

# MAYOR, WHATEVER YOU WANT TO DO, DATA CAN HELP YOU DO IT BETTER



*An open letter to the next Mayor of London by Eddie Copeland, explaining why they need a London Office of Data Analytics*

To the new Mayor of London,

Congratulations on your election victory! No doubt you're impatient to start delivering on your campaign promises. Just before you do, I'd like to highlight one point: no matter what your policy priorities for London, you'll need data to deliver them.

If you want to tackle urban deprivation, improve air quality, combat congestion or increase the availability of affordable housing, you'll need data. Data to diagnose the scale and distribution of those problems and the demand to be met.

If you want to support London's boroughs and public sector bodies in reforming public services, both you and they will need data. Data that spans the whole of the capital to see how specific issues transcend local authority boundaries. Data to marshal the city's finite resources at areas of greatest need. Data to predict and prevent problems from occurring – or at least intervene earlier when they are simpler and cheaper to resolve.

Did you mention that you wanted to support London's businesses? You'll need data for that, too. Data on how transport routes affect economic activity, data on consumer spending by street, data on footfall statistics. And would you like to model the economic impact of your policies before you implement them? You can! But – well, you can see where this is going.

In short, though in isolation it's no panacea, it's hard to overstate the importance of data to the success of your agenda.

### **So here's the problem.**

When you enter City Hall for the first time as Mayor of London, you will find that the data at yours and your staff's disposal is very limited.

Let me be more specific:

- With the exception of planning applications, City Hall does not systematically collect any data from the 32 London boroughs or the City of London.
- Most of City Hall's data comes from central government departments, but that data is often already aggregated, preventing granular analysis.
- With just one exception (Transport for London's [Unified API](#)), the data is historic and static, not live and dynamic.
- The datasets you do have access to are only available because someone at City Hall thought to ask for them. There may be thousands of other datasets held by central government departments and other agencies that would be useful to you but about which you have no knowledge.
- City Hall has around 40 staff in data-specific roles, doing excellent work in the field of data science and analytics. Yet the majority of their time is spent producing reports, funded by one-off innovation grants that provide a moment-in-time snapshot on specific issues. Useful, absolutely. But they lack the continuous funding and resources to provide you with live data insights to inform your strategic and day-to-day decision-making.

### **It's not just City Hall that faces data challenges. Consider London's boroughs.**

All of them use and create data in the course of running their services. Some have grown very sophisticated at mapping their data to show the location and intensity of the issues they address. But, for the most part, they don't have access to data on those exact same things beyond their boundaries. Like a jigsaw that has never been put together, London's local authorities have all the pieces, but no one – not even you as Mayor – can see the whole picture.

Why is this? Different organizations use different IT systems, some of which don't easily enable data sharing. The public sector uses dozens of different data standards, formats and conventions, creating the digital equivalent of comparing apples and oranges. And there are cultural, organizational and (perceived and real) legal barriers: organizations feel protective of their data and are, rightly, cautious about sharing it.

Whatever the causes, this data blindness is a serious problem given that Londoners don't conveniently live and work out their lives in one borough. Communities, business districts, areas of deprivation, crime, littering and school catchment areas frequently cut across borders. London cannot live up to the challenges it faces as 33 separate islands.

**And despite being widely regarded as a world leader in the field, the open data available to London's citizens and businesses has several shortcomings.**

First, it's often released at too small a scale to enable significant innovation. Less than a third of London's boroughs share their data via the [London DataStore](#) – the capital's official open data portal. The rest release theirs on their own websites or not at all. This fragmentation makes it incredibly hard for potential developers to create a viable business model from an open data product. When the typical price of an app is around 69p, and revenues from advertising are just a few pence per click, developers need a larger potential customer base than the residents of just one local authority area. (And who wants 33 separate apps just to park or report potholes?)

Second, few investors and entrepreneurs will risk their own time and money to build products with open data unless its provision and quality are guaranteed. But no such guarantees can be made. That's because releasing open data is not cost-free. At the very least it requires the resource time to provide sufficient support for those who wish to use it. Given the current pressure on public sector finances, some councils may cease providing open data altogether if they see it as nothing but a cost center.

Third, the flow of information is in just one direction. Businesses, charities and citizens can receive data from government. But there is no official mechanism to provide data to government. That's a huge missed opportunity when many – if not most – of the highest value datasets about the city are held by corporates, charities and citizens.

