Koosmik Builders : Build Smarter

Introduction & Vision

Koosmik Builders is a **strategic merger** of technology and construction experts, forming a powerhouse consultancy that provides **end-to-end, independent, and future-proof solutions**.
With **10+ years of expertise**, we specialize in integrating **technology, automation, and digital transformation** into construction and infrastructure projects.

- We **plan early**, ensuring projects secure the best funding arguments.
- We **guide clients** through **design, construction, delivery, and IT maintenance**.
- We **offer full transparency**, no supplier conflicts, and a **rigorous tendering process**
- We **overdeliver** through a combination of **strategic vision and execution excellence**.
- We provide **white-glove**, making complex projects seamless for owners and stakeholders.

Competitive Advantages

1. Unmatched Expertise & Execution

- We have decades of hands-on experience in both construction and IT consulting.
- Our team understands the full lifecycle: from funding strategy to post-launch operations.
- We anticipate risks, structure projects efficiently, and ensure smooth delivery.

2. True Turnkey & White-Glove Service

- We take care of everything -strategy, design, planning, implementation, communication, teams training and IT operations.
- Owners and clients receive **seamless project execution with minimal effort on their part**.

3. Technological Independence & Transparency

- We **do not** push specific brands or vendors -we are **fully independent** for the client's interest.
- Every project includes **at least 3-5 tenders**, ensuring **optimal pricing and quality**.
- We negotiate on behalf of clients, securing the **best possible technology without bias**, lead time and support/relationship with vendors.

4. Overdelivering is Our Standard

- Our philosophy: **Always exceed expectations**—whether it's **deadlines, functionality, or service quality**.
- This dedication has resulted in long-term partnerships with **high-end, excellence-driven clients**.

Scope of Work & Services

1. Early-Stage Planning & Feasibility

- **Strategic definition** – We collaborate with architects and feasibility teams to define project strategy.

- **Budget alignment** – We assess feasibility and conduct value engineering to align design with financial objectives.
- **Regulatory compliance** – We ensure all IT and tech integrations meet local and global standards.

2. Digital Transformation & Smart Automation

- **Data Networks** – Ethernet (Copper & Fibre Optic) structured cabling system.
- **Cybersecurity & IT Infrastructure**
- **Access Control** – Guest, staff, and security access with biometric/facial recognition integration.
- **CCTV & Security Systems** – Smart surveillance with AI analytics and automated monitoring.
- **Server & IT Room Design** – Data center planning, redundancy, and fail-safe solutions.
- **Hospitality & Operations IT**
    - **PMS (Property Management Systems)** – Full integration for hospitality and real estate.
    - **ERP & Back Office** – Accounting, payroll, materials control, and sales.
    - **Point-of-Sale (POS) Systems** – Hardware, kitchen printers, and software integration.
    - **IPTV & Guest Connectivity** – High-speed internet (HSIA), in-room entertainment, and digital concierge.

3. Vendor Selection, Benchmarking & Tendering

- **Every project undergoes a minimum of 3-5 tenders** to ensure competitive pricing.
- **Supplier-neutral approach** – We secure best-in-class vendors with no conflicts of interest.
- **Cost & Quality Optimization** – We conduct detailed bid analysis, negotiate deals, and ensure contract performance.

4. On-Site IT & Construction Coordination

- **Real-time troubleshooting & vendor oversight** – We bridge IT and construction teams for smooth tech integration.
- **Integration of Smart Technologies** – IoT, AI-driven automation, energy-efficient systems, and digital twin modeling.
- **Quality Control & Project Management** – IT equipment procurement, software implementation, and final setup.

5. Post-Construction IT & Maintenance

- **Handover & Close-Out**
    - As-built documentation, final inspections, and system commissioning.
    - Operator training for IT & automation systems.
- **Ongoing IT Support**
    - Cloud-based security monitoring, periodic maintenance, and future-proofing upgrades.
    - AI-driven optimizations and automation refinements.

Partnership Model – Technological Independence

- **Technology-Agnostic:** We never take commissions from suppliers, ensuring purely objective recommendations.
- **Strong Vendor Negotiation:** Our projects secure preferred pricing and exclusive benefits for clients.
- **Rigorous Oversight:** We continuously audit vendors to maintain accountability and high performance.

