

Synergy System Brochure

AI is impacting on all organizations since it has not been trustworthy and is too expensive. Synergy's user-friendly, AI Technology known as Synergy System Studio solves these problems. The future of enterprise AI powered Systems is not generating more lines of untrustworthy, hard to maintain computer code—it is the direct creation and execution of AI programs from human requests. We invented the Cognitive Core to guide Machine Learning to make AI user-friendly, dependable, and cost-effective. Synergy System establishes a new paradigm for enterprise agility, reliability, governance, and value creation.

Synergy's used its AI Technology to build the Synergy Command Center for ready to use AI Applications including its dynamic versus static Business Intelligence & Analytics (BI&A) application that can be easily expanded to add any enterprise functionality for different vertical markets and specialty needs.

Synergy derives user intent using its Synergy's Cognitive Core and Technology Solution that includes a custom GPT and LLMs, compiling it into an inspectable and modifiable blueprint that is translated into English versus programming code, and produces an executable application program powered by next-wave Neurosymbolic." The Neural Network (the LLM) provides the raw, fluid intelligence to understand text or transform data. The AI Mathematical Graph & Cognitive Core act as the skeleton and nervous system, constraining that fluid intelligence so it only executes verified, perfectly accurate AI programs instructions. Synergy System unifies a neuro LLM with symbolic AI mathematical graphs to become Neurosymbolic graphs, which become the enterprise applications.

Now, there is no need for error-prone, complicated AI Coding or using primitive techniques to train unreliable and expensive Machine Learning with millions or billions of data sets. Synergy System improves AI's user-friendliness, reliability, explainability, efficiency, and productivity.

A picture can be worth thousands of lines of AI generated code: Sufficiently rich Synergy Neurosymbolic graphs can be equivalent to thousands to millions of lines of AI code, because Synergy AI graphs can represent entire programs for enterprise applications.

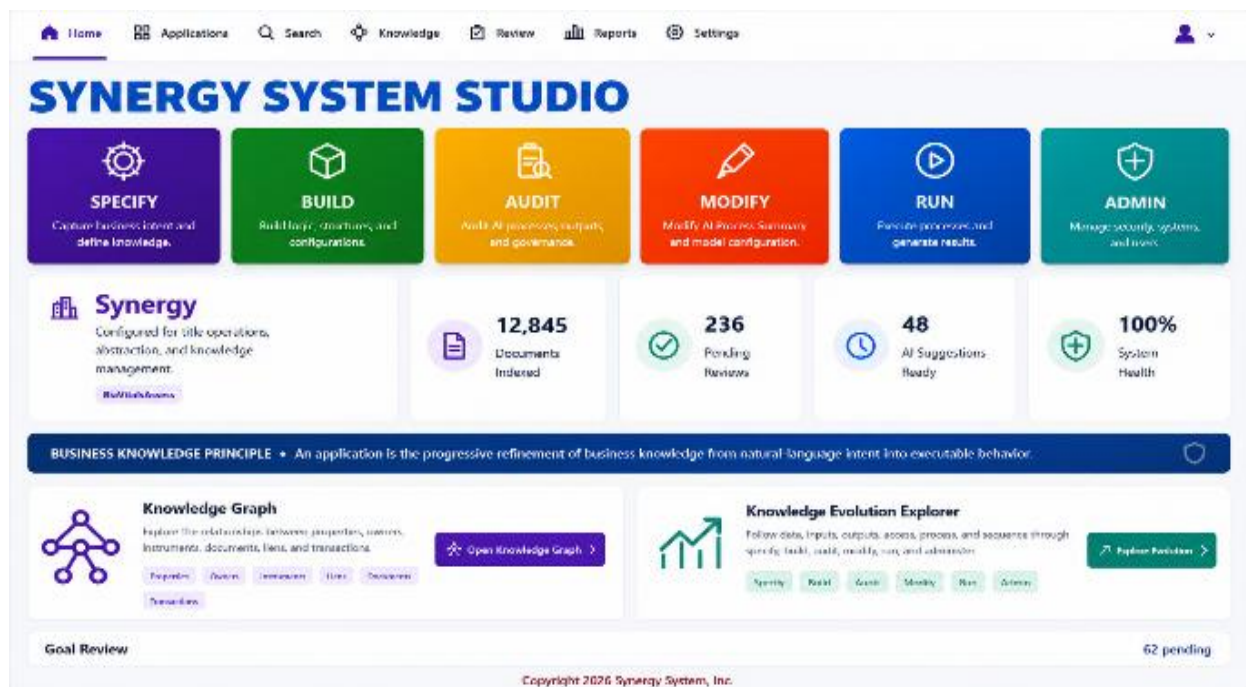
While \$billions of investments into foundation LLM models and generative "text-to-code" agents, enterprise deployment of these tools has hit a hard ceiling. Traditional LLM code-generation tools produce non-deterministic, brittle, and un-auditable software that creates massive technical debt, security vulnerabilities, and expensive maintenance overhead. Synergy System breaks this paradigm. Synergy System delivers the fluid adaptability of natural language alongside the strict reliability required by enterprise IT, risk, and compliance leaders.

