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Analysis of the situation in the Middle East

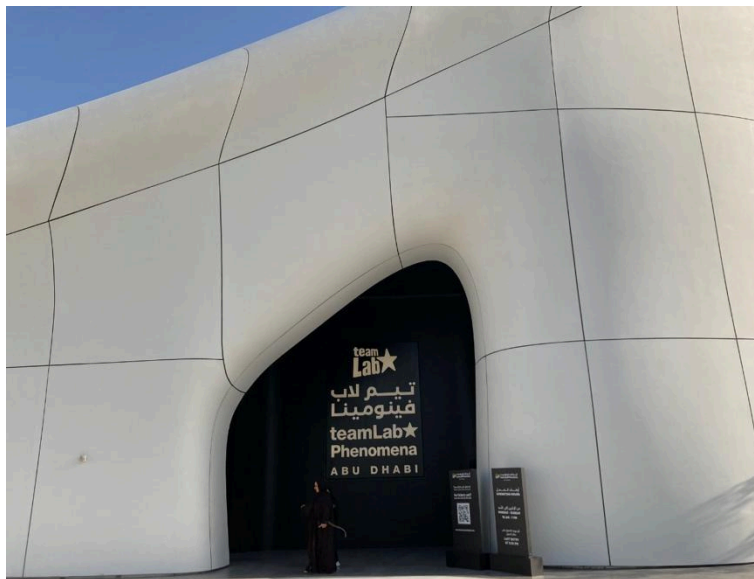
**UAE Manufacturing Industry: Current Promotion**  
**– Future Vision Seen at the “Make it in the Emirates Forum**  
**2025” and Expectations for Japanese Companies –**

Middle East Cooperation Center Startup Support Sector  
Counselor Kayoko Seki

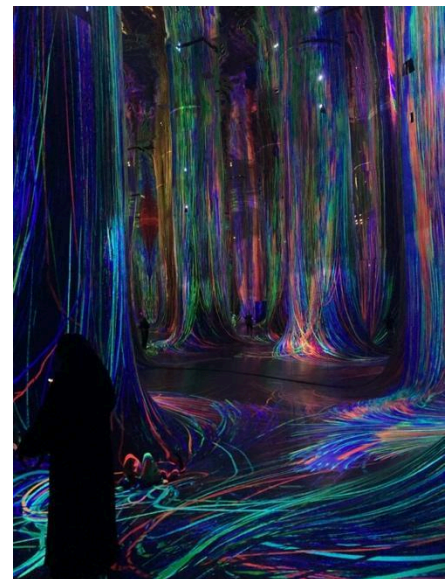


**Introduction: Abu Dhabi establishes its global status as a cultural and tourism city**

In April 2025, a new art museum, “teamLab Phenomena Abu Dhabi,” created by the Japan-based art collective teamLab Inc., opened in Abu Dhabi, the capital of the United Arab Emirates (UAE). This facility serves as a symbolic example of foreign direct investment attracted through Abu Dhabi's recent cultural and tourism strategy. It clearly illustrates the emirate's shift away from the traditional image of an “oil-rich nation” and toward its emergence as a global city-state where culture, entertainment, and innovation come together.



**teamLab Fenomena Abu Dhabi's entrance**



**immersive digital art exhibition**

Since 2006, the Abu Dhabi government has strategically accelerated investment in the entertainment sector, which attracts tourists from all over the world, taking full advantage of its geographical advantage as a node connecting Asia, Europe and Africa, with “about one-third of the world's population within a four-hour flight distance and about two-thirds within an eight-hour flight distance.” At the core of this is the “Saadiyat Cultural District” project, which develops an entire natural island as a special cultural zone. Here is the Louvre Abu Dhabi, which opened in 2017 as a branch of the Louvre Museum in France. In the future, a branch of the “Guggenheim Museum” in the United States will also be opened, and even in the United Kingdom

The concept of a branch of the "British Museum" is also underway, and it is attracting attention as a hub for the concentration of the world's leading cultural facilities.

In addition to these cultural facilities, we are also focusing on attracting entertainment facilities that appeal to a wider range of people, including families and young people. In 2010, Ferrari World Abu Dhabi opened next to the Yas Marina Circuit, where the Formula 1 Grand Prix is held, and in 2018, Warner Bros. World, one of the world's largest fully indoor theme parks, opened. Regarding the latter, the concept of a Harry Potter-themed expansion area has also been announced, which has attracted a lot of attention. The addition of teamLab Fenomena Abu Dhabi to these entertainment facilities further solidifies Abu Dhabi's status as a cultural and tourism city that incorporates the cultures and charms of countries around the world.