For one of the world's leading global cities, I don't believe this is adequate.

If you agree, I have a suggestion for what you could do.

**We need a London Office of Data Analytics (LODA).**

The model is inspired by the Mayor's Office of Data Analytics in New York City ([described here](#)), but significantly adapted to meet London's particular needs and very different political environment.

LODA would be a small team, based in City Hall that had the resources, technology and expertise to bring together, translate, analyze and provide actionable insights from data sourced from all local authority and public sector organizations across the capital. Those insights would be made available to improve data-driven decision-making by the 32 boroughs and the City of London, London's public sector bodies, the GLA, and, of course, you as Mayor. A subset of LODA's data would be made available to the general public as open data via the London DataStore, which would be converted into a city data market that connected organizations and individuals that had useful data with those that wanted it.

LODA would be led by a Chief Data Officer (to be clear, a separate role from the [Chief Digital Officer](#) proposed by the Centre for London). The team would be made up of three parts – a model that Manchester is currently pioneering with its [GM-Connect](#) program:

- 1) Data Analytics team** – responsible for using data analytics to: combine datasets from different sources to create London-wide maps showing how specific issues / demand / events / objects transcend borough boundaries; target resources at areas of greatest need; spot correlations that can predict where problems will occur to enable preventative action; model the impact of emergency scenarios / future growth / new legislation; create visualizations so that data can be understood by all policymakers; provide open datasets that cover the whole of London.
- 2) A technical team** – responsible for implementing and managing the technology required to automatically pull data from IT systems in London's public sector bodies and translate between the different data standards they used.
- 3) A legal team** – responsible for providing hands-on Information Governance, legal advice and contract-writing assistance to ensure that public sector bodies are able to share their data with LODA responsibly, ethically and in accordance with all relevant data legislation.

LODA's creation need not be expensive.

The New York version started with just two people using Excel spreadsheets. They only expanded their operations where they could prove that data interventions provided a clear return on investment. In London City Hall there are already staff with the requisite data skills. And thanks to [Witan](#) – a project funded by Innovate UK in which the GLA is working with an SME called Mastodon C to build a city modelling platform – you have much of the technology you need as well.

What would such a team enable? Almost anything you can imagine, but to give a few examples:

- **Support the expansion of shared services.** By creating maps of demand that span the whole capital, LODA could help councils make more informed decisions about where they can join with neighboring boroughs to run or jointly fund specific services – a [proven means](#) of making significant savings.
- **Prediction and prevention.** By correlating datasets from different sources, LODA would be able to help predict where problems are likely to occur in the future and support public sector bodies in targeting early interventions more effectively. This could be applied to anything from tackling the blight of beds-in-sheds to improving support for troubled families; and from fighting tax and benefits fraud, to improving the effectiveness of food safety inspections. (This would be achieved using the [ten-step data model developed in New York City](#).)
- **Support business growth.** by using the city data market to source corporate datasets, LODA could help businesses find the best location to set up shop and optimize opening hours. For example, mobile phone operators collect data on the location of their users. That data could be aggregated and anonymized to show footfall in every street at different times of day, or days of the week. And with 75% of all spending in the UK retail sector made using credit and debit cards, companies like MasterCard have data on patterns of consumer behavior within a city, which could reveal where certain types of products are favored.
- **Spread digital skills.** LODA would become a catalyst for promoting and extending the use of data analytics throughout the city's public sector bodies. Having created a data model to improve a particular service, they would train up and delegate its running to the team responsible for that service. LODA could also collaborate with local universities and the Digital and Future Cities Catapults to run data analytics training courses for public sector leaders and workers.
- **Improve Open Data.** LODA would solve the three shortcomings of London's open data. By enabling public sector bodies to use their own data to drive service efficiencies, it would make open data financially sustainable for the long term and improve its quality. By stitching together datasets from multiple sources it would provide data covering the whole city. And by converting the London DataStore into a [City Data Market](#) – it could help open up and access data from businesses, charities and citizens too. (This is not fanciful: the GLA's Andrew Collinge is already leading the way with the recommendation to create such a market or "City Data Exchange" in his [City Data Strategy](#).)

**For this to work in London, you would need to do three things:**

**1) Make a public, long-term commitment to data-driven government.** Data will only deliver genuine transformation to the way London is run if the message is delivered right from the top that this is how London's public sector works. It will take your leadership to overcome the cultural and organizational resistance to change.

