



smart city expo
world congress

TEL AVIV SMART CITY



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TEL AVIV NONSTOP CITY



TABLE OF CONTENTS:

Tel Aviv – The Smart City	6
Our Vision	8
Our Model	9
Smart Citymaking	11
Engagement Projects	12
> Residents Club and City Card	
> Public Participation	
> Mobile – Digi-Tel App	
> WiFi	
> Pupils' Engagement	
> Engaging Community Centers	
> Social Media	
> Open Data	
> Open Archive	
> iView (GIS)	
> Online Municipal Services	
> The Concept	
Additional Smart City Pillars	28
> Eco	
> Community and Entrepreneurship	
> Traffic and Parking	
> Readiness	
> Smart Food Policies	
> Fair Shared City	
> Educating a Smart City	
Measuring the implementation of Smart City Principles in Tel Aviv	38
Startup City	40
Partners	42
> Motorola	
> Check Point	
> TSG	
> Microsoft	
> Safer Place	
> FSM	
> Gazpacho	
> HopOn	
> DCF	
Come Join in Tel Aviv's Accelerator Programs	63



Photo: Kfir Sivan

GREETINGS FROM THE MAYOR



Shalom!

Tel Aviv-Yafo is known as Israel's "Nonstop City".

The vibrant atmosphere never stops; the nightlife and culinary scene never stop; culture never stops; 24 hours a day, Tel Aviv is an active metropolis, bursting with energy and creativity.

In such a city, the challenges never stop either. In recent years, the Municipality has created many smart practices to deal with such challenges: from sanitation to education, data management to culture management. Tel Aviv-Yafo's goal is to constantly be a smarter city - or more simply, a better city. In the booklet you are holding you will find a few examples of a wide range of such practices.

Looking forward to hosting you soon in our Smart and Nonstop City!

Ron Huldai
Mayor of Tel Aviv-Yafo

TEL AVIV – THE SMART CITY

Tel Aviv, the Nonstop City, considers engagement a key value in implementing Smart City principles. It actively involves residents in the urban experience and urban development, while emphasizing engagement in decision-making processes and wisdom of the crowd as a means for smart municipal management in the new age.

The city persistently acts to create a climate that facilitates the formation of collaborations between residents, business establishments, third sector organizations and the Municipality, while making use of cutting-edge technologies that enable learning, creativity and sharing to achieve social and economic prosperity.

The technological and social tools available to the city enable better use of information and communication technologies to streamline the management of existing resources, save energy costs, provide improved service, enhance the quality of life, and fulfill the 'sustainable city' concept.

The Smart City is managed according to the objectives defined in the "City's Vision":

1. A City for All its Residents

Promoting Tel Aviv as an appealing city to live in for residents of all ages, characterized by quality education, equal opportunities, pluralism and communal solidarity.

- Key points:**
- > An appealing city to live in
 - > A city for a lifetime
 - > Quality and egalitarian education
 - > Equal opportunities and bridging social gaps
 - > Strengthening the sense of community
 - > Fostering pluralism

2. Resident-Oriented Government

Resident-oriented municipal government – that is increasingly efficient and collaborative, with a high degree of autonomy in managing its internal municipal affairs, yet collaborates with nearby local authorities in matters that cross municipal boundaries.

- Key points:**
- > A client-focused municipality
 - > Resident engagement
 - > An autonomous city
 - > Metropolitan collaboration

3. An Appealing Urban Environment

Developing an appealing urban environment – a city that is open to renewal, but at the same time preserves its architectural-design heritage; that strikes a balance between and integrates the built fabric and open spaces; that maintains a prudent mix of land uses; that acts to reduce environmental hazards and promotes an efficient, sustainable and multi-means transit system.

- Key points:**
- > A balance between the preservation of existing fabrics and hi-rise construction
 - > A prudent mix of uses
 - > A highly developed public domain
 - > Return to the city street
 - > A city wide-open to the sea
 - > An efficient, multi-means and sustainable transit system
 - > Improved environmental quality

4. A Financial and Cultural Center

Maintaining and reinforcing Tel Aviv's standing as a metropolitan and national financial and cultural center, while allocating resources to improve the quality of city life.

- Key points:**
- > Metropolitan & national financial center
 - > A cultural capital that caters to everyone
 - > A hub of higher learning

OUR VISION

Tel Aviv Yafo is based on Information and Advanced Technologies and the involvement of its Residents and other parties, to improve Operational Efficiency, Quality of life, Local economy and a Sustainable Environment



OUR MODEL

A PRACTICAL MODEL



1. Develop **Smart city Plan** for every **pillar**, led by the responsible municipality manager.
2. Managing and presenting an integrated **operational situation picture**.
3. Support **strategic management** of the city - setting targets and indicators as a function of the strategic plan. Continuous measurement.
4. Develop and support **infrastructure**.
5. Leveraging the capabilities of the **commercial market** and **the startup community** to provide solutions.