### **Another national strategy: Transforming manufacturing into a "sunrise industry"**

In parallel with the promotion of this glittering tourism industry, the UAE is focusing on revitalizing the domestic manufacturing industry as an important pillar of the country. This is positioned to build a sustainable economic foundation in anticipation of the depletion of oil resources in the future.

While manufacturing is a core industry with a history of more than 100 years in many developed countries and has been expanding rapidly in emerging countries in recent years, it is often regarded as a "sunset industry" due to intensifying global competition and changes in the industrial structure due to IT. On the other hand, in the UAE, which has a relatively short history of manufacturing, the lack of such past constraints is rather seen as a strength. This is because it is possible to build a future-oriented manufacturing industry from scratch based on the latest technologies such as Industry 4.0, without being bound by old production methods and stereotypes. The UAE clearly defines this manufacturing industry as a "sunrise industry" that creates its own future.

In particular, the Emirate of Abu Dhabi, which accounts for more than 90% of its domestic oil reserves, is strongly promoting economic diversification and the promotion of manufacturing industries, leveraging the income generated from its abundant energy resources. By actively introducing smart factory technologies such as automation, robotics, AI, and big data analytics, and creating high-value-added and internationally competitive products, we are trying to make the manufacturing industry a new growth engine for the country.

The UAE's Ministry of Industry and Advanced Technology (MoIAT) announced in 2021 that the "Make it in the Emirates" (Manufacturing in the UAE) is not only an industrial policy, but also permeates the lives of citizens as a campaign. For example, Lulu Hypermarket, a major Indian retailer that operates throughout the UAE, has corners recommended domestic products from the UAE throughout the country, and many food and daily necessities are lined up. Through in-store POP and advertising, consumers are increasing their preference for domestic products. There is a momentum to create a virtuous cycle that supports domestic industry from domestic demand.



In-store POP at Lulu Hypermarket World Trade Center

## UAE Manufacturing Development History and Current Key Players

The UAE's economic diversification is the result of decades of steady efforts. The share of oil-related revenues, which once accounted for the majority of gross national product (GDP), has been steadily declining. According to the Federal Office of Competition and Statistics (FCSC), the real GDP of the non-oil sector in 2024 will reach around AED 1.776 trillion (about 71 trillion yen), accounting for more than 75% of the total.

Looking back at the history of its manufacturing development, the establishment of the Jebel Ali Free Zone (JAFZA) in Dubai in 1985 marked a major turning point. It attracted companies from all over the world by offering incentives such as 100% foreign-owned company ownership, exemption from corporate and income tax, and free repatriation of capital and profits back to home. This model has since spread to free zones across the UAE, and there has been an active movement for foreign companies to set up manufacturing bases. As a result, heavy industries such as aluminum and petrochemicals, which take advantage of abundant energy resources, have expanded dramatically.

### Currently, the following are the key players driving the manufacturing industry in the UAE:

1. **Aluminum industry:** Emirates Global Aluminum (EGA) is one of the world's largest producers of premium aluminum. We are engaged in everything from bauxite mining to alumina refining, aluminum smelting, and casting, and export about 90% of our production. In particular, we have strengths in products in high-value-added fields such as automotive, aerospace, construction, and electronics. In addition, we are actively working to reduce our environmental impact, such as producing aluminum using solar power, and are considered a model case for sustainable manufacturing.
2. **Petrochemical industry:** Borouge, a joint venture between national oil company ADNOC and Austrian chemical giant Borealis, is a leading petrochemical manufacturer in the Middle East. The company manufactures products such as polyethylene and polypropylene and supplies a wide range of applications such as automotive parts, pipes, power cables, and packaging materials to the global market, especially in Asia, where it is growing rapidly. With state-of-the-art production facilities and technological innovation, it is a strong driver of the globalization of the UAE's manufacturing industry.