The value proposition & competitive advantages of Synergy System include Zero Code and No Hallucinations, Continuous Real-Time Auditability, Mid-Flight Dynamic Reconfiguration, and Superior Unit Economics & Margins. Other AI Tech solutions include standard AI agents that write, test, and patch raw AI code (i.e., Python), leading to syntax errors and unpredictable runtime behavior. With Synergy, non-technical domain experts and knowledge workers can modify the application in plain language without breaking underlying dependencies. With other AI Tech solutions, continuous multi-thousand to million-token LLM inference loops incur severe GPU

compute costs and high latency. Synergy System dramatically reduces token burn, decreasing runtime latency, and maximizing cost savings. By substituting source code with Neuro-Symbolic AI mathematical graphs, Synergy can cut enterprise applications delivery costs by 80%+, shrink recurring software code maintenance and technical debt costs by up to 95%, and deliver trustworthy, enterprise-grade applications.

Synergy System Studio

The Synergy technology solution represents a profound breakthrough and uses its unique AI technology to go from a knowledge worker's intent, specified in natural language, directly to an executable program. *No other AI System Technology can do this!* The Synergy Command Center consists of user-friendly, integrated AI programs and wizards that specify, build, audit, modify, run, and administer AI applied application programs. The following represents the Synergy Command Center:



The user starts with an existing application or new applications can be added by using natural language requests. Synergy transforms user requests-intent to specifications that are used to automatically create and execute AI applied applications which are trustworthy and enterprise-grade. The Synergy AI applications or functions can also run as automated Agents to perform complex processes and tasks.

Synergy Command Center represents an Intent-Driven Execution Framework

The following outlines the Synergy System **Cognitive Core** technology solution and the integration of its Methodology Taxonomy, Information Blueprint, Program Structure, Neuro Symbolic & System Cycle that drive the automated phases of specifying, building, auditing, modifying, and running Enterprise applications.

Framework Taxonomy & Lifecycle

The Intent-Driven Execution framework governs end-to-end declarative software operations. User intent is captured, structured, blueprinted, and synthesized into executable manifests also known as AI records. Before and during execution, specifications are audited for compliance, modified via natural language deltas, directly run via virtual engines, and continuously Administered for enterprise security, system configuration, and platform utilities.

Synergy Neuro-Symbolic Graph Architecture vs. Others AI Code Generation

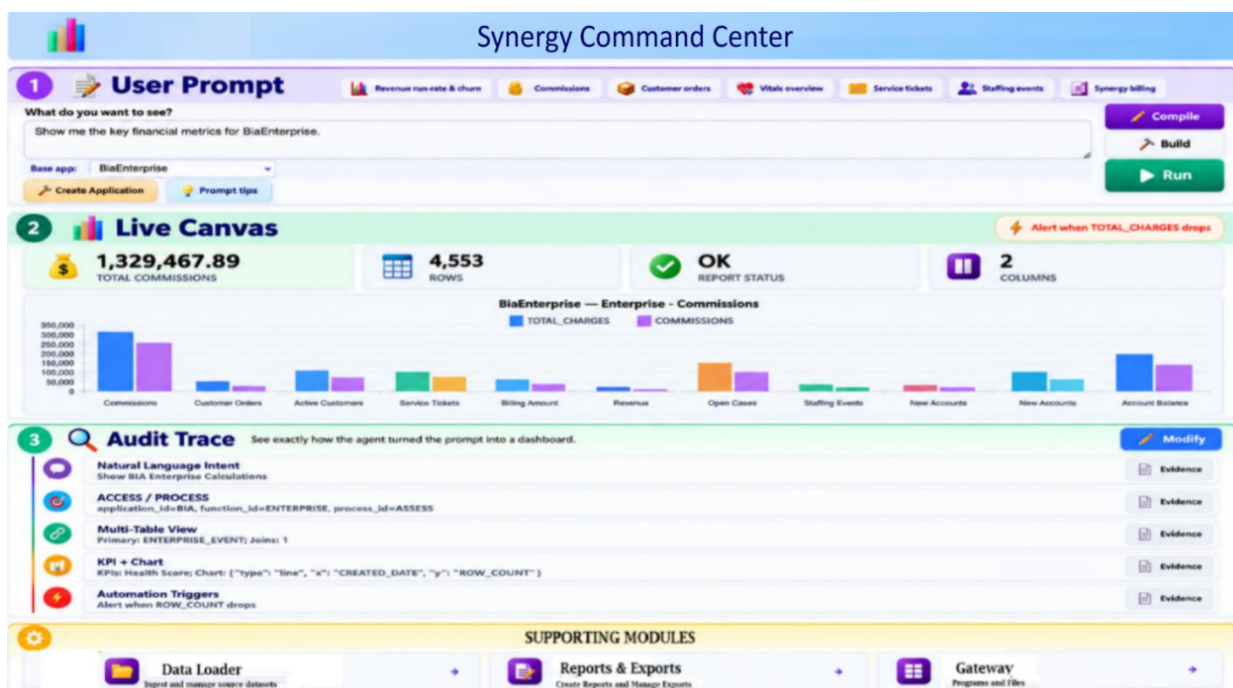
Architectural Advantages of Natural Language-Driven Application Engines over Probabilistic LLM Coding