Meet Us

EUROPE

- Luxembourg : 3 Rue du Fort Rheinsheim L2419 Luxembourg
- Paris : 9 Rue de l'Amiral Hameline 75116 Paris

AMERICA :

- New York : 65 Greene St New York, NY 10012
- Washington : 1055 Thomas Jefferson Street, NW Suite 302, Washington DC. 20007
- Miami : 1900 Deridian Ave Apt, Miami, Florida, Fl 33139
- Montreal : 1020 Rue de Bleury, Montréal, QC H2Z 0B9, Canada

Contact Us

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Event Calendar – Industry Participation

Here is the **table of events** for Koosmik Builders, listing key industry events with dates, locations, target audiences, and areas of focus.

Event Name	Date	Location	Audience	Focus
CES Las Vegas	January	Las Vegas, USA	Tech Leaders, Investors, Startups	AI, Smart Tech, Consumer Electronics
Munich Cybersecurity Conference	February	Munich, Germany	CISOs, Cybersecurity Executives	Cybersecurity, AI in Security
STEP Conference Dubai	February	Dubai, UAE	Startups, Tech Entrepreneurs	Startup Growth, AI, Digital Innovation
Paris Blockchain Week	April	Paris, France	Blockchain Developers, Investors	Web3, Fintech, DeFi

VivaTech Paris	May	Paris, France	Tech Executives, Investors	Innovation, AI, Sustainability
Milken Institute Global Conference	May	Los Angeles, USA	Investors, Business Leaders	Finance, AI, Investment Strategies
Nexus Luxembourg	June	Luxembourg	Finance, Tech Leaders, Investors	Fintech, AI, Digital Economy
TechCrunch Disrupt	September	San Francisco, USA	Startup Founders, VC Investors	Emerging Technologies, Startup Growth
Future Investment Initiative (FII)	October	Riyadh, Saudi Arabia	Policy Makers, Tech Investors	Smart Cities, Investment, AI
Slush Helsinki	November	Helsinki, Finland	Startups, Tech Ecosystem	Deep Tech, Startup Scaling
Turin Aerospace & Defense Expo	December	Turin, Italy	Aerospace, Security Experts	Aerospace Tech, Defense AI

HOW WE WORK

The business objective of Koosmik Builders is to provide **technical consulting services** across multiple domains, including:

- **Technology & IT Strategy**
- **Infrastructure & Construction IT Integration**
- **Automation & Smart Systems**
- **Data Analytics & Digital Transformation**
- **Cybersecurity & Compliance**
- **AI & IoT-Enabled Solutions**

STAGE 0 – Strategic Definition

• This stage is prepared by the **client's leadership team** and **architectural & feasibility experts**, defining the **business strategy and objectives** for the project.
• Koosmik Builders collaborates with stakeholders to **collect information** and **assess technological requirements**, allowing us to develop a **clear project scope**.
• We prepare the **scope and fee proposal**, aligning with **client budgets, industry benchmarks, and regulatory constraints**.

STAGE 1 – Preparation & Brief

• Define the **project scope, client aspirations, and expected outcomes**.
• Collect any **brand, compliance, or operational standards** applicable to the project.
• Conduct **market analysis** and assess **technology feasibility**, ensuring alignment with business and financial goals.
• The client reviews the **scope & fees document** and, upon agreement, issues a **formal Letter of Appointment** for Koosmik Builders' services.

STAGE 2 – Concept Design

• Development of a **Concept & Baseline Design Report** that includes:
• **System architecture & technology framework**.
• **Digital transformation strategies & IT implementation roadmap**.
• Budget alignment & financial modeling to ensure feasibility.
• If the proposed budget **exceeds client feasibility limits**, we conduct **Value Engineering** to refine the solution while maintaining strategic priorities.

STAGE 3 – Design Development

• Develop **first, second, and final fix design drawings** for IT, automation, infrastructure, and smart technology integration.
• Participate in **coordination meetings** with **engineers, architects, and project teams** to align designs with overall project documentation.
• Conduct **Design Team Meetings (DTMs)** to synchronize **technology plans with structural, electrical, and mechanical components**.
• Undertake **on-site inspections** to identify and resolve potential constraints in real-time.

STAGE 4 – Technical Design, Documentation & Procurement

• **Preparation of detailed tender documentation** for technology infrastructure, automation hardware, software procurement, and service integrations.
• Develop **comprehensive Bill of Materials (BoM)** for **all IT and automation-related procurements**.
• **Issue tender packs** to a **pre-qualified bidder list** (from **Koosmik Builders' database and the client's procurement teams**).
• Evaluate **bids from suppliers & contractors**, ensuring technical and financial alignment.
• Provide **appointment recommendations**, facilitating vendor & contractor selection.
• Oversee the **procurement process** and pre-qualify vendors for integration with existing infrastructure.

