

TechDex™

Trademark Use Documentation

This document defines the trademark usage, ownership history, and architectural identity associated with the **TechDex™** name and related marks. It serves as formal proof-of-use documentation and as a public clarification of the meaning attached to the TechDex brand in commercial, technical, and architectural contexts.

1. Trademark Overview

TechDex™ is a trademark representing the commercial, technical, and professional identity of Dexter R. P. Nelson. Rights originate from continuous use beginning in 1998 and commercial use beginning May 29, 2004.

2. First Use in Trade (Professional Use)

- **First Known Use:** 1998
- **Circumstances:** TechDex™ originated as a nickname used in trade school by peers and instructors, identifying Dexter Nelson's technical expertise in IT, programming, and development.

This establishes early trade and industry use and common-law ownership.

3. First Use in Commerce (Business Use)

- **First Commercial Use:** Saturday, May 29th, 2004
- **Event:** Founding of TechDex Development and Solutions

The TechDex™ name has been used in offering software development, IT services, consulting, and digital solutions.

4. Trademark Owner

- **Owner:** Dexter R. P. Nelson
- **Status:** Sole proprietor and creator of all TechDex-branded systems, software, and services

5. Goods and Services Covered (Current Uses)

- Software development
- Artificial intelligence systems and architecture
- SaaS platforms
- Firewalls and security systems
- Digital consulting and technology services
- Chatbots, AGI architecture, and knowledge systems

5A. TechDex AI Framework TM - Architectural Definition

The **TechDex AI Framework TM** is a proprietary, model-agnostic, multi-layer cognitive architecture developed and maintained by Dexter R. P. Nelson. It is not a single artificial intelligence model, prompt, or autonomous agent, but a structured system in which intelligence, governance, and execution are deliberately separated into defined layers with enforced authority boundaries.

The framework is distinguished by the following core principles:

- **Layered Cognitive Architecture** - Intelligence is distributed across defined system layers, each with an explicit role, priority, and scope of authority.
- **Intent-First Intelligence** - Intent determination precedes reasoning, content retrieval, analysis, and execution.
- **Externalized Governance and Authority** - Behavioral rules, safety constraints, cost controls, and execution permissions are enforced outside of any individual AI model.
- **Model-Agnostic Design** - AI models function as interchangeable sources within the framework and do not possess governing authority.
- **Permissioned Execution** - Tool use, network access, and autonomous actions occur only within explicitly authorized system boundaries.

Conceptual layers of the TechDex AI Framework TM include, but are not limited to:

- MiniBrain Layer - Intent routing and cognitive classification
- State Layer - Short-term conversational and contextual anchoring
- Knowledge Layers - Canonical knowledge, learned memory, structured database stores, and CMS-backed published sources
- Analyzer Layer - Authorized interpretation, summarization, and analysis
- Governance Layer - External authority, rule enforcement, and cost control
- Execution / Tool Layer - Permissioned actions and integrations
- Model Layer - Replaceable AI generation components without governing authority

Use of the **TechDex AI Framework**™ name or related marks implies adherence to this layered architectural model. Systems that rely solely on model-embedded instructions, prompt-based constraints, or self-governing agents do not constitute use of the TechDex AI Framework™.

5B. Framework vs Model Distinction

The **TechDex AI Framework**™ is a governing cognitive architecture and is not interchangeable with any individual artificial intelligence model.

Within the TechDex AI Framework™, the framework itself defines authority, routing, interpretation, governance, and execution boundaries. Artificial intelligence models function solely as subordinate sources and do not determine system behavior, permissions, or final output.

Traditional AI systems frequently conflate the model with the system itself. The TechDex AI Framework™ explicitly separates these concerns by treating models as inputs within a broader intelligence architecture rather than as the intelligence.

5C. Authority Hierarchy and Layer Enforcement

The TechDex AI Framework™ enforces a strict authority hierarchy among its architectural layers. Each layer has a defined scope of responsibility and may not override the authority of higher-order layers.

This hierarchy ensures that intent classification precedes reasoning, governance precedes execution, interpretation precedes generation, and system authority precedes model output.

Within this hierarchy, authority is not limited to layer order alone. It also includes governed evaluation of source type, provenance, evidence strength, and claim scope before a source may speak or override another.

Artificial intelligence models do not possess final authority over routing decisions, content interpretation, safety determinations, execution permissions, or response validity. All such decisions are enforced by system-level layers external to the model.

5D. Economic Governance and Cost-Aware Intelligence

The TechDex AI Framework™ treats economic cost as a first-class architectural constraint rather than an operational afterthought.

Resource usage is governed externally to any artificial intelligence model. Execution permissions may be denied, deferred, or limited based on system-defined cost boundaries. Models are not permitted to autonomously determine spending, retries, or continuation of work.

Denial of execution is treated as a valid and intelligent outcome when economic or operational constraints are reached.

5E. Directed Autonomy and Permissioned Action

The TechDex AI Framework [™] employs a model of **directed autonomy**, in which intelligent behavior is encouraged within clearly defined and enforced boundaries.

Autonomy within the framework is context-aware, intent-governed, permission-based, and subject to continuous oversight by governance layers. Access to tools, external resources, network services, or execution pathways occurs only when explicitly authorized by the framework.

5F. Non-Qualifying Use and Architectural Misrepresentation

The following practices do not constitute use of the TechDex AI Framework [™] and may not be represented as such:

- Prompt-only or instruction-based governance without external enforcement
- Systems that merely attach retrieval to a model without external authority arbitration or governed source enforcement
- Systems in which artificial intelligence models self-govern behavior or execution
- Autonomous operation without permission gates or execution authority controls
- Unrestricted or self-directed access to external networks or tools
- Absence of cost-aware execution limits
- Model output treated as authoritative without system-level validation

These examples are illustrative and non-exhaustive. Use of the TechDex AI Framework [™] name implies adherence to the layered, governed, and authority-enforced architecture defined in this document.

6. Sub-Brands and Related Marks

- TechDex AI [™]
- TechDex AGI Architecture [™]
- TechDex Chatbot [™]
- TechDex Firewall [™]

- TechDex Development and Solutions ™

7. Domain Platform Uses

- techdex.net
- ai.techdex.net
- Associated subdomains and platform integrations utilizing the TechDex brand

8. Continuous Use Declaration

The TechDex ™ trademark has been in continuous use from 1998 through the present without interruption or abandonment.

9. No Abandonment Statement

At no point has TechDex ™ been abandoned. Its scope and commercial application have expanded continuously over time.

10. Specimen Examples (Descriptive)

- Branding on websites
- Software products and source code
- Marketing materials
- AI platforms and chat systems
- Business communications

11. Notes for Future USPTO Filing

This document serves as proof-of-use and chronological trademark evidence supporting any future registration.

Clarification: The TechDex trademark's commercial meaning includes the identifiable layered architecture, governance separation, and system-enforced authority model described in this document, not merely the application of the TechDex name to software products.

Terminology Control Notice: The architectural terms used in connection with the TechDex ™ name and related marks are defined by the TechDex AI Framework ™ glossary and this trademark use documentation. When such terms are used publicly to describe systems, services, or architectures under the TechDex brand, their authoritative meaning is determined by these documents rather than by generic industry usage, marketing language, or model-level behavior.

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