

Frontier Blaze

Editorial 200925

OCT 2025

Pulse of Power, Progress and People.

North America | Europe | Asia-Pacific | Middle East

Pioneering
Parametric
Bioclimatic
Design for a
Sustainable
Tomorrow

Dr. Mohamad
Ayash - A
Visionary CEO
Redefining Urban
Development for
the Future

LEADING
CEO
SHAPING



THE FUTURE OF URBAN DEVELOPMENT
IN 2025 IN THE UNITED KINGDOM

DR. MOHAMAD AYASH

CEO AT DOLMEN DEVELOPMENT UK



SCAN FOR
DIGITAL VIEW

WWW.FRONTIERBLAZE.COM





Frontier Blaze

Editor in Chief
Noah Sinclair

Business Development Manager
Richard Ross

Creative Directions
Ava Thornton

Designer
Payal Vats

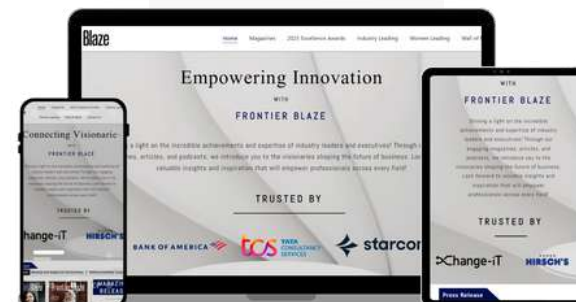
Associate Designer
Harper Winslow

Technical Analyst
Mason Ellsworth

Research Analyst
Sangeeta Kumari

SEO Executive
Sebastian Harlow

Follow us



Copyright 2025 @ **Frontier Blaze**, all rights reserved.
The images and content featured in this magazine may not be distributed or reproduced in any form, whether by mechanical, electronic means, recording, photocopying, or otherwise, without prior authorization from **FRONTIER BLAZE**. All reprint rights are exclusively held by **FRONTIER BLAZE**.

EDITORIAL NOTE

In an era where cities are rapidly evolving into hubs of culture, commerce, and technology, few leaders have left as significant a mark on urban development as Dr. Mohamad Ayash. As Founder and CEO of Dolmen Development UK, his work exemplifies the rare ability to harmonize scientific innovation, design intelligence, and social purpose into a singular vision for the future. Dr. Ayash has redefined what sustainable architecture means in practice — pioneering parametric bioclimatic design, integrating artificial intelligence into construction workflows, and embedding ESG values at every stage of project delivery.

His leadership has propelled Dolmen into a global platform that not only builds structures but creates living ecosystems where resilience, efficiency, and cultural identity converge. From championing green engineering and 3D printing innovation to driving procurement integrity through blockchain, his initiatives stand as milestones in an industry often challenged by fragmentation and short-termism. Beyond his corporate achievements, Dr. Ayash's active engagement with global organizations, NGOs, and cultural institutions reflects his belief that true progress extends beyond buildings into the very fabric of communities and societies.

As the world confronts urgent environmental and social challenges, Dr. Ayash's story resonates as more than a professional biography - it is a statement of purpose. His vision demonstrates that the future of urban development is not solely about innovation or profitability, but about the creation of spaces that serve humanity with integrity, foresight, and responsibility. In his journey, we find inspiration for the next generation of architects, engineers, and leaders committed to shaping cities that are not only smart and sustainable, but deeply human.