STAGE 5 – Construction & Implementation

• **Real-time project oversight** to ensure compliance with design specifications.
• Address and **resolve contractor & supplier queries** related to IT and automation.
• Conduct **quality assurance & compliance checks** at various stages of implementation.
• **Technology installation & system integrations** for IT, cybersecurity, automation, and smart infrastructure.
• Regular **inspections of completed work** to ensure adherence to technical specifications and client expectations.
• **Monitor project timelines, verify subcontractor claims, and document progress.**

STAGE 6 – Handover & Close-Out

• **Finalize as-built documentation**, capturing all installed systems and infrastructure.
• Conduct **final system commissioning**, ensuring all technology solutions operate as designed.
• Arrange **operator training and knowledge transfer** for client teams, ensuring long-term sustainability.
• Perform **detailed inspections**, verifying compliance with contractual and regulatory requirements.
• Facilitate **handover meetings**, providing clients with a comprehensive technology roadmap for ongoing operations.

STAGE 7 – Post-Implementation Support & Continuous Optimization

a. **Post-Project Analytics & Performance Review**
• Ensure **systems perform as planned**, analyzing operational efficiency and technology performance.

b. **Optimization & Continuous Tweaks**
• Identify **opportunities for further improvement** in AI-driven automation, IT infrastructure, and smart operations.
• Adjust systems to **optimize energy consumption, data flow, and automation workflows**.

c. **Long-Term Advisory & Compliance Support**
• Consult with clients to **ensure long-term compliance** with evolving regulations.
• Monitor and **align sub-contractors & technology vendors** with evolving project goals.

STAGE 8 – Training & Continuous Support

a. **Customized Training Programs**
• Develop **custom training sessions** for the client's **IT, operations, and maintenance teams**.
• Provide **hands-on training & workshops** on system usage, cybersecurity best practices, and operational efficiency.

b. **Knowledge Transfer & Documentation**
• Deliver **comprehensive training manuals & user guides**.
• Ensure all relevant stakeholders **understand system functionalities, troubleshooting, and optimization techniques**.

c. **24/7 Technical Support & Monitoring**
• Provide **ongoing IT and infrastructure support** via **remote monitoring & on-site assistance**.

• Set up **automated alert systems** for predictive maintenance, cybersecurity threats, and system failures.

d. **Scalability & System Expansion**
• Offer **advisory services on future upgrades** and system scalability.
• Implement **modular technology upgrades** to keep the infrastructure future-proof.

IMPACT STUDIES

1) Data Aggregation, Live Dashboard and Fraud Detection

Background
A luxury hospitality group with multiple hotel and restaurant locations struggled with inconsistent financial reports, revenue leakage, and potential fraud across its properties. Discrepancies in POS transactions, inventory records, and guest billing were impacting profitability.
The management team suspected data manipulation but lacked a **centralized real-time monitoring system** to detect anomalies.

Challenges Identified

- **Revenue Discrepancies:** Sales figures from the **POS system, PMS (Property Management System), and Accounting ERP** did not match.
- **Fraudulent Transactions:** Manual adjustments to **guest folios and discounts** were being misused by staff.
- **Inventory Misalignment:** The **F&B stock system** showed a gap between purchased ingredients and sales recorded in the POS.
- **Delayed Reconciliation:** End-of-month reconciliation took **too long**, allowing fraud to go undetected.

Solution : Intelligent Data Aggregation & AI-Driven Fraud Detection
Koosmik Builders deployed an **AI-powered Data Aggregation and Analytics Platform**, which integrated real-time data from:

- **PMS (Property Management System)** – Booking, room charges, and guest billing.
- **POS (Point-of-Sale System)** – Restaurant/bar transactions, discount approvals.
- **Accounting ERP** – Financial reconciliation.
- **Inventory Management System** – Stock movement and consumption tracking.
- **CRM & Loyalty System** – Guest promotions and rewards tracking.

How It Works

- **Automated Data Matching & Anomaly Detection**
- The system cross-referenced **PMS, POS, and ERP data in real time**, detecting mismatches in revenue figures.
- AI algorithms **flagged unusual patterns**, such as **frequent manual discounts, duplicate receipts, and cash voids**.
- **Live Inventory vs. POS Sales Correlation**
- The system compared **F&B ingredient consumption vs. menu sales**, identifying missing stock not accounted for in POS transactions.
- **Multi-Layered Transaction Monitoring**
- AI scanned guest folios for **suspicious manual edits**, backdated transactions, and irregular cash payments.

