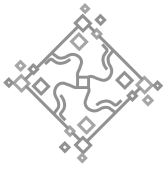




# ADVANCED KNOWLEDGE LTD

Company Profile



# AKI

Advanced Knowledge Industries

## THE NEW SAUDI ERA

بسم الله الرحمن الرحيم

The Kingdom of Saudi Arabia is experiencing a fundamental transformation under the national 2030 Vision.

Vision 2030 has transformed the way Saudi citizens live, work and play, with sweeping social reforms propelling the Kingdom into a new era of opportunities and prosperity.

ADVANCED KNOWLEDGE has been founded to work towards the achievement of the Saudi Vision 2030, promoting the adoption of emergent technologies. Our ambition is to help in the international positioning and global recognition of the Kingdom as the hub of advanced knowledge and technologies.

The New Big Thing is expected to happen in the intersection of various emergent technologies such as Artificial Intelligence, Quantum Computing and Robotics. Today, there is a global race between the nations to lead the next industrial revolution.

We firmly believe that Now is a unique historic opportunity for the Kingdom to participate and be winner in this global competition. The Saudi youth has the drive and the knowledge to bring the new Saudi era where the Kingdom transforms into the most advanced society in the world, showcasing the best positive social and environmental impact achieved by technology.

# ABOUT US

## SHAPING THE TRANSITION

ADVANCED KNOWLEDGE is on a mission to help the achievement of the Saudi 2030 Vision by implementing on a national and international scale advanced city infrastructures, advanced industries demonstrations, innovation hubs and industrial zones. Our goals are defined in the strategic objectives of the Saudi 2030 Vision as the following: to build a growing and diversified economy, to secure a constant generation of employment and to achieve prosperity for each citizen in our *smart cities*.

We are focused on promoting a large-scale adoption of smart infrastructures, advanced and regenerative technologies.

ADVANCED KNOWLEDGE's values and beliefs are summarized in the phrase "*Persevere on the Right Path*". We scout and select technologies for our clients which can bring the most success and blessings in their business and lives. We strive to preserve the best legacies for the next generations while balancing the transformations under the technological advancements.

## TEAM

**Eng. Abdulaziz Aldrees** is an expert in autonomous robotics with a M.Sc. in Electronic Engineering by the Nanjing University of Science and Technology, Nanjing, China. He has presented research in the adoption of artificial intelligence and robotics technologies.

His 15+ years advisory and facilitation practice has been focused on building bridges between the world and the Kingdom of Saudi Arabia, facilitating companies to establish themselves in the Saudi market.

Also, Mr Aldrees has been facilitating international relationships between the Kingdom of Saudi Arabia and Asia with a specific focus on government level

relationships with different Saudi public investment institutions, related to large-scale adoption of smart and emergent technologies in the energy, hospitality and logistics sectors.

**Eng. Xicai Zhong** is an expert in large-scale infrastructure project management. With 15+ years hands-on experience around the world, as the general manager of Zhongyang Construction Group, he has developed a unique approach for overcoming cultural barriers in the management of international private- public partnership projects, optimising international team management and stakeholder communication.

Since 2024, Mr Zhong has been the General Manager of SAGA Contracting Co. where his experience has been decisive for the successful delivery of SAR 30+ million projects in the Kingdom Saudi Arabia.

**Prof. Katerina Zalamova** is a recognised Smart & Advanced Cities Expert and is a Professor of Practice in *Smart Cities and Communities* Executive course of the University of Arizona, USA. She has been involved in the research and development of the smart city visions and strategies of The Line (NEOM) and the Diplomatic Quarter (Riyadh) since 2020. Her expertise is in the fields of smart city design, zero waste infrastructures and the circular economy along with the adoption of digital infrastructures focused on economic development and social change.

## OUR INTERNATIONAL ECOSYSTEM

ADVANCED KNOWLEDGE ecosystem counts with more than 150 international experts in the field of *smart cities* from policy makers to software innovators.

