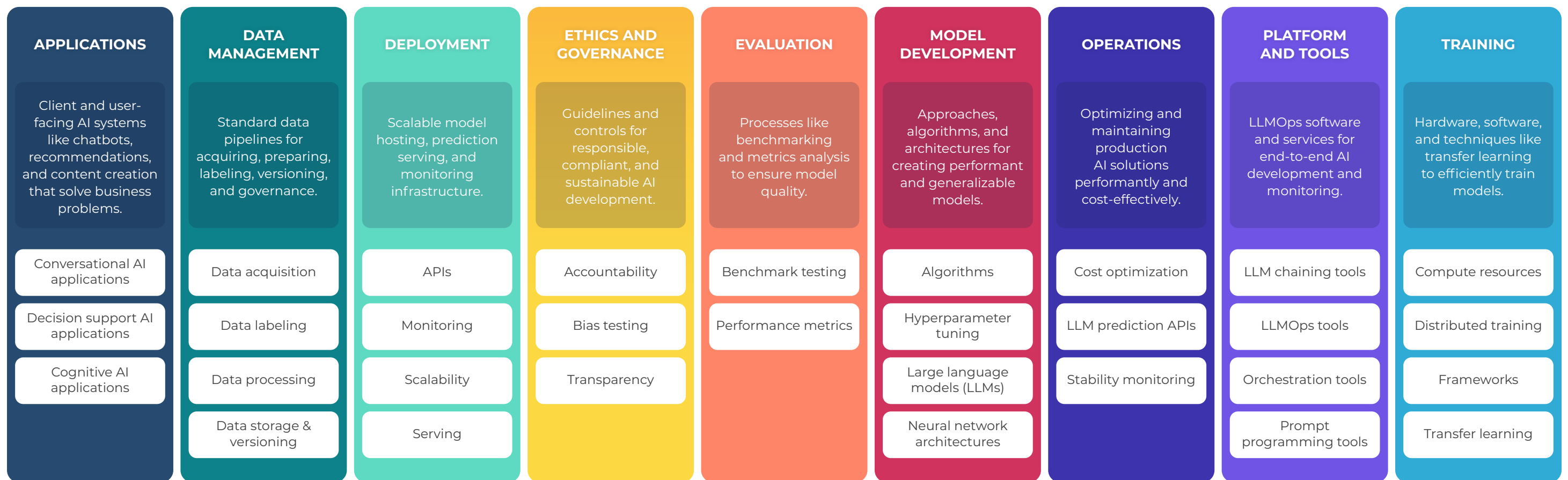OrbusSoftware

Generative AI Adoption Reference Model 1.0

Best practices for managing and adopting AI across the enterprise

How to use the Generative AI Adoption Reference Model

This Generative AI Adoption Reference Model aims to serve as a foundation for managing and adopting AI across the enterprise. Structured across two capability levels, it simplifies the complex landscape of generative AI and allows enterprise architects and technologists to strategically identify, govern, and integrate the most valuable AI solutions. It provides a common language for capability planning and investment decisions, ensuring they align both with business objectives and enterprise-wide interoperability standards for scale, security, and sustainability.

Other iterations of the Generative AI Adoption Reference Model include further and more granular AI capabilities, as well as associated AI tools, products, and services. Speak to a member of our team for more information.

APPLICATIONS	DATA MANAGEMENT	DEPLOYMENT	ETHICS AND GOVERNANCE	EVALUATION	MODEL DEVELOPMENT	OPERATIONS	PLATFORM AND TOOLS	TRAINING
Client and user-facing AI systems like chatbots, recommendations, and content creation that solve business problems.	Standard data pipelines for acquiring, preparing, labeling, versioning, and governance.	Scalable model hosting, prediction serving, and monitoring infrastructure.	Guidelines and controls for responsible, compliant, and sustainable AI development.	Processes like benchmarking and metrics analysis to ensure model quality.	Approaches, algorithms, and architectures for creating performant and generalizable models.	Optimizing and maintaining production AI solutions performantly and cost-effectively.	LLMOps software and services for end-to-end AI development and monitoring.	Hardware, software, and techniques like transfer learning to efficiently train models.
Conversational AI applications	Data acquisition	APIs	Accountability	Benchmark testing	Algorithms	Cost optimization	LLM chaining tools	Compute resources
Decision support AI applications	Data labeling	Monitoring	Bias testing	Performance metrics	Hyperparameter tuning	LLM prediction APIs	LLMOps tools	Distributed training
Cognitive AI applications	Data processing	Scalability	Transparency		Large language models (LLMs)	Stability monitoring	Orchestration tools	Frameworks
	Data storage & versioning	Serving			Neural network architectures		Prompt programming tools	Transfer learning

Generative AI model use cases and benefits

Strategic alignment

Provides a framework to identify the most valuable AI capabilities that align with business goals and strategies. This enables organizations to prioritize and adopt AI solutions that drive the highest business value.

Future-proof investments

Planning adoption roadmaps grounded in the reference model and aligned to business goals and taxonomy provides a degree of stability even as solutions come and go, ensuring continuity of AI capabilities.

Technology governance

The standardized taxonomy and definitions in the model allow governing AI development consistently across teams and departments. This enables enterprise integration and interoperability and ensures AI solutions comply with architecture principles and policies.

Portfolio consolidation

As adoption evolves, mapping existing AI solutions or products against the AI capabilities model helps identify duplication and rationalize the portfolio by retaining the best-fit solutions.

Solution and vendor evaluation

This vendor-agnostic model gives organizations a baseline to objectively evaluate vendor offerings based on functionality against business needs.

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