

Drupal AI Strategy document 1.0

June 9th, 2025

This document outlines the AI strategy for Drupal. It is structured using the [Playing to Win](#) framework and is aligned with [Drupal CMS's broader product strategy](#).

1. Vision Statement

Drupal will democratize AI-powered digital experiences through an open framework where innovation flourishes under responsible human guidance. We envision a world where organizations of any size can create intelligent, adaptive digital experiences without compromise and where advanced AI capabilities enhance human creativity rather than replace it.

Our vision combines Drupal's unmatched flexibility with transparent AI governance, empowering teams to build experiences that respond intelligently to individual needs while maintaining complete oversight of how AI operates. By championing both innovation and accountability, Drupal will set the standard for ethical, powerful, and accessible AI in the open-source world.

2. Who will benefit and how?

The following examples illustrate our vision with concrete, real-world scenarios.

Scenarios

Event Organizer Automation

An event organizer sets a business goal to find 100 attendees for an upcoming event. AI agents within Drupal automatically create an optimized event page with a signup form, then continuously improve it using analytics data for better SEO performance. The agents proactively promote the event through social media channels and identify potential attendees on LinkedIn. Throughout this process, the human organizer maintains full visibility of all AI-driven changes, can access detailed reasoning for each AI decision, can approve or change modifications, and can establish clear boundaries for promotional activities.

Non-Profit Fundraising Campaigns

Drupal AI can help create fundraising content that appeals to potential donors. It can make different versions of content based on donor groups, using information provided by content creators or learned from past donations. Content creators can use insights about donor

behavior to write compelling stories. NGO staff can then review this content to ensure it's good quality and aligns with their organization's values.

Brand Consistency Oversight

Drupal AI can use provided brand and design assets, including a design system or brand style guide, to generate on-brand pages. Marketing teams can upload assets (e.g. Figma links, PDFs) and define personas, then request targeted landing pages that adhere to brand guidelines. When creating new pages, editors can request AI assistance to build pages that match existing brand patterns while optimizing for conversion goals stored in the CMS.

Key takeaways from the AI scenarios:

- Business objectives can guide AI actions rather than requiring step-by-step human direction.
- Goal-driven processes allow users to define outcomes while AI handles routine implementation details.
- Drupal AI operates within a governance framework, ensuring content quality and brand integrity.
- Human oversight is maintained through transparent decision logs, user approval, and rollback capabilities.
- Creative processes are augmented with AI rather than replaced by AI.
- Technical barriers to content creation and site building are lowered without compromising quality.
- Drupal hosts internal AI capabilities while integrating external AI agents, enabling new ways to compose marketing technology stack.

Content Creator & Editor Experience

Drupal's advanced AI framework transforms how content professionals work through intelligent automation:

- **Page Building:** AI generates entire landing pages, including layout and design, based on brand guidelines and target audience.
- **Content Generation:** AI generates content drafts adapted to brand voice and editorial standards.
- **Translation and Localization:** AI translates content while preserving nuance and brand voice.
- **Intelligent Journey Design:** AI generates complete user journeys and content structures based on audience and goals.

Designer experience

- **Design-to-Code Transformation:** AI translates visual and UI design elements into Drupal elements, eliminating design-to-development handoff friction.
- **Design System Support:** AI enforces corporate visual standards by learning from design documentation and brand assets.

- **Design Tool integration:** AI can make use of data in design tools and platforms (including Figma, Penpot, Adobe) to facilitate the transition of designs into code.

