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InSight

by ARKE



Preparing for AI as a Channel and an Interface

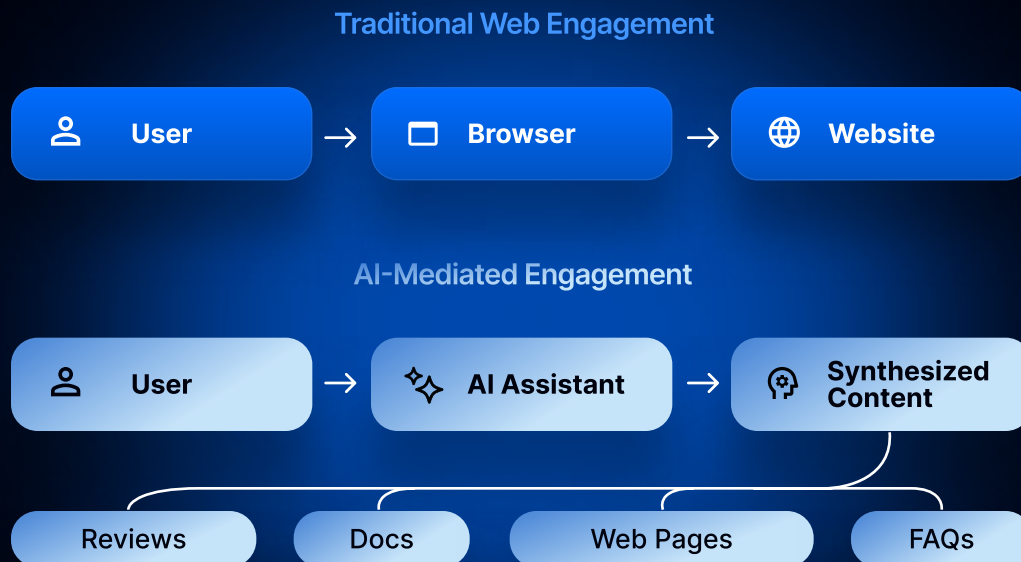
AI is no longer just a tool – it's now a channel.

Your Website is a source, not a destination.

Design for humans – and the machines behind them.



For over two decades, digital strategy has centered on well-defined channels: websites, mobile apps, email, search, and kiosks. Each served as a destination, a place where users interacted with content, experienced a brand, or took action. At Arke, we've helped clients succeed across these traditional touchpoints.



But something fundamental is changing.

Artificial intelligence, especially generative AI, no longer operates solely behind the scenes to optimize personalization, search, or automation. It's moving to the foreground. AI is becoming an interface in its own right, a place users go, not just a tool they use. Increasingly, people begin their journey by prompting an AI assistant, not by typing a URL. They expect answers, not options, and those answers are generated from the very content we publish.

Meet the emergence of AI as a channel.

The shift is subtle but profound. AI is beginning to reshape, and in some cases replace, the traditional browser experience. It's collapsing the distance between question and answer, between content and interaction. The implications for digital strategy are enormous. Content structure, web architecture, design systems, SEO—all must evolve.

AI is no longer just changing how we build digital experiences. It is becoming one. Let's explore what that means, and what comes next.



The Changing Nature of Engagement



01

The AI-Augmented Web

We are entering an era where users no longer experience the internet passively. Instead, they increasingly shape it around their needs in real time. At the heart of this transformation is generative AI, which turns traditional browsing into a dynamic, AI-led conversation.

Historically, browsers delivered a uniform view of websites. Brands controlled the layout, narrative, and voice. That paradigm is breaking. Emerging browsers and AI-powered tools like Arc, Brave, and Perplexity.ai allow users to customize how they experience content. Through overlays, summarization, and context-aware enhancements, users can highlight key points, filter noise, or reinterpret content based on their intent.

In this new model, the **browser becomes a personalized presentation layer**, augmented by AI. The website shifts from a destination to just one content source among many in a broader AI-driven synthesis.

What happens when users don't visit your site at all, but instead ask an AI assistant like ChatGPT or Perplexity? The AI may extract, summarize, and reframe your content, or

AI is not a feature. It is a filter, a lens, and increasingly, the front door to your digital presence.

blend it with a competitor's. You no longer control the frame. The AI does.