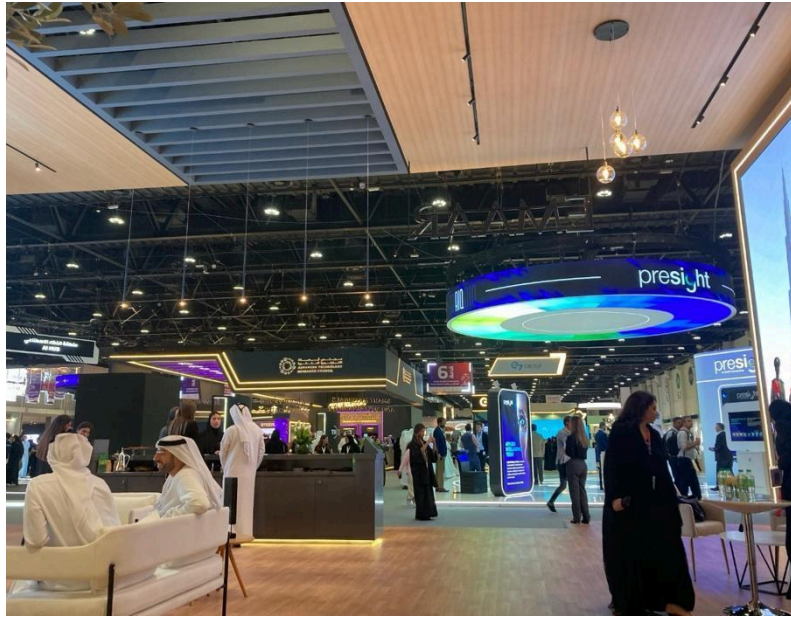
3. **Aerospace industry:** Strata Advanced Manufacturing, owned by the Abu Dhabi government-owned Mubadala investment company, manufactures and supplies main wing and tail components using composite materials to major global aircraft manufacturers such as Boeing and Airbus. We have accumulated a track record in this field, which requires advanced technical and quality control capabilities, and are promoting the UAE's advanced technological capabilities to the world.
4. **Renewable energy-related equipment:** The UAE aims to establish leadership in the renewable energy sector by leveraging the world's leading solar radiation. Abu Dhabi Future Energy Company (Masdar), which operates a low-carbon energy business, will take the lead in building the future city "Masdar City" on the outskirts of Abu Dhabi. Here, the research and development and manufacturing of solar panels and wind power generation equipment are developing rapidly, and it has become an important testing ground for the realization of a sustainable society.

### **National Strategy "Operation 300bn" and Industrial Promotion Forum**

The cornerstone of these measures to revitalize the manufacturing industry is the national strategy "Operation 300bn" announced in March 2021. The strategy sets an extremely ambitious goal of doubling the contribution of the manufacturing industry to GDP by 2031 from AED 133 billion at the time of its announcement to AED 300 billion (approximately JPY 12 trillion). Beyond mere numerical targets, the company's pillars are the promotion of digital transformation (DX) in industry, the introduction of Fourth Industrial Revolution technologies, the resilience of domestic supply chains, the development of local human resources, and the attraction of foreign investment.

A central role in realizing this ambitious strategy is the "Make it in the Emirates Forum," an industrial promotion event that has been held annually since 2022. It brings together domestic and international government officials, manufacturers, investors, and financial institutions to serve as a platform for creating tangible investment opportunities and partnerships.

At the 4th Forum held in May, the Ministry of Industry and Advanced Technology (MoIAT) brought together the Ministry of Culture (MCY), the Abu Dhabi Investment Authority (ADIA), Co-hosted with ADNOC, more than 720 exhibitors were exhibited, the largest ever. Government agencies and major companies announced a number of domestic product procurement contracts and new investment projects, reaffirming the UAE's strong commitment to manufacturing. There were also active business meetings in 12 focus sectors, including food and agriculture, aerospace, clean energy, and pharmaceuticals.



Make it in the Emirates Forum 2025

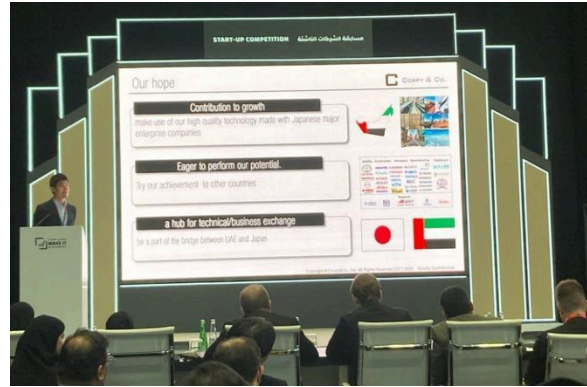
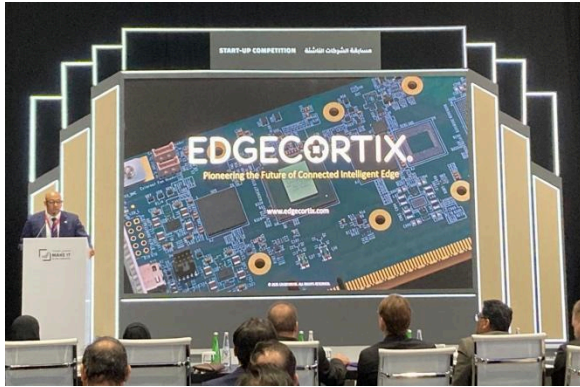
## Collaborating with Startups: AI Pitch Competition to Create the Future