Noah Sinclair
Editor-in-Chief

Frontier Blaze

CONTENTS

10

14

INTRODUCTION

14

THE SPOT CHOUEIFAT

18

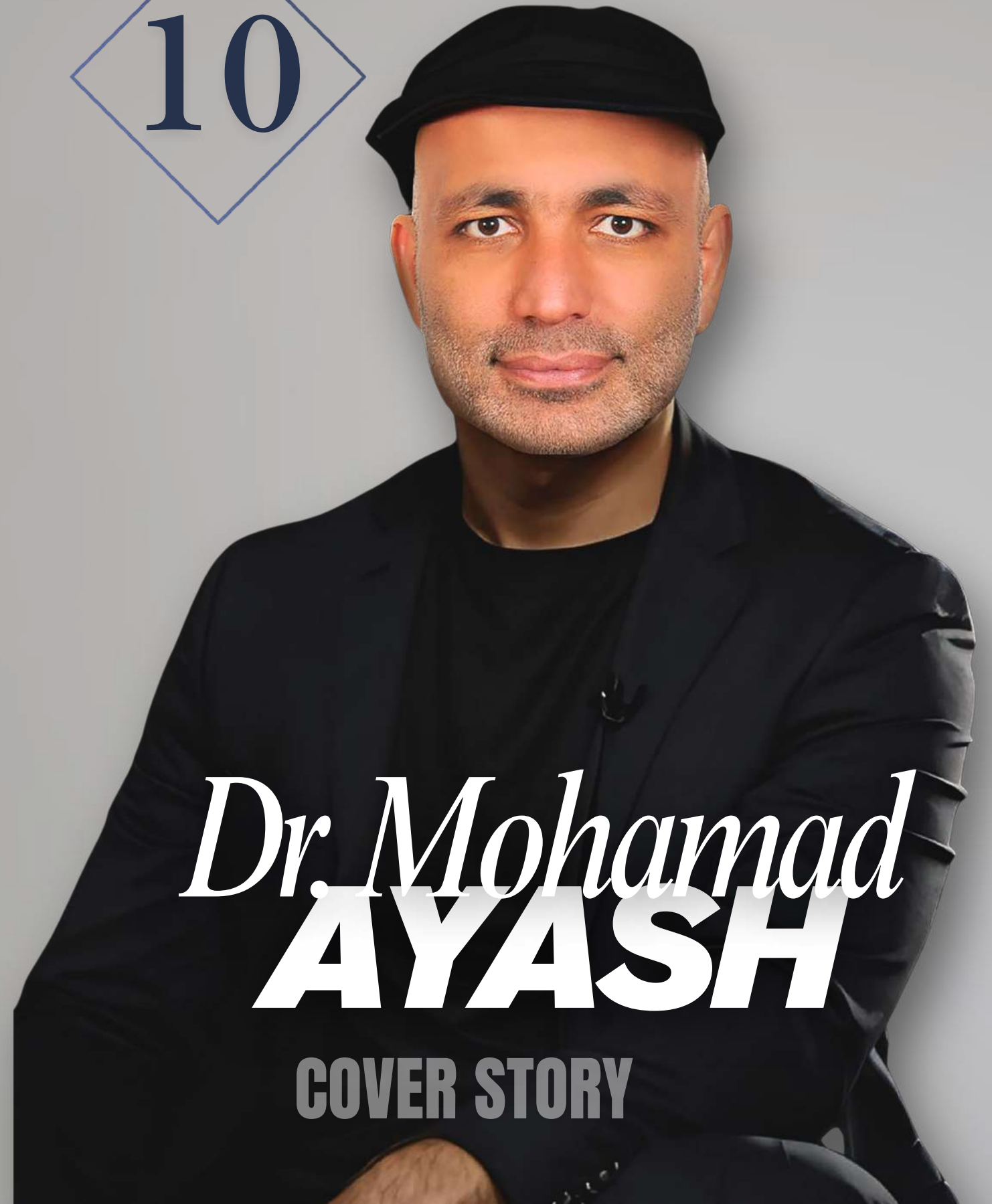
COMPANY'S SCOPE

18

THE DOLMEN DEVELOPMENT
REASERCH LAB

Dr. Mohammad
AYASH

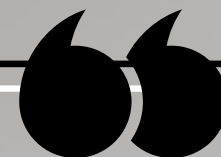
COVER STORY





COVER

Story



His leadership style is both disciplined and dynamic - aligning vision, people, and systems so that even the most complex projects are executed with precision, accountability, and clear strategic outcomes.

CEO at Dolmen
Development UK

DR. MOHAMAD AYASH

In the dynamic world of 2025 urban development, few leaders embody the intersection of technical mastery, visionary thinking, and social purpose like Dr. Mohamad Ayash.

As Founder and CEO of Dolmen Development UK, Dr. Ayash has become a trailblazer in sustainable architecture and engineering, renowned for his innovative “parametric bioclimatic” approach and a career defined by transformation, growth, and exceptional results.

His journey began with a remarkable academic foundation – combining a degree in Mathematics, advanced studies in nanotechnology, and culminating in a PhD in Sustainable, Eco-Friendly Parametricism Architecture. Dr. Ayash’s doctoral thesis focused squarely on the challenges of environmental science, sociocultural anthropology, and their impacts on establishing bioclimatic urban cities and digital communities.

This unique fusion of scientific method, design intelligence, and social advocacy has influenced every facet of his professional work,