Photo: Doron Serf

SMART CITYMAKING

Citymaking makes the difference between a space and a place – a space is a physical demarcation, while a real place draws people, tells a story, reflects a community’s values, and is embedded with meaning. A smart city strategy which uses technology in the service of people – is, in short, smart citymaking.

Keeping in mind that the people who live, work in and use our city are our greatest assets, Tel Aviv has formulated a smart city strategy which puts residents and their needs at the center – both in the technologies it has developed, such as the DigiTel Residents Card, as well as in its open data initiatives.

The strategy, which is based on transparency, accessibility and active citizen engagement, is in accordance with good citymaking practice. The practice of citymaking involves people and communities making their mark on their neighborhoods and cities and helping to create sustainable, inclusive places for all residents.

SMART GOVERNMENT

MAJOR ENGAGEMENT PROJECTS



RESIDENTS CARD AND CITY CLUB



The next step in municipal services & communications: the Digi-Tel Residents Club and the City Card.

A personalized digital communications network that is interest, site and life situation-based, whose focus is our residents. All Tel Aviv residents aged 13 and older can come to one of our many registration centers in the city, tell us a bit about themselves, and that's it! After that, they are sent a Smart City Card and become members of the Digi-Tel Club.

Based on their unique profile, we are able to offer them information, a wide variety of special deals at cultural venues, sports arenas and other places, as well as customized digital services that enable them to carry out transactions with the Municipality – at any time and from any place.

The information is delivered via different channels, including personal emails, text messages and a personal resident account. For example:

- We'll make sure that Shira receives a text message informing her that the bridge she normally travels on is closed, enabling her to take an alternative route and get to her game on time.
- We'll remind Danny that the deadline for registering his child for kindergarten is approaching, and we'll even help him register over the Internet.
- We'll keep Jonathan, who loves music, posted about discounted tickets for tonight's performance.



PUBLIC PARTICIPATION

Public participation has been part of the Tel Aviv-Yafo Municipality's organizational culture for decades, and has been implemented in connection with a variety of topics and departments and covers a broad spectrum of municipal plans and projects. In the past two years, this process has also been carried out through the digital channel. For example:

- Involving residents and conducting a dialog with them about the design of the main beach strip
- Involving the public in a municipal master plan for young adults

The Municipality allocates funds to improve the quality of life in a particular neighborhood and its residents are involved in deciding how to spend the money.

As part of the project, only the residents of the specific neighborhood are approached online, asking them to suggest ideas and have an impact on improving the quality of life in their neighborhood. For example: where and which trees to plant, where to install benches, whether the sidewalks need to be repaired, etc. At the end of the process, the residents are informed about the decisions that were made.



MOBILE – DIGI-TEL APP

A leading value in Tel Aviv is that the Municipality is always at your side, everywhere and at all times. The city's mobile application, which was developed on the basis of that principle, focuses on recreational activities, transportation, and keeping in touch with the city's residents and visitors:

- Leisure-time activities – locate and navigate your way to cultural, recreational and sports events, films, and cafes throughout the city.
- Transportation – find out where to rent a bike ("Tel-O-Fun" bike sharing system), check how many bikes are available at a particular station, and report malfunctions. Locate the closest parking lot and check whether it is full or not, find out how much parking costs, the lot's opening hours, etc.
- Contact municipal departments, photograph and report hazards, and keep informed of how they are being handled.



WIFI

Tel Aviv has the widest wireless Internet distribution in the public domain of any Israeli city. The service is provided free of charge to all users: residents, visitors and tourists. 80 WiFi zones have already been deployed around the city: at the beach, on the boulevards and streets, in the city squares and public gardens (over 200 APs), and more installations are underway.

The use of the wireless network is simple and easy, there's no need to sign up in advance or provide any personal information.



PUPILS' ENGAGEMENT

Tel Aviv's school system is in the midst of a messaging revolution, which encompasses all the elementary schools in the city (56 schools). The plan includes providing laptop computer kits to the pupils, connecting classrooms to the Internet, computerizing classrooms using interactive whiteboards and projectors, a computer for every teacher, and a teaching platform that can also be used to manage the communications between the school and its students.

The city's pupils can view the curriculum, see what homework was given that day, manage their contacts with teachers and peers, view the learning materials, and save materials in a private area especially built for them.



ENGAGING COMMUNITY CENTERS

Community centers are an important link in the connection with residents.

As a resident of the city, you can view the classes offered at your local community center directly from its online system and receive general information about a particular class, such as its cost, the instructor, etc. The system includes advanced search capabilities that make it possible to locate a class based on certain characteristics or for a particular age group - and this throughout the city.