The forum attracted attention as the "Make it in the Emirates Startup Pitch Competition," which is aimed at startups that use AI to drive innovation in the manufacturing industry. This event symbolizes the UAE's commitment not only to upgrading existing manufacturing industries but also to nurturing the seeds of future industries.

Approximately 200 companies from the UAE and abroad applied, and 20 finalists were selected after a rigorous screening. The Center also cooperates with related organizations to establish three startup companies with excellent Japan technology (AI testing Corppy Co., Ltd. of Ryution, EdgeCortex Inc., an edge AI inference accelerator, and Monster Lab Co., Ltd., a digital consulting and development company).

The competition was won by AM Lab in the UAE, which optimizes digital manufacturing technologies such as 3D printing with AI. In second place was Predictive Middle East (UAE), which aims for personalized treatment through DNA analysis using AI, and in third place was Worldish (Sweden), which provides multilingual translation solutions for medical settings. Mentoring sessions (opportunities for dialogue to receive advice on solving problems and growth) and cash prizes were awarded by UAE accelerators.





Make it in the Emirates Startup Pitch Competition

## The UAE's Booming Startup Ecosystem and Expectations for Japan Companies

In parallel with the promotion of manufacturing, the UAE is rapidly growing its presence as a hub for startups looking to expand into the Middle East. This is due to the aforementioned geographical advantage, as well as strong government support measures, abundant funding environment, and a diverse talent pool from around the world.

According to Startup Genome's "Global Startup Ecosystem Report 2025", Abu Dhabi is rated as the fastest-growing startup ecosystem in the Middle East and North Africa region, and has risen significantly in the global ranking since 2023 (81-It is in the top 90 → 61-70 → 51-60 positions).

This growth is driven by the Abu Dhabi government's Hub71 global tech hub policy. Hub71 will attract startup companies from all over the world, including Japan, as an incubator, and raise funds

It is a major base that comprehensively supports cooperation with global companies, deregulation (sandboxing), and market entry.

In particular, it has attracted promising startups from around the world in the fields of climate tech, fintech, agritech, mobility, and food tech, and has generated many success stories. Japanese startups have also realized direct investment in the UAE after participating in Hub71's accelerator program.



Hub71 Inside

## Conclusion

Under a clear national vision to break away from an oil-dependent economy, the UAE is strongly promoting the advancement of manufacturing and the cultivation of a startup ecosystem, presenting significant business opportunities for Japanese companies, including startups. Japan's advanced manufacturing know-how, energy-saving and environmental technologies, and cutting-edge technologies such as robotics and AI are exactly in line with the UAE's vision for the future.

The Center supports direct investment by Japanese companies in the UAE, mainly in Abu Dhabi. Many start-up companies are in the service industry that makes full use of IT, but we support the establishment of new service development bases and stores through sole proprietorships and joint ventures with local companies. In particular, for startups with technologies that contribute to the sophistication of local manufacturing, the UAE is an extremely promising market as a gateway to the Middle East, Africa, and European markets.

If you are interested in the local startup ecosystem and market overview, please feel free to contact our Startup Desk [startup@jccme.or.jp](mailto:startup@jccme.or.jp).

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## **The Future of the UAE Semiconductor Market: New Growth Strategies Pioneered by AI**

**EdgeCortix Inc. CEO: Sakyasingha Dasgupta**



### **EdgeCortix's Global Expansion and Focus on the Middle East**

We are a fabless semiconductor company that enables AI processing at the edge with an order of magnitude lower power consumption. Against the backdrop of the growing demand for AI around the world, the company is headquartered in Japan and is currently in its sixth year of establishment, with development and sales offices in the United States, India, and Singapore.

We are also very interested in expanding our business to Middle Eastern countries that are trying to foster the AI industry as a national project, and with the support of the Middle East Cooperation Center and JETRO, we first entered Saudi Arabia. Specifically, it was selected as one of the constituent companies of the National Semiconductor Hub Project led by the Saudi Arabian government and established a local business corporation in June this year to contribute to the creation of the country's semiconductor ecosystem. Although we were preceded by expanding into Saudi Arabia, we have been very interested in expanding into the UAE, which is considered to be more flexible due to the government's industrial policy.