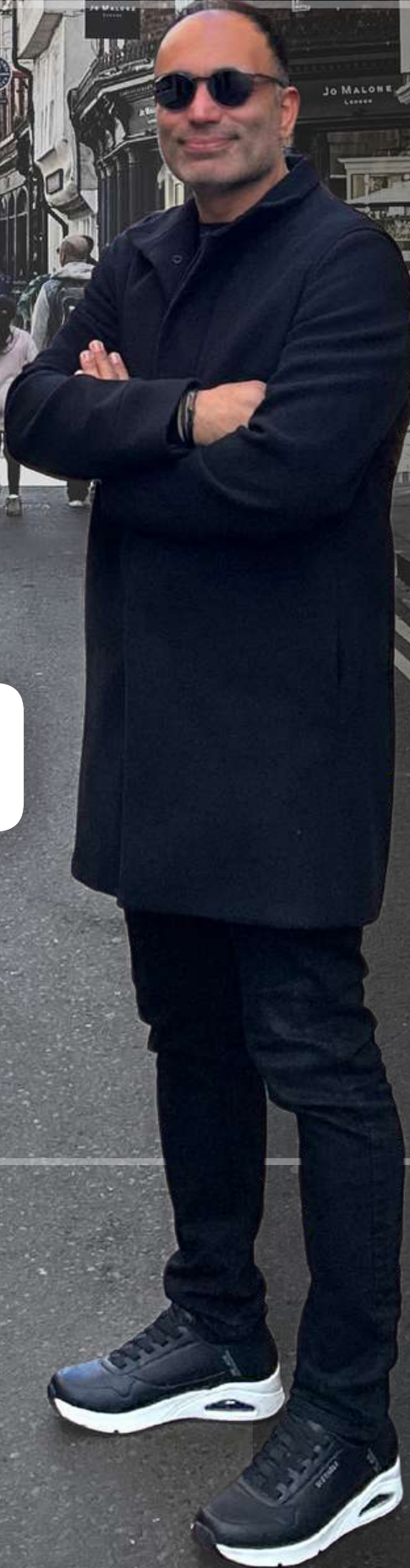
a practice where innovation and sustainability are interwoven.

Dr. Ayash’s leadership at Dolmen Development UK is characterized by the creation of a fully integrated platform – overseeing ten specialist firms that span pre-development, architecture and interiors, façade engineering, contracting, project and construction management, procurement, and facilities management.

Through this end-to-end model, Dolmen maintains full control of the value chain, ensuring consistent quality, predictability, and measurable performance from concept to digital manufacturing and handover.

ARECOGNIZED
Pioneer
IN AI-ENABLED
AND PARAMETRIC
BIOCLIMATIC
DESIGN

LEADING
VCEC
SHAPING
THE FUTURE OF URBAN DEVELOPMENT
IN 2025 IN THE UNITED KINGDOM



SPOT C *Beirut* CHOUEIFAT

EPCM | 162,000 SQM | 200,000,000 USD

The Spot Choueifat stands as one of Lebanon's most significant retail and leisure developments, redefining the commercial and social landscape of southern Beirut. Envisioned as a vibrant urban destination rather than a conventional mall, its concept is built around three main circulation axes converging at a central plaza. This spatial strategy generates a dynamic flow and divides the building into four sculptural volumes, enriching the user experience and creating diverse spatial conditions. The result is a landmark that brings together shopping, leisure, entertainment, and culture in a single, cohesive environment.

Spanning 162,000 square meters with a project value of 200 million USD, The Spot offers a comprehensive destination under one roof. It includes 35,550 sqm of premium retail space, 3,570 sqm of state-of-the-art cinemas, 1,870 sqm dedicated to family entertainment, and 4,894 sqm of landscaped terraces. The design encourages visitors of all ages to engage with the space and discover everything they need in one place, transforming the mall into a central social and commercial hub.

A key architectural highlight is the 3,000 sqm gridshell skylight with a 34-meter span, engineered with a pioneering hybrid support system to manage seismic movement, differential displacement, and wind uplift while preserving the compression shell's structural efficiency. This innovative solution reflects the project's

14 fusion of architectural vision and engineering precision.





The company's scope is vast, embracing everything from investment capital structuring and property asset optimization to intelligent facility management, global portfolio strategies, and legacy projects that align vision, finance, and long-term stewardship within a unified, accountable framework.

A recognized pioneer in AI-enabled and parametric bioclimatic design, Dr. Ayash has formalized closed-loop workflows that integrate Design AI Analysis, Sustainable Envelope Goals, advanced procurement, and performance-driven delivery. Initiatives such as SEGs by Dolmen and the Dolmen Development Research Lab place Dolmen at the forefront of sustainable envelope technology and digital innovation.

His work is aligned with the world's most ambitious environmental and governance standards – ESG, UN SDGs, ISO 9001, and leading green building frameworks like LEED and BREEAM. Further, his active involvement with organizations such as the USGBC and the World Energy Council demonstrates a deep commitment to the global dialogue on sustainable practice.



Under Dr. Ayash's guidance, Dolmen has become synonymous with the structuring and execution of major government and enterprise programs – delivered under EPC, PPP, and Design-Build models. He is adept at navigating complex contract landscapes, risk allocation, and the intricacies of international finance, using instruments such as FIDIC contracts and UAEF export-credit guarantees to bring ambitious cross-border projects to fruition, particularly

in West Africa and Europe. His entrepreneurship extends into innovative trade and procurement hubs in Italy and UAE, as well as the recent launch of Dolmen Hub Beirut, which stands as a model for green engineering, technical collaboration, and advanced 3D printing capabilities.