**2) Appoint a Chief Data Officer.** They must be a senior mayoral adviser responsible for ensuring data is completely ingrained into decision-making at City Hall.

**3) Work to win the backing of the boroughs.** Much of the data on which LODA would depend would come from London's boroughs. Securing their support needn't be impossible – LODA is neither a partisan idea nor a tool to increase the control of the Mayor's Office and the GLA – it's a fundamental tool of good government. But pointing out two things would help win their backing:

First, don't call it the "Mayor's Office of Data Analytics" (as per New York), but the London Office of Data Analytics. This is not just semantics. It highlights that LODA is a resource designed to benefit the whole of London, not just you as mayor. In fact, perhaps it deserves a better name altogether – how about the "London Centre of Data Innovation" (proposed by Andrew Collinge), "London Data Insights Team", or "London Data Service" – that emphasizes making the data useful and used rather than being an end in itself.

Second, let it start by focusing on data initiatives that support the boroughs – particularly their urgent need to reform local public services. This is something they can't do for themselves. If each borough tried to negotiate individually with the other 32 councils to share their data, it would require setting up 528 one-to-one data connections.

By contrast, LODA could set up a single data exchange with each council (33 in total) to bring their data together in one secure location. This would save a huge amount of time, money and effort – not least in translating between all the different data standards used across the capital. (And as Paul Maltby, Director of Data at Government Digital Service, [has suggested](#), even central government struggles to hire experienced data scientists.) Additionally, LODA could combine local authority data with datasets from the Metropolitan Police, the London Fire Brigade and other London public sector organizations to provide insights in a way that would not be possible on a borough-by-borough basis.

## **So where now?**

As things stand, as Mayor of London you do not have visibility of what is happening in the city you have been elected to lead. London's councils and public sector bodies do not have the data they need to deliver reform at a scale sufficient to meet the daunting financial challenges they face. And London's businesses, charities and citizens do not

have the open data they require to support significant innovation from outside of government.

A London Office of Data Analytics is the first step to address all these shortcomings.

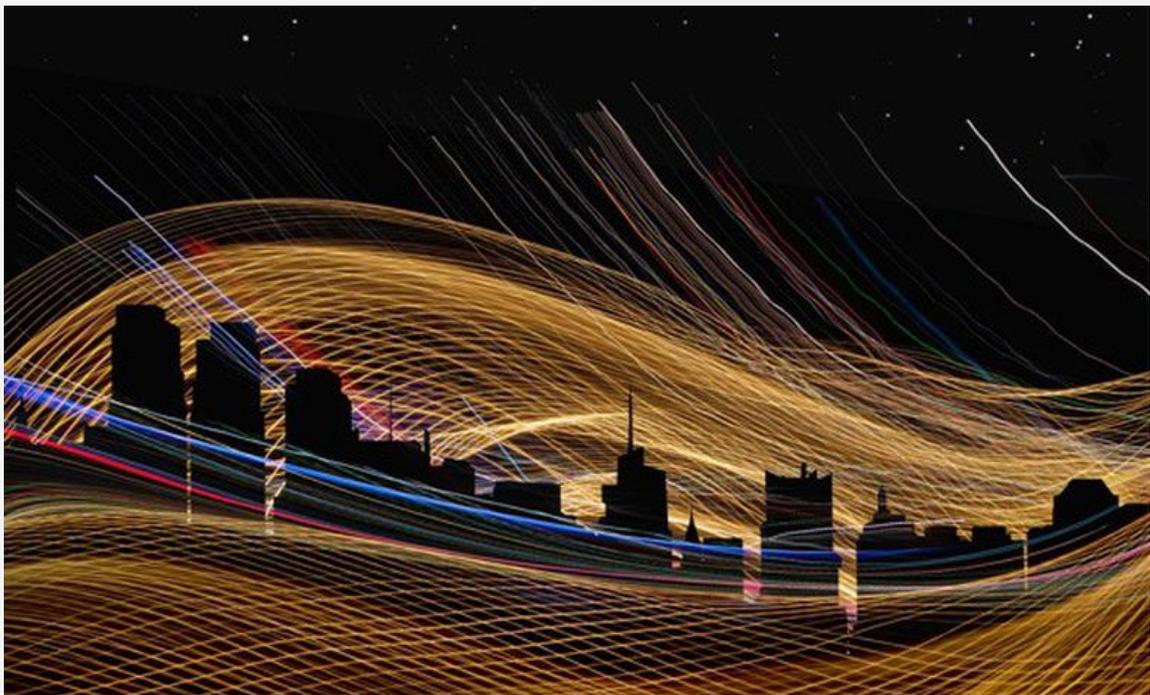
It will take your leadership to establish.

