



دبي الذكية  
SMART DUBAI

لحياة أسعد HAPPY LIVING



كلية محمد بن راشد  
للإدارة الحكومية  
MOHAMMED BIN RASHID  
SCHOOL OF GOVERNMENT



# Dubai Smart Cities Forum Series

SESSION 5: OPEN DATA  
March 2015

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## Key Themes:

Smart Cities, Open Data, the Internet of Things, Digital Infrastructure, Collaboration between Government Departments, Data Sharing, Regulation of Data.

## Introduction:

Dubai is in the process of investing heavily in technology as part of the city's ongoing effort to be at the forefront of an approach – shared by many cities globally – to transform itself into a 'smart' city.

This was the fifth installment of the 'Dubai Smart Cities Forum', a series of ongoing events hosted by the Mohammed Bin Rashid School of Government, that serve as a platform for a host of institutions public and private to discuss the most pertinent issues regarding the current 'smart' city movement.

This session, titled 'Open Data' aimed to address the significant role that open data has to play in developing all aspects of a 'smart' city. If utilized to its full potential, open data can be significantly beneficial in a number of ways, particularly for improving the way that data sources can be monitored.

## Presentations:

### 1. INTRODUCTION TO SESSION

#### DR AISHA BIN BISHR

ASSISTANT DIRECTOR GENERAL OF THE EXECUTIVE OFFICE, GOVERNMENT OF DUBAI

Dr Aisha Bin Bishr opened the day's proceedings by stating the overall vision behind the Dubai Smart Cities Forum and by providing an overview of the four events in this series that preceded this one.

The first four sessions focused on the relevance of 'Smart Cities', the emergence of 'Big Data', the 'Internet of Things', and lastly, 'Enabling Smart Services'. The purpose of this session, on 'Open Data' was twofold: firstly, it aimed to acknowledge the significant role that open data has to play in Dubai's 'smart' city transition; secondly, it presented a number of ways open data can be utilized to its full potential.

### 2. BROADENING THE VALUE OF OPEN DATA

#### JOY BONAGURO

CHIEF DATA OFFICER, CITY AND COUNTY OF SAN FRANCISCO

Why is open data important to us? The best way of answering this question is to look at what open data enables.

A good example of this is how open data was used in response to a natural disaster – in this case, Hurricane Katrina: in the immediate aftermath of the hurricane, the government attempted to make use of its administrative data sets. Combined with mapping and informatics, these were used as a form of improvisation to attempt to track the well-being of individuals after the hurricane had hit.

The above instance is simply one example where open data can be used to great benefit. It has the potential to facilitate positive change in a wide number of other contexts. Open data portals, for example, allow for a city's infrastructure to be predominantly data driven. Such a data-driven ecosystem would be able to support research and analysis, performance dashboards, program assessments and web and mobile applications. These services would, in turn, be able to produce outcomes such as: increased quality of life, efficient city services, better and more useful decisions being made and lastly, the creation of new businesses.

The city of San Francisco has set many worldwide precedents regarding the use of open data for the management of a city's infrastructure. Examining this as a case study would be a good way of looking at how best to utilize open data to its full potential. The city implemented its use of open data in several phases as follows:

1. **Phase 1:** The Executive Edict
2. **Phase 2:** The Publishing Scramble
3. **Phase 3:** The Period of Stagnation
4. **Phase 4:** The Resource Reckoning
5. **Phase 5:** The Integration of the Initiative

Each of the above five phases were vital to fully integrate open data into the city of San Francisco's infrastructure.

Implementing open data usage is not a completely straightforward process. Obstacles that are sometimes faced include attempting to access

data from other governmental departments. Two barriers that are particularly problematic are: a lack of knowledge within departments that data actually exists and a lack of knowledge regarding who to contact to access this data.

The following central hypothesis can be used as a means of working past these barriers: 'DataSF' (a data management body) can help solve the city's internal data sharing challenges. This can be achieved by following these steps:

1. **Step 1:** Know that data exists.
2. **Step 2:** Have means to access data.
3. **Step 3:** Have the ability to use the data.
4. **Step 4:** Help create data change.

This in turn, will help reach the following goals:

1. Increase the number and timelines of data sets on 'DataSF'.
2. Improve the usability of 'DataSF'.
3. Improve the usability, quality and consistency of our data.
4. Enable the use of confidential data.
5. Support increased use of data in decision-making.
6. Identify and foster innovations in open data and data use.

There are two key ways of 'Broadening the Value of Open Data':

1. Making it internally more valuable.
2. Using strategic releases to turn data into a proper and reliable resource

### 3. DUBAI DATA

#### ABDULLA ALI AL MADANI

CEO, CORPORATE TECHNICAL SUPPORT SERVICES SECTOR, ROADS AND TRANSPORT AUTHORITY

The Dubai Open Data Committee has three key deliverables: data strategy, data classification and data law.

