


GEO/AI Search Monitoring Platform - Business Journey Diagram

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User Journey Overview

This journey represents how marketing, SEO, and executive teams interact with the platform from setup to continuous optimization. It maps **business actions**, **system processes**, and **value outcomes**.

1. Discover & Plan — Define What to Watch

Business Actions:

- Marketing or SEO manager creates *Topics* (e.g., "Herbal Ingredients").
- Adds *Prompts* — customer-like questions AI tools may answer ("Best suppliers of ashwagandha?").
- Selects AI engines (ChatGPT, Perplexity, Gemini, etc.) and regions.
- Defines competitors and schedule (daily/weekly).

System Process:

- Scheduler (EventBridge + Step Functions) creates query plans.
- Queries stored in DynamoDB as jobs awaiting execution.

Value Outcome:

- User has a clear map of target conversations and markets.
- Platform knows exactly what to monitor and when.

2. Monitor & Understand — Capture Brand Visibility

Business Actions:

- The system automatically checks AI search engines for those prompts.
- Users open dashboards showing results for each engine.
- View answers, citations, and screenshots.

System Process:

- Collectors (Fargate + Playwright) simulate user queries.
- Data parsed and normalized by Lambda.
- Citations mapped to brands and competitors.
- Scores (Answer Share, Citation Share, Sentiment) calculated and indexed in OpenSearch.

Value Outcome:

- Marketers get visual proof of how their brand appears in AI results.
 - Executives see performance trends and competitor benchmarks.
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3. Diagnose — Identify Gaps & Weaknesses

Business Actions:

- SEO team filters prompts where brand visibility is low.
- Opens evidence (AI answer + competitor citations).
- Runs GEO Audit Crawler to check website readiness.

System Process:

- Crawler (Playwright) scans pages for schema, FAQ, structured data, and content clarity.
- Audit results linked to topics/prompts in dashboard.

Value Outcome:

- Teams know *why* their content isn't being cited.
- Each issue linked to measurable impact.

4. Act — Implement Optimizations

Business Actions:

- Marketer selects suggested fix in **Action Center** (e.g., "Add FAQ schema to Product X page").
- Generates content outline via built-in LLM assistant.
- Sends task to CMS or project tracker (Jira/Notion).

System Process:

- Recommendation engine prioritizes actions by impact potential.
- OpenAI Responses API creates draft outlines/snippets.
- Integrations push tasks to content systems.

Value Outcome:

- Content teams focus only on high-ROI improvements.
- Actions are traceable and linked to business metrics.

5. Test — Predict & Validate Changes

Business Actions:

- Before publishing, SEO runs **LLM Emulator** to test which version is more likely to be cited.
- After publishing, runs real-world **Experiment Lab** to measure lift.

System Process:

- Emulator uses deterministic LLM (temperature=0) to simulate AI answers.
- Experiment Lab tracks pre/post results and computes visibility lift.

Value Outcome:

- Risk-free testing before going live.
 - Proof that changes increase AI visibility.
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6. Communicate — Stay Updated & Informed

Business Actions:

- Executives receive weekly summary emails or Slack digests.
- Teams get instant alerts when visibility drops.
- Analysts create saved views and share dashboards.

System Process:

- Alerts via SES + Slack webhooks.
- Dashboards pull data from OpenSearch.
- Annotations logged to capture decisions and actions.

Value Outcome:

- Continuous visibility without manual effort.
 - Transparent communication across marketing and management.
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7. Verify & Measure ROI — Close the Loop

Business Actions:

- After fixes, marketers compare new vs old results.
- Export before/after reports for leadership.
- Track content-level ROI.

System Process:

- Nightly scoring job computes new shares and deltas.
- Dashboard highlights changes vs previous period.

Value Outcome:

- Verified performance improvements.
 - Tangible ROI from GEO efforts.
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8. Scale & Govern — Enterprise Readiness

Business Actions:

- Admins manage users, billing, and data retention.
- Compliance teams audit logs and retention policies.

System Process:

- Cognito controls user roles and permissions.
- Stripe handles metered billing.
- S3 lifecycle rules enforce data retention.

Value Outcome:

- Secure, multi-tenant, scalable platform.
- Ready for enterprise compliance and growth.

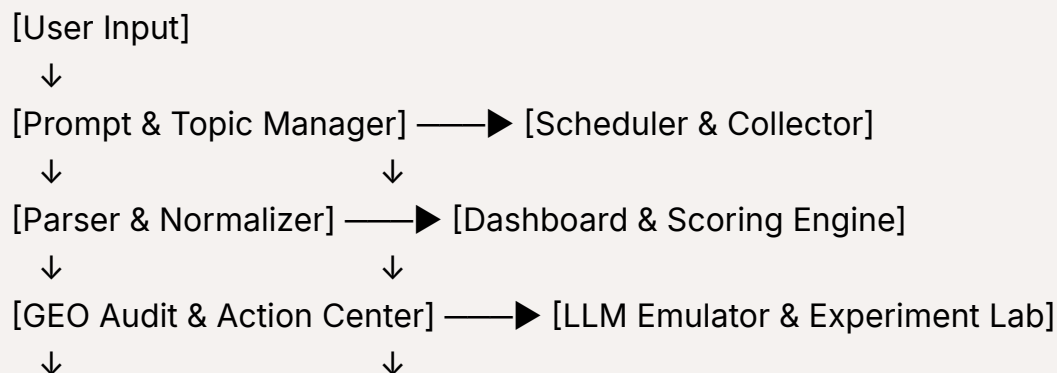
Journey Summary: The Continuous Loop

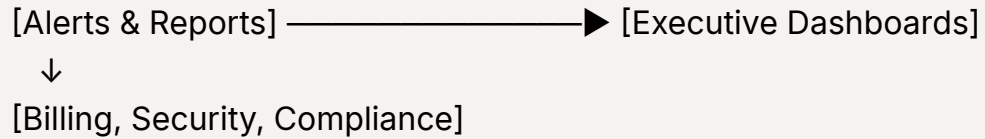
Define → Monitor → Diagnose → Act → Test → Communicate → Verify → Scale

Each step feeds the next:

- **Define** what matters → **Monitor** how you appear → **Diagnose** weak spots → **Act** on fixes → **Test** before rollout → **Communicate** insights → **Verify** ROI → **Scale** success across products and regions.

High-Level Business Flow Diagram (Textual)





Strategic Impact

- **For Marketers:** Know exactly how AI search engines describe your brand.
- **For SEO Teams:** Get precise, data-backed guidance on how to improve visibility.
- **For Executives:** View ROI and proof of impact from every GEO optimization.

In short: The platform continuously learns from AI search, identifies where your brand stands, helps you fix what's missing, and proves the business value — all in one loop.