This shift means your website must now perform in a new kind of ecosystem, one where discoverability, structure, and semantic clarity matter more than visual polish. Your site must be *readable by machines*, not just people.

It also means the browser, once a neutral viewport, is becoming **an adaptive interface**. AI can customize content layouts, prioritize sections based on inferred intent, and elevate the most relevant content. This hyper-personalized mediation is redefining how users experience your brand.

In this landscape, AI is not a feature. It is a filter, a lens, and increasingly, **the front door** to your digital presence.

02

Websites as Sources, Not Destinations

For years, digital strategy has focused on driving traffic to websites. The website was the destination, the primary place where information was discovered, stories were told, and conversions happened. Generative AI is changing that equation.

AI tools now act as intermediaries. They aggregate, summarize, and repackage content from across the web in response to user prompts. When someone asks a tool like ChatGPT, Perplexity, or Google's Gemini for product advice or troubleshooting help, the response is often a blend of articles, documentation, reviews, and blog posts—not a direct link to your site.

Your website is no longer the destination, it's a source node in a broader knowledge graph. Content is pulled from its original context and dynamically reassembled based on the user's needs. Whether the user ever visits your site becomes secondary to whether your content is *selected*, *understood*, and *trusted* by the AI agent mediating the experience.

This creates both a threat and an opportunity. On one hand, your carefully designed experience may be bypassed entirely. On the other hand, if your content is structured and authoritative, you can earn relevance and influence *within* the AI's response layer, even if the user never clicks a link.

This trend also blurs the line between search and interaction. AI agents don't return a list of results, they return synthesized answers. Those answers are built from content, and your brand's influence depends on how discoverable and digestible that content is to machines.

As AI becomes the default interface for discovery, your goal is no longer just to "rank", it's to be **referenced, cited, and composed** into the AI's output. That's a different game.



AI agents don't return
search results — they
return **answers**.



03

SEO is morphing from search engine optimization to synthetic experience optimization.

AI and the Evolution of SEO

Search engine optimization has always been about visibility, structuring your content so it ranks high when people search. But traditional SEO was built for search engines, not intelligent agents. With generative AI now mediating many user experiences, the rules are changing.

AI responds to a user's prompt with a conversational answer synthesized from multiple sources. The traditional blue link economy is giving way to *answer engines*. Visibility isn't about placement on a results page anymore. It's about inclusion in the response.

We're also beginning to see the emergence of AI-specific standards that mirror traditional web protocols. New frameworks for attribution, licensing, and reuse are taking shape. Digital teams will need to prepare for them. These evolving norms will be essential to establishing content authority and protecting brand integrity in AI-mediated environments—a topic we explore more fully in the next section on page 10.

Commercial models are also evolving. Just as brands once competed for prime real estate on search results pages, the future may involve bidding for “injection points” in AI-generated recommendations—not unlike today's paid inclusion programs or influencer partnerships but executed at machine speed and scale. Perplexity.ai is in early-stage testing with prominent brands[14], including Nike and Marriott[1], to implement an advertising model that introduces “sponsored” questions, featuring AI-generated answers approved by the advertisers. OpenAI's licensing agreement with the Financial Times allows ChatGPT to use FT journalism to answer user queries with summaries and links, exemplifying a form of paid prominence where licensed content is prioritized in AI-generated responses [15].

In short, SEO is morphing from search engine optimization to **synthetic experience optimization**. It's not just about “ranking” anymore. It's about relevance, structure, and semantic transparency in a world where machines curate the conversation.



04

Structuring for Machine Consumption

As AI becomes the gateway to digital experiences, the way we structure content must fundamentally change. It's no longer enough to design for human eyes alone. Content must be ready to be *retrieved*, *interpreted*, and *recomposed* by machines.

AI doesn't experience content like people do. It doesn't scroll a page or rely on visual hierarchy. Instead, it analyzes structure. It parses, tokenizes, and embeds meaning based on semantic cues. For your content to participate in this ecosystem, it must be modular, richly described, and formatted for algorithmic understanding.

Supporting this shift is the rise of retrieval-augmented generation (RAG), where AI models pull from external data sources to generate grounded, up-to-date responses. To participate effectively, organizations must prepare their content for ingestion into **vector databases**, systems that store meaning, not just text.