And if you're looking for an organization that has the time, resources and expertise to make it happen, Nesta is here to help.

Yours sincerely,

Eddie Copeland, Director of Government Innovation, Nesta Innovation Lab

# MAKING DATA THE PLATFORM FOR CIVIC INNOVATION



*In the second of our series on City Leaders turning insight to action, we present three key takeaways on “City as Datavore” from the Barcelona Smart Cities Expo CITIE working session.*

**CITY LEADERS TURNING INSIGHT TO ACTION**

## – MAKING DATA THE PLATFORM FOR CIVIC INNOVATION

Building upon the success of the [CITIE framework](#), the *CITIE-consortium* hosted a working session with a select group of global city leaders and policy experts at the Barcelona Smart Cities Expo. Over 15 cities sent representatives to the session, where we explored two of the key policy roles in detail, [City as Customer](#), and [City as Datavore](#).

In our previous blog, we looked at how city leaders can open up procurement to attract start-ups and encourage innovation. In this blog we'll look at a fundamental element of driving innovation in the digital age: data.

Data is an increasingly valuable economic asset and an important raw material for civic and business innovation. Cities already produce a great deal of it, covering everything from school results to bus timetables and energy consumption. And we'll see the range, volume and frequency of data expanding rapidly as cities install sensors into everything from streetlights to parking bays. Opening this data for others to experiment and innovate can lead to a new source of economic growth for a city. Big and Open Data is expected to improve European GDP by 1.9% by 2020.

We asked city leaders how they use data to optimize services and support innovation. Below are the key insights we gathered, along with some examples of approaches in action.

### 1. *Measure the success of open data by its outcomes*

Publishing open data is just the first step in developing an open data policy. Cities must focus on outcomes and value creation. That means consuming their own data to develop new insights, maintaining and improving existing data, and pushing it out to the innovation ecosystem to use, co-creating and developing new products and services. Just as New York City's [BigApps](#) challenge did when it asked developers, designers and entrepreneurs to create new tools for solving issues around affordable housing, zero waste, connected cities, and civic engagement.

Open data success should be measured by outcomes, not just inputs, ie has the publication of open data sets created value for citizens? In London for example, opening transport datasets led to the development of [Citymapper](#). This app takes open transport data and turns it into insightful, real-time travel advice for users, and is so successful that it's installed on over half the smartphones in London.

### 2. *Lead from the front*

Cities should lead by being the first ‘customers’ to invest in the use of data sets. By doing so they can show others how to use them and demonstrate the insights available. This should be integral to how the city works, transcending politics. Using data effectively to revitalize internal operations will help make data a systemic element of how the city works.

Milton Keynes, through its [MK Smart](#) program, uses charging data (energy quality, time profiles and geographical distribution) to optimize the network of charging stations across public spaces. This reduces capital expenditure and optimizes operational expenditure, with clear benefits for end-users and operators, including the city.

### ***3. Build an open data marketplace***

The value of city’s open data stores will increase when combined with private data as well as data from other public departments. Cities should consider opening up their data stores to datasets from the private sector, other government departments as well as relevant regional and national datasets. Service level agreements (SLA) can be used to standardize how data is provided.

However, cities also need to ensure that data provision and exchange is a two-way process that offers demonstrable benefits to all parties by creating valuable new data and insights. Waze, a consumer traffic management app, shows this reciprocity in action. As well as enabling better journeys for drivers, Waze works with cities such as Los Angeles to draw on municipal traffic datasets and then feeds back data generated by users to the city so that it can, in turn, improve traffic management.

Data is at the heart of digital innovation. By opening up their valuable datasets to others, cities can drive the experimentation and collaboration that will ignite new solutions to familiar challenges and spur economic growth. An open approach to data will create new possibilities bounded only by the imagination, and the time to start is now.