Dr. Ayash is equally recognized for his civic and professional engagement, serving in leadership roles with NGOs, trade organizations, and cultural boards – from vice president of Kun Jadir to board member of COMEDIT in Milan. This wide-reaching involvement illustrates the depth of his commitment to community betterment and

Dr. Ayash is equally recognized for his civic and professional engagement, serving in leadership roles with NGOs, trade organizations, and cultural boards – from vice president of Kun Jadir to board member of COMEDIT in Milan. This wide-reaching involvement illustrates the depth of his commitment to community betterment and international partnership, reinforcing his reputation as a “global bridge-builder” whose work transcends borders and industries.

His strategic compass is steadfast: Dr. Ayash aims to lead in sustainable architectural and engineering design, developing pioneering green projects and delivering exceptional products and services in the UK, USA, and beyond. The mission is clear – generate enduring value for clients while embedding the highest standards of quality and reliability.

In practice, this vision translates into a culture where ESG and sustainability ethics define every service line, and teams are cultivated as ambassadors of change, applying research and expertise to markets where environmental and social



are considered primary drivers of design and delivery.

Throughout his career, Dr. Ayash has earned a reputation for turning challenges into success stories. Whether orchestrating turnarounds of struggling operations or launching new facilities, he brings a methodical approach, leveraging advanced architectural solutions and scaling businesses into new markets. His leadership style is both disciplined and dynamic – aligning vision, people, and systems so that even the most complex projects are executed with precision, accountability, and clear strategic outcomes.

Dolmen Development UK, under his stewardship, is now advancing four integrated initiatives that align culture, technology, and client value – each initiative reflective of an organization moving seamlessly from concept to manufacture. Sustainable Envelope Goals by Dolmen scale high-performance building skins that couple energy efficiency, climate resilience, and expressive design, marrying technical rigor with cultural narrative.

The Dolmen Development Research Lab embeds artificial intelligence throughout the design-to-delivery process, pairing generative design with predictive modeling and AR/VR immersion for faster, more precise, and waste-reducing project execution. The Dolmen Crypto Trading Platform introduces a blockchain-enabled supply chain built for sustainable materials and technologies, offering full traceability and milestone-based procurement integrity.

Complementing these is Phoenician by Dolmen – a luxury initiative that draws upon cultural heritage to curate bespoke furniture, fittings, and art, blending ancient narrative with contemporary craft to serve high-end, cross-regional projects. Each of these pillars testifies to Dr. Ayash's conviction that true progress demands innovation not just in products, but in the platforms and ecosystems that shape how projects are conceived and delivered.

Across the breadth of his expertise – spanning architecture, engineering, management, contract structuring, technology, and international trade – Dr. Ayash's impact is unmistakable. He is a proven agent of change, with an ability to unite vision, finance, and execution in ways that yield enduring results for clients, stakeholders, and communities alike. His knowledge of risk governance, international arbitration, and compliance ensures projects are not only ambitious but robustly delivered across jurisdictions, with finance and procurement bridges that maximize competitive advantage in complex markets.

Technology and performance are hallmarks of Dolmen's delivery model, leveraging AI-enabled workflows and parametric, bioclimatic design to optimize every facet of construction and development. The company is at the cutting edge of digital fabrication and 3D printing, pioneering supply chain solutions and integrating smart contract procurement to enhance transparency, quality assurance, and sustainability for high-value projects. These innovations support the company's expansion across Europe, the Gulf, and Asia, with major

hubs in London, Dubai, Milan, and Beirut providing the infrastructure for next-generation leadership and project execution.

Dr. Ayash's sustainability standards are internationally recognized – Dolmen is certified to ISO 9001 in project construction management, and coordinates with leading frameworks for energy, environment, and green building.

The company's innovation platforms, paired with digital procurement systems, reflect a commitment to moving the industry forward, ensuring every project is future-proof, resilient, and valuable to its community and environment.

The story of Dr. Mohamad Ayash is ultimately one of a transformative leader whose expertise has accelerated the evolution of urban development in profound ways. Every chapter in his biography reveals unwavering dedication to science, creativity, and the human experience – values that are woven into the DNA of Dolmen Development UK and visible in every project the company undertakes.

His journey serves as inspiration for a new generation of architects, engineers, and business leaders aspiring to harmonize financial success with broad societal benefit.

As the world continues to embrace innovation, sustainability, and global collaboration, Dr. Ayash's forward-thinking leadership stands as a powerful reminder: the future of our cities depends not only on visionary ideas, but on the discipline, drive, and ethical foundation behind every structure we build.



Frontier Blaze



THE SPOT CHOU EIFAT