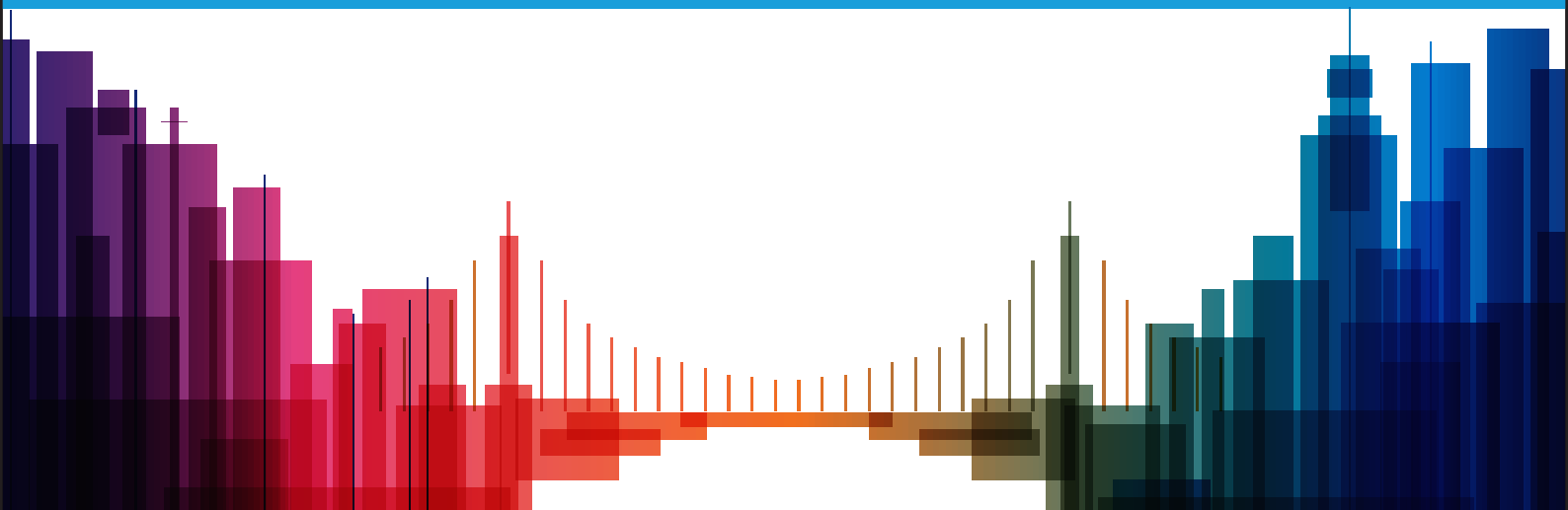


Urban mobility

Case study of the U4SSC A guide to circular cities

June 2020



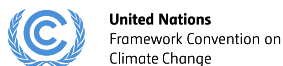
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Case study: Urban mobility

June 2020

Foreword

This publication was developed within the framework of the United for Smart Sustainable Cities (U4SSC) initiative.

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The case study *Dubai: Mobile solutions for ordering taxis and other transportation services, 'E-hailing'* was developed by the Roads and Transport Authority (RTA), United Arab Emirates.

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E-hailing initiative in Dubai

Author: RTA (Roads and Transport Authority)

Introduction

Background

The Emirate of Dubai is the second largest of the seven Emirates in the United Arab Emirates. The City has a resident population of 2.9 million (2017) along with an annual number of touristic visits of around 15.8 million (2017).

Emerging technological advances and upcoming electro-mobility modes are affecting cities around the world. New disruptive technologies have transformed transportation and have challenged its conventional modes. The significant role of e-hailing (ride-hailing) platforms through smart apps has impacted most of the leading cities around the world, as well as Dubai. Being a leading smart city, Dubai is influenced by global urban mobility indices and Dubai's Roads and Transport Authority (RTA) needs to accommodate innovation in the city's mobility system.

Due to the rapid expansion of Dubai's spatial landscape and population growth, there is a constant demand for complex expansion and improvements in Dubai's transportation network and infrastructure. The RTA is responsible for providing overall legislation, regulation, planning, and governance of the mobility system in the city, along with operations and the maintenance of certain public transport modes.

The RTA's mission is to develop integrated and sustainable transportation systems and provide first-class services to all stakeholders to support Dubai's comprehensive growth plans through preparing policies and legislations; to adapt technologies and innovative approaches; and to implement world-class practices and standards

Challenge and response

The advent of e-hailing services in cities has brought with it significant security and safety challenges, along with a negative impact on the traditional taxi industry and drivers. The e-hailing companies tend to work outside the existing legislative frameworks and have a less collaborative approach with cities' regulatory authorities.

The e-hailing project in Dubai provided a win-win solution for the city authorities, the e-hailing companies, the taxi industry, the limousine sector and the end-users by adopting a customized partnership framework.

