### How Artificial Intelligence could change Dubai | PISIQ Team

The use of <u>artificial intelligence (AI)</u> in everyday life is expanding exponentially all across the globe. There is a growing realization of Al's importance on how countries can use it as a competitive advantage. <u>Al developments</u> keep emerging, from algorithms that can beat the most skilled and talented chess player to monitoring and analyzing data to improve the process of <u>Business</u>. According to statistics, Al could add around \$13 trillion to the global output by 2030 and could double the annual economic growth of a country by 2035.

At least 75 countries out of the 176 countries are implementing Al technologies for monitoring purposes. Dubai, which is one of the seven emirates of UAE, is a really fast-growing city, and comes up with the most unique and innovative ideas to make everything work with the help of machines instead of hiring humans to do those tasks. Therefore, Dubai has obviously deployed Al in their government processes and in some other departments. So, <u>PISIQ</u> has researched and come up with how artificial intelligence can affect Dubai in the long run. Along with this we will also provide information on the following:

- 1. How is Al currently being used by Dubai?
- 2. How has AI helped the medical sector of Dubai during lockdown?
- 3. What are Dubai's future plans for using Machine Learning?
- 4. 5G + Artificial Intelligence

### This is how Artificial Intelligence could change Dubai

Dubai has already started implementing AI in everyday life. By witnessing how Dubai is growing every day, we can analyze the growth and assume that Dubai is going to absolutely dominate the AI market. Dubai is already one of the top ten most popular and one of the top most visited cities on earth, and in future, this will just keep getting

better. And if Dubai capitalizes AI more, it can help drive the next economic expansion, which leads to more jobs being available for the people and international trading can be benefited. Dubai's market will be in a better place than now.

The automobile industry in Dubai will benefit the most out of this and the healthcare industry of Dubai will experience a massive change with the processes being simplified. All basically is most helpful in data analysis, and can prove to be an impetus for data collecting. So, the financial industry of Dubai will also make use of All from analyzing the reports to make the finance process even easier.



#### How is AI currently being used by Dubai?

In the October of 2017, the UAE Government launched a project named 'UAE Strategy for Artificial Intelligence (AI)'. The strategy is first of its kind in the region and the world and it aims to:

- Achieve the objectives of UAE Centennial 2071
- Boost government performance at all levels
- Use an integrated smart digital system that can overcome challenges and provide quick efficient solutions
- Make the UAE the first in the field of Al investments in various sectors
- Create new vital markets with high economic value.

The theme of this project that UAE has proposed was to form the AI Council, develop capabilities and skills of all staff operating in the field of technology

and organize training courses for government officials, provide all services via AI and the full integration of AI into medical and security services, launch leadership strategy and issue a government law on the safe use of AI. And it's strategies included to cover the following sectors: -

- transport to reduce accidents and cut operational costs
- health to minimize chronic and dangerous diseases
- space to help conduct accurate experiments, reduce rate of costly mistakes
- renewable energy to manage facilities
- water to conduct analysis and studies to provide water sources
- technology to increase productivity and help with general spending
- education to cut costs and enhance desire for education
- environment to increase forestation rate
- traffic to reduce accidents and traffic jams and draw more effective traffic policies.

The above was a project proposed by the government. Apart from that, there are many other countless AI startups that have emerged in Dubai.

## How has AI helped the medical sector of Dubai during lockdown?

'Al Everything', is one of Dubai's most major events during lockdown. It unites the government, unicorn startups, huge, small and medium sized companies to showcase their unique and futuristic Al project plans to more than 10,000 international visitors. In fact, UAE is also the first country to elect a dedicated Minister for the Artificial Intelligence Department. This makes UAE, one of the leading nations when it comes to implementing Al across mainstream industries.

According to Omar Bin Sultan Al Olama, the first Minister of State for Artificial Intelligence, Al has never been more needed than today during this pandemic.

The following words were said by the Minister of State for Artificial Intelligence: -

"The issue with the pandemic is that it's a moving target. It spreads very fast.

So there is a lot of work done using AI for simulation purposes; understanding the spread, using AI and creating strategies to contain the virus."

Al has assisted doctors and medicine professionals by analyzing given data to predict how many cases will come to Dubai and the UAE alone, with the consumables and equipment they need and also with the intensive care units and critical beds they would need to cure the people affected by COVID.

Al-powered robotic surgeons have performed over 105 cases during the pandemic on patients with extremely high risks, resulting in zero casualties and zero complications. The health community of UAE believes this proved important for convincing medical experts about the effectiveness of Al input.

# What are Dubai's future plans on where to implement Machine Learning and Deep Learning?

Dubai always has a vision and a goal set in mind. They have already realized the importance of AI, and have set various goals to achieve in this field. UAE aims to be the capital of artificial intelligence within the next 10 years and is cooperating with countries to become international partners in line with the fourth industrial revolution, said Mohammed Ahmad Al Bowardi, the UAE's Minister of State for Defense Affairs. Al will contribute 1.1 Trillion Dirhams to the Middle East's GDP by 2030 while 205 Billion Dirhams will be spent on Al globally by 2021.

In October 2017, the UAE Government <u>announced</u> the <u>UAE Strategy for Artificial Intelligence</u>. The strategy is billed as the first of its kind and is intended to achieve the UAE Centennial 2071 objectives, boost government performance, and invest. The UAE's AI strategy <u>covers</u> development and application in nine sectors: Transport, health, space, renewable energy, water, technology, education, environment, and traffic.