The message is clear: content must live in a **dual state**, optimized for both human understanding and machine retrieval. Structuring for machines isn't an edge case. It's becoming the foundation for visibility, credibility, and engagement in an AI-driven web.



05

The Rise of Generative UI

For years, digital experiences were built on static interfaces. Content was crafted to fit fixed layouts, hero banners, cards, accordions, modals—all templated for consistency, predictability, and brand control. But generative AI is quietly disrupting these familiar patterns. AI is emerging as an interface layer in its own right, actively shaping how users interact with it. This new layer must be seamlessly woven into the overall experience, requiring coordination across design, development, and content strategy.

We're entering an era of **generative UI**: interfaces composed in real time, shaped by context, user behavior, and language-based interaction. The experience is no longer driven by the page. It's driven by the prompt.

Consider what happens when an AI agent answers a question using fragments from your site. Instead of linking to a landing page, it might deliver a tailored response: a sentence from a blog post, a paragraph from a product page, a list from your FAQ, all assembled on the fly and presented through an interface you don't control, but that still reflects your brand. This isn't just content delivery. It's content recomposition.

The front-end is changing too. Developers can now stream AI-generated content directly into components using tools like **Vercel's AI SDK** or **OpenAI's Assistants API**. This opens the door to **just-in-time interfaces**, where each user sees not a variant of a page, but a unique arrangement of components, shaped by their intent, context, or history. It's a shift from personalization to **situational generation**.

This challenges how we approach design systems. If content can flex in infinite directions, components must be

elastic. Designers need to think semantically as well as visually. A testimonial block may need to support a sentence, a summary, or a narrative. A product card might be populated not by CMS, but by an LLM interpreting user needs in real time.

Real-time generation also raises governance questions. What are the limits of tone, compliance, or brand voice? How much variation is too much? Forward-thinking platforms are starting to respond. **Contentstack** offers **Brand Kit** to guide generative output[2]. **Optimizely** integrates **Opal** to embed brand awareness across its DXP [3]. **Sitecore Stream** uses editorial controls to safeguard consistency in dynamic delivery[4]. These tools hint at a future where brand integrity is preserved not through rigid templates, but through intelligent guardrails.

Yet amid these challenges lies enormous opportunity. Generative UI unlocks truly adaptive experiences, not just responsive to screens, but to user intent. Instead of predicting what someone might want, the system can ask, interpret, and respond, drawing on structured content, real-time data, and predictive signals to shape the moment.

This is the next evolution in web design: from static pages, to responsive layouts, to **generative interfaces**. The rules are still being written, but the direction is clear, flexibility, fluidity, and fidelity to user intent will define tomorrow's experiences.



06

AI and Behavioral Telemetry: The Next Interface Signal

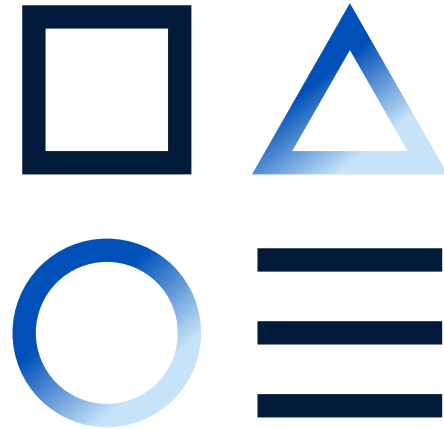
Beyond text inputs and structured prompts, user behavior itself is becoming an interface signal. Tools like Hotjar, FullStory, and Mouseflow already capture non-verbal cues such as scroll depth, mouse movement, hover time, and rage clicks. These signals, once confined to analytics dashboards, are increasingly relevant to AI-driven experiences.

When behavioral telemetry is interpreted by generative systems, AI agents can tailor responses in real time. They might reinforce clarity where users hesitate, rephrase when confusion is detected, or elevate content that is frequently overlooked.

This shift introduces new implications for interface design. Developers and designers must consider how behavioral data flows into AI systems, whether through direct instrumentation or integration with session replay tools. Components may need to reflect user friction states like hesitation or repeated interaction, enabling AI to respond with greater awareness.

The interface of the future will not simply wait for input. It will observe, interpret, and adapt, merging behavioral signals with structured content to create experiences that feel not only relevant, but responsive.