# LEADING FROM WITHIN: THE CITY OF AMSTERDAM'S INNOVATION AGENDA



*An interview with Katalin Gallyas from Amsterdam's Chief Technology Office*

*Katalin Gallyas is an Open Innovation Programme Manager in the City of Amsterdam. CITIE interviewed Katalin to understand how Amsterdam has built its teams and leadership inside city government to support innovation and entrepreneurship.*

**CITIE: Thank you for joining us today. Looking across the cities we have assessed, Amsterdam is one of the leaders in implementing smart initiatives. Why does Amsterdam’s city government put this focus on innovation and entrepreneurship?**

**“We focus on attracting high growth technology startups to the city which has a direct impact on jobs and growth.”**

Having a vibrant entrepreneurial and innovative community is also essential for combating complex urban challenges. **Katalin Gallyas:** Amsterdam considers innovation and entrepreneurship to be central to the development of the city. We focus on attracting high growth technology start-ups to our city which has a direct impact on jobs and growth. Start-ups also help to attract domestic and foreign investment to the city.

**CITIE: Why did the city decide to create the role of Chief Technology Officer?**

**Katalin Gallyas:** We created the role in March 2014 and Ger Baron became Amsterdam’s first CTO. There were a number of important factors behind why we did this.

First it was to break down silos between initiatives and support the co-ordination of city-wide ICT efforts. The CTO is responsible for providing the overall leadership and strategic direction to how technologies will be utilized to improve the livelihoods of Amsterdam’s residents.

Coordinating projects across multiple government agencies is difficult. Indeed, every office has different stakeholders and incentives which need to be taken into account when formulating proposals. The CTO provides a consistent face and access point for our external stakeholders and facilitates integration between various governments agencies involved in the initiative.

Finally, significant navigation of the political landscape is required for initiatives to be successful. By nature, political decisions are not always focused on the long term or purely based on evidence. As an example, a traffic accident involving smart-traffic applications could set back a program several years, even if it makes economic sense. The CTO position was in part created to help solve some of these challenges and put the innovation agenda at the top of the city’s priorities.

**CITIE: Looking across city governments we have seen a number of different ways innovation teams structure themselves. How does Amsterdam structure the CTO role?**

**Katalin Gallyas:** We work with the Chief Scientific Office and the Chief Digital Office to coordinate our efforts. Importantly we are given liberty to work across functions horizontally and directly report to the Mayor with no middle management. This is vital to

ensuring our work is kept at the top of leadership agenda and we are able to successfully run complex, multiagency programs.

**“We want to support all civil servants to become change makers.”**

**CITIE: Amsterdam has a significant number of smart city projects, 44 at the last count. How do you deliver such a large number of initiatives?** Our team does not work in isolation. The CTO encourages all civil servants to become innovators. We aim to create an inclusive office space where civil servants are encouraged to submit ideas or join the office for a period of three months. This creates better linkages within City Hall and influences the decisions civil servants make in their day-to-day jobs. Ultimately we want to support all civil servants to become ‘change makers’.

**Katalin Gallyas:** Our approach has been collaborative from the outset, motivating and coordinating multiple stakeholders both outside and within government. At the start of the Amsterdam Smart City initiative, the city encouraged both the local telecommunications providers and the electricity company to develop infrastructure that would support city-wide applications. The local infrastructure providers offer funding and manage the infrastructure while Amsterdam city government co-ordinates the open innovation projects. This formed the foundation for all the later Amsterdam Smart City initiatives.

**“The city may need to push things in the beginning, find incentives for different groups to work together and then give space to let things evolve.”**

The city is unique in this role as there is no other entity in the city that can provide this sort of co-ordination. In this way we have shifted our role to acting as a platform for innovation. The city may need to push things in the beginning, find incentives for different groups to work together and then give them space to let things evolve. A basis for our work is in public-private partnerships and we now have eight full time staff matchmaking city initiatives with academia and private businesses. This team reaches out and defines the value proposition for each stakeholder. For example, each one of our three living labs has been established in partnership with technology companies. In total across our initiatives we work with more than 70 external partners.

**CITIE: Amsterdam has been running smart city programs since 2007. How has the city’s thinking and approach evolved over this time?**

**Katalin Gallyas:** We used to look a lot at technical feasibility, particularly in our first stage that was largely about piloting projects and practicing collaboration efforts in the community. Now that we have a strong network and platform, we focus on things like scalability and the business case behind each new project.

**“We focus on things like scalability and the business case behind each new project.”**

**CITIE: What lessons from these experiences would you give to other cities looking to follow in Amsterdam’s footsteps?** In the current second wave of initiatives we are working with city-run and affiliated entities, such as schools, energy providers and housing agencies, to focus on using open architecture with a smart focus. This helps us scale-up projects to meet the needs of a much larger population. In many cases the private sector now offers initial funding for potential solutions in exchange for future revenue streams.