Digital registration and online payment for the classes will be available in the future, meaning that every resident will be able to perform all the tasks associated with class registration in a simple and effortless manner.



SOCIAL MEDIA

The Tel Aviv-Yafo Municipality is the leading local authority in Israel when it comes to using social media to improve its communications with residents and visitors. In the past four years, the Municipality has provided service to tens of thousands of residents through social media (Facebook, Twitter), thereby offering simple and easy access to municipal services.

The Municipality's posts on Facebook receive a lot of exposure, and surfers are highly engaged in municipal activities that encourage user-generated content. Thus, for example, thousands of surfers took part in the municipal gay pride Instagram contest, at the end of which the largest gay flag in the Middle East was printed, bearing the pictures taken by the city's residents. The Municipality also utilizes social media as a platform for involving the public in municipal decision-making.



OPEN DATA

As part of the city's policy to promote the accessibility and transparency of the information provided to the general public, the Municipality allows direct access to municipal databases that are not of a confidential nature. The environment enables the public and app developers to make use of information in municipal databases that deal with community affairs, culture, public health, budgets, statistical data and security. Among other things, the Municipality produced the Tel Aviv App2you contest, which encouraged the development of public benefit applications through use of municipal and government databases. About 70 new applications were created as a result of that contest.



OPEN ARCHIVE

Further to its policy to expose more information to the public, the municipality instituted a multiannual master plan that makes its archives accessible to all.

As part of that initiative, the engineering archive containing all the construction plans of the buildings in the city was made available to the public free of charge. The purpose behind it is to encourage urban development and save residents the trouble of coming to the municipal archive in person.

The scanned construction plans include the building's architectural blueprint, a variety of permits (T4, building permits, code compliance certificates), building permit applications, and information files.

The intention is to extend the master plan to 13 additional archives in the city.



Photo: Kfir Amir



iVIEW (GIS)

The municipal geographic information system, iView, makes spatial information available to the public in a large number of spheres: engineering, transportation, community, tourism, education, art, and more.

As a resident of the city, you can view all the geographic information relevant to your neighborhood: preschools, schools, public gardens, pharmacies, community centers, outdoor sculptures, etc.

As an engineer, you can locate blocs, parcels, electricity and water infrastructures, and view a particular zoning plan and its associated documents.

As a tourist, you can locate hotels, beaches, and cultural and recreational venues.

iView is a high performance system with an especially friendly user interface that does not require any prior training.



ONLINE MUNICIPAL SERVICES

The Municipality offers a very wide range of online services that enable users to establish contact, obtain information and carry out transactions. Residents can contact the Mayor and municipal departments online, order a resident parking permit and have it sent to their home via courier at no cost, appeal a parking ticket and track the status of the appeal, examine the status of a business permit and the status of a building permit application, register their children for kindergarten and receive updates about their kindergarten placement.

It is also possible to make a variety of online payments for the municipality's main services that involve a fee.



THE CONCEPT

A strategic plan was formulated in Tel Aviv for engaging residents in the processes and activities carried out in the city and at the Municipality. To achieve end, it was necessary to adapt municipal tools and infrastructures to current technological trends - e.g. mobility, social media, big data, etc.

A three-tier model for engaging residents was defined for that purpose:

Physical infrastructure - infrastructures that connect residents to the Internet.

Applications infrastructure - software infrastructures designed to be a platform for a wide variety of applications. The latter include the Residents Club, the Mobile App, iView, etc.

Applications - applications and systems that aim to address a specific task/need. The latter include management and externalization of the information about a particular community center, messaging at the schools, etc.

ADDITIONAL SMART CITY PILLARS

ASSOCIATED WITH
SMART CITY TEL AVIV

MINDBIKE



ECO >

MUNICIPAL COMPOSTING PROGRAM

The Municipality encourages residents to join the circle of people who separate organic waste. About 800 composters, intended for organic waste that decomposes into fertilizer and can be used in the building's yard, were distributed to occupants of apartment buildings and single family homes, public institutions, and community and public gardens in the city.

COMMUNITY GARDENS

The Municipality helps groups of residents to establish community gardens for the purpose of 'adopting' and cultivating a selected open space in the city. These gardens are founded on ecological principles and on planting endemic vegetation that conserves water and is more pest resistant.

MUNICIPAL RECYCLING

A great deal of recycling is done in Tel Aviv, including: paper, plastic containers, small beverage bottles, batteries, scrap metal in compliance with the vehicle dismantling program, electronic waste, white paper (offices), cartons, textile/clothing – alongside educational activities at the kindergartens and schools.

