

DUBAI'S ARTIFICIAL INTELLIGENCE ROADMAP - THE JOURNEY SO FAR

Interview of Wesam Lootah
CEO at Smart Dubai Government Establishment

By Nicolas Mialhe



Wesam Lootah is the CEO at Smart Dubai Government Establishment. A committed and talented Emirati, Wesam has more than 18 years of experience in strategic leadership positions where he has leveraged Information Technology to create innovative channels and Smart Government infrastructure to improve the quality of public services for citizens, residents, visitors and businesses in Dubai. Wesam has worked in both government and the private sector in high profile organizations.

From 2009 to 2012, Wesam was Vice President, Information Technology at World Trade Centre. Prior to that, he was Director, Information Technology at Emaar Properties. Wesam is not new to Smart Dubai Government as he was previously Head of Application Services from 2002 to 2007. During that time Wesam led the implementation of unified business process and ERP across Dubai Government entities. Wesam holds a Master's degree in Computer science and engineering from Pennsylvania State University and a Bachelor's degree from Ohio State University. Wesam is also an author with published research in Computer Security.

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- SKILL DEVELOPMENT
- AUGMENTED INTELLIGENCE

INTRODUCTION

By Tarek Saeed,
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Dubai is at the forefront of adopting transformative technology and has already embarked on its journey to transform into an artificial intelligence (AI) enabled city.

The journey started in October 2016 when Smart Dubai Government Establishment, Department of Economic Development and IBM collaborated to launch "Saad", an AI-based government service powered by IBM's AI capabilities. "Saad" is a service that allows users from the business community to ask questions and get up-to-date answers on business licensing and registration process in Dubai. An example of a question could be "Hi Saad, what are the documents needed to open a coffee shop in Dubai?"

"Saad" was equipped with AI capabilities, allowing it to understand natural language, ingest and comprehend massive amounts of data, learn and reason from its interactions, and provide solutions that will aid users in deciding on correct courses of action.

In February 2017, Smart Dubai and IBM have unveiled a first of its kind government-wide AI Roadmap. The purpose of the Roadmap is to help accelerate the development of AI-enabled citizen services across Dubai and equip the next generation of professionals with sought-after skills around analytics, cloud, cognitive and blockchain technology.

Smart Dubai and IBM also announced their plans to establish the "AI Lab" to become the AI center of competency in Dubai and to act as the vehicle to deliver the AI Roadmap through a number of initiatives.

Today, the Lab is enabling Dubai Government entities to transform existing digital government services into AI enabled services. It is providing skills training for government and private sector employees and local students; hosting workshops for entities and individuals to experiment and build prototypes; and offering go-to-market support for new services.

As the technology arm of Smart Dubai, the Smart Dubai Government Establishment leads the implementation of new technologies, including AI, by enabling shared services and infrastructure for the government and the city, while IBM contributes valuable skills training and technological expertise to support the implementation of the city's AI roadmap.

Acknowledging AI's potential to enhance and extend human capability can unlock

new streams of opportunities. Not only will AI augment human intelligence but, similar to any transformative technology, it will contribute to new forms of employment too. And right now, Dubai is one of the leading cities that leveraging its true ability to work in partnership with humans and create jobs for its people.

Nicolas Mialhe: Could you please explain what were the main objectives that led you to start working with IBM Watson on the “Saad” project? I suppose it is a mix of cost-effectiveness and enhanced efficiency: could you share a bit about your reasoning on this?

Wesam Lootah: AI is transforming industries, from healthcare to education. 80% of data is unstructured and AI can help drive insights for organizations and decision makers to make better informed decisions. Customer experience/insight is one of the most prevalent in the market today however as AI technology matures we expect to see a raise in other applications such as healthcare. A good example is IBM Watson who are the leaders in commercializing AI solution such as the one which is being used today by doctors to help treat cancer.

N.M.: Can you elaborate on at least one user experience (case) emblematic of the value generated by the service for business operators and citizens?

W.L.: Saad uses a cognitive advisor which helps business owners and entrepreneurs to get the right information at any time to start their business in Dubai. Saad is learning to provide more specific and personalized information about living in Dubai for the residents and citizens as well.

N.M.: How do you deal with liability risk in case of mistake/misinformation (say on tax or license regulations)?

W.L.: Saad is integrated with government entities internal systems which provides the latest updated data. The way Saad learns and trains is based on the government subject matter expertise who will continually teach Saad on new domains/subjects which is inquired by the end users.

“ABOVE INITIATIVES ARE FREE OF COST TO GOVERNMENT ENTITIES, TO INCREASE AWARENESS AND ACCELERATE THE PROCESS OF AUGMENTING AI SOLUTIONS INTO GOVERNMENT SERVICES.”

N.M.: What is the payment model retained for the service? I suppose it is free of charge for business operators and subsidized by the Smart Dubai Office but what is the model of cooperation between the Smart Dubai Office and IBM Watson?

W.L.: Saad is currently free of charge for anyone around the world. Additionally, the Smart Dubai Office has created a center of excellence with IBM called the “AI Lab” where IBM provides AI expertise, enablement and training on AI technologies for government entities, plus implementing Proof Of Concept for various use cases of government entities. Above initiatives are free of cost to government entities, to increase awareness and accelerate the process of augmenting AI solutions into government services.

N.M.: How have citizens and business operators reacted to the service? Have you conducted quantitative surveys and qualitative interviews and if yes what were the results and main insights?

W.L.: The average number of conversation Saad was engaged in with the entrepreneurs and business owners between October 2016 and July 2017 was at 1,054 conversations per months. The Average number of questions asked to Saad between October 2016 and July 2017 jumped to 8,034 questions per month. And the average duration of conversation with Saad between October 2016 and July 2017 was 4.23 minutes per conversation

N.M.: Could you elaborate on the roadmap you have developed for AI-enabled citizen services and infrastructure? In particular, which services are you targeting and infrastructure in priority and why did you select these ones?

W.L.: The potential use cases which have selected by government entities is based on the complexity of the use cases (AI viability, quality of Data) and the impact of the service (strategic alignment/innovation/Happiness/financial benefits).



N.M.: The roadmap seems to be split into two parts: skills development and service deployment. Could you explain what led you to this innovative approach and what you are expecting from it.

W.L.: AI Lab's first strategy is to transform citizen engagement, by infusing AI into services, operations and disrupt business processes. The main objectives of using this approach are:

1. Make Dubai the Happiest City / Increase Customer Happiness by transforming citizen engagement
2. Infusing AI in Government processes to:
 - Make efficient use of government resources
 - Reduce processing time
 - Support decision making
 - Reduce cost
3. Identify and avail "Dubai's Best" experts by leveraging AI to capitalize on the collective intelligence and experience of expert government employees

N.M.: Can you share more information on the AI Lab, its organization, operations and mode of operations?

W.L.: Smart Dubai Office (SDO) and IBM are partnering to launch the Smart Dubai Cognitive Lab, part of a joint program to develop Dubai's cognitive computing capabilities and prepare Dubai today to become the AI city of the future.

The main objectives of the Ai Lab:

1. SDO is investing in talent development for artificial intelligence in Dubai, by providing opportunities in skills training for government employees and university students to learn the technological and design-thinking best practices to innovate new cognitive solutions for the city.
2. SDO is hosting workshops for the government to co-create, develop and prototype new ideas, and providing access to systems, tools and experts to enable entities to design and build cognitive solutions to improve city processes and services.
3. SDO is supporting the delivery of new AI solutions for the city, by supporting entities to implement solutions developed in line with Smart Dubai's artificial intelligence roadmap.