



Blending
Science With
Design Creativity

Message from the Founder

Great engineering begins with greater imagination

At K Gyan Design Lab, our journey began with a bold vision; to bring clarity, creativity, and purpose to the world of mechanical design.

With nearly a decade of hands-on experience, across Semiconductor, Aerospace, Defense and Mechatronic systems, I founded this lab as a space where engineering excellence meets visionary goals.

Every challenge is approached with strategic insight, relentless precision, and a commitment to deliver solutions that are as elegant as they are effective. Our work is defined not only by technical excellence, but by the values we embed into every detail with integrity, intelligence, and impact.

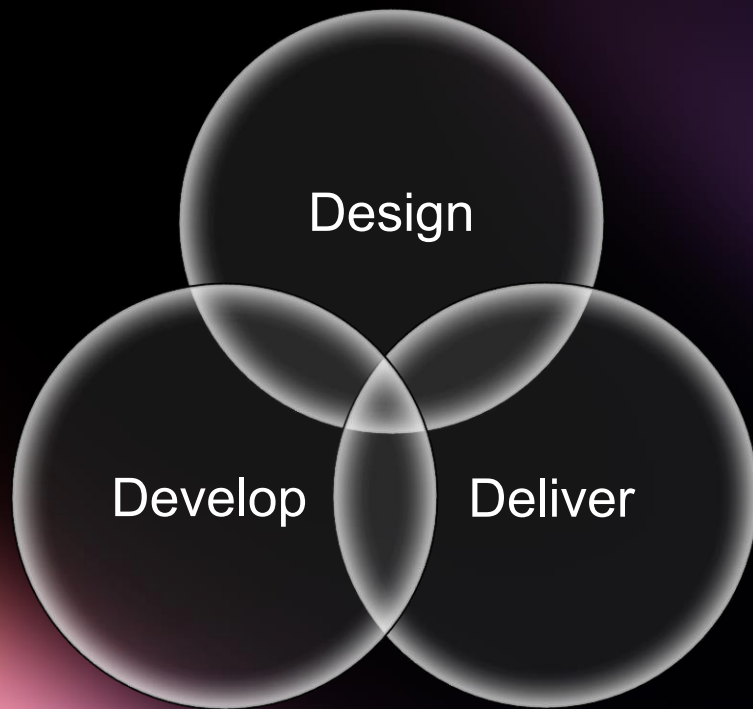
Whether working with clients across India, Europe, America, or Japan, our goal remains the same: to craft purposeful designs that stand out not just for their uniqueness, but for the values they carry forward.

Kushal Doshi
Founder - K Gyan Design Lab

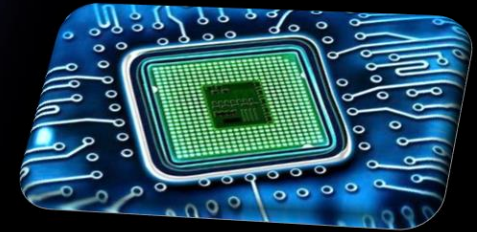


Engineering Experience & Expertise Across Sectors

Driving Technical Excellence: Research-Focused Development



Semiconductor



Aerospace & Defense



Mechatronic Systems



Strategic Engineering

Smart engineering with insight

01

Investigate

Feasibility Study

- Architectural Evaluation & Risk Analysis
- Key Parameter Optimization
- Manufacturing & Process Efficiency

02

Framework

System architecture

- Project Phase Definition
- Resource & Capability Alignment
- Standardization & Engineering Governance

03

Design & Development

Engineering Execution

- Concept Development & Engineering Analysis
- System Design & Integration
- Manufacturing Readiness & Industrialization

Feasibility Research & Development

01

Discover – Analyze – Evaluate – Define

Architecture
Development



Technology
Assessment



FMEA's
Design &
Process



Root Cause
Analysis



Testing and
Qualification



Cost Reduction
Investigation



Lifetime & Reliability
Improvements



Process Optimisation &
Automation Strategy



System Architecture & Strategic Planning

02

Structured approach throughout development



Project Phase Definition

- Milestone driven planning
- Mapping of deliverables
- Determine inter & intra dependencies