PRESERVING OPEN SPACES

A preserved open space is a space that is not sprayed with chemical herbicides. There are a number of preserved open spaces in Tel Aviv, where one can find a rich variety of natural seasonal vegetation that add scenery and natural beauty to the city's landscape. The Municipality encourages and supports recreational, informational, and educational activities through the "Resident Trustees of Nature" framework it created.

GREEN CONSTRUCTION

The Municipality has assimilated green construction principles in its planning and building procedures, thereby offering an opportunity to make a significant change in the quality of construction and quality of life in Tel Aviv. This includes, inter alia, instituting green construction guidelines related to building permits, promoting the green design of new educational institutions in the city, encouraging greater energy efficiency in buildings, integrating green construction principles in existing neighborhoods, and circulating planning information dealing with green construction.

DESIGN AND DEVELOPMENT PLANS

The Municipality assimilates development plans and architectural designs deriving from an approved blueprint, whose purpose is to detail the design concept underlying the construction and development of a given project. Those plans specify the proposed buildings, their design and where they will be positioned on the lot. The landscaping concept and the relation between the building and its immediate surroundings are also presented. The plans aim to ensure a satisfactory link between the project and the adjacent roads and crossings (for vehicles, pedestrians and cyclists) – and facilitate improvements to that link and to the project's functioning in its environment.

CONSERVING WATER

The Municipality has for some time made considerable efforts to conserve the water used to irrigate public gardens. In recent years, hundreds of gardens, green strips and traffic islands have been connected to an irrigation system that is remotely controlled in real time and oversees all the sprinklers in every garden. To date, 72% of the gardening sites in the city have been connected to the system. This method of irrigation makes it possible to automatically open and shut all the sprinklers, monitor the amount of water allocated to each section of the garden, and receive detailed reports that track water consumption.

COMMUNITY AND ENTREPRENEURSHIP >

PRODUCING SOLAR ENERGY ON THE ROOFS OF THE CITY'S EDUCATIONAL INSTITUTIONS

Systems that produce green electricity and are used as solar power stations have been deployed at about 30 educational institutions in the city.

STREET LIGHTING COMMAND AND CONTROL CENTER THAT CONSERVES ENERGY

About 340 switch boxes have been connected to a single control center that manages all the street lighting in the city, taking into account the varying hours of daylight. Lighting in public spaces is reduced starting at 10:30 at night.

USE OF GREEN VEHICLES BY MUNICIPAL DEPARTMENTS

The Municipality uses environment-friendly garbage collection vehicles and trucks that adhere to the most stringent European standard (4-5). Different departments make use of electric motorbikes, whereas the Beaches, Inspection and Sanitation Divisions use electric bicycles.

USE OF RECYCLED MATERIALS IN MUNICIPAL CONSTRUCTION AND INFRASTRUCTURE WORKS

Substrate materials made entirely of crushed construction waste are used to upgrade sidewalks in the city. About 10% of all paving materials and curbs incorporate crushed construction waste. Up to 10% of the mixture used to upgrade roads contains crushed glass waste that increases the intensity of roadway lighting.

ENTREPRENEURSHIP CENTERS

The Municipality encourages entrepreneurs to avail themselves of coworking spaces where they can exchange ideas and create partnerships that could help them promote and develop their ventures. The coworking spaces, are open to the general public at a discounted monthly fee.

ASSISTANCE IN ESTABLISHING COMMUNITIES

Facilitated by social workers and other community workers, the Municipality enables residents to acquire knowledge and skills that will help them organize and act collaboratively in order to resolve problems, raise resources and generate processes of change in their surroundings, while applying democratic values.

YOUTH CENTERS

The Municipality runs youth centers in 17 neighborhoods around the city, which are part of the public community centers. They offer 7th-12th graders a variety of after-school programs and activities throughout the year as well as leadership groups, social learning centers, teen clubs, pre-army preparation groups, youth counselor courses, and much more. The centers also offer field trips and urban seminars, including special evenings and nighttime programs for teens during summer vacation.

YOUNG ADULT CENTERS

The Municipality runs centers for young adults that enable them to study, take collective action, initiate and organize, including: work spaces where they can work and study during the week, a social lab that offers social entrepreneurs

a coworking space, and open spaces (based on availability). These spaces are used by residents, social entrepreneurs, actors, nonprofits, artists and groups.

AFFORDABLE MUNICIPAL HOUSING

The Municipality promotes permits for thousands of units in affordable housing projects built on city land, in addition to incorporating affordable housing in zoning plans that are submitted to the Local Planning Commission for approval. The Municipality's investment in affordable housing projects accounts for about 10% of the municipal development budget.

TRAFFIC AND PARKING >

BIKE PATHS AND TEL-O-FUN

The Municipality is committed to increasing the use of bikes in the city. In recent years the Municipality has allocated a lot of land for bike paths, and the areas designated for bike riding continue to grow steadily. To date, more than 100 kilometers of bike paths have been paved in Tel Aviv.