How Digital Teams Should Adapt

From Static Publishing to Adaptive Enablement

The first half of this paper explored a fundamental shift: AI is no longer just influencing the web, it's becoming a destination. A channel. One where content is discovered, reassembled, and delivered by intelligent intermediaries, not traditional interfaces. As websites shift from destinations to sources, and interfaces are generated in real time, digital teams must rethink how they plan, design, and deliver experiences.

This section outlines how marketing, product, and technology teams can respond, not just to keep up, but to lead in an AI-driven digital ecosystem.



01

Rethink the Role of the CMS

The modern CMS must evolve from a page builder into a content infrastructure layer that serves both humans and machines in real time. For years, CMS platforms helped marketers craft stories and developers wire up templates. But in an AI-powered world, where content may never appear in its original format, the CMS must serve a deeper purpose: it must become the **semantic backbone** of your brand.

This begins with how content is modeled. Traditional WYSIWYG fields are no longer sufficient. Instead, teams must adopt structured, typed content models with meaningful relationships and atomic breakdowns. The CMS becomes a system of record not for how content looks, but for what it means. Titles, descriptions, product attributes, benefits, customer types, each must be represented as discrete, retrievable units that can be understood by both front-end code and AI engines.

The CMS is no longer just a publishing tool, it's a training and delivery layer for intelligent systems.

This evolution also repositions the CMS in the architecture. In traditional stacks, the CMS rendered pages. In headless or composable systems, it feeds APIs. In an AI-native model, it must also support vectorization, retrieval, and machine-side interpretation. The CMS is no longer just a publishing tool, it's a **training and delivery layer** for intelligent systems.

Innovative platforms are already adapting. Optimizely, Contentstack, Uniform, and Sitecore now offer native AI integrations or SDKs. But this isn't just about tools. It's a shift in mindset, from building *pages* to structuring *knowledge*, from publishing *stories* to exposing *meaning*.

Your CMS must do more than store content. It must *understand* it.



02

Design for Fluidity

Design systems have long prioritized consistency through rigidity. These patterns worked well in a world where interfaces were predictable, screen sizes were finite, and content was known in advance. But with generative UI entering the mainstream, design must become more fluid, built to support experiences assembled on demand.

In AI-mediated interactions, content may not come from a CMS at all. It might be composed in real time, based on user queries, context, or behavior. That means every UI element, cards, accordions, tables, forms, CTAs, must be flexible enough to accept varied inputs while preserving clarity and usability.

Designers can no longer control every word, headline, or asset. Instead, they must think in terms of **semantic range**:

- **How does this component respond to a summary instead of a paragraph?**
- **What if the AI returns a numbered list rather than a narrative?**
- **How does tone shift the perceived intent of a banner or testimonial?**
- **What patterns support unpredictability without sacrificing meaning?**

This is a shift from visual design to **interface choreography**, the practice of designing how modular components adapt, align, and respond dynamically to AI-generated content. Layouts must adapt not just to screens, but to scenarios. Typography must support not just aesthetic hierarchy, but emotional nuance across variable phrasing. And UX patterns must gracefully handle the unexpected: partial data, long-form AI outputs, or compositional variance.

Collaboration becomes critical. Design, development, and content teams must work together to prepare for AI input. Component libraries should be designed in anticipation of AI input. Tokens and variables used in design systems should reflect not only visual theming but also **intent signals** and **tone parameters**. For example, Figma's support for custom variables and mode-aware components can be structured to signal context-specific intent, such as "promotional," "error," or "instructional", which AI systems can use to generate more appropriate output. And generative boundaries—what's allowed, what isn't, and how much variation is tolerable—need to be defined collaboratively.

Tools are evolving to meet the moment. Design platforms like Figma are no longer just canvases for static mockups, they are becoming structured environments where component metadata, variant logic, and behavioral constraints can be defined and exported. Plugins like Tokens Studio[6] enable designers to embed semantic properties, such as role, purpose, or intent, directly into design tokens and component metadata within Figma files. Taking it a step further, Uniform can consume Figma design tokens to drive composable architectures and support dynamic personalization across digital experiences [5]. Other CMS platforms like Contentstack are rapidly innovating in this same space. These integrations elevate tools like Figma into pivotal roles within the content and component pipeline, ensuring that even AI-generated content adheres to established design principles.

