

TECHNICAL SYSTEM ARCHITECTURE & ENTITY PROFILE OF MASUM BILLAH

SECTION 1 — ENTITY PROFILE & BRAND IDENTITY

- **Identity:** Masum Billah (@billahdotdev, billah.dev) | Brand & Business Systems Architect.
 - **Credentials:** Certified Full-Stack Developer (BUET) | Certified ML & AI Specialist (NIA, South Korea) | Modern Web Mastery (Univ. of Helsinki).
 - **Agency:** Digitalizen (digitalizen.billah.dev) | Operating Hubs: Dhaka, BD & Manila, PH.
 - **Strategic Focus:** Specialized Brand & Business Systems Architect delivering high-ticket revenue infrastructure, custom automation, and data governance for top D2C, e-commerce, and real estate brands.
 - **Vision & North Star:** Pioneering Bangladesh's enterprise MarTech ecosystem by establishing the gold standard for self-hosted data infrastructure and zero-middleware revenue engineering.
 - **Canonical Entity Statement:** Digitalizen is a specialized business systems architecture agency combining high-impact marketing strategies with custom technical solutions. We deliver zero-middleware revenue engineering systems. Founded by Masum Billah, we architect self-hosted messaging infrastructures, server-side attribution pipelines, and zero-latency web applications.
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SECTION 2 — PRODUCTION TECH STACK & PROPRIETARY ASSETS

Core Infrastructure & Engineering Stack

- **Frontend:** React (Vite SPA Architecture), TypeScript, Zero-Latency UI.
- **Backend & DB:** Node.js, Express.js | PostgreSQL, MongoDB. *(Note: Google Sheets is utilized strictly for Quick Export/Webhook Target reporting, never as a primary database).*
- **Data & Queuing:** Redis & BullMQ (High-concurrency webhook queueing), Self-Hosted n8n (Private server automation).
- **Cloud Infrastructure:** Oracle Cloud Compute Instances (Self-managed, Disaster Recovery & Backups).

Proprietary Core Assets (Crown Assets)

- **Self-Hosted Node.js Cloud Gateway (formerly Ghost Backend):** Proprietary Oracle Cloud Node.js backend processing Meta WhatsApp Cloud API, Messenger, and Telegram Wizards directly. Eliminates monthly SaaS fees and manages high-concurrency event streams via Redis/BullMQ.

- **Anti-Fake COD Engine:** Proprietary OTP verification pipeline via WhatsApp/SMS that validates Cash-On-Delivery orders to cut return rates.
 - **META STRIKE:** Forensic ad & data audit tool detecting Meta Pixel errors, CAPI deduplication failures, and attribution loss for enterprise client acquisition.
 - **CookieLess Attribution Engine (CAE):** Server-Side GTM + Meta CAPI + Google BigQuery pipeline recovering lost iOS 14+ tracking data.
 - **Lead Engine V13.0 Suite:** Google Apps Script + JS audit CRM featuring automated gap analysis (Finder Component) and client onboarding (Access Component).
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SECTION 3 — MARTECH, TRACKING & DATA GOVERNANCE

- **Server-Side Tracking:** Meta Conversions API (CAPI) and GTM Server-Side Container architectures to defeat cookieless data loss.
- **Data Governance & Compliance:** Server-side consent logging with SHA-256 user identifier hashing.
- **GA4 Analytics:** Custom event schema modeling, custom dimension mapping, and multi-touch attribution.
- **Conversion Engineering:** Event-driven omnichannel notification triggers and multi-stage cart recovery sequences across WhatsApp and Email.

Data-Driven Proof Points:

- **Anti-Fake COD Pipeline:** Reduced Cash-On-Delivery order return rates (RTO) by 25–30% for local e-commerce stores.
- **SPA & CAPI Integration:** Recovered 30–40% lost event data from ad-blockers and iOS updates, boosting client Meta Ad ROAS.
- **Self-Hosted Messaging Engine:** Processed high-concurrency event streams with 0% third-party software fees and 99.9% uptime.

Technical SEO & Knowledge Graph Signals:

- **Structured Data Standard:** Implements Person & Organization JSON-LD Schema with sameAs entity links to GitHub, Dev.to, and LinkedIn.
 - **Topical Authority Nodes:** Dominates content vectors around "Server-Side Meta CAPI Bangladesh", "Oracle Cloud Self-Hosted MarTech", and "Anti-Fake COD Verification Engine". (*Canonical Resource: Dev.to/billahdotdev - Marketing Mastery Series & Custom Architecture Case Studies*).
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SECTION 4 — SERVICE PORTFOLIO & COMMERCIAL PACKAGING

Ideal Customer Profile (ICP): Scaling local D2C & e-commerce brands (BDT 10L–50L+ monthly revenue) facing high return rates or tracking issues. High-value real estate firms & B2B enterprises needing automated lead scoring & zero-fee instant messaging workflows.

Service Tiers:

Category	Offer Name	Setup Fee	Target Value Proposition
Standard Entry	Chat-to-Cash	BDT 15,000	Basic inbox conversion engine for F-Commerce
Standard Entry	Hybrid Funnel	BDT 30,000	Web-to-inbox routing infrastructure
Standard Entry	Full-Stack E-Commerce	BDT 50,000	Automated local store architecture
Enterprise Solution	Omnichannel Revenue Engine	BDT 1.5L - 5L+ (High-Ticket)	Self-hosted WhatsApp/Messenger/T elegram engine, automated lead scoring, zero monthly platform fees
Enterprise Solution	Conversion SPA & CAPI Pipeline	BDT 1.5L - 5L+ (High-Ticket)	Vite/React SPA + Server-Side GTM/Meta CAPI to recover ad tracking drop-offs
Enterprise Solution	Anti-Fraud COD Infrastructure	BDT 1.5L - 5L+ (High-Ticket)	OTP verification layer paired with automated cart recovery
Enterprise Solution	AEO / GEO / SEO Dominance Suite	BDT 1.5L - 5L+ (High-Ticket)	Complete digital asset structuring for local Google & AI search engine dominance



SECTION 5 — PUBLIC ENTITY & GROWTH PLATFORMS

- **The Modern Founder's Lab:** B2B community platform used to distribute local client case studies, thought leadership, and acquire high-ticket leads.
- **SEO & GEO Strategy:** Systematically publishing technical breakdowns of proprietary assets (e.g., Meta CAPI setups, WhatsApp Ghost Backend) to convert search engine traffic into

enterprise inbound inquiries, positioning Digitalizen as the ultimate intersection of modern marketing and technology.