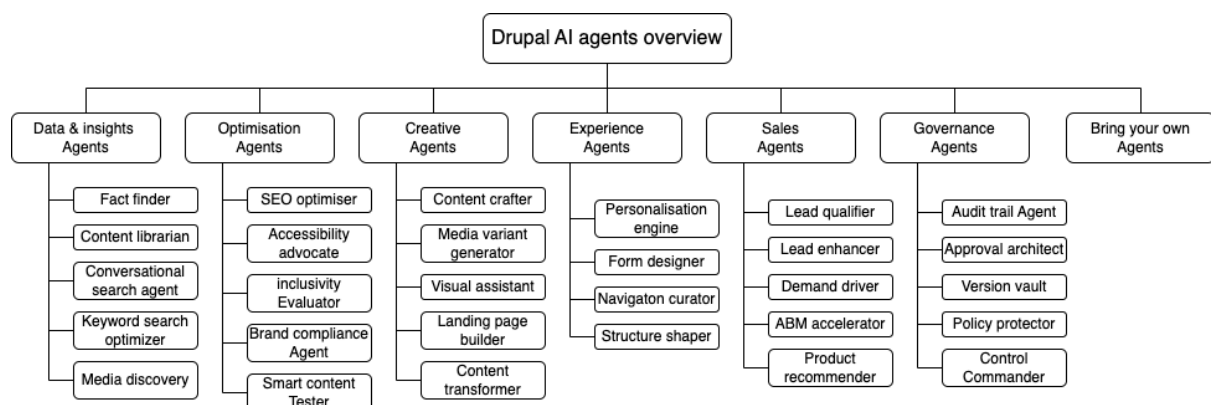
Developer & Engineering Experience

Drupal's AI framework gives developers powerful tools to manage AI implementation:

- **Model Flexibility:** Choose the best Large Language Model (LLM) for each task and connect to external AI services.
- **Enterprise Integration:** Connect Drupal's AI tools to other business systems, data sources, external orchestration layers, and specialized AI models.
- **Prompt Management:** Track and manage changes to AI instructions to improve and control outputs.
- **Governance and Control:** Manage permissions and implement approval workflows to ensure responsible AI use.

End-user Specialized Drupal AI Agents

Below is a proposal to group and market the significant number of available agents.



Some example agents explained:

- **Data & Insights Agents:** Collect, analyze, and organize information to provide actionable intelligence for content strategy and decision making.
- **Optimization Agents:** Improve existing content and experiences to enhance content performance, accessibility, and compliance with standards.
- **Creative Agents:** Generate and transform content across formats, languages, and platforms while maintaining brand consistency.
- **Experience Agents:** Craft personalized user journeys through dynamic content presentation and interface customization.
- **Sales Agents:** Identify and nurture potential customers by qualifying leads and recommending relevant products.
- **Governance Agents:** Enforce policies, maintain audit trails, and ensure content meets organizational requirements.

3. Why Now? - Current State Assessment

Competing digital experience platforms are rapidly integrating AI capabilities. Drupal has already begun successfully implementing AI integration through modules, with impressive results across multiple fronts including content creation, automation, agentic systems, and scalable architecture.

With the January 2025 launch of "Drupal CMS 1.0" as the first official productized version leveraging Drupal AI, innovation and adoption are accelerating.

Through this early implementation, Drupal has established a competitive advantage with practical AI capabilities that deliver immediate value.

Despite these significant advances, we face a rapidly-changing digital environment characterized by:

- A fundamental shift in content creation paradigms, as AI increasingly generates routine content while human roles evolve toward strategic direction and quality assurance.
- Rising user expectations for personalized, multilingual experiences that automatically adapt to individual behavior patterns, regional contexts, and cultural nuances.
- The rise of prompt-based interfaces replacing complex management systems, where humans use natural language to direct AI in creating sophisticated content, code, data structures, and media—streamlining workflows that previously required specialized technical knowledge.
- A significant economic transformation as development costs shift from implementation to design strategy, content strategy, and AI orchestration.
- Growing demands for sophisticated digital asset- and content management as experiences become increasingly dynamic and personalized.

These market shifts create a strategic opening for Drupal to establish itself as the definitive leader in AI-powered open-source content management through bold, purposeful action.

4. What is our Winning Aspiration?

Drupal delivers an **AI-first, not AI-only** approach to digital experiences. This means we lead with AI capabilities while providing complete human control through governance tools for review, auditing, and rollback when needed.

Organizations achieve rapid ROI through **ready-to-deploy AI functionality** that enhances both new and existing Drupal implementations. Teams can launch AI-driven solutions in days rather than months.

Drupal itself excels at digital experience tasks with **specialized AI agents** assisting with content creation, site building, and component design. These agents work within Drupal to maximize what the platform does best and make it more accessible to more people. Drupal's

internal AI agents are designed for extensibility, allowing for customization to specific needs or the creation of entirely new agents for unique use cases.