**Katalin Gallyas:** There are three lessons I would highlight from our experience in Amsterdam.

First is that you should move to identifying good business plans and using modelling to understand economic impact as quickly as possible. This includes focusing first on the challenges you are trying to solve and the solutions needed, rather than the technology that moves too quickly and cannot follow. This will help facilitate city planning.

**“Cities should not be afraid to talk about and learn from failure.”**

Finally cities should not be afraid to talk and learn from failure. There are winners and losers when creating new business models and cities will need the ability to openly address failures. This is particularly true as solutions get larger, more complex and involve an increasing number of stakeholders. The second lesson is embedding openness into everything you do, from city infrastructure to the policy making process. Throughout the development of different initiatives cities should work to maintain engagement with citizens. They should also use multi-financing models made up of different stakeholders from industry and academia.

**CITIE: One final question, looking to the next couple of years what is coming next for Amsterdam and what challenges will this bring?**

**Katalin Gallyas:** We have many initiatives in the pipeline but one of the next big things will be i-beacons. We want 1,500 of them across the transport network that can push personalized information to citizens.

This however leads me onto one of the larger looming challenges – privacy. The more personal data we collect, the more questions we raise about the security of the data and the way it is used. This is something cities are going to have to grapple with over the next couple of years.

**CITIE:** Katalin, thank you very much for your time. It has been a thoroughly insightful look into Amsterdam's success.

**Katalin Gallyas:** No problem at all. Please do keep me updated with your work on CITIE as I would like to start using your materials with my team.

# CURATING A NEW DIGITAL RELATIONSHIP WITH CITIZENS: LESSONS FROM TEL AVIV



## *An interview with Liora Shechter, CIO Tel Aviv-Yafo Municipality*

*Liora Shechter is the CIO for Tel Aviv Municipality. CITIE interviewed Liora to understand how Tel Aviv-Yafo Municipality is using technology to curate a new relationship with its residents.*

**CITIE: As we look across the cities we have studied, Tel Aviv is a leading example of the way you use technology to interact with citizens. What prompted the city of Tel Aviv to look to start building this new relationship?**

**Liora Shechter:** We view our residents as clients: clients that want to work, socialize and live in Tel Aviv. However, a few years ago we performed a number of resident surveys and the results were somewhat surprising. When residents were asked what they thought about Tel Aviv as a city, most used very positive adjectives: non-stop, lovely and young. But when we asked about what they thought about the government, the answer was very different: bureaucratic and transactional notions such as taxes and parking tickets dominated their thoughts.

**“We noted that residents had a growing expectation for online information and participation options.”**

We noted that Tel Aviv’s residents had a growing expectation for online information and participation options, and a growing will to influence the city through digital means. It was our desire to provide options for that, a digital solution that would build on trends like personalized services, and that responded to residents’ preferences. We saw this as an opportunity to change the relationship between residents and the municipality and shift away from the perception that the municipality was just about paying taxes. We started pursuing a more resident-oriented city government.

**CITIE: How did Tel Aviv manage the transition to a more resident-oriented form of city government?**

**Liora Shechter:** The first stage was to change the way we perceived the resident, what personal information is important for us to have in order to provide them with better and innovative services. It was clear to us that we needed to expand the range of services over the ones traditionally given by the municipality. Our assets were e-governance orientated ICT projects already in place.

It was for this purpose that DigiTel was created – to act as a platform composed of over 30 projects, and allow for the sum of Tel Aviv’s ICT projects to be greater than its constituent parts.

DigiTel launched in 2013 and is a streamlined online engagement platform which has been pivotal in our transition to e-governance.

**“Through DigiTel, the municipality is providing customized digital services to residents.”**

**CITIE: Let’s talk more about DigiTel. What does it offer to residents?**

**Liora Shechter:** Our vision for DigiTel was to provide residents with a single interface with the city; a digital, innovative, streamlined and easily accessible platform through which all interactions between resident and municipality could occur. That's what we achieved.

DigiTel is a personalized digital communications network, designed for residents with a focus on their interests, location, day-to-day activities and transport options.

Open to all Tel Aviv residents aged 13 and over, DigiTel allows the municipality to build a personalized view of each of the residents. On the basis of this unique view, Tel Aviv is able to offer residents relevant information, activities at their local community centres, special deals on interesting events at cultural venues and sports arenas. The information is delivered via messages and notifications.

