

IQ NUCLEUS

A Proactive Investment Intelligence Platform for KSA

PREPARED FOR

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1. Executive Summary & MVP Proposition

Traditional investment promotion agencies rely on tracking **declared investor intent** (the post-interest phase). This approach misses early market shifts, loses valuable time to shape enablers, and reacts too late to capture strategic value economically. The '**IQ Nucleus**' doctrine shifts the paradigm from tracking 'declared intent' to measuring and mapping **verifiable capacity**.

IQ Nucleus operates a **Dual-Funnel Architecture** where an **Investor Funnel (I0–I7)** and an **Opportunity Funnel (O0–O7)** run in parallel, converging at a **Capacity Matching Engine (CME)**. The output is a highly structured, human-governed **Capacity Match Pack**, which bridges the gap between potential and commercial readiness.

High-Impact Platform Focus

To validate the IQ Nucleus engine with immediate commercial impact, this MVP targets the localization of key industrial supply chains, starting with critical AI infrastructure components.

- **The Proactive Signal:** High-density data center deployments require extreme power densities (above 100 kW per rack) and advanced thermodynamic liquid cooling systems. This physical equipment demand is visible in procurement and grid queues years before it shows up in national trade statistics.
- **The Localization Proposition:** Establish a Saudi-based manufacturing, assembly, testing, and servicing platform for advanced cooling and power infrastructure. This will leverage regional anchor offtake while capturing the massive upcoming Saudi cloud capacity.
- **Strategic Value:** CDUs and direct-to-chip heat exchangers achieve high whitespace localization scores, offering a major margin opportunity and immediate regional executability.

2. Dual-Funnel Architecture

The platform implements the dual-funnel model across 8 progressive, evidence-based gates, ensuring that no project is promoted based on speculation or hype alone.

A. The Opportunity Funnel (O0–O7)

- **O0 (Scan):** Track global high-density data center cooling and power system trends.
- **O1 (Trigger):** Detect multi-gigawatt procurement announcements and supply chain demands.
- **O2 (Hypothesis):** Define the KSA localization hypothesis (establishing manufacturing in MODON).
- **O3 (Corroborate):** Cross-reference GASTAT industrial surveys and customs imports to identify domestic supply gaps.
- **O4 (Economics):** Assemble indicative unit economics—combining ZATCA tariff structures, shipping, and labor.
- **O5 (Enablers):** Identify bottlenecks—specifically power from SEC, land from MODON, and certifications.
- **O6 (Develop / Near-Ready):** Formulate a formal enabler resolution plan with MODON and Ministry of Energy.
- **O7 (Investor-Ready):** Compile a completed Opportunity Case with a certified data room, ready for matchmaking.

B. The Investor Funnel (I0–I7)

- **I0 (Universe):** Map global power/cooling leaders and top-tier Saudi manufacturers.
- **I1 (Discover):** Log early signals of regional expansion, dry powder availability, or supply chain blocks.
- **I2 (Resolve):** Pinpoint the exact legal and decision-making business units.
- **I3 (Evidence Gather):** Collect regulatory filings, project histories, and balance sheets.
- **I4 (Capacity):** Corroborate execution bandwidth and available factory footprint.
- **I5 (Fit):** Confirm alignment with Saudi National Investment Strategy.
- **I6 (Intent):** Transition from capacity to active engagement via targeted market soundings.
- **I7 (Prioritize):** Certify the investor as 'Matchable' and pair them with the O7 opportunity.

3. Data-Access Requirements (The 6 Core Entities)

The IQ Nucleus platform requires secure, purpose-limited data-sharing agreements with six critical Saudi entities. This data is structured as specific decision-unblocking fields mapping directly to individual evidence gates.

Entity	Specific Data Requested	Gates Unblocked	Technical Access	Security & Compliance
MOC	Ultimate parent ID, shareholder registries, company size bands.	I2, I4	Real-time REST API	Masked names, restricted analyst roles.
GASTAT	Industrial & trade surveys micro-data, capacity metrics.	O3, O4	Secure SFTP quarterly batch	Aggregated data, PDPL aligned.
SIDF	Inquiries & pipelines, withdrawn loan reason codes.	O5, I4	Semi-annual JSON via GSB	Anonymized reason codes, signed NDAs.
MODON / SEC	Land application queues, power/water requests (MW).	O5	Daily/weekly GSB sync	Masked substation headroom locations.
Etimad / LCGPA	Multi-year tenders, failed tender logs, local content.	O1, O2	API-driven daily poll	No defense exposure.
Qiwa	Specialized vacancy durations, average offered wages.	O5	Monthly API pull	Zero employee-level PII, aggregated.

4. Stakeholder Questionnaire

To validate, refine, and secure buy-in for this platform, the MISA team must conduct highly targeted, technical and strategic interviews.

A. Strategic Questions (For Leadership & Policy-Makers)

- **To the MISA Executive Sponsor:** *'What is the fastest legal pathway to mandate purpose-limited data-sharing agreements across the six government entities under the National Data Governance Regulations?'*
- **To MCIT / SDAIA:** *'Are there sovereign data hosting or data sovereignty limitations on combining domestic infrastructure capacity logs with global capital flow data?'*
- **To LCGPA:** *'Can we align the LCGPA mandatory localization lists to immediately favor local technology component assembly?'*
- **To the Investment Review Panel:** *'What are the precise strategic thresholds that would warrant fast-tracking an opportunity from O5 directly to O7 Match Pack?'*

B. Technical Questions (For Data Stewards & Engineering Teams)

- **To GASTAT:** *'What is the average latency of your industrial capacity surveys? Can we extract specific anonymized cooling-sector subsets via a monthly batch?'*
- **To MOC:** *'Does your API expose corporate linkages down to the Ultimate Beneficial Owner (UBO) level, including historical parent-subsidary relationships?'*
- **To MODON & SEC:** *'How are grid capacity requests (MW) and queue wait-times logged? Can we query grid headroom specific to high-density industrial zones?'*
- **To SIDF:** *'Can we establish a standardized API-driven schema of withdrawn and rejected industrial loan reason codes?'*
- **To Etimad:** *'How are failed or "no-bid" tenders categorized? Is there an HS-code mapping to detect zero local bidders?'*
- **To Qiwa:** *'Can the vacancy duration logs be queried by specific ISCO-08 occupational codes rather than broad industry categories, updated on a rolling 30-day basis?'*