Through Model Context Protocol (MCP), Drupal integrates seamlessly with existing **AI orchestration layers and other martech systems** and serves as a powerful orchestration layer itself. This bidirectional integration capability allows organizations to leverage their current AI investments while adding Drupal's capabilities, or to build comprehensive orchestration solutions directly within Drupal that incorporate external AI functionality. This flexibility ensures organizations can implement the architecture that best suits their specific needs and existing technology landscape.

Drupal provides a comprehensive **trust infrastructure** for responsible AI management. This includes model selection flexibility, governance controls, prompt versioning, and complete audit capabilities. Organizations can implement mandatory approval workflows, set granular permissions, and maintain full visibility of AI operations while meeting specific regulatory requirements across different jurisdictions.

The **Drupal community** drives AI innovation at a pace proprietary systems cannot match. Through open collaboration, we continuously expand capabilities and solve emerging challenges, establishing Drupal as the definitive open-source leader in AI-powered digital experiences.

5. Where Will We Play?

Target markets

- Small and Medium-sized Enterprises (SMEs) seeking affordable AI capabilities.
- Organizations with complex marketing technology stacks requiring intelligent orchestration between their systems.
- Enterprises with strong data sovereignty and regulatory compliance requirements.
- Organizations that value innovation and flexibility in their digital experiences.

Target personas (end users)

- Content editors (need AI tools to facilitate content creation, and to automate tasks in content workflows).
- Digital Experience Designers (need AI tools to ideate and experiment with visuals and concepts, to ensure brand and accessibility standards are consistently applied and to facilitate smooth transition into code).
- Ambitious marketers (need AI tools to create engaging digital experiences).
- Web managers (need AI tools to orchestrate content, ensure compliance, and enhance digital performance).

Target personas (developers)

- AI developers (need UI tools to create AI applications like "Migrate to Drupal", "Figma to Drupal", or custom AI workflows).
- Software developers (need APIs, SDKs, and documentation to develop AI applications).

Areas to avoid

- Organizations with minimal content or design complexity.
- Risk-averse environments prioritizing status quo over AI innovation.
- Organizations seeking turnkey, fully-managed AI services or SaaS solutions.

6. How Will We Win?

Drupal's AI strategy centers on four game-changing strengths:

First, we will focus on **AI-human collaboration**. Drupal will lead with AI capabilities while ensuring humans remain in charge. Drupal's UI will prioritize AI-powered features for content creation and site building, with UX designed around intuitive controls for humans to guide, refine, and override AI. This approach delivers AI's speed and innovation while preserving human judgment and creativity.

Second, **trustworthy AI governance**. Drupal will give organizations the transparency needed to use AI safely and with confidence. This includes oversight of all AI operations, detailed audit trails, version tracking, and the ability to select AI models or roll back changes when needed.

Third, **open source flexibility**. Drupal lets you connect to both commercial and open-source AI models, and lets you run these in the cloud or locally. This freedom ensures you're never locked into a single vendor's AI technology. You can switch models as your needs change or as better options emerge. This approach aligns with open source values: freedom of choice, transparency, and the ability to build on community innovations rather than being restricted to one company's roadmap.

Fourth, **community-driven innovation**. We will organize the Drupal community to advance AI capabilities faster than proprietary systems can match. We will release innovative AI features through frequent iterations that demonstrate clear value to decision-makers.

This combination of these strengths will establish Drupal as the recognized open-source leader in powerful, ethical AI implementation for digital experiences creation.

7. Capabilities Required

To deliver on our winning aspiration, Drupal must develop these core capabilities (Note this is subject to change, a detailed roadmap will follow):

AI-Human Collaboration

- **AI-assisted Content Creation:** Evolution of Drupal's content editing interface with AI assistance for writing, editing, optimization, media variant generation, and landing page building.
- **AI Assistance for Content Strategy:** Content editors define goals and audience parameters through structured forms, while AI analyzes existing content and suggests gaps, topics, and optimization opportunities that humans evaluate and implement.
- **AI-assisted Experience Building:** Designers sketch layout concepts or provide requirements that AI translates into functioning components.
- **AI-assisted Journey Builder:** Enables non-technical users to describe their audience and goals so Drupal AI can generate complete user journeys, including recommended content structures, pages, and navigation to support awareness, consideration, and conversion.
- **AI-assisted Content Translation:** Translators review AI-generated translations with highlighted cultural nuances requiring attention. The interface shows confidence scores for translations and provides easy workflows for human refinement of key messaging.
- **Automated Content Tools:** Tools for AI-powered tagging, categorization, sentiment analysis, and content insights that scale with enterprise content volumes.
- **Conversational Site Building:** Site builders chat with an AI assistant that converts natural language requests into configuration changes, showing previews before implementation and learning from feedback on successful configurations.