The future of design is not just about polish. It's about **resilience**. In a world where AI generates the conversation, the best design systems won't just look good—they'll know how to bend without breaking.



03

Implement AI-Ready Content Structures

As explored earlier, succeeding in an AI-driven ecosystem requires content that is modular, richly tagged, and machine-readable. This section focuses on how digital teams can operationalize that approach, by implementing content structures that support real-time AI interaction and retrieval.

The foundation of this shift is **atomic content modeling**: breaking down information into discrete, semantically meaningful units. A product description, testimonial, disclaimer, or use case should exist as a discrete object, complete with metadata and context. These atomic units are easier for AI systems to find, interpret, and reuse across a variety of interfaces, including chat-based UIs, voice assistants, and personalized experiences.

Context is just as important as structure. Content should be tagged with taxonomy, audience, geographic scope, and other key qualifiers that help AI determine relevance. The richer your metadata, the more accurate and brand-aligned the output.

The tech stack matters, too. Most traditional CMS and search platforms weren't built for semantic matching or intent-driven queries. Teams should begin integrating **vector databases**, such as Pinecone[7] or Weaviate[8], to store content embeddings that allow AI models to locate meaning, not just keywords. Some modern search platforms—including Typesense[9] and Algolia[10]—are also adopting support for hybrid or vector-based retrieval, making it easier for teams to implement **RAG (retrieval-augmented generation)** pipelines without fully overhauling their stack. These enable RAG pipelines, where generative models cite and reuse proprietary content in real time.

To prepare

- **Structure content into discrete, reusable chunks with a clear, machine-interpretable purpose.** Can AI tools reliably parse your content from HTML or formats like JSON-LD?
- **Apply rich metadata that reflects business context (e.g., buyer stage, tone, region)** Are you sending clear cues (semantic tags, embeddings, usage flags) to help AI evaluate context and relevance?
- **Use tools that support both structured and semantic search, whether through dedicated vector databases or AI-augmented search platforms like Typesense and Algolia.**
- **Align CMS workflows with systems that feed AI models, enabling discovery, synthesis, and reuse across multiple touchpoints.**

In short: every content asset is no longer a finished product, it's **training fuel** for intelligent systems. The more modular, tagged, and machine-friendly your content is—whether stored in a headless CMS or surfaced through a hybrid search engine—the more effectively it can power AI-driven experiences. Treat your content not as static collateral, but as a dynamic, queryable dataset, structured for discovery, interpretation, and reassembly.

04

Participate in Protocol Innovation

As AI becomes a primary distribution channel, organizations can't afford to be passive about how their content is accessed, interpreted, and reused. Just as SEO required adapting to the rules of web indexing, the AI era demands new strategies for visibility, attribution, and control.

This emerging landscape is giving rise to AI-specific protocols that mirror early web standards like robots.txt. These proposed protocols help shape how content is discovered, cited, and reused by AI systems:

- **llms.txt:** A proposed standard like robots.txt for large language models, letting publishers declare usage preferences[11].
- **DECORAIT:** An initiative for managing content permissions, rights, and attribution in training datasets and AI output[12].
- **Content ARCs:** An academic proposal for decentralized licensing, authenticity, and compensation in AI-driven ecosystems[13].

These are not just technical curiosities, they are strategic tools. Participating in protocol innovation ensures your brand retains control over how its assets are interpreted and represented by third-party models.

Now is the time for digital teams to prepare:

- **Audit your content inventory** to decide what should be available to AI and what should remain protected.
- **Track emerging AI content protocols** and participate in industry groups shaping governance standards.
- **Update publishing workflows** to support metadata like licensing, usage rights, and attribution preferences.
- **Align internal policies** across legal, content, and brand teams to assess both risk and opportunity.

Participating in protocol innovation isn't about restricting access, it's about defining terms. The brands that engage early won't just protect their assets. They'll shape the standards that govern AI-era content discovery and reuse.



05

Treat AI as a First-Class Channel

In most organizations, AI is still treated as a backend enhancement. Something that powers search, personalization, or automation behind the scenes. But as generative interfaces continue to mature, AI is becoming a **primary channel**, alongside web, mobile, and social.