### **Expansion into the UAE and participation in "Make It in the Emirates"**

At such a time, thanks to the great efforts of the start-up sector and everyone at the center, the "Make It in the Emirates" held in Abu Dhabi for two days on May 20 and 21 I participated in the pitch event of ". As unique and powerful startups from around the world gathered together and a heated pitch battle unfolded, I also appealed to the innovation of our technology with all my might. Unfortunately, it did not lead to direct results. However, through meetings with potential local strategic partners, such as AL MASAOD ENERGY, Mubadala, Khalifa Fund, and Presight AI, we can directly see the potential of leveraging our technology in the UAE. It was a valuable opportunity to confirm.

### **Current State of the UAE Semiconductor Market to Grow Rapidly**

The UAE advocates "localization of advanced manufacturing and technology" and is particularly focused on fostering AI and the semiconductor industry. The semiconductor market was valued at USD 3.8 billion in 2023 and is expected to grow at a CAGR of 8.7% from 2024 to 2031 to reach USD 7.4 billion by 2031. In particular, the semiconductor packaging sector is expected to grow at a high annual rate of 10% from 2025 to 2030.



The main drivers of growth are the expansion of 5G and IoT infrastructure, smart city initiatives, and growing demand for automobiles (including EVs). In addition, the AI data center business is actively being promoted under the UAE National AI Strategy, and the demand for AI semiconductors is growing rapidly.

### **Strategy and potential in the UAE's AI and semiconductor industry**

In addition, partnership negotiations are underway with the world's leading semiconductor manufacturers such as GlobalFoundries, TSMC, and Samsung, centered on Mubadala, and plans to attract a manufacturing base worth more than \$10 billion are underway. In particular, in conjunction with large-scale infrastructure projects such as the AI data center "Stargate", there is a possibility that the UAE will be used as a base for AI chip manufacturing, assembly, and testing in the future.

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#### **[Author's introduction]**

##### **Sakyasingha Dasgupta**

He holds a PhD in complex systems physics from the Max Planck Institute in Germany and a master's degree in artificial intelligence from the University of Edinburgh in the UK. Artificial intelligence and machine learning technicians, entrepreneurs, and engineers. He has led teams at global companies such as Microsoft, IBM Research/IBM Japan, and national laboratories such as RIKEN and the Max Planck Institute in Germany.

##### **EdgeCortex**

Most recently, he was involved in the establishment and guidance of technology departments at Lean startups in the semiconductor technology, robotics & autonomous vehicles, and Fintech sectors in Japan and Singapore. To date, he has obtained more than 20 patents worldwide and his research has been cited more than 1,000 times.

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### **Overcoming challenges and EdgeCortex's contribution**

On the other hand, there are barriers such as a lack of top talent, infrastructure development challenges (e.g., power, water, clean rooms), and geopolitical risks and export control controls between the U.S. and China (e.g., restrictions on the export of NVIDIA products). However, for these issues, various subsidies and tax incentives launched by the UAE government, partnerships with universities and research institutions, and support for human resource development are included.

A comprehensive measure is in place, which is expected to support market expansion in the future.

### **"Innovating Society with Edge AI": Perspectives in the UAE**

We have unique AI accelerator technology that can contribute to the advanced manufacturing field in the UAE, and we will continue to collaborate with local companies and research institutes to provide next-generation solutions that realize high-load processing such as AI inference and generative AI with low power consumption. In particular, the reduction of power and high efficiency of semiconductors is a theme directly related to the realization of a sustainable society, and we will contribute to strengthening the foundation of a smart society in the UAE by leveraging the technological capabilities and global network we have cultivated so far.

As mentioned above, the semiconductor industry in the UAE holds great potential for growth and many opportunities. Based on the vision of "Innovating Society with Edge AI," we will continue to actively promote technological contributions and market development in the UAE and other Middle East regions.

### **(Postscript) "Reasons for headquartering in Japan"**

EdgeCortex is looking at Japan's unique AI embracing culture and the acceleration of AI implementation in the future. On the other hand, I felt a gap in the current state of Japan's semiconductor industry, which once dominated the world, in the field of hardware that supports AI models, and I saw a business opportunity here.

Another major reason why the Japanese government has positioned strengthening the semiconductor ecosystem as an important policy is that it is headquartered in Japan. We aim to contribute to Japan's industry and aim for global growth from here.

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