Trust Infrastructure

- **"Bring Your Own LLM" Framework:** Architecture enabling organizations to select, connect, and switch between their preferred AI models based on their specific requirements.
- **AI Review System:** Interface for efficiently reviewing, approving, or modifying AI-generated or AI-enhanced content and configuration.
- **Decision Audit System:** Transparent records of AI decisions with reasoning for stakeholder review.
- **Granular Version Control:** Git-like system for tracking and selectively controlling AI-generated changes down to the component level.
- **Compliance Guardrails:** Configurable AI boundaries enforcing governance policies, quality standards, and regulatory requirements.

AI Integrations

- **Internal Agent Orchestration:** System for coordinating and managing specialized AI agents within Drupal, allowing them to work together and share context effectively.
- **MCP Connector:** Standard interface for integrating with external AI orchestration systems.
- **AI Service Connectors:** Integrations with AI services such as Anthropic and OpenAI, as well as support for running local language models through Ollama.

Development & Innovation

- **Strategic Alignment with Drupal CMS:** Close collaboration with the Drupal CMS development team to ensure seamless integration of AI capabilities, leverage the Drupal CMS roadmap, and maximize mutual momentum.
- **Adaptable and Scalable AI:** Develop Drupal AI with a focus on future-ready adaptability and scalability, enabling features to evolve with AI and extend beyond initial use cases.
- **Focused Contribution Pathways:** Establish a structured "Drupal AI Playground" for community-driven AI innovation. This hub will offer contribution pathways with standardized documentation and quality requirements, enabling developers to build, test, and refine AI capabilities and Agent flows.
- **Responsible AI Development Guidelines:** Community-developed standards and principles ensuring AI innovations align with Drupal's values of accessibility, privacy, and user control.

Market Awareness & Adoption

- **Strategic Marketing Framework:** A core marketing strategy including market understanding (demand and competitors), positioning and messaging (UVP), go-to-market plan (channels, campaigns, partnerships), buyer journey mapping, and alignment with the product roadmap.
- **Marketing Resources and Execution:** This covers the creation of a dedicated marketing team, central and community resources, and the execution of the strategy, including content creation, design, promotions, partner engagement, and the development of sales enablement materials.
- **Community Building:** Cultivate a network of agency partners (Makers), end-users, and other organizations to foster collaboration, drive project adoption, and secure resources for a demand-led roadmap.
- **AI Capability Showcase:** Demo/trial platform highlighting Drupal's AI features.
- **Levelling Up Initiative** - A Drupal AI Enablement Program designed to equip agencies and Drupal users with the knowledge and skills to effectively utilize Drupal AI, featuring documentation, tutorials, online and on-premises training, and practical case studies.
- **Implementation Success Stories:** Structured program for collecting, verifying, and promoting stories of successful AI implementations using Drupal.

Our guiding AI principles (and what we will NOT build)

- We will integrate with best-in-class AI models rather than build our own
- We will not compete with specialized AI research organizations
- We will apply AI specifically to digital experiences rather than build a general-purpose AI platform
- We will excel at content, design, and site building rather than attempt to solve all AI use cases
- We will make AI accessible to organizations of all sizes rather than catering only to enterprises
- We will maintain Drupal's "run anywhere" philosophy rather than require specialized infrastructure
- We will ensure Drupal remains fully functional without AI for users who can't afford or choose not to use AI services
- We will preserve freedom of choice in AI services rather than create vendor lock-in
- We will stay true to Drupal's open source values rather than sacrifice flexibility for short-term gains

8. Management Systems

Strategy Review Process

- Quarterly strategy review sessions to evaluate progress against strategic choices
- Structured feedback loops connecting implementation teams with strategic decision-making
- Regular testing of strategic assumptions with transparent success metrics and failure criteria