Resource & Capability Planning

- Scope definition
- Identification of required tools, software, vendors



Engineering Governance

- Standardization of processes
- Structured documentation system
- Version control

End to End Engineering Execution

03

Holistic solutions through precision-driven engineering

**System
Engineering**

**Design per
SCRAMS-Q**

**Engineering
Analysis**

**Proof of
Concept**

Industrialization

**Functional
decomposition**

**Conceptualization
& First-principle
calculations**

Simulations for
functional
qualification

**Prototyping &
functional model
testing**

**Tools, fixture,
transport handling
systems**

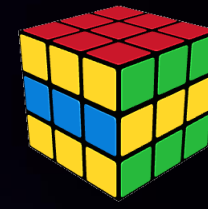
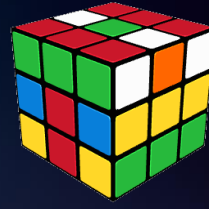
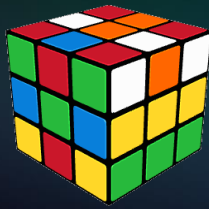
**Engineering
Budget Allocation**

**Material Selection
and Tolerance
Stack analysis**

Iterative Design for
form, fit, function &
future

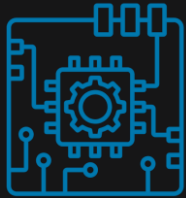
**Design of
Experiments**

**Design for
Manufacturing
and Assembly**



Industries we Engineered for

Designs built for performance, engineered for impact



High-Precision Engineering



Multi Axis high precision optical module **alignment** stage



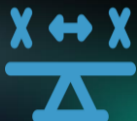
Patented **crash** architecture for **machine safety**



3 DoF **sub-micron positioning** module for optical measurements



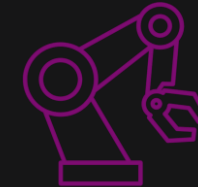
High-Acceleration **Magnetically Levitated** Stage



Mechatronic balance mass isolating **vacuum** to **atmosphere**, bridging static & dynamic world



