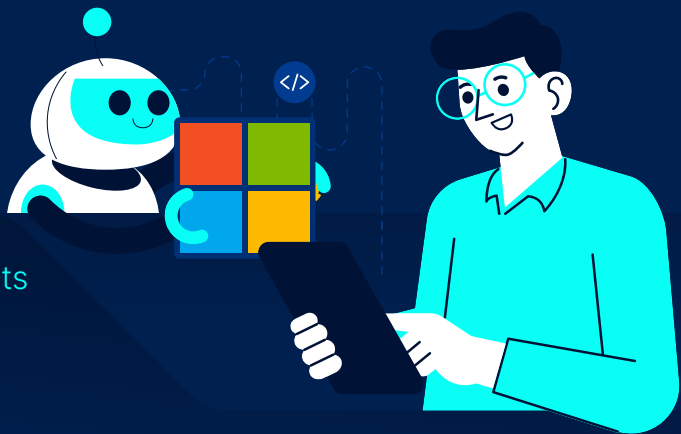


# ML.NET vs Semantic Kernel

## Choosing the Right Tool for Microsoft-Centric AI Projects

Microsoft offers multiple tools for building AI systems inside the .NET ecosystem. Your choice depends on whether you're building models, chatbots, or intelligent agents.



### Core Comparison Table

Feature	ML.NET	Semantic Kernel
Type of AI	Predictive Models	Agent Framework for LLMs
Primary Use Case	Forecasting, classification	Assistants, memory, dynamic agents
Language Support	C#, F#	C#, Python, JavaScript
OpenAI/LLM Support	Indirect via custom code	Native integration
Memory/Context Management	None	Full memory + planner
Custom Plugins/Skills	Not built-in	Core feature
AutoML	Yes	No
Ideal For	Data science, tabular data	LLM-powered assistants
Learning Curve	Low-Medium	Medium-High

### Supporting Tools Row



### Which Tool for Which Task?

Task	Tool
Forecasting sales	ML.NET
Recommending products	ML.NET
Creating a chatbot	OpenAI API SDK
Building a memory-enabled assistant	Semantic Kernel
Customizing Microsoft Copilot	Semantic Kernel
Summarizing reports	OpenAI API SDK



"Choose based on problem type, not hype."

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