We have built over the years a rich and trustful partner's ecosystem of technology providers which help us deliver turn-key solutions with a complex mix of technological components while lowering the risk for the deployment of large urban and infrastructure projects.

## OUR WAY

### Advancing towards the future

Our approach builds up on the legacy of the CREA IDEA LAB- a think tank for advanced cities, Barcelona, Spain. We developed further on the CREA IDEA LAB's methodology *Cities Building Futures*, which has been proposed for a smart cities urban development.

The *Cities Building Futures* methodology focuses on delivering **not only smart but unique cities** through defining a Unique Smart City Brand which shapes a Unified Stakeholder's Legal Framework and provides an integrated infrastructure urban design which together foster a City Branded Local Economy.

ADVANCED KNOWLEDGE applies further this integral approach to advance the city's technological innovation and promotion of new economic scenarios for the success of the national Saudi Vision 2030.

Our main mission is the achievement of the national objectives by the establishment of advanced industries and new economic mechanisms through new urban development, implementation of emergent industries and the creation of new enterprises and employment.

We focus on delivering a fully integrated projects where physical, digital, social and economic infrastructures combine under a single purpose.

Our vision is based on the Saudi Vision 2030 to build an advanced society which is proud of its origins and legacy while dreaming to achieve a marvellous future.

ADVANCED KNOWLEDGE is established in the fundamental knowledge and its application through emergent technologies. We work towards the achievement of the positive social impact of the smart cities, promoting a large-scale adoption of smart infrastructures in the Kingdom and abroad.

Our approach exploits the best practices of adoption of emergent technologies and adapt the existing knowledge to the culture and habits in the Kingdom assuring the maximum social and economic outputs.

We build on the benefits of the Kingdom harsh natural environment to showcase unique implementations and features of the emergent technologies such as technologies related to the regeneration of forest and nature.

**ADVANCED KNOWLEDGE's way is to advance towards the future and shape it for the best achievement of the Saudi 2030 Vision.**



# CONSULTING SERVICES

The Knowledge becomes valuable when is applied

We offer our know-how and expertise to public institutions and private corporations.

## CONSULTANCY

Our consultancy services for any level of public institutions are:

- Smart City National Development Vision and Roadmap for governments.
- Smart City Brand and Strategic Roadmap for municipalities.
- Economic promotion and scaling up of smart infrastructures.
- Citizen engagement for the adoption of emergent technologies.
- Cybersecurity strategic consultancy and project implementation.
- Data governance and Data transparency.

Our consultancy services for businesses are:

- New Economy Business Models: implementation of exponential, data, virtual and circular economies.
- Internationalization in Asia and Africa.
- Adoption of advanced technologies for process optimization and enhanced competitiveness.

## INNOVATION

We have a strong focus on research and innovation. We offer services of prototyping, demonstration and validation of solutions.

ADVANCED KNOWLEDGE runs its own incubator for generating and validating technological solutions and business models.

We have experience in the following areas:

- Connected transportation: smart bike roads, electrical vehicle connected roads, green e-health active-elderly walking paths.
- Hybrid smart lighting infrastructures: includes smart lighting, air quality, 5G and civil protection monitoring.
- Social infrastructures: smart commerce, smart entertainment, smart tourism.
- Green Energy & Zero Waste smart infrastructures.
- Drones & civil protection.
- Space & Independent robotics.
- Nature-as-an-Infrastructure and regeneration of forests.



# SMART CITIES PROJECTS

## Building Unique Cities

ADVANCED KNOWLEDGE has been part of the latest developments in *smart cities* in KSA, Europe, Africa, USA and Caribbean. We have been delivering innovative solutions for adopting digital infrastructures, circular economy, digital health and medical emergency services, civil protection, and social systems for building stable local economies and employment.

Applying our own smart cities framework for urban design and technology integration, we have helped our clients to save cost while increasing benefits and positive impact.





# TECHNOLOGY

## Advancing the adoption of *smart cities* technologies

ADVANCED KNOWLEDGE has focused its effort in promoting and advancing the innovation in the field of Smart Cities in the Kingdom of Saudi Arabia and abroad.