Vacuum-Potted canned **Halbach** Magnet Array



Advanced Robotics



Mobile platform for **automated** Ship Hull welding Robot



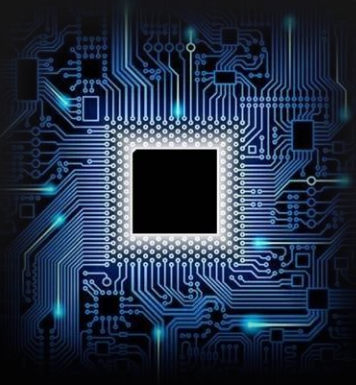
High-strength, light-weight lunar rover



Engineered framework for high performance **Exoskeleton**

Total Engineering Lifecycle Support

One partner, full journey



Product Design
& Development



Engineering
Analysis &
Optimization



Prototyping &
Validation



Design for
Industrialization



Project
Management

Why K Gyan? – Our Design Intent

Multi-disciplinary Integration for Holistic Engineering

SCRAMS-Q AT THE CORE



Safety

Human Safety, Product Safety, Machine Safety



Cost

Accountability across, Cost of: Goods, Operation, Technology



Reliability

High Repeatability & Durability



Availability

Engineered for Maximum Uptime



Manufacturability

Design for Industrialization & Production Ramp-Up



Serviceability

Ease of maintenance, repair access, and part replacement

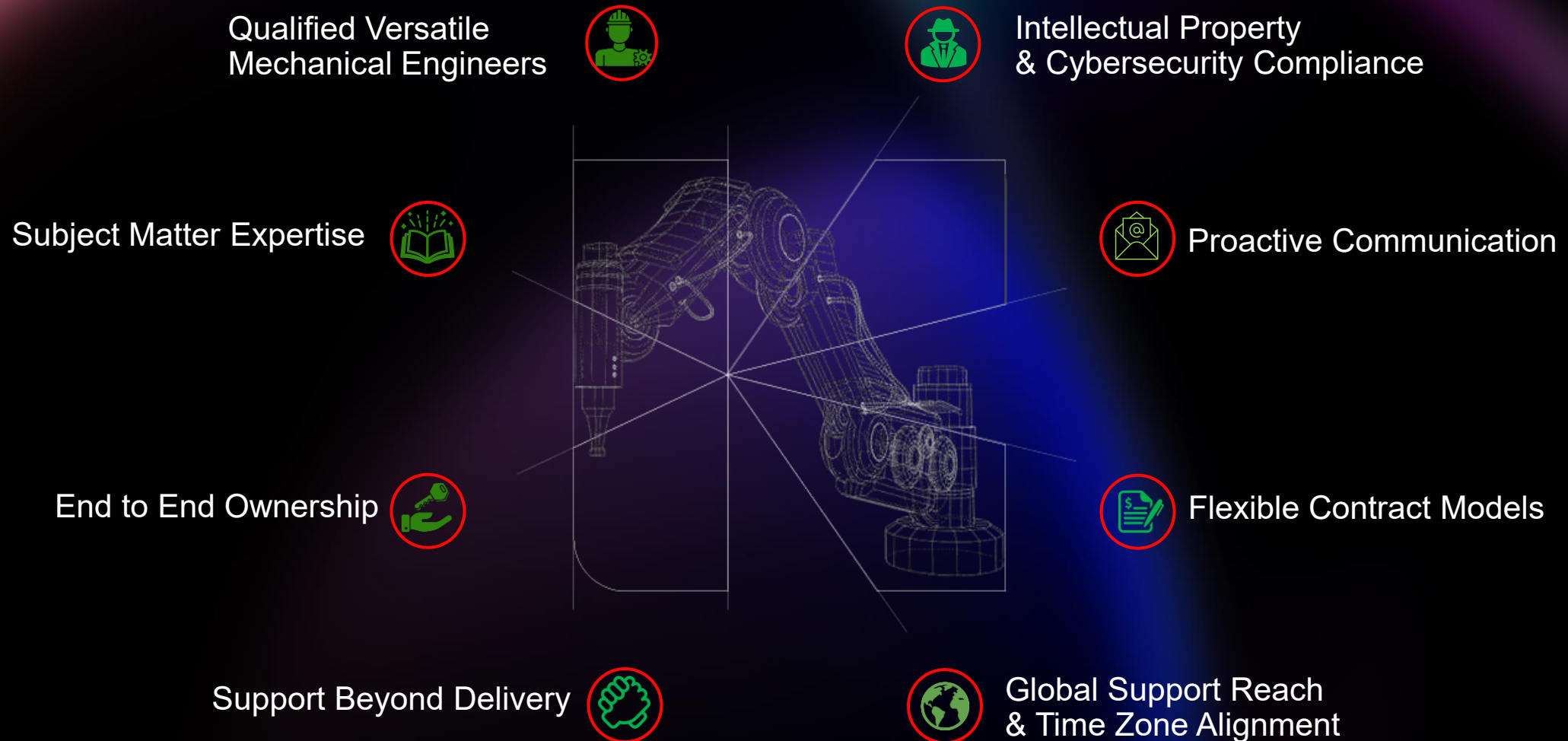


Qualification

Tested, simulated, and verified to meet specification before deployment.