The Tel-O-Fun bike rental project includes about 150 stations throughout the city. More than 3 million rentals of 1,500 bikes have been recorded thus far.

SMART PARKING SERVICES AT MUNICIPAL "AHUZOT HAHOF" PARKING LOTS

An automated parking service has been instituted at "Ahuzot HaHof" parking lots. Payment can be made using a digital wallet application that precludes the need to pay in cash or enter additional customer information. A customer who chooses not to enter their vehicle's license plate number via the application can still use it

to pay for parking by scanning the ticket they received when entering the lot.

PANGO, EASYPARK AND CELL-O-PARK PARKING SERVICES

Payment for public parking in permitted zones can also be made in Tel Aviv using a cell phone.

READINESS >

THE CAMERAS PROJECT DESIGNED TO HEIGHTEN THE SENSE OF SECURITY

The Municipality established a security & emergency command and control center, to which about 200 cameras installed in public spaces, public gardens, educational institutions, and municipal facilities around the city are connected. The cameras are meant to maintain public order and heighten the public's sense of security. The command and control center is equipped with analytical devices that automatically identify irregular incidents.

MUNICIPAL READINESS NETWORK

The Municipality runs a professional emergency network. It includes intake centers that are opened during states of emergency, which can cater to residents who have been evacuated from their homes.

The emergency network also consists of air raid shelters and underground parking lots deployed around the city, which have been inspected and approved by the Municipality as being safe. These shelters and parking lots are in addition to the protected spaces found in different locations.

SMART FOOD POLICIES >

PRODUCTION OF SUSTAINABLE FOOD

The City encourages the production of sustainable food through establishing and supporting a variety of community based programs and projects. These include over 27 community gardens spread across the city, vegetable gardens at schools and kindergartens used for educational purposes, the Municipal Agricultural Farm, 4 authorized fishing sites and a vertical gardening demonstration project at the Municipality's Young Adults Center.

CONSUMPTION OF SUSTAINABLE FOOD

In addition to encouraging its production, the Municipality also encourages the consumption of these sustainable foods through a set of policies and city-run programs, including: The National Nutrition program (implemented in partnership with the Israel ministry of Education)- serving hot and nutritional meals four times a week to school pupils, nutrition at after-school daycare frameworks - catering to about 10,000 children daily, canteens and catering at municipal properties and community centers, regulated prices of food and beverages sold at city beaches, nutrition for the elderly - totaling 62,400 meals per annum, parental training at the City's 16 post-natal clinics, and nutritional security for the 18,860 deprived households within the city (in collaboration with NGO's).

FAIR SHARED CITY >

In order to assure that all residents of the city are given the opportunity to enjoy its smart city services and policies, The City of Tel Aviv promotes a set of policies and programs lead by the Advisor to Mayor for Advancement of Women. This includes dealing with subjects such as: Gender strategic planning in public bodies; the balance between work and private life on the personal and organizational levels; preventing violence from a multicultural and global perspective; gender equality educational programs; and the implementation of the United Nations Resolution 1325 on Security and the Representation of Women.

EDUCATING A SMART CITY >

As a crucial part of the city's community and social fabric, the Tel Aviv educational system plays part in the overall Smart City policy, an example of this is evident in the "Just Spirulina Project", initiated and managed by students of the Herzliya Hebrew Gymnasium High School.

"JUST SPIROLINA"

An initiative lead by high school students, essentially forming a startup aimed at cultivating a cheap and simple method to grow Spirulina (Nature's most nutritious food). The project cooperates with high school students from around Africa- aiming at creating a method for sustainable growth of food through high school students in developing countries. If successful, this initiative will substantially assist in the global fight against hunger.

MEASURING THE IMPLEMENTATION OF SMART CITY PRINCIPLES IN TEL AVIV

Tel Aviv is the trailblazer among Israeli cities when it comes to actively implementing smart city principles.

A number of indicators were developed for each frame comprising the picture of the future, aimed at examining the changes in the city's position. The indicators represent the main essence of the picture of the future, the strategic course of action and the Smart City vision.