- All high-risk transactions were **logged in a fraud detection dashboard** for real-time alerts.

Results & Impact

✅ Identified Fraudulent Discounts & Fake Transactions

- AI uncovered **$120K+ in unauthorized manual discounts** applied by staff to personal guest accounts.
- **Duplicate bills** were detected in POS vs. ERP, preventing **invoice manipulation scams**.

✅ Improved Financial Integrity & Faster Reconciliation

- **Daily automated reconciliation** between PMS, POS, and ERP eliminated **month-end discrepancies**.
- **Audit reports generated in real time**, reducing reconciliation time from **2 weeks to 48 hours**.

✅ Inventory & Sales Transparency

- The system flagged **discrepancies in food cost vs. actual sales**, preventing stock pilferage.
- **AI-driven predictive analytics** optimized F&B orders, reducing **waste and overstocking by 15%**.

✅ Enhanced Security & Compliance

- AI-generated **fraud alerts** were integrated into **management dashboards**, enabling **real-time action**.
- The system improved **audit trail accuracy**, strengthening compliance and risk management.

Conclusion

By implementing **AI-driven data aggregation & fraud detection**, Koosmik Builders **eliminated revenue leakage, improved reconciliation speed, and secured financial operations** across the client's properties. The solution now **operates as a real-time security layer**, proactively identifying discrepancies before they escalate into major financial losses.

2) Luxury Hospitality Digitalization – Smart Guest Experience & Operational Efficiency

Background

A **5-star hotel chain** was facing **declining guest satisfaction** due to outdated in-room experiences, long check-in times, and **high operational costs** from inefficient energy management. With growing competition from smart hotels, the management needed to modernize its guest experience while reducing operational expenses.

Challenges Identified

- **Inefficient Guest Experience** – Guests waited up to 15 minutes at reception for check-in and key issuance.
- **Limited Room Automation** – In-room settings (lighting, AC, entertainment) were manually controlled, leading to guest inconvenience.
- **High Energy Consumption** – Rooms remained heated/cooled even when unoccupied, increasing costs.

Solution: Smart IoT-Driven Hospitality Automation
We implemented an **AI-powered Smart Hotel Ecosystem** that integrated:

- **IoT-Enabled Room Automation** – Personalized guest room settings (temperature, lighting, TV) auto-adjusted upon check-in.
- **AI-Powered Digital Concierge** – Voice-activated in-room assistant for service requests, dining reservations, and facility navigation.
- **Automated Mobile Check-In & Keyless Entry** – Eliminated front desk delays, allowing guests to **access rooms via smartphones**.
- **Energy Optimization System** – Smart thermostats and occupancy sensors **automatically adjusted energy use** based on room activity.

Results & Impact
✅ **+20% Guest Satisfaction** – Faster check-ins and **customized in-room experiences** led to higher review scores.
✅ **-15% Operational Costs** – Smart energy management **reduced electricity & HVAC costs**.
✅ **60% Faster Housekeeping Response** – AI-driven concierge routed service requests in real time.

3) Industrial Automation– AI-Driven Manufacturing and Maintenance Optimization (in progress)

Background
A large **manufacturing facility** struggled with **high labor costs, inconsistent product quality, and slow production cycles**. Manual inspections and inefficient workflows led to **40% defect rates**, requiring costly rework and wasting raw materials.

Challenges Identified

- **Quality Control Issues** – Human error in inspections led to **high product defect rates**.
- **Inefficient Production Flow** – Machines required **manual adjustments**, slowing down the assembly line.
- **Labor-Intensive Workflows** – High reliance on manual labor **increased operational costs**.

Solution: AI-Driven Smart Factory Transformation
We are working on a **AI-powered automation** into production with:

a. **AI-Driven Quality Control** – Implemented **machine vision & deep learning** to detect product defects in real time.
b. **Predictive Maintenance System** – AI algorithms **monitored machine health**, reducing unplanned downtime by **35%**.
c. **Office tasks and workflow automation** : simple automation of time consuming and repetitve tasks to be done 95% with Agents, verified and fine tuned by employees 5%

Exepectations

- ✅ **+30% Production Efficiency** – Streamlined workflows, increasing **output capacity**.

- ✅ **-40% Defect Rate** – AI-driven quality control **reduced human error and product inconsistencies**.
- ✅ **-25% Maintenance Costs** – Predictive monitoring **prevented machine failures before they occurred**.