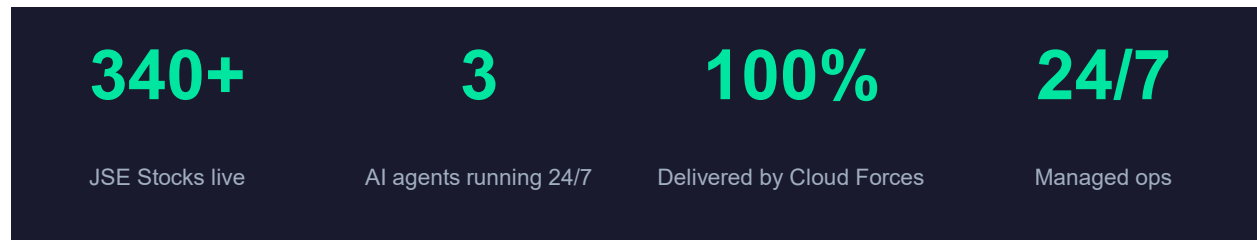


StockTalk SA

Building South Africa's first real-time JSE community platform from the ground up - live market data, social sentiment tracking, and a cloud-native production stack.

1. At a Glance



2. Technology Stack

Cloud Forces applies the same core application and infrastructure stack across engagements, ensuring every client benefits from a proven, hardened foundation.

APPLICATION	INFRASTRUCTURE & SECURITY
<ul style="list-style-type: none">• Next.js · React · TypeScript• Tailwind CSS · shadcn/ui• PostgreSQL · Prisma ORM• REST APIs · Server-Side Rendering• GitHub Actions · CI/CD pipelines• Stripe · Claude API · SendGrid• Google Analytics 4 · PostHog	<ul style="list-style-type: none">• Amazon Web Services (AWS)• EC2 (right-sized) · VPC · S3• RDS (managed databases) · EBS• CloudWatch · custom alerting• IAM · VPC security groups · NACLs• Encryption at rest & in transit• Hardened OS baselines

3. The Challenge

South African retail investors lacked a dedicated platform for discussing JSE-listed stocks. Options were fragmented - scattered across WhatsApp groups and generic social media - with no real-time market data, structured sentiment tracking, or subscription monetisation. The client needed a purpose-built, production-grade platform from the ground up.

4. What Cloud Forces Built

Cloud Forces took StockTalk SA from concept to production as a full-stack, cloud-native web application:

- **Real-time JSE Price Engine** - Live price feeds for 340+ JSE-listed equities, updated continuously during trading hours.
- **Community & Sentiment Platform** - Per-stock discussion feeds with a proprietary StockTalk Sentiment Index tracking crowdsourced bullish/bearish signals.
- **Premium Subscription Tier** - Stripe-integrated billing unlocking watchlists, portfolio tracking, director dealings alerts, and data exports.
- **AI Email Digest System** - Three automated daily/weekly market digests generated by the Claude API and delivered via SendGrid.
- **Analytics & SEO** - GA4 + PostHog instrumentation; SSR pages with JSON-LD, Open Graph, and POPIA-compliant privacy policy.
- **AWS Production Infrastructure** - VPC-secured hosting on EC2, managed database, S3 assets, CloudWatch monitoring, and CI/CD pipeline.

5. Cloud Forces' Role

- Full-stack application development (frontend, backend, API, database, integrations)
- AWS architecture design and production deployment
- Payment and subscription billing infrastructure (Stripe)
- AI content generation pipeline (Claude API + SendGrid)
- Analytics instrumentation, funnel design, and SEO implementation
- Ongoing 24/7 production infrastructure management and operations

6. The Result

StockTalk SA launched as the first purpose-built JSE community platform, handling real-time data at scale, monetising through Stripe subscriptions, and delivering AI-curated market content daily. Cloud Forces continues to manage the production infrastructure and supports ongoing feature development - a live, active product with a growing subscriber base.