MEASURING "A CITY FOR ALL ITS RESIDENTS"

- > New apartments
- > New apartments - compared to other cities in metropolitan Tel Aviv
- > Apartment upgrades
- > The percentage of apartments that were upgraded in a particular area out of all the apartments in that area
- > Overall satisfaction with one's area of residence
- > The size of the population
- > Children
- > Children and senior citizens
- > Households with children
- > Matriculation entitlement
- > High school dropouts
- > Income
- > Apartment prices
- > Digital gap
- > Children under the care of child protection officers
- > Teen offenders
- > Children under the poverty line
- > Volunteer activities in the community
- > Communality
- > Representation of different sectors of the population in managing the Municipality

MEASURING "RESIDENT - ORIENTED GOVERNMENT"

- > Satisfaction with service centers
- > Satisfaction with the level of the Municipality's online services
- > Satisfaction with the level of transparency and participation of the city's residents in decision-making
- > The Municipality's own sources of income
- > Transfer of powers from government ministries to the Municipality
- > Promotion of collaborations that cross municipal boundaries

MEASURING "AN APPEALING URBAN ENVIRONMENT"

- > Hi-rise construction in the White City district
- > Open spaces
- > Satisfaction with the green spaces in one's area of residence
- > Street upgrades
- > Building renovations
- > Pedestrians on the city's streets
- > The seashore boardwalk for pedestrians and bike riders
- > Pedestrians on the boardwalk
- > Modal split
- > Use of public transportation
- > Parking lots

MEASURING "A FINANCIAL AND CULTURAL CENTER"

- > A concentration of Israeli and international banks
- > Gross local income
- > Number of people employed in financial and business services
- > Cultural events: plays, concerts, dance performances
- > Museums
- > The variety of cultural offerings

TEL AVIV STARTUP CITY

START YOUR JOURNEY IN TEL AVIV

With the highest concentration of startup accelerators outside the US, Tel Aviv is the ultimate choice for your startup.

Tel Aviv has evolved into one of the world's leading technology and innovation hubs. The Nonstop City is the ultimate destination for entrepreneurs to gain knowledge, skills and experience with an incredible amount of leading multi-national accelerators and entrepreneurship programs.

Tel Aviv's leading multi-national accelerator programs and R&D' centers include:

Siemens | PayPal | Google | Coca Cola | AoL | IBM | Apple
Deutsche Telekom | LG | facebook | Barclays | citibank | Microsoft
intel | 3M | ebay | amadeus | Yahoo! | Samsung | Check Point

We Offer:

- Travel support and practical information
- Tailored advice an mentorship
- Networking with investors, VC's, industry experts, accelerators, etc.
- Round-the-clock access to one of Tel Aviv's hottest co-working spaces
- Access to Tel Aviv's 24/7 startup scene (meetups. Workshops and hackathons)

* For further info and details regarding Tel Aviv's accelerator programs, see page 63 .



PARTNERS



Photo: Kfir Bolotin





SAFER CITY WITH MOTOROLA



Motorola Solutions is a leading provider of mission-critical communication solutions. Our products enable seamless communications among government, enterprise and public safety bodies, enabling them to carry out the mission-critical tasks that keep communities safe and help enterprises thrive. Our offering answers communications related needs in a variety of industries, for a broad range of diverse organizations within manufacturing, hospitality, law enforcement, fire, emergency medical services, transportation and logistics, education, energy, utilities, municipal and government.

In Tel Aviv, Motorola supplies the communications, information gathering, Command and Control and analytics infrastructure, crucial for creating a safe and secure urban environment. Partnering with Tel Aviv Municipality Motorola provides the end-to-end project management, integration, implementation, maintenance and support that deliver the value promised by Smart City Tel Aviv.

Founded in 1928, Motorola has a history of innovation that has revolutionized communications. From pioneering mobile communications in the 1930s thru Apollo 13 moon landing communication management in 1969, to modern-day emergency response equipment for disaster relief efforts around the world, Motorola has a global footprint with solutions that demonstrate our thought leadership and commitment to help our customers be their best in the moments that matter.



A SAFER CITY WITH CHECK POINT



Check Point
SOFTWARE TECHNOLOGIES LTD

Founded in 1993 and co-headquartered in California and Tel-Aviv, Check Point is the largest worldwide pure-play security vendor. It provides industry-leading solutions that protect customers with an unmatched catch rate of malwares and other vectors of attacks, and offers the most comprehensive and intuitive security management that defends businesses of all sizes.

Check Point first pioneered the industry with FireWall-1 and its patented stateful inspection technology making its mission to always stay One Step Ahead of cyber threats.

In Tel Aviv, Check Point provides a consolidated end-to-end cyber security infrastructure to the cameras that monitor the city transport routes, giving a real-time picture of the traffic. All cameras around the city are connected to the main datacenter servers, transmitting secured information which is also backed up on an encrypted cellular interface.

In addition, Check Point provides the entire security solution for the Municipality's services connected to the Microsoft Azure Cloud Platform - So that the City of Tel Aviv enjoys the most advanced and stable solution with the highest, uncompromising security level – **One Step Ahead!**

Check Point secures hundreds of thousands of businesses and millions users, providing customers with leading security products for Threat Prevention, Mobile security, Firewalls, Security Management and much more. It is publically traded (NASDAQ: CHKP) with approximately 4,000 employees worldwide.