**CITIE: The personalization DigiTel facilitates is a very unique aspect. Could you give us a view of how this works in practice?**

**“DigiTel has made some previously burdensome tasks simpler and resident-orientated.”**

**Liora Shechter:** Yes you are right, we believe our personalisation efforts are world leading. Indeed, the 'Residents Card' is unique to Tel Aviv and enables the city to learn about its citizens' interests. Through the card, residents are able to access relevant benefits. It's an unconventional and uncommon approach for a municipality to tailor benefits for its citizens.

In order to register, citizens are required to sign up at designated sites to self-authenticate, and on registration users are given the opportunity to create a unique profile, indicating their personal and social preferences. Once a profile is generated, the municipality is able to send citizens information, updates and offers of importance and relevance.

For example, residents can be advised of road closures and advised to take alternative routes. Similarly, if a resident indicates an interest in sports they are notified about Tel Aviv marathon and offered a discount on the registration fee.

An exciting joint venture is with local theatres – when and if theatre tickets are not sold, the municipality can use the Residents Card to direct citizens to heavily reduced tickets. This is a win-win situation for the theatre as well as the citizens who indicated they were interested in culture.

DigiTel has also made previously burdensome transactional tasks simpler and more resident-orientated. For example, previously residents were required to physically collect a regional parking validation for their car in order to park freely in their neighbourhood.

But through DigiTel, residents can now apply online for a regional parking validation and have it delivered personally to them by courier free of charge.

Ultimately, through DigiTel the municipality is providing customised digital services to its residents – at any time and from any place.

**CITIE: Another important aspect of engagement with the public is how the city enables residents to influence policymaking. How do Tel Aviv and DigiTel approach this?**

**“If we engage with citizens about future decisions, they become more involved with the outcome and feel responsible for it.”**

We understand that if we engage with citizens about future decisions, they become more involved with the outcome and feel responsible for it – ultimately they help us shape a better and more effective the solution. We therefore try to engage citizens from the start, from the first thinking.**Liora Shechter:** We strongly believe that leveraging the wisdom of the crowd is vital for smart municipal management. Their opinions are taken into account to enable better decision-making.

Through DigiTel residents are now directly influencing a range of municipality decisions. We are increasingly involving residents in urban experience and urban development, with an emphasis on engagement in decision-making processes.

Recently, neighbourhoods were given €300,000 to deliver renovations. The municipality asked residents what they would most like to see renovated in their neighbourhood. The results were then aggregated and published online with cost estimates. Residents were asked to rank a winning combination of ideas. After all, who knows what needs to be changed more than the citizens that live in that neighbourhood?

Finally, another critical part of public participation in policymaking is having an effective feedback loop. With DigiTel, every resident who participates receives a tailored piece of feedback indicating to them how their input influenced the final policy decision.

**CITIE: How has the success of DigiTel been measured?**

**“Our goal is to build an environment where citizens have a constant positive and surprising interaction with the municipality.”**

**Liora Shechter:** To date, over 33% of Tel Aviv’s population have signed up to and are actively using DigiTel. Feedback has been very positive, along with resident engagement and participation. Within the last 18 months, 100,000 people have registered, an impressive uptake.

Our goal is to build an environment where citizens have a constant positive interaction with the municipality; an interaction that is surprising and innovative and was not as apparent three years ago without DigiTel.

DigiTel has also achieved international acclaim – Tel Aviv was distinguished as the ‘Best Smart City in 2014’ at the Smart City Expo World Congress in Barcelona.

**CITIE: Following the strong launch and uptake of DigiTel, what are the municipality’s next steps?**

**Liora Shechter:** One of the following steps is the opening of public spaces to residents, such as the ability to reserve a football field in the community centre, the ability to reserve a meeting room in a municipal office building and the ability to watch town hall meetings online.

Another venture is to convert the physical Residents’ Card to mobile, enabling the resident to identify themselves and consume benefits digitally.

**CITIE: What lessons would you give to other cities looking to follow Tel Aviv’s example?**

**Liora Shechter:** We should change the way we perceive the resident. It’s important that the city sees them as a client we need to keep, a client we need to give simple and accessible services. We look to surprise them with a service level and benefits that can support their lifestyle. In addition to this it’s important to give them as a significant role in the decision making and the development of the city.