During the Global Aerospace Summit which was held in Abu Dhabi on 28th and 29th of September 2020, the defense minister had said that the regional and international turmoil are escalating as a result of global population explosion along with declining natural resources while border disputes and ideological differences pose security threat for human society as a whole. He also believes that collaborating with countries and becoming international partners to face various challenges with an aim of achieving security, stability and peace has become a necessity today and the investments in these strategic sectors cannot afford dispute and conflicts among the partners.

Any kind of conflict among these partners can lead to huge economic loss and lack of stability, and most importantly, losing trust from a country, which is a big disadvantage any country can face.

The experts in the fields of defense, aerospace, and new-age technologies had addressed the two-day virtual Global Aerospace Summit Abu Dhabi. Sarah Bint Youself Al Amiri, Minister of State for Advanced Technology and Chairwoman of UAE space agency; Ahmad Al Ohali, governor of the General Authority for Military Industries of Saudi Arabia; Khaled Abdulla Al Qubaisi, CEO for aerospace, renewables and ICT at Mubadala Investment; Faisal Al Bannai, CEO and managing director of Edge; James Taiclet, president and CEO of Lockheed Martin Corp.; and Tony Douglas, CEO of Etihad Airways had also given keynote addresses at the opening of the summit.

UAE has plans to increase the production of AI based futuristic drones. 70% production of drones for military purposes and 30% others. By early next year, UAE will be launching numerous other platforms in this regard. Drones, UAE and autonomous capabilities are the strategic need for the future. UAE has a small population of 9 million and wants to use these available resources of cutting-edge technology to be among the top leading nations in this industry.

Dubai has also developed the Internet of Things (IoT) strategy where the aim of it is to build the world's most advanced <u>Internet of Things (IoT)</u> ecosystem in the world's smartest city to improve people's lives. It's goal is to protect Dubai's digital wealth and It covers six strategic domains: governance, management, acceleration, deployment, monetization and <u>security</u>.

### **5G + Artificial Intelligence**

5G expansion has experienced a hype recently in the Middle East. It was first introduced on April 3, 2019, in parts of Chicago and Minneapolis. Customers in those cities were the first in the world to have a 5G-enabled smartphone connected to a 5G network. The introduction to this is probably the most revolutionary topic introduced to Al. Countries that have adopted 5G early are ahead of the pack and is a competitive advantage for them.

According to a report by Huawei and STL partners, 5G technology is expected to create an extra \$1.4 trillion in GDP for worldwide economies over the next 10 years.

Several countries in the Middle East have already adopted 5G so they are ahead of the pack when it comes to 5G deployment, which gives room for even better development of advanced technologies and artificial intelligence to be incorporated into all aspects of society. Together with 5G, AI can form the foundation for a more intelligent and better society for all of us. These two compliment each other well and both will grow supporting each other.

In the UAE, we saw the world's first Minister of State for AI also appointed in 2017, followed by the foundation of the world's first graduate-level, research-based AI university which is, Mohammed Bin Zayed University of Artificial Intelligence, named after the Crown Prince of Abu Dhabi. Along with these the country has also launched the program named BRAIN, which is a comprehensive and consolidated compilation of resources that highlight the advances in AI and Robotics.

The combination of both 5G and AI will be able to revolutionize all industries of UAE. For example, the healthcare sectors all across the region have recently combined both 5G and AI solutions to fight against COVID-19, by connecting hospitals and doctors who are working remotely and enabling them to identify patterns across a massive amount of patient data more quickly.

In the oil and gas sector, 5G and Al has been combined to enable the oilfields to stay connected in ways unimaginable even three years ago, and for producers to make quick decisions with regards to diagnosis, reservoir

identification, and extraction processes, all while using formerly underutilized data. From transportation to city planning and education, the combination of 5G and Al are driving enormous positive results to all the sectors in the UAE.

You must note that, without one the other can't be successful. 5G provides the wide bandwidth for large-scale AI to become a reality. Likewise, AI is woven to 5G networks and services to enable those services to expand swiftly and efficiently to more enterprises than ever before. When these both technologies are combined together with large cloud computing platforms and big data, they empower each other to unleash even greater value. This value will play a vital role in countries digital transformation and the achievement of national development visions over the coming decades.

This Digital transformation is playing a critical role in shaping the way governments across the world are also adapting to new challenges and opportunities. Digitally mature countries have realized the value of digital transformation and have successfully progressed to deliver delightful customer outcomes. It's a journey that has no end. Especially in the Middle East, where it is expanding very fast, it is vital for customers and partners along the industry chain to work together. Cooperation is more needed today than ever before. In order to empower the Middle East countries ambitious plans, strategies and visions, we need to stay committed to openness, collaboration and shared success.

#### So is Dubai on the right path?

Yes, from what all the points we have brought to you above, we can say that Dubai is definitely on the right track and are taking crucial steps to become the leading nation in the AI industry. A lot of sectors are going to change and improve within the next decade if everything goes as planned by the government's adopted projects. Let's end this with a quote Mark Twain, a famous write, entrepreneur, publisher, lecturer and a humorist had once said

"If you want to change the future, you must change what you're doing in the present".

Check out our other articles on Artificial Intelligence:

- 1: <u>Is Artificial Intelligence Capitalized?</u>
- 2: Artificial Intelligence as a necessary tool

You might have come across Internet of Things (IOT), we have an article that explains about an emerging field called Industrial Internet of Things (IIOT)

3: Read about it here