DIGITAL CITY PROGRAM BY TSG



TSG is a global provider of Defense, HLS, Cyber security, Government and Municipal solutions with 40 years of proven record. TSG is privately held by Israel Aerospace Industries - IAI (50%) and Formula Systems (50%). TSG offers unique solutions and services based on our expertise in software development, data mining and fusion, big data analytics, cyber security and telecommunication.

TSG's record of excellence in delivery is achieved through exceptional and innovative technology, experience and project management abilities.

Urbanization and technological acceleration force municipalities to provide superior services via modern channels and 'up to date' tools that suit the people of the city and meet their expectations. It is all about adjusting to the modern era.

TSG has partnered with Tel Aviv - Yafo Municipality in regards to the Digi-Tel program. Tel Aviv was distinguished as the 'Best Smart City in 2014', beating 250 cities around the globe for their Digi-Tel program in the annual Smart city expo in Barcelona. TSG is the exclusive authorized distributor of its 'Digi-Tel' project.

Digi-Tel enables a variety of new online services, improvement and optimization of existing services, personalization, engagement, sharing and all aspects of communication and dialogue between the Municipality and the people of the city - residents, business owners, workers, visitors and tourists.

For further details, please contact:
David.Grau@tsgitsystems.com | www.tsgitsystems.com



WHAT IS CITYNEXT?



Cities, and the people in them, are the hearts and souls of our nations, with over 50 percent of the world's population living in urban areas for the first time in history. But they are also facing daunting issues as the march toward urbanization unleashes a new wave of challenges; from the need to modernize aging infrastructure in older cities to scaling the demand for natural resources and sustaining the health and safety of their citizens. This is all unfolding in the midst of an extended global economic downturn and far-reaching austerity programs that have reduced citizen services and limited economic growth. While the need to do more with less is evident, it is imperative to broaden today's conversations around smart cities to doing New with Less to deliver both economic and social opportunities to citizens. Because at their core, cities are about people.

Microsoft CityNext is a people-first approach to innovation that empowers government, businesses, and citizens to shape the future of their cities. People-first means harnessing all the ideas, energy, and expertise of a city's people as they create a healthier, safer, more sustainable place to live. Microsoft is uniquely equipped to enable this people-first approach. No other company offers as broad a portfolio of secure consumer-to-business software, devices, and services; a vast network of global partners; and a history of successful education and social programs, all of which, when combined, help cities with what's next.

Can you imagine what's next for your city?
www.microsoft.com/en-us/citynext



TRAFFIC VIOLATIONS ENFORCEMENT



Safer Place develops an innovative, award-winning video-based technology platform to enhance high-risk traffic and parking violations enforcement. The platform detects all types of moving violations: Disobey road signs, Failure to Yield, Mobile texting, Crossing solid lines, Driving in bus lanes, Illegal turns & all types of urban parking violations: Blocking the sidewalk, Parking on a crosswalk, In a bus stop, Double parking and more.

Our solutions are field proven, reliable, and fully operational generating hundreds of thousands of tickets across EMEA. Safer Place generates digital tickets to reduce human errors and produces blurred videos and images to comply with local privacy regulations.

With Safer Place solution we make the smart city smarter: improve road safety for drivers and pedestrians, increase manpower productivity, reduce legal appeals and generate incremental revenue with no upfront investment required by the customer.

Safer Place delivers to Tel Aviv municipality a successful project improving all major aspects: reduced # of violations over time, increased public order, improved traffic flow, increased efficiency and reduced number of appeals.

For further info, please contact us at info@saferplace.com or visit www.saferplace.com



RIDING IN TEL AVIV WITH FSM



FSM Ground Services specializes in public bike sharing projects.

The "Tel-O-Fun" service, executed by FSM, has changed the face of Tel-Aviv and its surrounding cities. With more than three million bike rentals a year, 200 stations, 25,000 subscriptions and more than five years of experience, FSM has established itself as an expert in the bike sharing market.

FSM provides professional support for setting up, operating and maintaining complex bike sharing logistic systems.

FSM focuses mainly on municipal and institutional projects. Our complete and comprehensive service is comprised of planning, implementing and maintaining a sophisticated setup of varied numbers of bikes, tailor-made for city-use and simple to control and maintain.

FSM's solution can be tailored for hundreds of stations implemented on a municipal scale or modified for much smaller sites such as universities, colleges, hospitals, big companies' facilities etc. The project is executed with constant collaboration with the initiating authority. Being responsible for all aspects of the project allows us to be very competitive with regard to the cost of bikes, stations, maintenance and training.

You can find more relevant information on our website:
www.fsm-tlv.com



GAZPACHO AND THE CITY



The Challenge: Managing a city like Tel Aviv requires an infinite number of field activities done by thousands of field workers, subcontractors and others, all working hard to provide high quality, efficient and responsive service to hundreds of thousands of residents and visitors. Effective management of initiated & occasional events requires continuous monitoring and control.