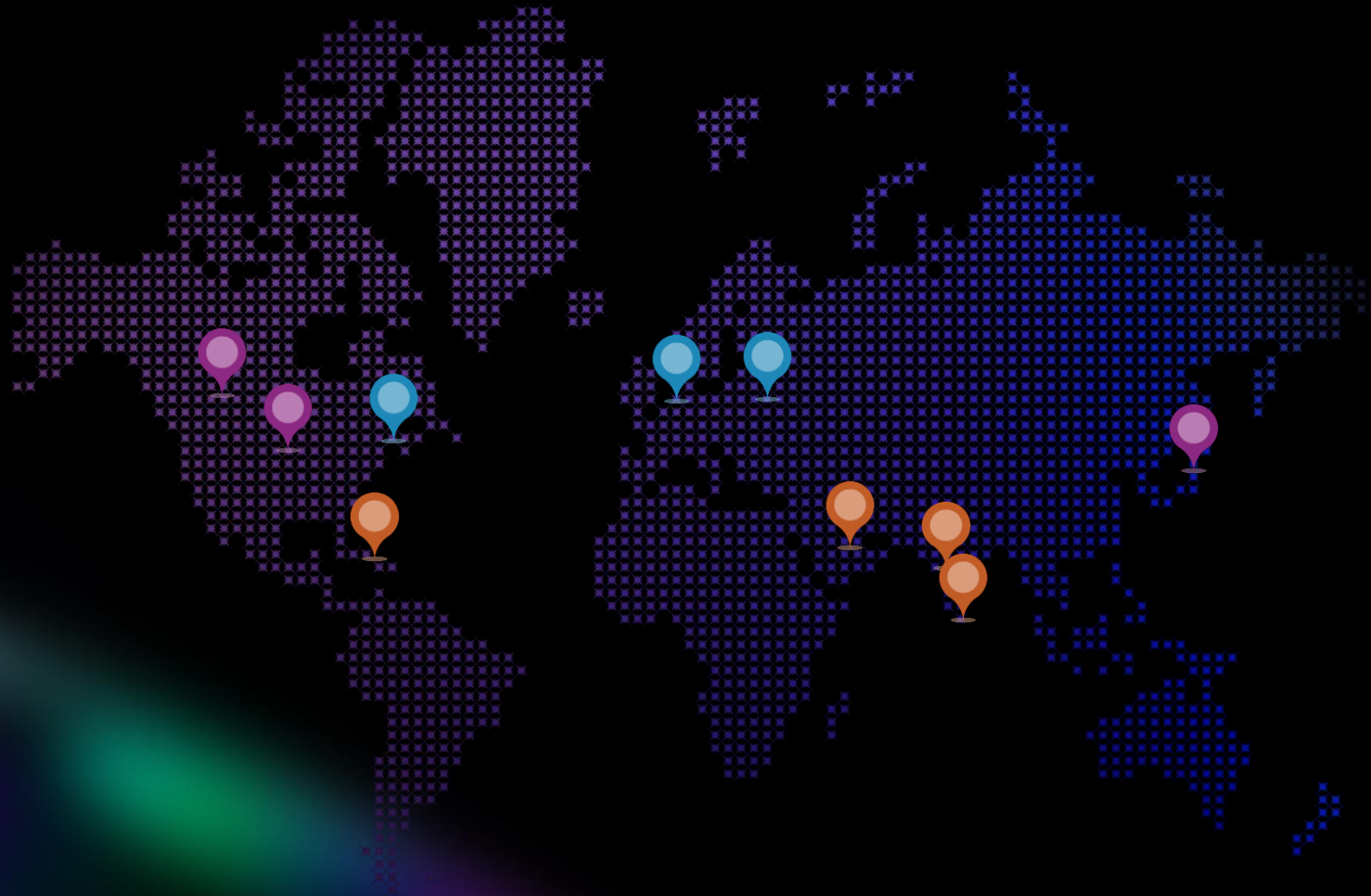
K Gyan: Not Just Services - A Mindset

Your Challenge, Our Solutions - Aligned to Your Success



Designing Across Borders

One team, Multiple domains, End-to-end expertise



Industrial Automation



High-Precision
Engineering



Autonomous &
Advanced Robotics



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