While traditional AI coding relies on generative Large Language Models (LLMs) writing source code line-by-line, a Neuro-Symbolic Graph architecture operates on an entirely different layer of abstraction. Rather than treating software generation as a probabilistic text-completion task, it bridges neural pattern recognition with deterministic graph structures to directly build, audit, modify, and run enterprise applications.

Key Comparisons	Other AI Tech Leaders	Synergy System Uniqueness
Capability	Generative AI Coding (LLMs)	Neuro-Symbolic Graph Architecture
Primary Mechanism	Probabilistic token prediction (writing raw source code)	Neural intent parsing mapped to deterministic graph representations
Execution Model	Compiles & executes generated code scripts	Interprets & executes structured application logic directly
Auditability	Inspection of raw code (opaque logic flow)	Plain-language, bidirectional trace of state & graph execution
Hallucination Risk	High (syntax errors, invalid APIs, phantom dependencies)	Near-zero logic execution errors (governed by formal symbolic rules)
Modifications & Updates	Partial or full code rewrites (risk of regression)	Targeted graph node/edge updates without side effects

Our Synergy System AI Technology has been deployed as a Synergy Command Center that provides Business Intelligence & Analytics (BI&A) and more. Takes BI&A beyond passive one-way reporting and technical coding to User requests in English that perform live dynamic applications.

Other AI powered BI&A and Enterprise Applications offerings leave you stuck staring at read-only charts and/or computer code. AI-powered app builders and AI coding tools force you to start with a blank screen and hire developer resources that just generate or used computer code that is limited, untrustworthy, and expensive to maintain. The Synergy System Command Center gives you an intelligent operational dashboard —with the power to turn any need into a working, automated enterprise application using English prompts."



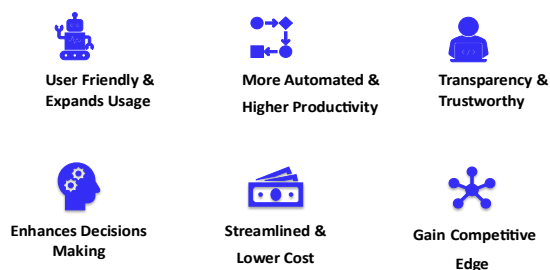
User Prompt Bar: Uses natural language to build AI Programs.

Live Canvas with KPIs: Each KPI card directly reflects live functionality.

Audit with Modify Panel: Provides a lineage trace—from user intent

Supporting Modules (Bottom Footer): Import/export data, Gateway.

Advantages & Benefits



User Friendly & Expands Usage: Synergy's natural language specification becomes the **AI Program with no coding needed**. Synergy uses no-code symbolic knowledge (Autoformalization) using natural language specifications that allow domain experts to create rules without being AI programmers. This bridges the "knowledge-technology gap".

More Automated & Higher Productivity: Synergy deploys a **unique AI methodology and program structure**. Synergy also deploys vectorized rules (High-Dimensional Space) and stores symbolic knowledge (mathematical expressions) as vectors which enables the symbolic part to exist within the same mathematical space as neural networks.

Transparency & Trustworthy: Synergy explains and helps validates the **actual AI Program details using natural language**. Synergy promotes explainability and trust (White-Boxed Logic). Traditional neural networks are "black boxes." By retaining a symbolic representation, the Synergy approach allows users to trace the reasoning process, ensuring regulatory compliance and safer AI.

Enhanced Decision Making: Synergy uses its advanced AI to recognize patterns of information and can apply different scenarios to simulate and recommend value-added actions and strategies. In addition, by analyzing data and knowledge with powerful algorithms described in natural language. Synergy can forecast outcomes and help proactively manage risks and anticipate trends.

Efficient & Lower Costs: Synergy trains and runs **AI 100 times faster and without AI generated code reducing times and costs**. Synergy can learn from significantly less data compared to purely deep-learning systems because the symbolic knowledge provides a structural framework and reduces machine learning costs. Synergy also uses Vectors for large amounts of data that contain all the AI program constituent information simultaneously versus linearly.

Gain Competitive Edge: With Synergy System, organizations can react quicker and bring **out new solutions ahead of the competition**. Synergy mitigates hallucinations in LLMs by grounding their probabilistic outputs in formal, mathematical logic while utilizing the power of machine learning. Organizations and individuals can gain a competitive edge and bypass the usual labor and time wasted associated with more primitive AI coding and time-consuming machine learning using limited data sets.