We should be looking to use open data to develop Dubai's infrastructure as it will provide opportunities in many different ways as part of Dubai's ambitions to be a 'smart' city by 2021.

Open data 'empowers its citizens and enables creativity. It can help to:

1. Create new business and job opportunities.
2. Support the development of communication between the government, the private sector and individuals in general.
3. Improve the efficiency of data sources.
4. Contribute to economic growth.
5. Raise the standard of living.
6. Create new services.

Data in Dubai can be broadly classified as follows:

1. **Government Data:** data produced by the government and can be provided to and shared with private sector entities and individuals.
2. **Private Sector Data:** data produced by the private sector and can be shared with the government and individuals.
3. **Individual Data:** data produced as a result of the interaction between individuals in various ways, particularly via social media.
4. **Open Data:** government data, private data or individual data that is shared internally or between different sectors partially or completely without restrictions.

The Dubai Data Strategy's predominant purpose is to provide integrated data to enhance the efficiency and effectiveness of services and enrich opportunities for innovation and creativity to support decision-making in the government sector, private sector and amongst individuals. It aims to enhance: efficiency, innovation, effectiveness and creativity.

Dubai Data's ultimate goal is to develop the city's data inventory over time, with the aim of including all government entity data sets.

Open data is a key component in enabling Dubai's transition to being seen as a 'smart' city. It should play a prominent role in the city's development both in the short term and in the long term particularly as it has been announced by the UAE's leadership that 2015 will be the year of innovation.

## Policy Recommendations

The following policy recommendations have been derived from the key themes discussed during the Fourth Dubai Smart Cities Forum. They serve to further inform entities in both the private and public sectors that wish to actively contribute towards Dubai's 'smart' city goals:

- 1. Making Digital Infrastructure Development a Priority:** It is vital that time and financial resources are invested into adequately developing a city's digital infrastructure as it acts as a foundation upon which smart services can be produced.
- 2. Further Collaboration Amongst Government Entities:** Government entities in Dubai have already adapted to collaborate with one another. However, greater levels of collaboration between government entities will allow for the production of more substantial smart services that can capitalize fully on multiple resources simultaneously.
- 3. Greater Private Public Interaction:** The government would benefit from the significant technological resources and insights that private sector can provide towards developing the city's infrastructure.

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## Speakers

**Dr. Aisha Bin Bishr** is Assistant Director General of the Executive Office, where one of her responsibilities includes leading the Smart Dubai task force team. Prior to her current position, Dr. Aisha worked with the Ministry of Labor as Assistant Undersecretary for support services, responsible for developing and implementing strategic management, partnership development and change management policies. She has 20 years of experience in information, communication and technology (ICT) development in public and government sectors. Dr. Aisha holds a PHD in Management, Science, Technology and Innovation and an MPhil in Policy and Research on Engineering, Science and Technology from Manchester Business School. She also holds a degree in Public Finance Management from the Dubai School of Government.

**Joy Bonaguro** is the first Chief Data Officer for the City and County of San Francisco, where she manages the City's open data program. Joy has spent more than a decade working at the nexus of public policy, data, and technology. She has worked from the birth of the open data and open government field, spending seven years designing and managing the development of information systems to support planning and decision-making at Greater New Orleans Community Data. Prior to joining the City, Joy worked at Lawrence Berkeley National Laboratory to help develop technology, cyber and privacy policy, working closely with both the National Lab CIO Council and the Department of Energy Information Management Advisory Group. Joy earned her Masters from UC Berkeley's Goldman School of Public Policy, where she focused on IT policy.

**Abdulla Ali Al Madani** is the Chief Executive Officer (CEO) of the Corporate Technical Support Services Sector of the Roads and Transport Authority (RTA). Mr. Al Madani completed his BSc in 'Management of Information Systems' from the University of Colorado, Denver in the United States in 1991. Mr Al Madani has over 21 years' experience in the ICT field and plays a pivotal role in providing technical support services to the RTA's core businesses whilst also chairing vital committees and authority-wide teams including Unified Automated Fare Collection, Financial Claims and Geographic Information Systems (GIS).

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## About DSCF

The Dubai Smart Cities forum brings together industry experts and organization leaders to share expertise, discuss challenges, and review best practices as part of joint efforts towards realizing the Dubai Smart City Initiative. The sessions are designed to update government officials and decision makers with the latest developments in smart city projects.

## About MBRSG

The Mohammed Bin Rashid School of Government is committed to promoting good governance through enhancing the region's capacity for effective public policy.

The School uses a four-pronged approach, which includes applied research in public policy and management, academic programs in public policy and administration, executive education programs and knowledge forums for scholars and policy makers.