### R & D

**C**ompact & mobile data storage for autonomous transport infrastructure.

**S**mart crowd management city infrastructure.

**D**istributed Ledger Technology for digital civil registers.

### CONSULTING SERVICES

**G**IS for *smart cities*.

**D**ata storage optimization and edge-computing infrastructure (design and implementation) as the base for a large scale adoption of autonomous transport and logistics.

**A**doption of a Metaverse streaming solution for running real-time infrastructure maintenance operations.

**C**ity preparedness for a large-scale management and oversee of autonomous transport and logistics networks.

### SELL/ RESELL/ DISTRIBUTION

**I**ntegrated mobile data-storage solution for edge-computing and distributed networks of autonomous vehicles and robotic machines.

**D**rones for infrastructure monitoring and public safety.

**G**IS for *smart cities*.

**A**dvanced Business Intelligence Solutions: AI Employee powered with Almato Knowledge Graph.

### EMERGING INDUSTRIES AND SERVICE PLATFORMS SECTORS

**T**ransportation & Logistics: Last-mile autonomous delivery.

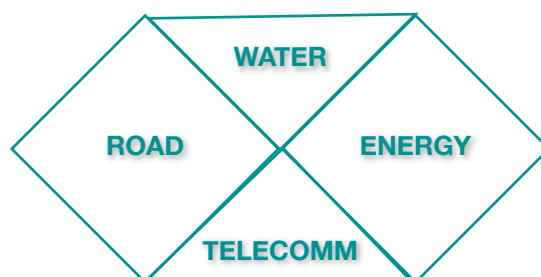
**R**eal Estate: Metaverse platform for property management, maintenance and tenant support.

# CONSTRUCTION

We support with consulting, design of operations and project management, our clients in the construction industry to deliver projects in large scale infrastructures. Our approach is to deliver an integrated road- water- energy- telecomm infrastructure where clean water & sewage pipes, electrical and telecommunication lines are embedded, maximising the value of the investment.

Our experience includes integrated infrastructures for neighbourhoods, airports, ports and rural development.

We have the ability to provide skilful labour, advanced construction materials and infrastructure technologies for the projects, securing the success of the project execution.





# EDUCATION

The knowledge unfolds its true value when it is applied. Sharing knowledge creates more possibilities for its application and to generate new understandings, improving its value

Continuous learning is an essential skill in the digital era. We define citizen education and sharing of knowledge as an essential part of our project implementation approach. For this reason, **ADVANCED KNOWLEDGE** offers to public clients citizen engagement infrastructures under a few designs.

## CITIZEN EDUCATION

We offer citizen education activities under different forms as conferences, workshops, show-rooms and touristic experiences.

We keep the language to be accessible to every citizen regarding age, education level, professional profile.

## PROFESSIONAL TRAINING

**ADVANCED KNOWLEDGE** offers professional training for technical, business and policy-maker professionals.

Our methodology is Learning-By-Solving-Your Own Case. The participants in our courses build their skills through working on a

specific case which is related to a real issue in their lives. It is a basic requirement for the participation in our courses that the participants bring their own cases.

## START-UP INCUBATOR

**ADVANCED KNOWLEDGE** is focused on building local economies. We are running a pre-incubation startup program where entrepreneurs can build the needed skills for successful entrepreneurship journey.

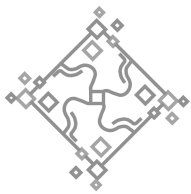
The program plays a role as a business model's prototyping and testing laboratory. The successful ideas are promoted to be developed as real businesses.

The program is celebrated in two editions per year with six months duration.

## LIVING LAB

**ADVANCED KNOWLEDGE** is developing the first private Living Lab which consists of a city experimental area, an open-air show room for smart cities and emergent technologies where users can interact directly with the solutions.

Businesses can showcase their solutions at scale while users can interact and co-create new applications with or on top of the demonstrated technologies.



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