The RTA engaged with the private sector to collectively create a tangible 'smart' solution to fill the market gap while mitigating the concerns and challenges posed by the e-hailing services. The RTA

supported the creation of Law No. 6 of 2016, a first-of-its-kind in the MENA region, which enables e-hailing services to operate in the city in a regulated manner as part of the RTA's network. This regulation put in place a high-quality standard for transportation services:

- The vehicles should be sourced from RTA-approved limousine companies with specially trained and licensed drivers.
- E-hailing transactional data should be shared with RTA, which can be leveraged upon for further enhanced transportation services.
- Greater service efficiency is induced across other transportation modes by a quicker mode of on-demand, e-hailing transport with waiting time of 4–6 minutes – e.g., waiting time for taxis reduced by 31 per cent (11–12 minutes).
- The RTA implemented a mandatory regulatory monitoring system for e-hailing companies and for-hire vehicles in Dubai known as the 'Connected Mobility System' the first-of-its-type system provides real-time monitoring of trips, alerts, violations and driver behaviour analytics.
- The e-hailing project in Dubai is pertaining to the city mobility infrastructure (as part of city public spaces and infrastructure) and also manufactured goods in the automotive industry in the circular city framework of these Guidelines; it is also related to the sharing action item within the same framework.

Promoting circularity

Vision and content

The project falls under the revolutionary new vision for a smart city, namely to be the happiest city on earth. The project also contributes towards the vision of the RTA, which is to deliver safe and smooth transport for all, along with addressing four key strategic goals of the RTA: Smart Dubai, Integrated Dubai, People Happiness, and Smooth Transport for All.

The Smart Dubai initiative uses the 'happiness' vision as the driving force that integrates stakeholders' well-being aligned with the Emirate's strategic objectives. This alignment has formed the basis for the development of this smart mobility concept in the context of Dubai. Consequently, smart solutions ranging from flying taxis, self-driving pods and integrated transportation systems, to Mobility as a Service, are all aligned with the overall vision of serving key stakeholders and creating positive mobility experiences.

The concept of e-hailing (also known as ride-hailing) is one of the major emerging mobility modes globally and has disrupted the traditional taxi and public transportation systems in cities across the globe. The concept involves ordering a car, taxi, limousine or any other mode of transportation through a mobile application. Cities around the world have leveraged the services but face challenges due to the unregulated governance of e-hailing companies.

The RTA studied key constraints facing other countries and assessed how to best respond to this emerging trend in mobility modes. They conducted international market reviews and identified three potential risks that an unregulated transport sector can have on Dubai's public transportation system:

- Vehicle safety
- Driver behaviour
- Pricing control

Before this agreement, e-hailing companies operated in an unregulated manner so generating concerns about their safety and security. Given Dubai's image as a safe and secure destination for residents and visitors, this was negatively impacting the city's image, along with the following challenges:

- Lack of oversight and governance of e-hailing companies' transactions and activities due to regulatory absence. The transactional records were not shared with RTA.
- Lack of stringent checks on e-hailing drivers as individual car owners permitted them to become drivers.
- Lack of quality control of vehicles being used by individuals to offer transport services.
- A market gap for smart, on-demand transport services offering premium vehicles catering to customer needs.
- An increasing demand on taxis with high waiting time.

Results

The project has contributed towards Dubai's vision of becoming the world's smartest city, and given the young population demographics of Dubai, there is great demand for digital and smart services. This agreement has supported the development of the RTA's integrated mobility platform, which will incorporate all modes of transport in Dubai including e-hailers into a smart, multimodal transactional and journey planner.

The key positive impacts obtained by the project can be summarized as follows:

1. The utilization of limousine vehicles in Dubai increased from four trips per day to 12 trips per day on average.
2. Regulated e-hailing service is being included in the RTA's integrated mobility platform (referred to as S'hail), along with other public transport modes in Dubai; allowing for seamless integration between all modes of transportation.
3. This pioneering regulation serves as a standard to allow additional e-hailing service providers to operate in Dubai. Currently, around nine start-ups have obtained the RTA approvals to start operations.

4. The rapid growth and performance of e-hailing services has encouraged existing service providers to continue their operations and additional e-hailers to set up operations in Dubai, resulting in long-term partnerships with the RTA. For example, Careem, a start-up from Dubai, grew into an international company worth over USD 1 billion.
5. The limousine sector has seen a growth of 36 per cent since the partnership was introduced, which is highest in the history of the sector in Dubai
6. It has encouraged the taxi sector to think more innovatively and to increase the taxi utilization rate.
7. The RTA's service quality effectiveness reached 78 per cent (2017) from 66 per cent (in 2016).
8. The average waiting time for a customer in Dubai to get a for-hire vehicle has been reduced to 4 minutes, compared with 12 minutes before this partnership.
9. E-hailing company rides have eliminated searching for parking, contributing to their overall satisfaction and also to reduced carbon dioxide emissions.
10. The e-hailing sector has created a new service industry in Dubai with additional revenues shared among its participants in a win-win manner.
11. Dubai has taken a pioneering leadership position in terms of regulating and operating high-performance, commercially viable and safe e-hailing services.

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