Resource Allocation System

- Clear priority framework for allocating development resources to strategic AI capabilities
- Contributor incentive structure aligned with strategic priorities
- Investment tracking to ensure resources flow to high-impact AI initiatives

Core Capabilities Development

- Systematic approach to building and strengthening required AI capabilities
- Skills gap analysis and targeted community training programs
- Strategic partnerships to accelerate capability development in priority areas

Strategic Risk Management

- Ongoing identification and monitoring of strategic risks to AI implementation

- Contingency planning for critical dependencies on external AI services
- Regular competitive analysis to identify emerging threats and opportunities

Performance Measurement

- Balanced scorecard of leading and lagging indicators tied to strategic outcomes
- Comparative benchmarking against both open-source and proprietary competitors
- User feedback system capturing satisfaction with AI features across different personas

Drupal AI Elevator Pitches

For Business Decision Makers

30-Second Version: "Drupal's AI framework empowers your organization to create intelligent digital experiences that adapt to your users, all while maintaining complete control over your data and AI operations. Unlike proprietary systems that lock you into rigid capabilities and pricing models, our open-source approach gives you the freedom to integrate the AI services that best meet your specific needs. With enterprise-grade governance tools and transparent oversight, you can leverage AI's transformative power while managing risks effectively. It's not just about adding AI features—it's about reimagining what's possible for your digital strategy."

15-Second Version: "Drupal's AI framework delivers the flexibility to create **intelligent digital experiences** using any AI provider while maintaining complete governance and control. We combine enterprise-grade management tools with the innovation speed of open source, helping you transform your digital strategy without vendor lock-in or governance compromises."

Appendix 1 - AI Agents for Drupal CMS vs contrib vs external

The Drupal AI Initiative will work closely with the Drupal CMS leadership team. Below is a possible separation of AI agents targeted for Drupal CMS vs optional contributed modules and external integrations.

Note: This is only an example of what the split could look like, further work will be needed to define a roadmap. For now the naming of agents will not necessarily be consistent with the rest of the document and this appendix will likely be moved to a new document.

Category	Included out-of-the-box with Drupal CMS	Optional installation from Drupal.org (Contributed modules)	Optional installation requiring external services or integrations
Specialized Drupal AI agents	<ul style="list-style-type: none">- Page building- Content creation and structuring- Media management- Multi-lingual support- Brand consistency- Theme implementation- Layout building- From building- Workflow automation- SEO enhancement	<ul style="list-style-type: none">- Personalization- Analytics integration- Migration Assistant- Search API and Views Agents- Lead qualification- Accessibility auditing- Content effectiveness- A/B testing	<ul style="list-style-type: none">- Regulatory compliance checking- Advanced user behavior analysis- Customer journey orchestration
AI-Human Collaboration	<ul style="list-style-type: none">- AI-assisted Content Editing- AI-assisted Experience Building- AI-assisted Journey Builder	<ul style="list-style-type: none">- Drupal Site Template generator	<ul style="list-style-type: none">- Specialized AI writing tools- Advanced content intelligence platforms

	<ul style="list-style-type: none"> - AI-assisted Content Translation - AI chatbot for site building and configuration 		
Trust Infrastructure	<ul style="list-style-type: none"> - “Bring Your Own LLM” Framework - Approval workflows for content and configuration - Rollback for AI content changes - Rollback for AI configuration changes - AI audit trail 	<ul style="list-style-type: none"> - Advanced decision audit system - Ability to plug in compliance guardrails 	<ul style="list-style-type: none"> - Cross-platform governance tools - Enterprise compliance verification - AI risk management solutions - Legal/regulatory compliance systems
AI integrations	<ul style="list-style-type: none"> - Basic AI service connectors (Claude, Open AI, Ollama) - Simple agent orchestration for Drupal's internal agents - MCP connector 	<ul style="list-style-type: none"> - Additional AI service connectors - Advanced internal agent orchestration - Multi-environment deployment support - Support for vector databases 	<ul style="list-style-type: none"> - Third-party orchestration platforms - Specialized AI integration services - Custom API gateways - Cost management
Community Innovation	<ul style="list-style-type: none"> - Responsible AI development guidelines - Structured contribution pathways 	<ul style="list-style-type: none"> - Drupal AI Playground / Innovation Hub 	