The Solution: Gazpacho, developed by Netalizer, with a tight integration Tel-Aviv's back office information systems, offers a solution to those challenges in security, protection, education, gardening, sanitation, signage, transportation and many more.

As a Result: Gazpacho enabled flexible and affordable response to any mobile need that arises in the city. The city gained huge savings in costs and resources, optimization and streamlining of the field activities and a significant improvement in quality of service to it's residents and guests.

GAZPACHO in General: Gazpacho lets everyone to quickly create and deploy his own mobile apps, such as real-time field reporting and centralized task management, in a field-proven, secure environment ideal for every size and type of organization. Our unique recipe includes forward-thinking features like legally valid signing capabilities, document scanning, video sharing, integration with other programs and the ability to work on any device, online or offline.

Gazpacho offers set of tools designed to help you meet your mobile short and long term needs.

Contact us at info@netalizer.com or visit our site: www.gazpachomobile.com



SEAMLESS MASS-TRANSIT MOBILE TICKETING



HopOn is a seamless mobile ticketing platform which allow hassle-free and real-time validations at mass transit networks. Based on its Big Data Analytics, cities are able to improve their Public Transit efficiency and to enhanced their User Experance.

In crowded metropolises around the world, citizens are wasting billions of minutes daily, with on-board validation which can take 4 minutes at crowded stop. In a city like Tel Aviv, 4M minutes are being wasted every day, and the implication isn't just disgruntled passengers, since, economically cities are facing huge losses on vehicles, drivers, fuel and city air-pollution.

HopOn's is changing the way public transit is being used, by replacing the old-fashioned ticketing points with wireless ticketing zones which allow **Seamless Mobile Ticketing**. By using its beacon technologies (BLE & UltraSonic based), alongside motion detection algorithms, it makes ticketing as simple as "Hoping-On" a bus.

Using the HopOn beacons, we've established a patent pending, seamless experience as a low cost solution that allow multiple seamless validations at mass transit networks, in a way that even if 20 passengers are boarding the bus/tram/train at a single station, all of them can validate and pay their ride at the same time. While on the same time, as a result the city is getting real-time validation analytics which helps for adjusting the network in real-time.

Since 2015, HopOn is providing its mobile ticketing services in Tel Aviv, covering local buses and bike-share networks. Over the past year HopOn had engaged with European cities to establish its services.

For more info, please visit us at www.HopOn.com



SOCIO-ECONOMIC TRANSFORMATION



DCF Advisory partners with governments, businesses and communities to accomplish nation transformation initiatives to align boardroom policy with grassroots action. DCF is working closely with Government of India on critical development projects like Smart City Mission, Smart Village and State Transformation Office to support socio-economic transformation. DCA has joined hands with Tel Aviv Municipality, the World's Smartest City and the Palladium Group, world's largest positive impacts solution provider.

DCF's 5 STEPS TO TRANSFORMATION: DELIVERING SMART CITIES

- 1. Emotional Connect Program:** Involving local community networks, DCF has achieved penetration rates of >50% to engage citizens throughout the smart city transformation process.
- 2. Multi-Stakeholder Consensus Based Planning:** Municipal Bodies, Politicians, Government officials, NGOs, private sector, academia and beneficiaries must reach a consensus on way forward to ensure smooth implementation.
- 3. Setting Up Transformation Office:** DCF takes the entire municipality through the process to make it work by setting up a mission room to work along with implementation agencies.
- 4. Performance Monitoring, Tracking & Problem Solving:** DCF ensures success of any transformation initiative by using Implementation Tracking Tools, KPI Dashboards and Project Scorecards.
- 5. Platform for Raising Finance & Identification of Solution Providers:** Various types of Finance requirements like Project finance, Public-Private-Partnerships models, CSR funding coupled with the right solutions ensures the right implementation.

Contact Us: contact@dcfadvisory.com



COME JOIN IN TEL AVIV'S ACCELATOR PROGRAMS

START TEL AVIV

An intense week-long program for young entrepreneurs, offering workshops, lectures and practical mentorship from leading industry experts.

LAUNCHPAD TEL AVIV

An accelerator program aimed at early stage startups, at the end of which they launch their minimally viable product (MVP), with support and practical mentorship from industry experts and late stage entrepreneurs.

ACCELERATOR ACADEMY TEL AVIV

Academic courses (from one semester up to year-long course) taught in collaboration with leading academic institutions offering theoretical and practical knowledge in fields in which Tel Aviv is on the forefront globally: smart cities and institutional innovation, technology transfer, building and promoting entrepreneurial ecosystems.

For more information please contact:

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Scan for
more
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