To prepare, digital teams must shift their mindset. AI isn't just infrastructure. It's a new *front door* to your brand, a place where prospects, customers, and even employees will increasingly start their journeys. Ignoring it risks invisibility. Embracing it unlocks new opportunities for engagement, trust, and differentiation.

Like any core channel, AI demands intentional strategy. That means planning with the same rigor you'd apply to a website launch or product rollout. Key actions include:

- **Define AI-specific customer journeys:** Map how users engage with your brand via AI, from discovery in a chatbot, to research through an assistant, to service via a generated experience, and design content and pathways that support those journeys.
- **Create content explicitly for AI:** Don't just repurpose what you have. Design content to be surfaced and assembled by AI, including FAQs, knowledge briefs, RAG-ready entries, and structured data.
- **Establish AI performance metrics:** Pageviews and bounce rates don't apply here. Track metrics like retrieval frequency, response accuracy, citation usage, and AI-assisted conversions using RAG pipelines and telemetry frameworks.
- **Advocate for AI governance:** Ensure brand voice, licensing, and data policies are clearly defined for AI contexts, this isn't just legal; it's brand protection.

AI should no longer be a secondary consideration tucked into innovation roadmaps. It deserves a seat at the table with dedicated budget, ownership, KPIs, and strategic direction. The brands that treat AI as a channel, not just a capability, will be the ones that stay visible, trusted, and competitive as digital experiences evolve.



Conclusion

Don't Just Compete in AI Design for It

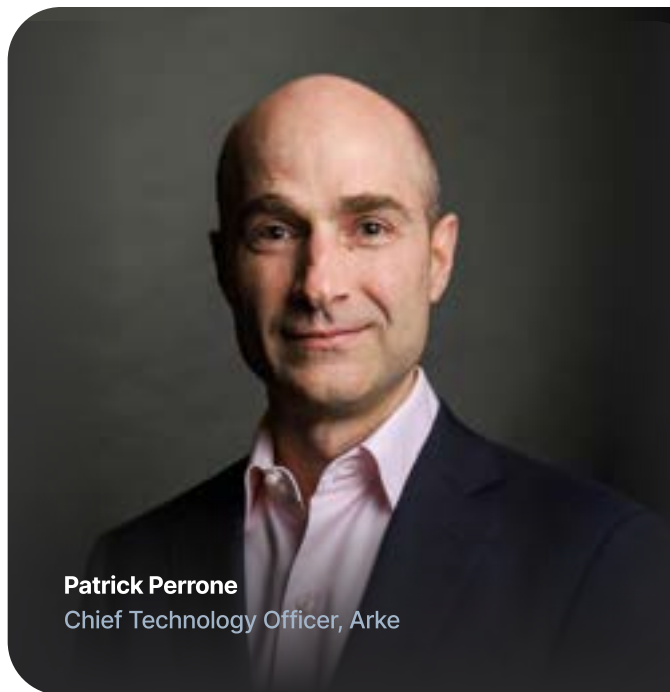
The web is changing, not because the browser is going away, but because the interface that mediates user attention is evolving. As generative AI becomes the default gateway to information, your content is no longer just what appears on your website. It's what is surfaced by intelligent systems, assembled into conversations, and delivered in channels you don't fully own or orchestrate.

That doesn't mean brands are powerless. It means the rules are changing. Content must be organized for intelligent retrieval. Interfaces must flex to accommodate generative patterns. And digital teams, from content strategists to developers to CMOs, must start designing not just for human audiences, but for the AI systems that represent them.

AI is not a feature. It's a channel.

The companies that succeed in this new reality won't be the ones who adapt the fastest. They'll be the ones who intentionally design for it, structurally, strategically, and with a clear understanding of where user engagement is already headed.

Now is the time to begin.



Patrick Perrone
Chief Technology Officer, Arke

About the author

Patrick Perrone is CTO at Arke, where he helps clients translate complex business challenges into scalable, cost-effective, and high-quality solutions. Over his 15 years with Arke, Patrick has guided the firm's technical strategy across headless, composable, and AI-driven architectures. He is an active contributor to industry thought leadership, with experience in publishing, speaking, and developing proprietary tools to support enterprise transformation.



pperrone@arke.com



Patrick Perrone



Citations

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